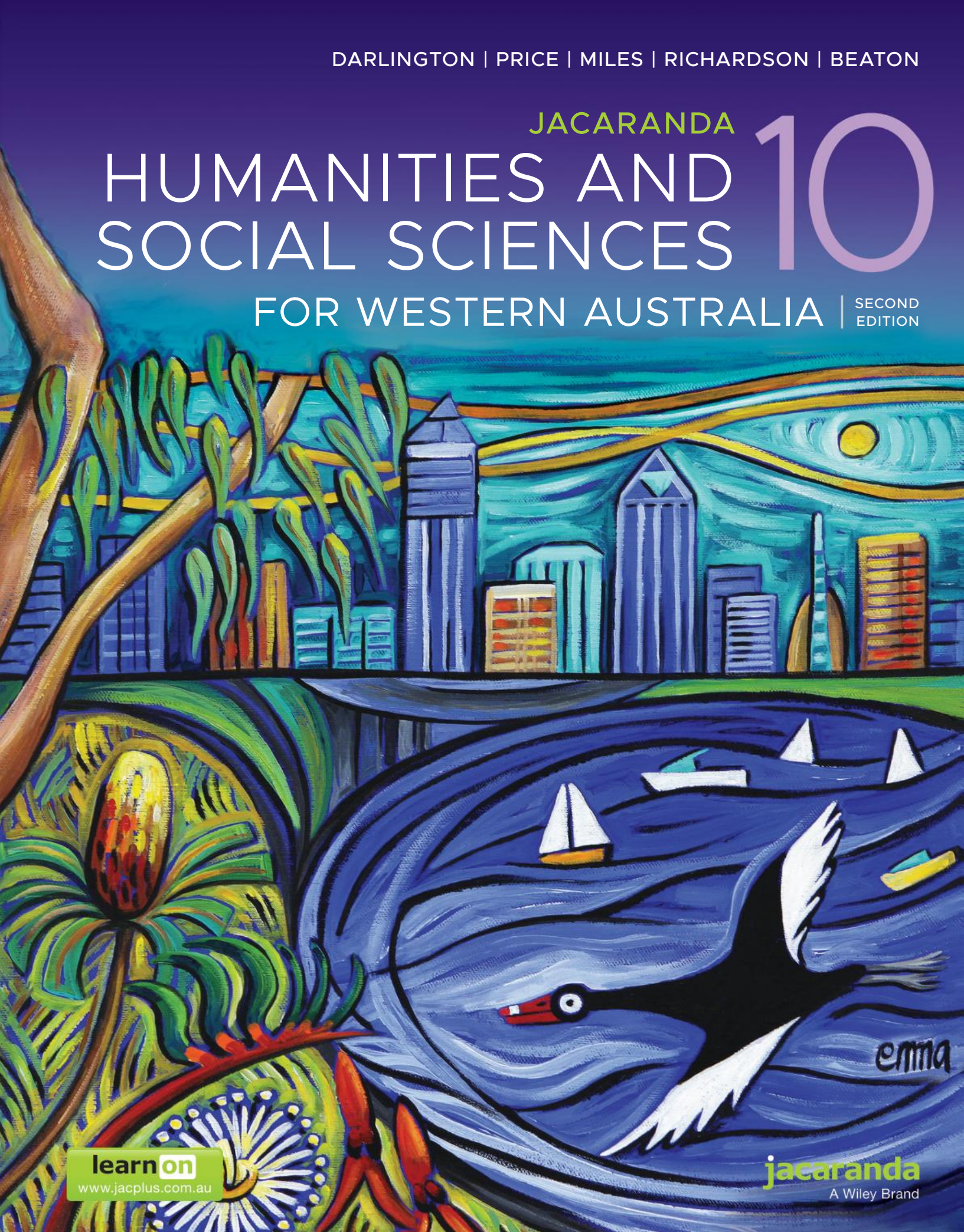
DARLINGTON | PRICE | MILES | RICHARDSON | BEATON

JACARANDA

HUMANITIES AND SOCIAL SCIENCES 10

FOR WESTERN AUSTRALIA

SECOND EDITION



learnon
www.jacplus.com.au

jacaranda
A Wiley Brand

JACARANDA

HUMANITIES AND SOCIAL SCIENCES 10

FOR WESTERN AUSTRALIA | SECOND EDITION

JACARANDA

HUMANITIES AND SOCIAL SCIENCES 10

FOR WESTERN AUSTRALIA | SECOND EDITION

ROBERT DARLINGTON

JILL PRICE

DENISE MILES

MATTHEW RICHARDSON

MEREDITH BEATON

CATHY BEDSON

KINGSLEY HEAD

JANE WILSON

LUKE JACKSON

BENJAMIN ROOD

CONTRIBUTING AUTHORS

Ben de Vries | Lindy Precious | Jaana Wilson
Nicole Gray | Tom Hawkins | Helen Rabenda

jacaranda
A Wiley Brand

Second edition published 2021 by
John Wiley & Sons Australia, Ltd
42 McDougall Street, Milton, Qld 4064

First edition published 2018

Typeset in 11/14 pt TimesLTStd

© John Wiley & Sons Australia, Ltd. 2018, 2021

The moral rights of the authors have been asserted.

ISBN: 978-0-7303-8755-8

Reproduction and communication for educational purposes

The *Australian Copyright Act 1968* (the Act) allows a maximum of one chapter or 10% of the pages of this work, whichever is the greater, to be reproduced and/or communicated by any educational institution for its educational purposes provided that the educational institution (or the body that administers it) has given a remuneration notice to Copyright Agency Limited (CAL).

Reproduction and communication for other purposes

Except as permitted under the Act (for example, a fair dealing for the purposes of study, research, criticism or review), no part of this book may be reproduced, stored in a retrieval system, communicated or transmitted in any form or by any means without prior written permission. All inquiries should be made to the publisher.

Trademarks

Jacaranda, the JacPLUS logo, the learnON, assessON and studyON logos, Wiley and the Wiley logo, and any related trade dress are trademarks or registered trademarks of John Wiley & Sons Inc. and/or its affiliates in the United States, Australia and in other countries, and may not be used without written permission. All other trademarks are the property of their respective owners.

Front cover image: Emma Blyth

Illustrated by various artists, diacriTech and Wiley Composition Services

Typeset in India by diacriTech
Printed in Singapore by

Markono Print Media Pte Ltd



A catalogue record for this book is available from the National Library of Australia

10 9 8 7 6 5 4 3 2 1

This suite of print and digital resources may contain images of, or references to, members of Aboriginal and Torres Strait Islander communities who are, or may be, deceased. These images and references have been included to help Australian students from all cultural backgrounds develop a better understanding of Aboriginal and Torres Strait Islander peoples' history, culture and lived experience.

Wherever possible, culturally sensitive material has been flagged with a disclaimer at the beginning of a subtopic to help teachers and students navigate the material.

CONTENTS

So much more than a textbook ... ix
New features xi
eWorkbook xiii
Acknowledgements xiv

1 HASS concepts and skills 2

1.1 Key concepts in HASS 2
1.2 Key skills in HASS 5
1.3 SkillBuilder: Identifying knowledge and perspectives 8
1.4 SkillBuilder: Writing and dissecting research questions 11
1.5 SkillBuilder: Finding and referencing primary and secondary sources 14
1.6 SkillBuilder: Analysing primary and secondary sources 18
1.7 SkillBuilder: Identifying and comparing perspectives 23
1.8 SkillBuilder: Identifying and explaining relationships and patterns 29
1.9 SkillBuilder: Forming strong conclusions based on evidence 31
1.10 SkillBuilder: Proposing plausible explanations for patterns and relationships 34
1.11 SkillBuilder: Proposing possible actions and predicting their outcomes 36
1.12 SkillBuilder: Choosing appropriate formats and language 40
1.13 SkillBuilder: Developing strong evidence-based discussions and explanations 43
1.14 SkillBuilder: Reflecting on research techniques and findings 47
1.15 Review 49

RESOURCE SUMMARY 51

CIVICS AND CITIZENSHIP

2 Civics and Citizenship concepts and skills 54

2.1 Overview 54
2.2 Concepts in Civics and Citizenship 55
2.3 Skills in Civics and Citizenship 57
2.4 SkillBuilder — Using the inquiry approach for research 58
2.5 SkillBuilder — Using the deconstruct/reconstruct method 59
2.6 SkillBuilder — Conducting an interview 62
2.7 SkillBuilder — Using and referencing quotes 65
2.8 SkillBuilder — Analysing political cartoons 67
2.9 SkillBuilder — Writing essays 70
2.10 SkillBuilder — Writing a feature article 73
2.11 SkillBuilder — Debating an issue 78
2.12 Review 81

RESOURCE SUMMARY 82

3 Regional government and global citizenship 83

3.1 Overview 83
3.2 Key features of Australia's system of government 84
3.3 Key features of Japan's system of government 89
3.4 Key features of India's system of government 93
3.5 Key features of Indonesia's system of government 97
3.6 Foreign aid from governments and NGOs 101
3.7 Australia and the UN 106
3.8 Keeping the peace 108
3.9 Thinking Big research project — Humanitarian aid proposal 111
3.10 Review 114

RESOURCE SUMMARY 118

4 The High Court and Australia's international agreements 119

4.1 Overview 119
4.2 Resolving disputes between state and federal governments 120
4.3 Interpreting the Constitution 125
4.4 International law 129
4.5 Applying international treaties 132
4.6 International law and Indigenous Australians 139
4.7 Thinking Big research project— Create a bill of rights 143
4.8 Review 145

RESOURCE SUMMARY 148

5 Sustaining a cohesive society 149

5.1 Overview 149
5.2 Living in a cohesive society 150
5.3 Threats to social cohesion 153
5.4 Protecting social cohesiveness 157
5.5 Resolving conflict 160
5.6 Thinking Big research project — Celebrating diversity 163
5.7 Review 165

RESOURCE SUMMARY 168

ECONOMICS AND BUSINESS

6 Economics and Business concepts and skills 170

6.1 Overview 170
6.2 Concepts in Economics and Business 171
6.3 Skills in Economics and Business 179
6.4 SkillBuilder — Conducting research into indicators of economic performance 180
6.5 SkillBuilder — Analysing a business case study 182
6.6 SkillBuilder — Predicting the outcomes of economic and business decisions 184
6.7 SkillBuilder — Preparing a budget 187
6.8 Review 190

RESOURCE SUMMARY 192

7 Economic performance and living standards 193

7.1 Overview 193
7.2 Economic growth and Australia's economy 194
7.3 Employment trends and Australia's economy 199
7.4 Inflation rates and Australia's economy 205
7.6 Other indicators of economic performance and Australia's economy 212
7.7 SkillBuilder — Calculating inflation 216
7.8 Living standards related to economic performance 218
7.9 Measuring living standards 221
7.10 Macroeconomic policy options 224
7.11 Microeconomic policy options 231
7.12 Direct government intervention in the market 237
7.13 Thinking Big research project — How does Australia measure up? 241
7.14 Review 243

RESOURCE SUMMARY 248

8 Influencing consumers 249

8.1 Overview 249
8.2 Business influences on consumer decisions 250
8.3 Consumer choice, attitude and preference 255
8.4 Making major purchases 258
8.5 SkillBuilder — Choosing a mobile phone plan 263
8.6 Thinking Big research project: Hitting the target — multimedia advertising campaign 265
8.7 Review 267

RESOURCE SUMMARY 270

9 Improving business productivity 271

9.1 Overview 271
9.2 Managing operations and improving productivity 272
9.3 Improving productivity through human resource management 277
9.4 Ethics, social responsibility and the triple bottom line 281
9.5 Responding to variations in economic conditions 286
9.6 Thinking Big research project — Ethical business — real change or fast fashion? 290
9.7 Review 292

RESOURCE SUMMARY 296

GEOGRAPHY

10 Geography concepts and skills 298

10.1 Overview 298
10.2 Concepts in Geography 299
10.3 Skills in Geography? 306
10.4 SkillBuilder — Interpreting a complex block diagram online only
10.5 SkillBuilder — Creating a fishbone diagram online only
10.6 SkillBuilder — Reading topographic maps at an advanced level online only
10.7 SkillBuilder — Comparing an aerial photograph and a topographic map 312
10.8 SkillBuilder — Using geographic information systems (GIS) online only
10.9 SkillBuilder — Constructing and interpreting a scattergraph 315
10.10 SkillBuilder — Interpreting a cartogram 322
10.11 SkillBuilder — Using multiple data formats 326
10.12 SkillBuilder — Constructing and describing complex choropleth maps 329
10.13 SkillBuilder — Evaluating alternative responses online only
10.14 SkillBuilder — Drawing a futures wheel online only
10.15 SkillBuilder — Comparing aerial photographs to investigate spatial change over time online only
10.16 SkillBuilder — Describing change over time online only
10.17 SkillBuilder — Building a map with geographic information systems (GIS) online only
10.18 SkillBuilder — Using Excel to construct population profiles online only

10.19 SkillBuilder — How to develop a structured and ethical approach to research online only
10.20 SkillBuilder — Understanding policies and strategies online only
10.21 SkillBuilder — Debating like a geographer online only
10.22 SkillBuilder — Writing a geographical essay ... 338
10.23 Review ... 342

RESOURCE SUMMARY ... 342

11 Introducing environmental change and management 346

11.1 Overview ... 346
11.2 Interacting with the environment ... 347
11.3 Is climate change heating the Earth? ... 353
11.4 Tackling climate change ... 356
11.5 Is Australia's climate changing? ... 363
11.6 Thinking Big research project — Wacky weather presentation ... 368
11.7 Review ... 370

RESOURCE SUMMARY ... 374

12 Land environments change and management 375

12.1 Overview ... 375
12.2 The causes and impacts of land degradation ... 376
12.3 Managing land degradation ... 384
12.4 Environmental change and salinity ... 390
12.5 Desertification: the drylands are spreading ... 398
12.6 Introduced species and land degradation ... 406
12.7 Native species and environmental change ... 414
12.8 Indigenous communities and sustainable land management ... 418
12.9 Thinking Big research project — Invasive species *Wanted*! poster ... 423
12.10 Review ... 425

RESOURCE SUMMARY ... 430

13 Coast change and management 431

13.1 Overview ... 431
13.2 Understanding coastal landscapes ... 432
13.3 Challenges to coastal management ... 440
13.4 How do we manage coastal change? ... 450
13.5 Thinking Big research project — Ecology action newsletter — reef rescue ... 458
13.6 Review ... 461

RESOURCE SUMMARY ... 465

14 Urban change and management 466

14.1 Overview ... 466
14.2 Cities' impact on the environment ... 467
14.3 The development of urban environments ... 470
14.4 Case studies in urban growth — Perth and Mumbai ... 474
14.5 Factors in urban decline ... 481
14.6 Future challenges for sustainable urban environments ... 486
14.7 Thinking Big research project — Slum improvement proposal ... 491
14.8 Review ... 494

RESOURCE SUMMARY ... 499

online only

15 Inland water change and management 500

15.1 Overview ... 500
15.2 Wet and wonderful — inland water
15.3 Damming rivers — the pros and cons
15.4 Alternatives to damming
15.5 Using our groundwater reserves
15.6 The impacts of drainage and diversion
15.7 Putting water back — managing the Murray–Darling
15.8 Thinking Big research project — Menindee Lakes murder news report
15.9 Review

RESOURCE SUMMARY ... 501

16 Marine environments change and management 502

16.1 Overview ... 502
16.2 Motion in the ocean
16.3 Travelling trash — marine pollution and debris
16.4 Cleaning up our mess
16.5 Oil and water — a toxic mix
16.6 Thinking Big research project — 'Plastic not-so-fantastic' media campaign
16.7 Review

RESOURCE SUMMARY ... 503

17 Measuring and improving wellbeing 504

17.1 Overview ... 504
17.2 Understanding and measuring wellbeing ... 505

17.3 Wealth and wellbeing 510
17.4 Life expectancy and wellbeing 513
17.5 Variations in wellbeing in India 520
17.6 Poverty as a factor in wellbeing 525
17.7 Variations of wellbeing in Australia 532
17.8 Thinking Big research project — Improving wellbeing in a low-HDI ranked country 540
17.9 Review 542

RESOURCE SUMMARY 548

18 Global responses to human wellbeing 549

18.1 Overview 549
18.2 Poverty and the Sustainable Development Goals 550
18.3 Health and wellbeing 555
18.4 Government responses to population and wellbeing issues 561
18.5 The importance of human rights 564
18.6 CASE STUDY: Syria — the impact of conflict on wellbeing 569
18.7 Seeking refuge 574
18.8 Providing assistance for global human wellbeing 579
18.9 Thinking Big research project — UN report — Global wellbeing comparison 586
18.10 Review 588

RESOURCE SUMMARY 592

HISTORY

19 History concepts and skills 594

19.1 Overview 594
19.2 Concepts in History 595
19.3 Skills in History 604
19.4 SkillBuilder: Analysing cause and effect with graphic organisers 605
19.5 SkillBuilder: Analysing historical debate 607
19.6 SkillBuilder: Analysing political cartoons and propaganda posters 610
19.7 Review 615

RESOURCE SUMMARY 617

20 The modern world and Australia 618

20.1 Overview 618
20.2 Examining the evidence 620
20.3 The peace treaties and the League of Nations 622
20.4 The 'Roaring Twenties' 627
20.5 The Great Depression 631
20.6 Communism — dream or nightmare? 637
20.7 The rise of fascism 639
20.8 Thinking Big research project: TV Quizmaster 644
20.9 Review 646

RESOURCE SUMMARY 649

21 World War II 650

21.1 Overview 650
21.2 Examining the evidence 682
21.3 The Nazis take power in Germany 654
21.4 Japanese militarism 659
21.5 The road to war in Europe 663
21.6 Overview of World War II to 1944 667
21.7 Australians at war: enlistment and the Mediterranean battles 674
21.8 Australia under threat 678
21.9 Australians in the Pacific War: Kokoda 682
21.10 Australians in the Pacific War: beyond Kokoda 685
21.11 Australian prisoners of war 688
21.12 The Australian home front 693
21.13 Australian women at war 697
21.14 Australia's relations with the US 703
21.15 The end of the war 705
21.16 War crimes and retribution 709
21.17 Changing international relations 715
21.18 Commemoration and contested debates 718
21.19 Thinking Big research project — Honouring Indigenous Australians' service 722
21.20 Review 723

RESOURCE SUMMARY 730

22 Rights and freedoms (1945 to present) 732

22.1 Overview 732
22.2 Examining the evidence 734
22.3 The beginnings of an Aboriginal protest movement 737
22.4 The Stolen Generations 741
22.5 Influence on Australia of civil rights movements abroad 745
22.6 The Freedom Ride in Australia 750
22.7 Being counted 754
22.8 Torres Strait Islander rights and freedoms 757
22.9 The Aboriginal Tent Embassy 762
22.10 Land rights and protests 765
22.11 Reconciliation 772
22.12 Fighting for equity 778
22.13 The struggle continues 783
22.14 Thinking Big research project — Needed: Social media guru! 790
22.15 Review 793

RESOURCE SUMMARY 801

Glossary 802
Index 813

SO MUCH MORE THAN A TEXTBOOK ...

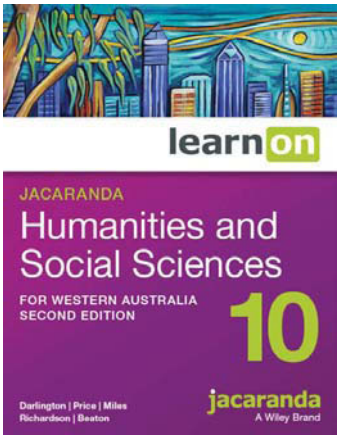
DIGITAL

learnON	eBookPLUS	eGuidePLUS	PDF	iPad app	Print
An immersive, interactive and flexible online learning course	An electronic version of the student text, with digital resources	Everything in the eBookPLUS plus additional resources designed for teachers	Downloadable PDFs directly from your Jacaranda bookshelf	Access trusted Jacaranda content both online and offline	Printed textbook with free digital access code inside

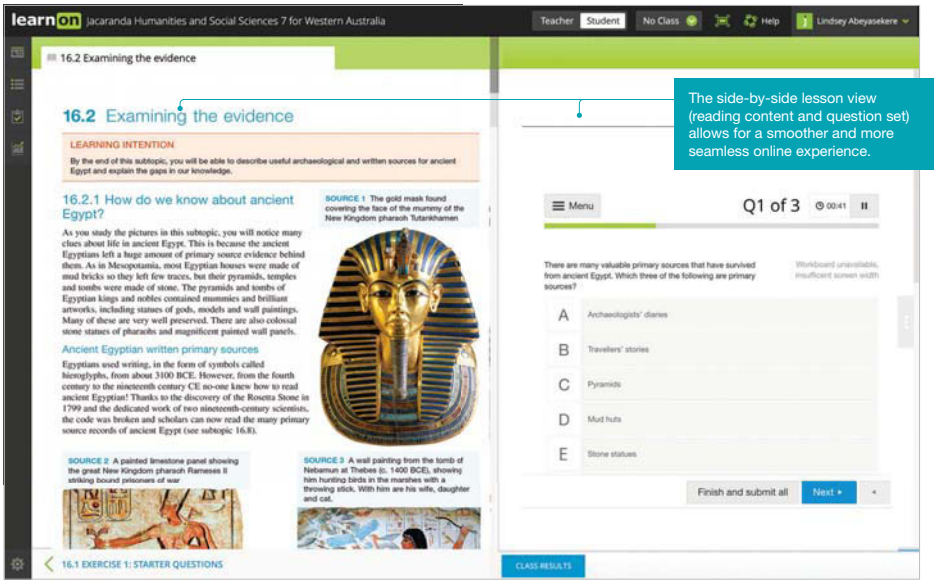
Jacaranda Humanities and Social Sciences for Western Australia 2nd Edition, includes a wealth of online resources. Teachers have access to powerful diagnostic and assessment tools through the learnON platform. Students have access to their own set of easy-to-use tools that have been specifically designed to help them track and reflect on their own learning. These include visual indicators to reflect progress, and the ability to choose and mark their own practice tasks.

The power of learnON

The Humanities and Social Sciences for Western Australia series learnON resources provide an immersive digital learning platform that provides teachers with valuable insights into their students' learning and engagement. It's so much more than a textbook! It provides all of the content included in your eBookPLUS and eGuidePLUS, with important additional features that allow you to assign, mark and track student work. The platform can monitor and report progress in real time to give you immediate insights into student achievement. This helps you to easily isolate areas in which students (or groups of students) need additional support or extension.



The learnON platform gives you the flexibility to create multiple learning pathways.

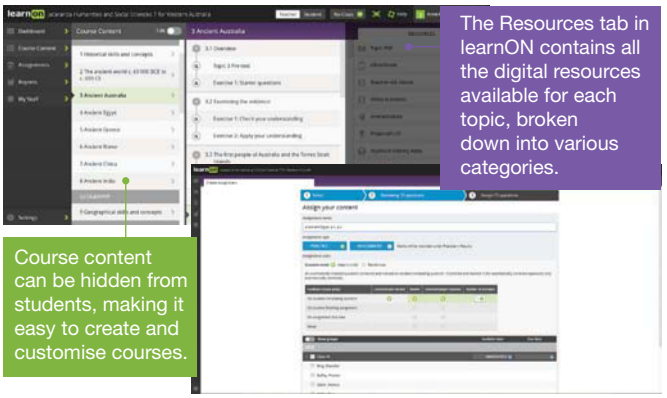


Customise student learning

At Jacaranda, we understand that good teaching begins with understanding each of your student's learning needs. With learnON, teachers can tailor each task and assign it to individual students, create their own groups or assign to the whole class.

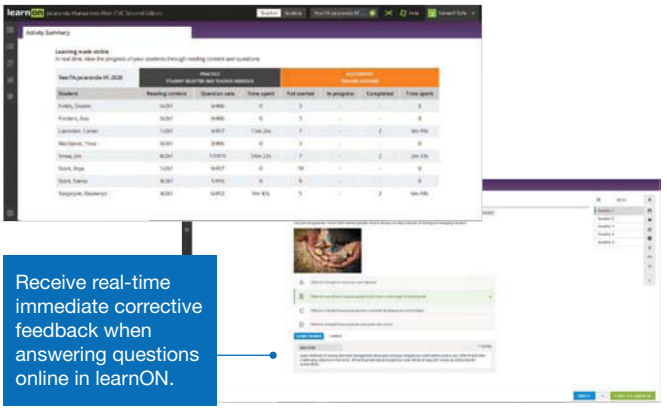
Teachers have complete control over which questions or tasks each student is assigned, whether it is for practice or assessment, their due dates and when they have access to results.

Teachers also have the ability to hide specific parts of the reading content from student view, to allow for 'closed-book' tests or to create their own pathway through the material for their class.



Track activity

The learnON platform provides real-time data of student activity to teachers about their class, and to students about themselves. At a glance, teachers can see how long a student spends reading, how many question-sets they have attempted and their progress with assessment tasks.

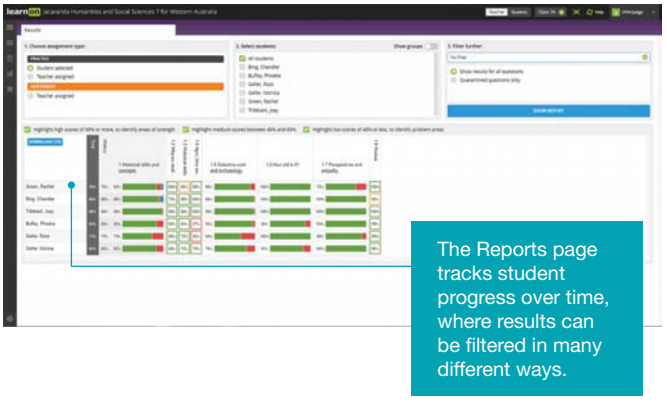


Provide meaningful feedback

The learnON platform also provides an easy-to-navigate marking interface that allows teachers to see student responses, provide feedback and mark their work. Students also have access to sample answers and guides that help them self-mark their own practice tasks.

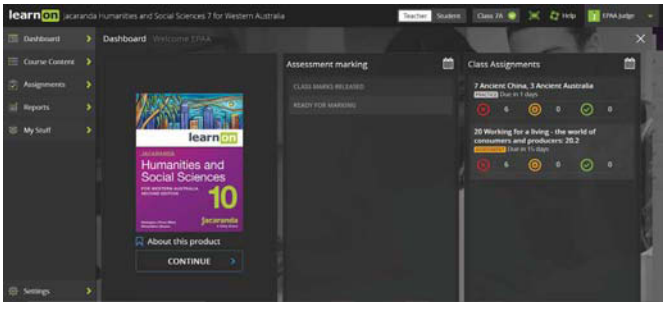
Gain deep insights

Teachers receive detailed data about student progress that allows them to filter results for specific skills or question types. With learnON, teachers can show students (or their parents or carers) their assessment data in fine detail. Teachers can filter results to show development with each HASS skill, topic or subtopic. Students also have access to their own learning data, colour-coded to help them understand their strengths and weaknesses at a glance.



Keep track of your 'to do' list

The learnON dashboard gives students and teachers a clear picture of their progress throughout the year. For teachers, it provides a visual summary of upcoming assessment deadlines, student submissions waiting to be marked and overdue tasks. For students, it providers reminders of due dates and notifications about the availability of feedback and marked tasks.



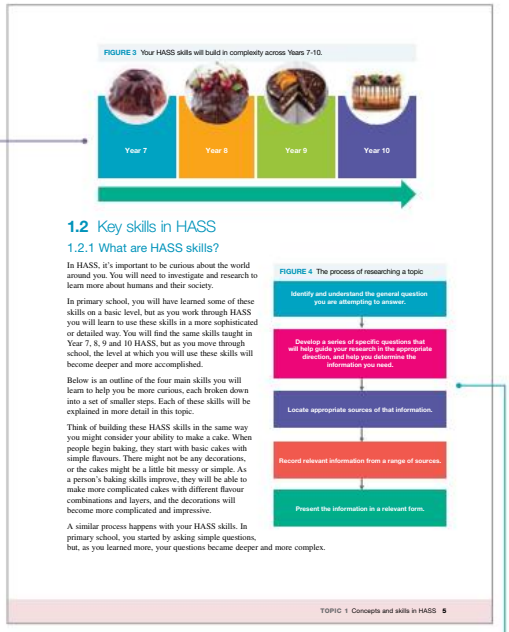
NEW FEATURES

The ever-popular *Jacaranda Humanities and Social Sciences for Western Australia series* has been re-published for the Western Australian Curriculum. The series is available across a number of digital formats: learnON, eBookPLUS, eGuidePLUS, PDF and iPad.

Explicit HASS skills teaching

Skills development is integrated throughout the new edition, and explicitly targeted through SkillBuilders and dedicated skills topics for all four subject areas. Each title in the second edition also includes a new, stand-alone HASS concepts and skills chapter, that introduces students to the key concepts in each subject, and explicitly teaches the HASS inquiry process. This topic has been specifically tailored for each year level (in content and complexity), to show the progression of inquiryvskills. HASS SkillBuilders within this topic are complemented by subject-specific differentiated worksheets, to provide teachers with three separate levels of support for their class. Throughout the topics, students will find links to relevant SkillBuilders alongside exercises and activities.

This suite of resources is designed to allow for differentiation, flexible teaching and multiple entry and exit points so teachers can teach their class their way.


FIGURE 3 Your HASS skills will build in complexity across Years 7-10.

Year 7 Year 8 Year 9 Year 10

1.2 Key skills in HASS

1.2.1 What are HASS skills?

In HASS, it's important to be curious about the world around you. You will need to investigate and research to learn more about humans and their society.

In primary school, you will have learned some of these skills on a basic level, but as you work through HASS you will learn to use these skills in a more sophisticated or detailed way. You will find the same skills taught in Year 7, 8, 9 and 10 HASS, but as you move through school, the level at which you will use these skills will become deeper and more accomplished.

Below is an outline of the four main skills you will learn to help you be more curious, each broken down into a set of smaller steps. Each of these skills will be explained in more detail in this topic.

Think of building these HASS skills in the same way you might consider your ability to make a cake. When people begin baking, they start with basic cakes with simple flavours. There might not be any decorations, or the cakes might be a little bit messy or simple. As a person's baking skills improve, they will be able to make more complicated cakes with different flavour combinations and layers, and the decorations will become more complicated and impressive.

A similar process happens with your HASS skills. In primary school, you started by asking simple questions, but, as you learned more, your questions became deeper and more complex.

FIGURE 4 The process of researching a topic

Identify and understand the general question you are attempting to answer.

Develop a series of specific questions that will help guide your research in the appropriate direction, and help you determine the information you need.

Locate appropriate sources of that information.

Record relevant information from a range of sources.

Present the information in a relevant form.

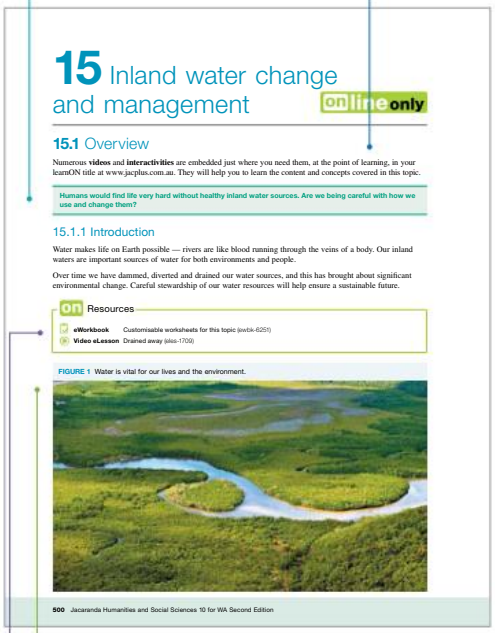
TOPIC 1 Concepts and skills in HASS 5

Topics open with an inquiry question to spark students' curiosity about the topic.

All topics start with an **Overview**, which includes a pre-test to gauge students' existing knowledge.

Explicit discussion of how each year level's concepts and skills link through 7–10 HASS.

Clear links to **HASS** inquiry skills show students how each skill is connected and can be broken down into manageable steps.


15 Inland water change and management

online only

15.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

Humans would find life very hard without healthy inland water sources. Are we being careful with how we use and change them?

15.1.1 Introduction

Water makes life on Earth possible — rivers are like blood running through the veins of a body. Our inland waters are important sources of water for both environments and people.

Over time we have dammed, diverted and drained our water sources, and this has brought about significant environmental change. Careful stewardship of our water resources will help ensure a sustainable future.

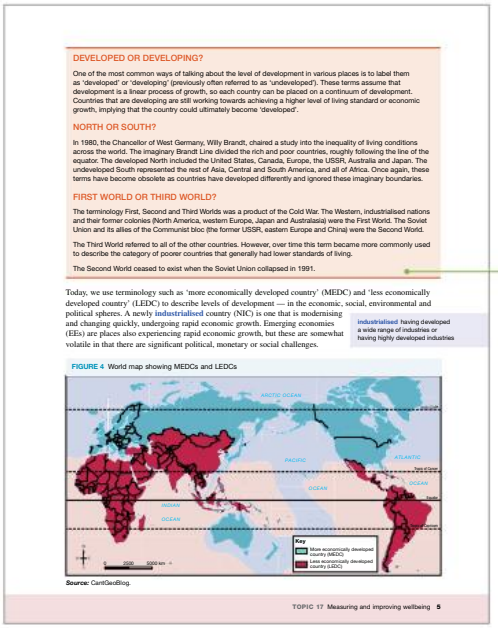
on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6251)

Video eLesson Drained away (eles-1709)

FIGURE 1 Water is vital for our lives and the environment.

500 Jacaranda Humanities and Social Sciences 10 for WA Second Edition


DEVELOPED OR DEVELOPING?

One of the most common ways of talking about the level of development in various places is to label them as 'developed' or 'developing' (previously often referred to as 'undeveloped'). These terms assume that development is a linear process of growth, so each country can be placed on a continuum of development. Countries that are developing are still working towards achieving a higher level of living standard or economic growth, implying that the country could ultimately become 'developed'.

NORTH OR SOUTH?

In 1980, the Chancellor of West Germany, Willy Brandt, chaired a study into the inequality of living conditions across the world. The imaginary Brandt Line divided the rich and poor countries, roughly following the line of the equator. The developed North included the United States, Canada, Europe, the USSR, Australia and Japan. The undeveloped South represented the rest of Asia, Central and South America, and all of Africa. Once again, these terms have become obsolete as countries have developed differently and ignored these imaginary boundaries.

FIRST WORLD OR THIRD WORLD?

The terminology First, Second and Third Worlds was a product of the Cold War. The Western, industrialised nations and their former colonies (North America, western Europe, Japan and Australasia) were the First World. The Soviet Union and its allies of the Communist bloc (the former USSR, eastern Europe and China) were the Second World.

The Third World referred to all of the other countries. However, over time this term became more commonly used to describe the category of poorer countries that generally had lower standards of living.

The Second World ceased to exist when the Soviet Union collapsed in 1991.

Today, we use terminology such as 'more economically developed country' (MEDC) and 'less economically developed country' (LEDC) to describe levels of development — in the economic, social, environmental and political spheres. A newly **industrialised** country (NIC) is one that is modernising and changing quickly, undergoing rapid economic growth. Emerging economies (EEs) are places also experiencing rapid economic growth, but these are somewhat volatile in that there are significant political, monetary or social challenges.

industrialised having developed a wide range of industries or having highly developed industries

FIGURE 4 World map showing MEDCs and LEDCs

Source: CamGeoBlog.

TOPIC 17 Measuring and improving wellbeing 5

onResources feature boxes provide guidance about additional resources online.

A free, customisable online workbook is provided for each title in the series.

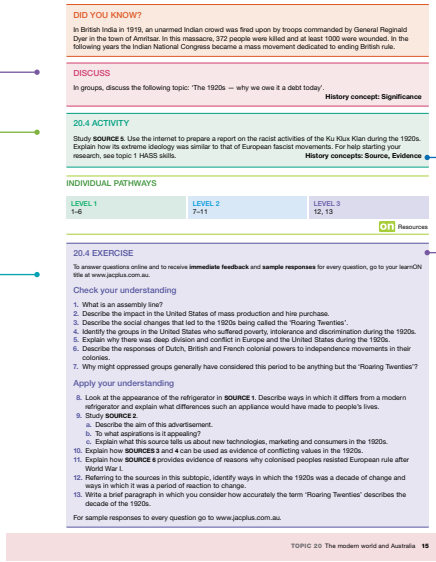
Activities extend student skills and provide classroom practice.

Prompts and support for students who require additional scaffolding.

Discuss features explicitly address general capabilities, subject concepts and HASS skills.

Activities promote deeper inquiry, encourage collaboration and help students to develop their research skills.

Immediate feedback and sample responses are available online for every question.



DID YOU KNOW?

In British India in 1919, an unarmed Indian crowd was fired upon by troops commanded by General Reginald Dyer in the town of Amritsar. In this massacre, 372 people were killed and at least 1000 were wounded. In the following years the Indian National Congress became a mass movement dedicated to ending British rule.

DISCUSS

In groups, discuss the following topic: 'The 1920s — why we owe it a debt today'.

History concept: Significance

20.4 ACTIVITY

Study **SOURCE 5**. Use the internet to prepare a report on the racist activities of the Ku Klux Klan during the 1920s. Explain how its extreme ideology was similar to that of European fascist movements. For help starting your research, see topic 1 HASS skills.

History concepts: Source, Evidence

INDIVIDUAL PATHWAYS

LEVEL 1 1–6 | LEVEL 2 7–11 | LEVEL 3 12, 13

on Resources

20.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Check your understanding

1. What is an assembly line?
2. Describe the impact in the United States of mass production and hire purchase.
3. Describe the social changes that led to the 1920s being called the 'Roaring Twenties'.
4. Identify the groups in the United States who suffered poverty, intolerance and discrimination during the 1920s.
5. Explain why there was deep division and conflict in Europe and the United States during the 1920s.
6. Describe the responses of Dutch, British and French colonial powers to independence movements in their colonies.
7. Why might oppressed groups generally have considered this period to be anything but the 'Roaring Twenties'?

Apply your understanding

8. Look at the appearance of the refrigerator in **SOURCE 1**. Describe ways in which it differs from a modern refrigerator and explain what differences such an appliance would have made to people's lives.
9. Study **SOURCE 2**.
   a. Describe the aim of this advertisement.
   b. To what aspirations is it appealing?
   c. Explain what this source tells us about new technologies, marketing and consumers in the 1920s.
10. Explain how **SOURCES 3** and **4** can be used as evidence of conflicting values in the 1920s.
11. Explain how **SOURCE 5** provides evidence of reasons why colonised peoples resisted European rule after World War I.
12. Referring to the sources in this subtopic, identify ways in which the 1920s was a decade of change and ways in which it was a period of reaction to change.
13. Write a brief paragraph in which you consider how accurately the term 'Roaring Twenties' describes the decade of the 1920s.

For sample responses to every question go to www.jacplus.com.au.

TOPIC 20 The modern world and Australia **15**

The development of **skills**, **concepts** and **general capabilities** are clearly identified through activity and discussion labels.

Exercise sets at the end of each subtopic allow students to check and apply their understanding.

Key terms are included in every topic review.

Links to the **myWorld Atlas** and **myWorld History Atlas** are provided throughout.

A wide range of **engaging sources**, **diagrams** and **images** support learning, and wherever relevant give examples from a WA context.

Skillbuilders model and develop key skills in context.

In each topic, a **Thinking Big research project** provides opportunities for students to delve deeper, think creatively and work collaboratively,



4.14 SkillBuilder: Analysing and corroborating sources

online only

What are the main ancient Egyptian primary sources?

Ancient Egyptian primary sources include pyramids, tombs, temples, mummies, coffins, art and written records on stone and papyrus.

Select your learnON format to access:

- an explanation of the skill (Tell me)
- a step-by-step process to develop the skill, with an example (Show me)
- an activity to allow you to practise the skill (Let me do it)
- questions to consolidate your understanding of the skill.

4.15 Thinking Big research project: Ancient Egyptian archaeological excavation

online only

SCENARIO

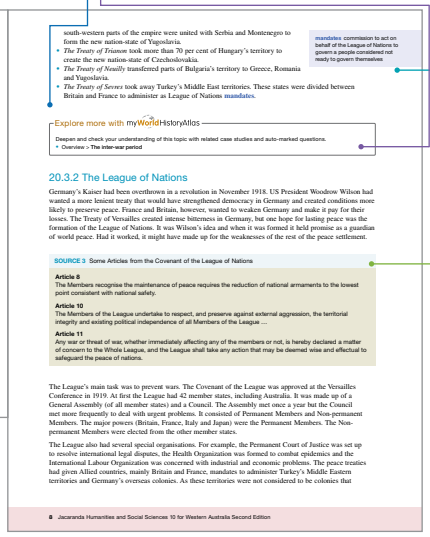
Apply for a role at an archaeological dig in Egypt. Interested students have been asked to identify sites in Egypt where significant remains could be unearthed during an archaeological excavation, explain what types of traces might be found at these sites, and submit their research as an application.

Select your learnON format to access:

- the full project scenario
- details of the project task
- resources to guide your project work
- an assessment rubric.

on Resources

projectsPLUS Thinking Big research project: Ancient Egyptian archaeological excavation (pro-0228)



south-western parts of the empire were united with Serbia and Montenegro to form the new nation-state of Yugoslavia.

- *The Treaty of Trianon* took more than 70 per cent of Hungary's territory to create the new nation-state of Czechoslovakia.
- *The Treaty of Neuilly* transferred parts of Bulgaria's territory to Greece, Romania and Yugoslavia.
- *The Treaty of Sevres* took away Turkey's Middle East territories. These states were divided between Britain and France to administer as League of Nations mandates.

mandates commission to act on behalf of the League of Nations to govern a people considered not ready to govern themselves

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- Overview > The inter-war period

20.3.2 The League of Nations

Germany's Kaiser had been overthrown in a revolution in November 1918. US President Woodrow Wilson had wanted a more lenient treaty that would have strengthened democracy in Germany and created conditions more likely to preserve peace. France and Britain, however, wanted to weaken Germany and make it pay for their losses. The Treaty of Versailles created intense bitterness in Germany, but one hope for lasting peace was the formation of the League of Nations. It was Wilson's idea and when it was formed it held promise as a guardian of world peace. Had it worked, it might have made up for the weaknesses of the rest of the peace settlement.

SOURCE 3 Some Articles from the Covenant of the League of Nations

Article 8
The Members recognise the maintenance of peace requires the reduction of national armaments to the lowest point consistent with national safety.

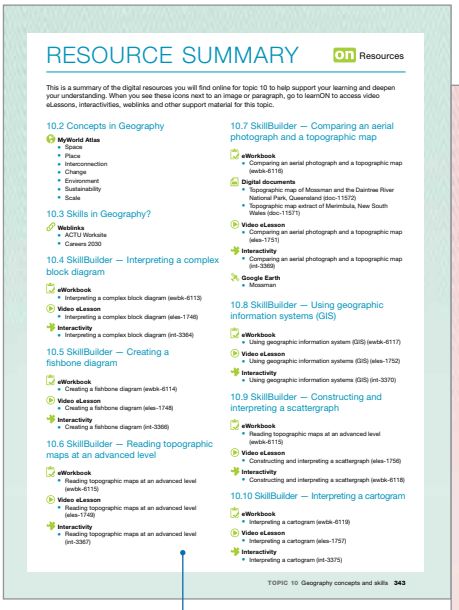
Article 10
The Members of the League undertake to respect, and preserve against external aggression, the territorial integrity and existing political independence of all Members of the League ...

Article 11
Any war or threat of war, whether immediately affecting any of the members or not, is hereby declared a matter of concern to the Whole League, and the League shall take any action that may be deemed wise and effectual to safeguard the peace of nations.

The League's main task was to prevent wars. The Covenant of the League was approved at the Versailles Conference in 1919. At first the League had 42 member states, including Australia. It was made up of a General Assembly (of all member states) and a Council. The Assembly met once a year but the Council met more frequently to deal with urgent problems. It consisted of Permanent Members and Non-permanent Members. The major powers (Britain, France, Italy and Japan) were the Permanent Members. The Non-permanent Members were elected from the other member states.

The League also had several special organisations. For example, the Permanent Court of Justice was set up to resolve international legal disputes, the Health Organization was formed to combat epidemics and the International Labour Organization was concerned with industrial and economic problems. The peace treaties had given Allied countries, mainly Britain and France, mandates to administer Turkey's Middle Eastern territories and Germany's overseas colonies. As these territories were not considered to be colonies that

8 Jacaranda Humanities and Social Sciences 10 for Western Australia Second Edition



RESOURCE SUMMARY on Resources

This is a summary of the digital resources you will find online for topic 10 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

10.2 Concepts in Geography
- MyWorld Atlas
  - Space
  - Place
  - Interconnection
  - Change
  - Environment
  - Sustainability
  - Scale

10.3 Skills in Geography?
- Weblinks
  - ACTU Worksite
  - Careers 2030

10.4 SkillBuilder — Interpreting a complex block diagram
- eWorkbook
  - Interpreting a complex block diagram (ewbk-8113)
- Video eLesson
  - Interpreting a complex block diagram (eles-1748)
- Interactivity
  - Interpreting a complex block diagram (int-3364)

10.5 SkillBuilder — Creating a fishbone diagram
- eWorkbook
  - Creating a fishbone diagram (ewbk-8114)
- Video eLesson
  - Creating a fishbone diagram (eles-1748)
- Interactivity
  - Creating a fishbone diagram (int-3366)

10.6 SkillBuilder — Reading topographic maps at an advanced level
- eWorkbook
  - Reading topographic maps at an advanced level (ewbk-8115)
- Video eLesson
  - Reading topographic maps at an advanced level (eles-1749)
- Interactivity
  - Reading topographic maps at an advanced level (int-3367)

10.7 SkillBuilder — Comparing an aerial photograph and a topographic map
- eWorkbook
  - Comparing an aerial photograph and a topographic map (ewbk-8116)
- Digital documents
  - Topographic map of Mossman and the Daintree River National Park, Queensland (doc-11572)
  - Topographic map extract of Marimbula, New South Wales (doc-11571)
- Video eLesson
  - Comparing an aerial photograph and a topographic map (eles-1751)
- Interactivity
  - Comparing an aerial photograph and a topographic map (int-3369)
- Google Earth
  - Mossman

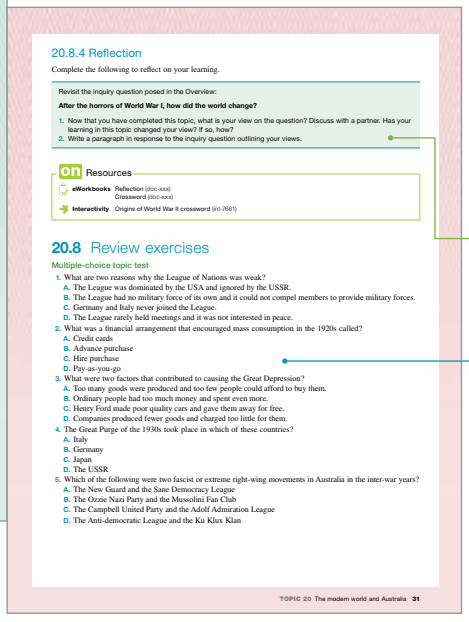
10.8 SkillBuilder — Using geographic information systems (GIS)
- eWorkbook
  - Using geographic information system (GIS) (ewbk-8117)
- Video eLesson
  - Using geographic information systems (GIS) (eles-1752)
- Interactivity
  - Using geographic information systems (GIS) (int-3370)

10.9 SkillBuilder — Constructing and interpreting a scattergraph
- eWorkbook
  - Reading topographic maps at an advanced level (ewbk-8115)
- Video eLesson
  - Constructing and interpreting a scattergraph (eles-1756)
- Interactivity
  - Constructing and interpreting a scattergraph (ewbk-8118)

10.10 SkillBuilder — Interpreting a cartogram
- eWorkbook
  - Interpreting a cartogram (ewbk-8119)
- Video eLesson
  - Interpreting a cartogram (eles-1757)
- Interactivity
  - Interpreting a cartogram (int-3375)

TOPIC 10 Geography concepts and skills **343**

Resource summaries for each topic help teachers and students find online resources easily and quickly.



20.8.4 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

After the horrors of World War I, how did the world change?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question outlining your views.

on Resources

eWorkbooks Reflection (doc-xxxx)
Crossword (doc-xxx)
Interactivity Origins of World War II crossword (int-7661)

20.8 Review exercises

Multiple-choice topic test

1. What are two reasons why the League of Nations was weak?
   A. The League was dominated by the USA and ignored by the USSR.
   B. The League had no military force of its own and it could not compel members to provide military forces.
   C. Germany and Italy never joined the League.
   D. The League rarely held meetings and it was not interested in peace.
2. What was a financial arrangement that encouraged mass consumption in the 1920s called?
   A. Credit cards
   B. Advance purchase
   C. Hire purchase
   D. Pay-as-you-go
3. What were two factors that contributed to causing the Great Depression?
   A. Too many goods were produced and too few people could afford to buy them.
   B. Ordinary people had too much money and spent even more.
   C. Henry Ford made poor quality cars and gave them away for free.
   D. Companies produced fewer goods and charged too little for them.
4. The Great Purge of the 1930s took place in which of these countries?
   A. Italy
   B. Germany
   C. Japan
   D. The USSR
5. Which of the following were two fascist or extreme right-wing movements in Australia in the inter-war years?
   A. The New Guard and the Sane Democracy League
   B. The Ozzie Nazi Party and the Mussolini Fan Club
   C. The Campbell United Party and the Adolf Admiration League
   D. The Anti-democratic League and the Ku Klux Klan

TOPIC 20 The modern world and Australia **31**

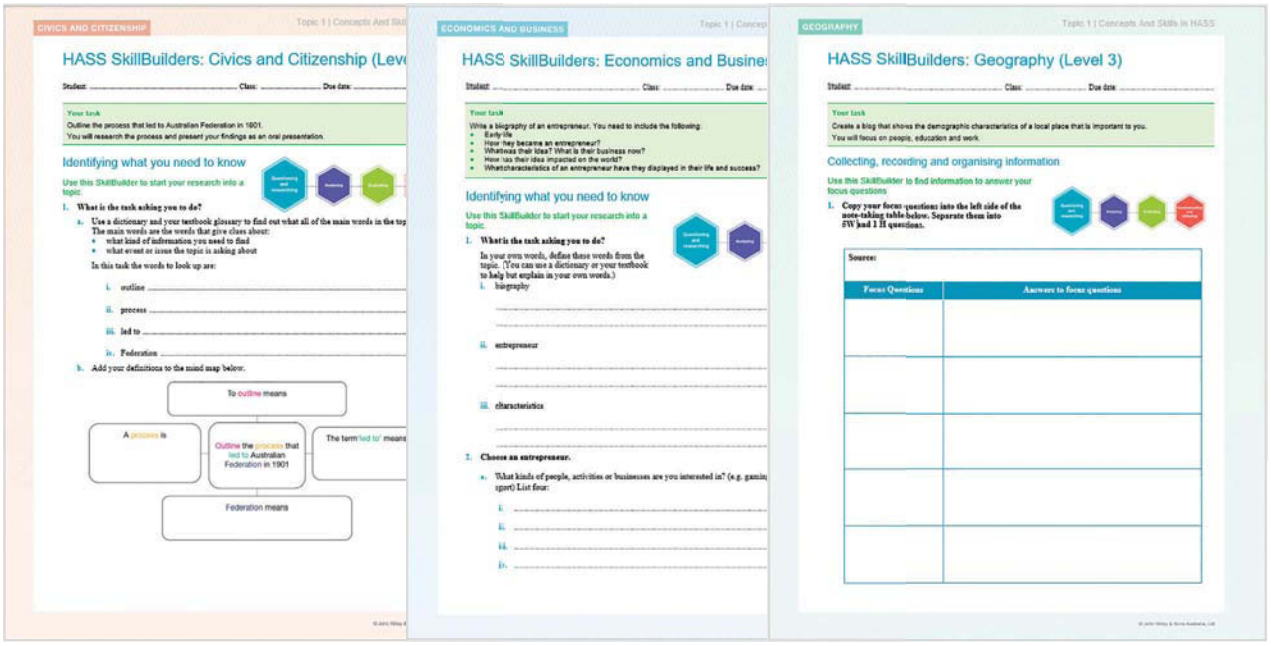
Definitions are provided within the content to help students understand key terms; online, definitions are included as clickable popup notes.

Topic-specific **reflections** help students understand their learning more effectively.

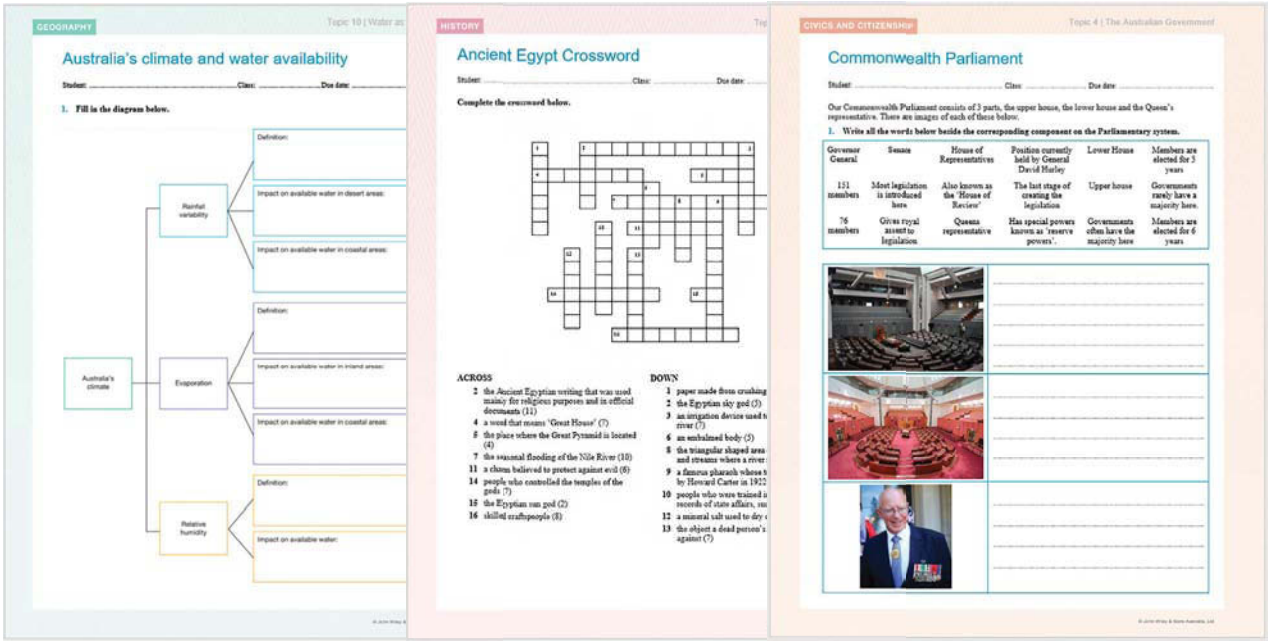
A range of questions and a post-test are available online and in print to test students' understanding of the topic.

eWORKBOOK

Jacaranda's brand-new *eWorkbook for Humanities and Social Sciences for Western Australia* is available online in learnON. The eWorkbook is the perfect companion to the series adding yet another layer of individualised learning opportunities for students. One of the main features of the eWorkbook is the Level 1, Level 2 and Level 3 individual pathway worksheets for HASS skills topics.



The eWorkbook also features fun and engaging activities for students of all abilities — from introductory activities such as language familiarisation puzzles to structured worksheets to step students through the process of evaluating their own learning — both in terms of the content understanding and skills development. Teachers, students and parents or carers can monitor progress over the course of each topic using the student learning matrix (checklist). All of these powerful resources are available in the new eWorkbook as a downloadable PDF or a customisable Word document in learnON.



ACKNOWLEDGMENTS

The authors and publisher would like to thank the following copyright holders, organisations and individuals for their assistance and for permission to reproduce copyright material in this book.

© Australian Curriculum, Assessment and Reporting Authority (**ACARA**) 2009 to present, unless otherwise indicated. The copyright material published on this website is subject to the Copyright Act 1968 (Cth) and is owned by ACARA or, where indicated, by a party other than ACARA.

Front cover

The covers of the *Jacaranda Humanities and Social Sciences for Western Australia* series are the work of WA artist Emma Blyth.



Emma's paintings express a passion for colour, and she has a unique ability in translating Australian culture to canvas. Emma utilises large brushstrokes and vibrant colours to portray scenes from Australia's rugged outback, to the beautiful beaches and forests of the southwest. Emma's art has struck a chord with collectors both nationally and internationally.

Emma is inspired by her own extensive travels and her love of the outback is obvious. She has spent months camping from the back of a ute, with a sketch book in hand.

'Camping on a river under a boab tree surrounded by brolgas, bush turkeys and cockatoos. Whistling kites hovering in the smoke of our campfire. Barramundi jumping as my man catches a mudcrab and cooks it on the coals for dinner. I love capturing the simplicity of life in this unique part of our country on canvas.'

Emma has expanded her range into quality Australian made art prints, gifts and souvenirs. All products are proudly Australian-made — most in her own backyard!

Discover more about Emma's art at https://emmablyth.com.au/

• © Anton Balazh / Shutterstock: 2 • © Kirasolly / shutterstock: 5 Nadyaeugene / Shutterstock: 6 • © Shutterstock / koya979:10, 17, 20, 25, 31, 35, 39, 42, 45, 47, 48, 50 (top) • © Chris Warham / Alamy Stock Photo: 12, 23 (top) • © Peshkova / Shutterstock: 15 • © Alister G Jupp / Shutterstock: 15 • © Public Domain: 27, 5, 15, 16 (top), 17 (bottom), 43 (bottom), 3 (top), 22 (top), 5 (bottom), 4 (middle), 4 (bottom), 5 (top), 5 (middle), 5 (bottom), 9 (bottom) • © Courtesy of Randall Bytwerk, German Propaganda Archive: 19 (bottom) • © Stocktrek Images, Inc. / Alamy Stock Photo: 19 (top) • © Alamy Stock Photo: 26 (left), 19 (top), 4 (top) • © Benny Marty / Alamy Stock Photo: 26 (right) • © Susan Flashman / Shutterstock: 43 • © sindlera / shutterstock: 53 • © frankies / Shutterstock: 50 (bottom) • © Shutterstock / sadik gulec: 2 • © Chanau / Shutterstock: 3 • © Sean Pavone / Shutterstock: 9, 9 (top) • © mentatdgt / Shutterstock: 11 • © Shutterstock / krie: 12 • © Saltbush Club www.saltbushclub.com: 16 • © Cartoon © David Pope / The Canberra Times: 18 • © Dominionart / Shutterstock: 19 • © Ortis / Shutterstock: 20 • © Augusto Colombo - ITALIA / Alamy Stock Photo: 22 • © David Clark Photography / Newspix: 26 • © Faithie / Shutterstock: 2 • © Ivan Ponomarev / Shutterstock: 3 • © Dan Breckwoldt / Shutterstock: 4 • © Commonwealth of Australia 2017:6 • © Commonwealth of Australia 2014:7 • © The Asahi Shimbun / Getty Images: 9 (bottom) • © Ned Snowman / Shutterstock: 11 • © ARTEKI / Shutterstock: 12 • © PIB / Alamy Stock Photo: 13 • © Saikat Paul / Shutterstock: 14 • © Idealink Photography / Alamy Stock Photo: 16 • © EPA European Pressphoto Agency B.V. / Alamy Stock Photo: 17 • © EPA European Pressphoto Agency B.V. / Alamy Stock Photo: 19 • © EPA European Pressphoto Agency B.V. / Alamy Stock Photo: 21 • © Worldmapper.org: 22 (top), 33 (top), 9 • © Commonwealth of Australia, DFAT, Australian AidBudget Summary 2017–18. 22 (bottom) • © Michael Amendolia / Newspix: 23 (bottom) • © ArtisticPhoto / Shutterstock: 25 (bottom) • © corgarashu / Shutterstock: 25 (top) • © lev radin / Shutterstock: 26 (top) • © Holli / Shutterstock: 26 (bottom) • © rizanda / Shutterstock: 27 • © Dimas Ardian / Stringer / Getty Images: 28 • © Chris Warham / Shutterstock: 30

• © Barry Barnes / Shutterstock: 31 • © africa924 / Shutterstock.com: 32 • © Ren © mansi / iStockphoto: 37 • © Phillip Minnis / Shutterstock: 3 • © Australian Parliament House: 4 • © Volina / Shutterstock: 6 • © Felman / Shutterstock: 7 (top) • © Boris Z. / Shutterstock: 7 (bottom) • © Rawpixel.com / Shutterstock: 9, 28 • © Elzbieta Sekowska / Shutterstock: 10 • © Stuart Monk / Shutterstock: 13 • © jan kranendonk / Shutterstock: 16 (bottom) • © Tim Graham / Alamy Stock Photo: 18 • © Photo courtesy of National Archives of Australia, NAA: A6135, K16/2/83/4:19 • © Robert Mandel / Shutterstock: 20 • © Rainer Plendl / Shutterstock: 21 (top) • © BNK Maritime Photographer / Shutterstock: 21 (bottom) • © National Gallery of Victoria, MelbourneGilbee Bequest, 1902:23 • © News Ltd / Courier Mail / Newspix: 24 • © Charles Haire / Shutterstock: 27 • © Shutterstock / creative screen: 1 • © ChameleonsEye / Shutterstock: 2 • © Nils Versemann/ Shutterstock: 3 (top) • © Shutterstock / ChameleonsEye: 3 (bottom) • © DEAN LEWINS / AAP Image: 5 (top) • © scyther5 / Shutterstock: 5 (bottom) ROB GRIFFITH / AAP Images: 7 • © David Hewison / Shutterstock: 9 • © Bettmann / getty images: 10 • © wavebreakmedia / Shutterstock: 12 (top), 12 (top), 27 (bottom), 4 (bottom), 17 • © fizkes / Shutterstock: 12 (bottom), 13 • © Shutterstock / Callahan: 2 • © Shutterstock / controlmedia: 8 • © Shutterstock / Christine Bird: 9 (top) • © Shutterstock / Jacob Lund: 9 (bottom) • © Shutterstock / Feylite: 12 • © Shutterstock / Edward Haylan: 15 • © Shutterstock / Kaspars Grinvalds: 17 • © Shutterstock / Africa Studio: 18 • © Shutterstock / Zadorozhnyi Vikto: 19 • © kurhan / Shutterstock: 2 • © potowizard / Shutterstock: 3 (top) • © Kunal Mehta / Shutterstock: 3 (bottom) • © Trading Economics: 5 (top), 5 (bottom), 6, 10, 11, 18 • © Everett Collection / Shutterstock: 8 • © Rachell Coe / Shutterstock: 12 (bottom) • © Jamie Farrant / Shutterstock: 15 (top) • © mangostock / Shutterstock: 15 (bottom) • © Madjacktaylor1970 / Shutterstock: 17 (top) • © vallefrias / Shutterstock: 19 • © Anton Gvozdikov / Shutterstock: 22 • © National Australia Bank: 23 (top) • © Shutterstock / nigel jarvis: 23 (left) • © Javen / Shutterstock: 23 (right) • © Monkey Business Images / Shutterstock: 24, 29, 260 • © Anton Watman / Shutterstock.com: 26 • © Pavel L Photo and Video / Shutterstock: 27 (top) • © Jinga / Shutterstock: 31 • © Tracey Nearmy / Getty Images: 34 (top) • © paintings / Shutterstock: 34 (bottom) • © Maksim Vivtsaruk / Shutterstock: 35 • © Commonwealth of Australia 2019. 36 (top), • © 37 RAGMA IMAGES / Shutterstock: 36 (bottom) • © TK Kurikawa / Shutterstock: 38 (top) • © alexskopje / Shutterstock: 38 (bottom) • © Natasha Kramskaya / Shutterstock: 39 • © My Portfolio/Shutterstock: 40 • © TonyV3112 / Shutterstock: 41 • © Data Sourced from Department of Foreign Affairs and Trade website – www.dfat.gov.au; Australian Chamber of Commerce and Industry 2006. Productivity Commission © Commonwealth of Australia: 42 (top) • © fizkes / Shutterstock: 42 (bottom) • © MelBrackstone / Shutterstock: 43 • © patrimonio designs ltd / Shutterstock: 44 (top) • © Constantine Pankin / Shutterstock: 44 (bottom) • © Vaclav Volrab / Shutterstock: 45 • © Mattz90Shutterstock: 46 • © Reprinted with permission of John Wiley & Sons, Inc. 47 p11irom / Shutterstock: 48 (top) • © Semmick Photo / Shutterstock: 48 (bottom) • © William Potter / Shutterstock: 50 • © DZMITRY PALUBIATKA / Shutterstock: 51 • © Syda Productions / Shutterstock: 249 • © Trade marks of The Coca-Cola Company are used with permission. The Coca-Cola Company is not the producer of this guide, nor does it endorse the contents. 250 EdBockStock / Shutterstock: 251 • © Aaron Francis / Newspix: 252 (top) • ©John Wiley & Son Australia: 252 (bottom) ArliftAtoz2205 / Shutterstock: 253 • © testing / Shutterstock: 255 • © Marina Cortese: 256 • © Thankyou Group: 257 • © Lisa F. Young / Shutterstock: 258 • © conrado / Shutterstock: 259 • © Shutterstock / yalcin sonat: 263 • © patpitchaya / Shutterstock: 265 • © RoseStudio / Shutterstock: 266 • © Laitr Keiows / Shutterstock: 2 • © 06photo / Shutterstock.com: 3 • © John Wiley & Sons Australia: 4 (top), 10 (top), 5 (top), 5 (bottom) • © vladimir salman / Shutterstock: 5 • © Tyler Olson / Shutterstock: 6 (top) • © Andrey_Popov / Shutterstock: 6 (bottom) • © ESB Professional / Shutterstock: 8 • © Odua Images / Shutterstock: 9 • © Jaren Jai Wicklund / Shutterstock: 10 (bottom) • © JuliusKielaitis / Shutterstock: 11 • © Kheng Guan Toh / Shutterstock: 14 (top) • © TungCheung / Shutterstock: 14 (bottom) • © Andy Dean Photography / Shutterstock: 15 • © Shutterstock / vgstockstudio: 19 • © mady70 / Shutterstock: 27 • © Nicoelnino/ Shutterstock: 2 • © Commonwealth of Australia Geoscience Australia 2020:8 • © AfriPop 2013. IUCN and UNEP-WCMC 2013, The World Database on Protected Areas WDPA [On-line]. Cambridge, UK: UNEP- WCMC. Available at: www.protectedplanet.net [Accessed 30/07/2013]. Made with Natural Earth Map by Spatial Vision. 4 United States Census Bureau: 11, 46 • © NASA Earth Observatory image created by Jesse Allen and Robert Simmon, using Landsat data provided by the United States Geological Survey. 12 Caleb Holder/ Shutterstock: 13, 12 (top) • © Government of India, Ministry of Home Affairs, Office of Registrar General Made with Natural Earth. Map by Spatial Vision: 14, 19 (bottom), 20 (top), 21 (top), 21 (bottom) • © Goodluz / Shutterstock: 3 (top) • © Free Wind 2014 / Shutterstock: 3 (middle) • © goodluz / Shutterstock: 3 (bottom) • © Willem van Aken / CSIRO Land and Water: 16 • © Spatial Vision: 23, 2 (bottom), 63 (bottom) • © Commonwealth of Australia, Geoscience Australia 1982. Topographic map of Daintree National Park — Mossman, QLD. 1:100 000 Series R631, Sheet 7965, Edition 1 1- AAS. 1982. Redrawn by MAPgraphics: 28 • © Reefbase: 31 • © Reefbase / Worldfiish: 32 (top), 32 (bottom), 34 • © Reefbase: 33 (top), 33 (bottom) • © Food and Agriculture Organization of the United Nations, 2015:38 • © Spatial Vision: 43 (top), 17, 25 (bottom), 22 (bottom), 23, 8, 34 (bottom), 17 (bottom), 20 (bottom) • © Source: The World Bank: Poverty headcount ratio at $1.25 a day PPP % of population: World Development Indicators. Map by Spatial Vision: 44 • © Spatial Vision: 49 • ©Rawpixel.com / Shutterstock: 99 • © Tony Campbell / Shutterstock: 1 • © commonwealth of australia geoscience australia 2013. • © Commonwealth of Australia Geoscience Australia 2013. • © Commonwealth of Australia Department

of Sustainability, Environment, Water, Population and Communities 2013. Map by Spatial Vision: 2, 7 (bottom) • © Global Footprint Network: 6 • © Bureau of Meterology: 8 • © University Corporation for Atmospheric Research: 9 • © The Garnaut Climate Change Review 2008, p. 88:12 • © Energy Information Administration EIA: 14 • © Photodisc: 15 • © Bureau of Meteorology and CSIRO: 19 • © 2016 Climate Council: 20 • © Zak Simmonds / Newspix: 21 • © Harvepino/ Shutterstock: 23 • © paintings / Shutterstock: 24 • © Dirk Ercken/Shutterstock: 1 • © Pauline English: 5 • © MAPgraphics Pty Ltd Brisbane: 7 (top) • © Valentin Valkov / Shutterstock: 8 • © HHelene / Shutterstock: 10 • © Mark Winfrey / Shutterstock: 11 (top) • © Neil Bradfield / Shutterstock: 11 (middle) • © Clem Sturmfel / Dept of Primary Industries Vic: 11 (bottom) • © John Ivo Rasic: 12 (bottom) '• © State of Victoria Department of Environment and Primary Industries 2013. Reproduced with permission. Photograph by Stuart Boucher.': 13 • © Stuart Boucher / Dept of Primary Industries Vic: 14, 15 • © Map drawn by Spatial Vision. Data sourced from Western Australian Land Information Authority, Department of Primary Industries and Regional Development, Soil landscape land quality - Wind Erosion Risk DPIRD-016, License under Creative Commons Attribution 4.0 https://creativecommons.org/licenses/by/4.0/: 16 • © Pete Titmuss / Alamy Stock Photo: 18 • © Ashley Whitworth / Shutterstock: 19 (bottom) • © Genevieve Vallee / Alamy Stock Photo: 21 • © Made with Natural Earth. Vector Map Level 0 Digital Chart of the World Map by Spatial Vision: 22 (top) • © doraclub / Shutterstock: 22 (bottom) • © UNEP World Conservation Monitoring Centre Made with Natural Earth. Map by Spatial Vision. 25 • © SJ Allen / Shutterstock: 27 • © United States Department of Agriculture, Natural Resources Conservation Service, Soil Survey Division, World Soil Resources; Paul Reich, Geographer. 1998. Global Desertification Vulnerability Map. Washington, D.C. 28 • © Image courtesy Jacques Descloitres, MODIS Rapid Response Team at NASA GSFC: 29 (top) • © Mike Patterson / Alamy Stock Photo: 29 (bottom) • © velvetweb / Shutterstock: 31 YuliiaKas / Shutterstock: 33 • © Commonwealth of Australia Geoscience Australia 2013. • © Commonwealth of Australia Department of Sustainability, Environment, Water, Population and Communities 2013. Map by Spatial Vision: 34, 35 (top) • © mrfotos / Shutterstock: 35 (bottom) • © Western Australia Agriculture Authority Department of Primary Industries and Regional Development: 36 (bottom) • © Green Eyes / Alamy Stock Photo: 36 (top) • © K.A.Willis / Shutterstock: 37 (top) • © Allan Fox & DSEWPAC Australia • © Commonwealth of Australia 2013. 37 (bottom) • © Grezova Olga / Shutterstock: 38 • © Mike Keating / Newspix: 40 • © Creative Commons: 43 • © Sam DCruz / Shutterstock: 45 • © J C Clamp / Alamy Stock Photo: 47 (bottom) • © Paul Dymond / Alamy Stock Photo: 47 (top) • © edelmar / Getty Images: 49 • © Chyrko Olena / Shutterstock: 50 (top) • © Milan Rybar / Shutterstock: 50 (bottom) • © Belozorova Elena / Shutterstock: 55 (top) • © Frantisek Czanner / Shutterstock: 55 (bottom) • © Ashley Whitworth / Shutterstock: 56 • © Vince Streano / Getty Images: 2 • © Peter Harrison / Getty Images: 3 • © Martin Maun / Shutterstock: 4 • © Paul A. Souders/Corbis/VCG / Getty Images: 8 (bottom) • © Rodney Hyett / Getty Images: 8 (top) • © SeaphotoartShutterstock: 12 • ©Mohammed Seeneen / AAP Newswire: 13 • © MAPgraphics Pty Ltd Brisbane: 14 • © Ashley Cooper / Getty Images: 15 • © Made with Natural Earth. Map by Spatial Vision. 16 (top) • © Mohamed Shareef / Shutterstock: 16 (bottom) • © imageBROKER / Alamy Stock Photo: 17 • © STR / Getty Images: 19 • © Based on information from the United Nations Environment Programme: 22 (top) • © The Asahi Shimbun Premium / Getty Images: 22 (bottom) • © David Wall Photo / Getty Images: 24 • © Brad Wagner / Newspix: 25 (top) • © 2012 Oz Aerial Photos Australia: 26 • © NSW Land and Property: 27 • © JC Photo / Shutterstock: 29 • © unterwegs / Shutterstock: 30 • © Tanya PunttiShutterstock: 31 • © chungking / Shutterstock: 1 Nataliya Hora / Shutterstock: 2 • © bmphotographer / Shutterstock: 3 (bottom) • © Alexandr Vlassyuk/Shutterstock: 4 • © VIGO-S / Shutterstock: 5 • © Data sourced from: United Nations, Population Division 2017, World Population Prospects: The 2017 Revision, Medium Variant: 6 • © Data sourced from United Nations Department of Economics and Social Affairs; Worldatlas.com: 7 (top) • © Demographia World Uban Areas http://www.demographia.com/db-worldua.pdf: 7 (bottom), 8 (top) • © donsimon / Shutterstock: 8 (bottom) • © Steve Mc Carthy / Shutterstock: 11 • © matt mawson / corbis: 13 • © Randy Olson: 14 (top) • © AFP / Getty Images: 14 (bottom) • © Vladimir Korostyshevskiy / Shutterstock: 17 (top) • © Roy Garner / Alamy Stock Photo: 17 (bottom) • © Esin Deniz / Shutterstock: 18 (top) • © Paul Mayall Australia / Alamy Stock Photo: 18 (bottom) • © Made with Natural Earth. © OpenStreetMap contributors Map by Spatial Vision. 19 (top) • © Jonathan Blair / Getty Images: 19 (bottom) • © Luigi Costantini / AAP Newswire: 20 • © Paolo Bona/ Shutterstock: 24 • © Yury Birukov / Shutterstock: 26 • © Elena Mirage / Shutterstock: 27 • © David Bokuchava / Shutterstock: 28 • © g215 / Shutterstock: 33 (bottom) • © Getty Images: 10, 22, 13, 22, 18, 50 (top), 59 (middle) • © Alamy: 11, 16, 10, 23 Shutterstock / xpixel: 34 • © Shutterstock / oleksiy mark: 35 (top) • © Shutterstock / photoholgic: 35 (bottom) • © Shutterstock / maria pomelnikova: 15 • © Shutterstock / rich carey: 29 • © Shutterstock / shine nucha: 30 • © Shutterstock / joyfull: 31 • © Anton_Ivanov / Shutterstock: 2 • © United Nations Development Report Made with Natural Earth. Map by Spatial Vision: 5 (top) • © United Nations Publications: 11 • © United Nations Inter-agency Group for Child MortalityEstimation UN IGME, 'Levels & Trends in Child Mortality: Report 2017, Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation', United Nations Children's Fund, New York, 2017. 12 • © Andrei Shumskiy / Shutterstock: 13 • © Source: World Bank Data. Map by Spatial Vision: 14, 15 (top), 16 • © Source: UNFPA Data. Map by Spatial Vision: 15 (bottom) • © Data Source: World Health Organization Map Production: Health Statistics Information Systems HSI World Health Organization Total population: United Nations Population Division. Regional aggregates calculated by

UNFPA based on data from United Nations Population Division. 17 • © Matyas Rehak / Shutterstock: 18 • © Based on information taken from United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2015 Revision. 19 (top), 15 • © Percentage of Population Below Poverty Line URP Consumption, ChartsBin.com, viewed 27th August, 2013, Made with Natural Earth. Map by Spatial Vision: 20 (bottom) • © Mlenny / Getty Images: 20 (bottom) • © singh_lens / Shutterstock: 22 • © Source: World Bank: 23 • © Instituto Brasileiro de Geografia e Estatística Made with Natural Earth. Map by Spatial Vision. 24 • © Publio Furbino / Shutterstock: 25 (left • ©) Jan Sochor / Alamy Stock Photo: 25 (right) WHO/UNICEF JMP report Progress on household drinking water, sanitation and hygiene 2000-2017: Special focus on inequalities assesses progress made at national, regional and global levels in reducing inequalities in WASH services. New York: United Nations Children's Fund UNICEF and World Health Organization WHO, 2019:27 • © UNICEF and World Health Organization: 28 • © Australian Bureau of Statistics / Spatial Vision: 30 Brisbane / Shutterstock: 31 (bottom) • © Bill Bachman / Alamy Stock Photo: 31 (top) • © Australian Bureau of Statistics: 31 (bottom), 32, 34 (top) • © Susanna Bennett / Alamy Stock Photo: 33 • © Australian Institute of Health & Welfare: 34 (bottom) • © Outback stores: 35 • © Commonwealth of Australia GimageBROKER / Alamy Stock Photoeoscience Australia 2013.• © Commonwealth of Australia Australian Bureau of Statistics 2013. Map by Spatial Vision: 36 • © John Wollwerth / Shutterstock: 37 • © Punghi / Shutterstock: 39 • © Australian Bureau of Statistics: 44 (top) • © Lucian Coman / Shutterstock: 44 (bottom) • © Milles Stud / Shutterstock: 2 (top) • © FAO 2013 Made with Natural Earth. Map by Spatial Vision: 3 (top) • © FAO, IFAD, UNICEF, WFP and WHO. 2018. The State of Food Security and Nutrition in The World 2018. Building Climate Resilience for Food Security and Nutrition. Rome, FAO: 3 (bottom) • © Global Food Consumption - Richard & Slavomir Svitalsky / Cartoon Movement: 4 (top) • © Amir Ridhwan / Shutterstock: 7 • © EPA European Pressphoto Agency B.V. / Alamy Stock Photo: 9 (top), 24 (top), 25 • © World Bank: 10 <• © Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2016 GBD 2016 Results. Seattle, United States: Institute for Health Metrics and Evaluation IHME, 2017:11 • © Meunierd / Shutterstock: 13 <• © Based on information taken from United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2015 Revision: 15 • © Mykeyruna / Shutterstock: 14 • © c Freedom House. Freedom in the World 2018 www.freedomhouse.org: 17 • © Copyright © International Labour Organization 2017:19 • © Internal Displacement Monitoring Centre IDMC: 21 • © Based on data from UNHCR, Government of Turkey: 22 • © EIU Data Liveability Index 2018:23 • © Alexander Kots / Shutterstock: 24 (bottom) • © Bulent Kilic / AFP / Getty Images: 29 (top) • © Thanassis Stavrakis / AAP: 29 (bottom) • © DPA Picture Alliance / Alamy Stock Photo: 29 (top) • © Institute for Economics & Peace. Global Peace Index 2018: Measuring Peace in a Complex World, Sydney, June 2018. Available from: http://visionofhumanity.org/reports: 31 • © GNES / Shutterstock: 32 • © Data from DFAT: 34 (top• © John Austin / Shutterstock: 35 (top) • © Anne Yzebe / Medecins Sans Frontieres Australia: 35 (bottom) • © Monkey Business Images / Shutterstock.com: 37 • © Suttirat Wiriyanon / Shutterstock: 38 • © Riccardo Mayer / Shutterstock: 39 • © Martin Williams / Alamy Stock Photo: 2 • © Archive PL / Alamy Stock Photo: 3 • © Gino Santa Maria / Shutterstock: 4 • © Chronicle / Alamy Stock Photo: 8 (top) • © Gbrev / Alamy Stock Photo: 8 (bottom) • © Bettmann / Getty Images: 9, 16 (top), 16 (bottom), 17 (top) • © Shutterstock / Everett Historica: 10 • © Australia War Memorial Artv10464:19 (bottom) • © Noel Counihan / Copyright Agency, 2020:19 (top) • © Australian War Memorial ARTV02161:22 (bottom) • © Australian War Memorial ARTV06721:22 (top) • © Ullstein Bild Via Getty Images: 4 (bottom) • © Bettmann / Corbis: 11, 26 • © News Ltd / Newspix: 18, 20 (top), 21 • © Milleflore Images / Shutterstock: 3 (bottom) • © Australian War Memorial AWM 050124:3 (top) • © Museum Victoria: 4 • © Australian War Memorial AWM 003288:5 (left) • © Australian War Memorial P02018.133:5 (top) • © Australian War Memorial MED1826:5 (bottom) • © Moore, Alan Blind man in BelsenOil on canvas, 1947Australian War Memorial ART27620:5 (top) • © Bettmann Archive: 7, 13 (top), 13 (bottom) • © Map by Spatial Vision. Based on map on p. 11 of Conflict in the Pacific, 1937-1951 by Roger Bell, et al., Cambridge University Press, Melbourne, 2005:12 • © Map by Spatial Vision: 16, 23 (bottom), 57 (top) • © Australian War Memorial P02436.001:17 (bottom) • © Everett Historical / Shutterstock: 17 (top) • © Reproduced with permission from Pearson Australia, Re History Zone 2 by Robert Darlington, Vicki Greer, John Hospodaryk: 22, 27 • © By Official U.S. Navy photo 19-N-68376 from the U.S. Navy Naval History and Heritage Command: 23 (top) • © Australian War Memerial AWM 040609:31 (top) • © Australian War Memorial 127894:31 (middle) • © Australian War Memorial AWM 041103:31 (bottom) • © Robert Darlington: 32 (top), 32 (bottom), 53, 62 (bottom), 63 (top), 70, 72 • © Map by Spatial Vision. Based on inside front cover map from Retreat from Kokoda by Raymond Paul, William Heinemann Australia, 1982:34 • © Australian War Memorial AWM 013288: 35 • © Mainwaring, Geoffrey, Australian action at Buna 1932 Oil on canvas, 274 × 137 cm, Australian War Memorial ART27547:37 • © RAAF publisher Coming? Then hurry! 1940 Photolithograph, 100.5 × 73.2 cm Australian War Memorial ARTV04297:41 • © Norton, Frank HMAS Sydney in action against Italian cruisers 1941 Oil on artist's board, 30.5 × 37.4 cm Australian War Memorial ART30095:42 • © Australian War Memorial AWM 027451:46 • © Australian War Memorial AWM 042773:47 (bottom) • © National Archives Of Australia: 47 (top) • © Australian War Memorial AWM 045120: • © 48 Out of Copyright: 50 (bottom) • © Photo12 / Getty IMages: 52 (top) • © AWAS, McCowan, Ian, Second Aust Army Svy Mob Reproduction Section Release a man. Join the A.W.A.S. Offset lithograph on paper,

1941-1945 Australian War Memorial ARTV01049:52 (bottom) • © Australian War Memorial AWM140631:55 • © National Archives Identifier NAID 195515:57 (bottom) • © Keystone Pictures USA / Alamy Stock Photo: 58 • © The Life Picture Collection Via: 59 (top) • © Roger Viollet via Getty Images: 59 (bottom) • © Australian War Memorial AWM 098776:71 • © Australian War Memorial P02018.390:62 (top) • © Australian War Memorial P03007.015:74 • © Moore, Alan SS guards burying dead, BelsenOil on canvas, 1947Australian War Memorial ART27621:65 • © Australian War Memorial P02018.359:67 (top) • © Argus Newspaper Collection, State Library of Victoria: 67 (bottom) • © National Library of Australia: 67 (top) • © Australian War Memorial P01499.007:68 • © Keith Tarrier / Shutterstock: 74 • © Australian War Memerial AWM 020623:81 (top) • © Australian War Memorial ART22831:81 (bottom) • © News Ltd / Newspix: 3, 8 (top) AF Archive / Alamy Stock Photo: 5 (top) • © Alan Moir, Sydney Morning Herald: 5 (bottom) • © Mitchell Library, State Library of NSW, Home And Away - 17963:8 (bottom) • © Mitchell Library, State Library of NSW, Call Number: q 059 / 9 Mitchell Library Printed Books Collection: 9 • © State of Western Australia. Edwardi Septimi Regis. Western Australian Legislation. Licensed under under aCreative Commons Attribution 4.0 International Licence CC BY 4.0:11 • © State Records NSW; NRS 4346; Cootamundra Training Home for Girls - School © State of New South Wales through the State Records Authority of NSW 2016:13 • © Fotosearch / Stringer / Getty Images: 14 • © Robert Mcfarlane: 20 (bottom) • © Commonwealth of Australia National Archives of Australia 2015:23 (top) • © National Library of Australia: 23 (bottom) • © Mapgraphics: 26 (top) • © Yui / Shutterstock: 26 (bottom) • © Tracey Nearmy / AAP Image: 28, 44 (top) • © AAP Image / National Gallery of Australia: 31 • © National Archives of Australia: F1, 1968 / 2735o: 35 (top) • © Department of the Prime Minister and Cabinet / The Australian Commonwealth: 35 (bottom) • © Oliver Strewe / Getty Images: 36 • © Geospatial Services, National Native Title Tribunal 14/07/2020. Reproduced with permission under Creative Commons Attribution 4.0 International license: https://creativecommons.org/licenses/by/4.0/: 38 • © Stephen Cooper / Newspix: 40 • © Ray Strange / Newspix: 42 • © Julian Smith / AAP Image: 44 (bottom) • © Fiona Morrison / Newspix: 46 • © Commonwealth of Australia 2016:49 • © Photo Courtesy Brien Holden Vision Institute: 50 (bottom) • © Renee Nowytarger / Newspix: 50 (top) • © Stuart Mcevoy / Newspix: 52 • © c Broddi Sigurdarson: 55 • © Brett Costello / Newspix: 56 • © Filedimage / Shutterstock: 62 • © Dave Hewison Photography / Shutterstock: 63 • © Alexander Raths / Shutterstock: 219 • © MagSpace / Shutterstock: 464

Every effort has been made to trace the ownership of copyright material. Information that will enable the publisher to rectify any error or omission in subsequent reprints will be welcome. In such cases, please contact the Permissions Section of John Wiley & Sons Australia, Ltd.

HASS concepts and skills

1.1 Key concepts in HASS 2
1.2 Key skills in HASS 5
1.3 SkillBuilder: Identifying knowledge and perspectives 8
1.4 SkillBuilder: Writing and dissecting research questions 11
1.5 SkillBuilder: Finding and referencing primary and secondary sources 14
1.6 SkillBuilder: Analysing primary and secondary sources 18
1.7 SkillBuilder: Identifying and comparing perspectives 23
1.8 SkillBuilder: Identifying and explaining relationships and patterns 29
1.9 SkillBuilder: Forming strong conclusions based on evidence 31
1.10 SkillBuilder: Proposing plausible explanations for patterns and relationships 34
1.11 SkillBuilder: Proposing possible actions and predicting their outcomes 36
1.12 SkillBuilder: Choosing appropriate formats and language 40
1.13 SkillBuilder: Developing strong evidence-based discussions and explanations 43
1.14 SkillBuilder: Reflecting on research techniques and findings 47
1.15 Review 49

1 HASS concepts and skills

1.1 Key concepts in HASS

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

1.1.1 Overview

Welcome to Year 10! By now, you will have gained a broader understanding of the world around you and how you fit into that world for your studies of HASS. You will also have developed the skills needed to further investigate these things. In Year 10, you will refine your skills and deepen your ability to research and form strong, evidence-based conclusions.

Think back to the analogy from Year 9, that compares learning the vital HASS skills with swimming. To continue that analogy into Year 10, you are now at the point where you can swim in a race or swim at the beach without a parent watching your every move. You may need to check with your coach or the lifeguard every once in a while, but you are at the stage when your basic swimming skills are sound and can be developed independently. That means one thing: practice.

The same applies to your HASS inquiry skills. You may need to check some things with your teacher, but overall you are able to forge ahead and investigate the world and other things that are of interest to you. Like any skill, however, you also have to practise.

Resources

eWorkbook Customisable worksheets for this topic (ewbk-5995)

FIGURE 1 This is a year to practise and refine your skills.



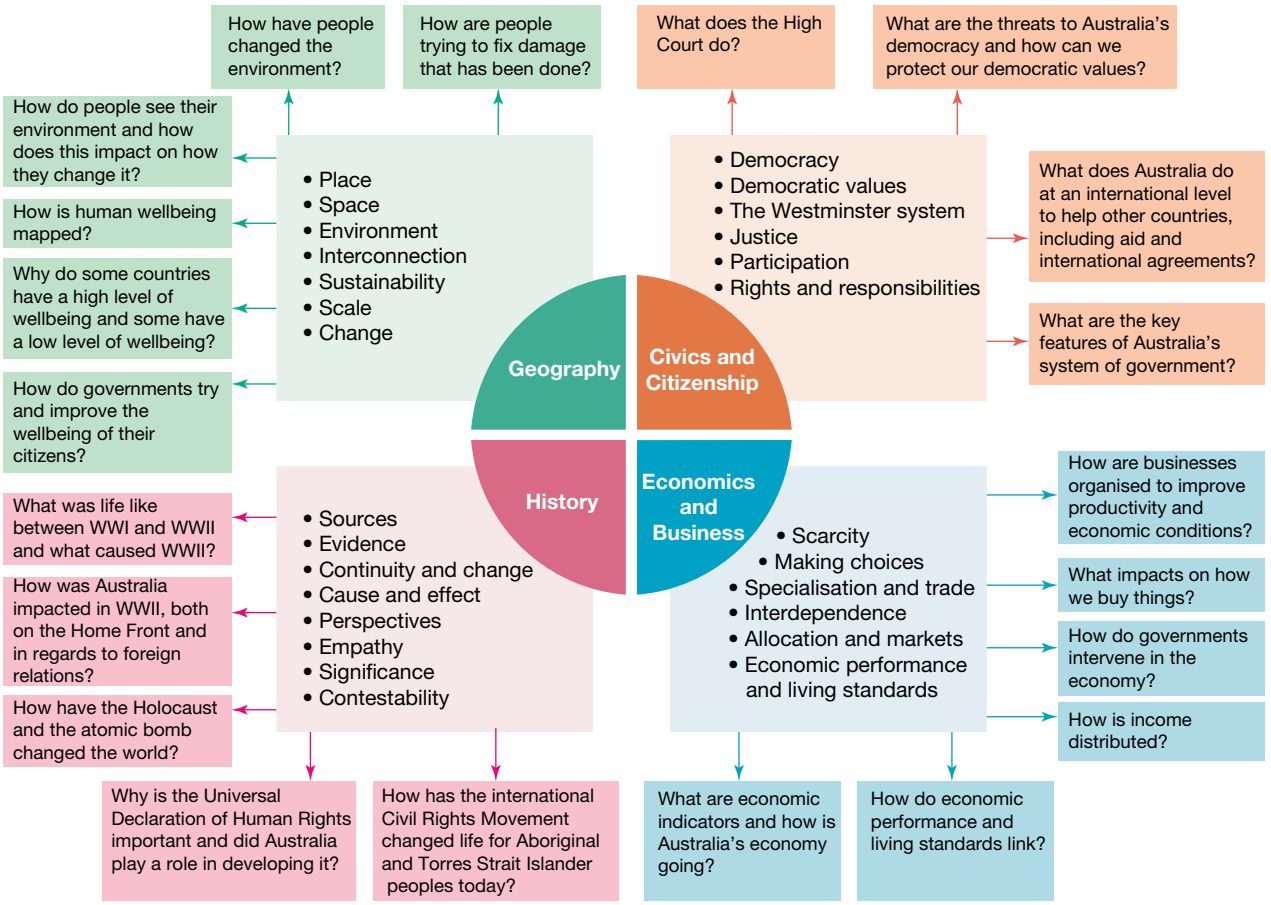
1.1.2 Key concepts in Year 10 HASS

Let's have a look at what you will be specifically learning in Year 10. Remember everything you learn in HASS can be interconnected and you can use what you learn in one context and apply it to the others. For example, you can look at the civil rights movement for Aboriginal and Torres Strait Islander peoples and see how this movement changed the Australian Constitution.

You will also see that in Year 10 you are investigating more issues related specifically to Australia, both national and on a global level. This is designed to help you understand the world around you on a larger scale.

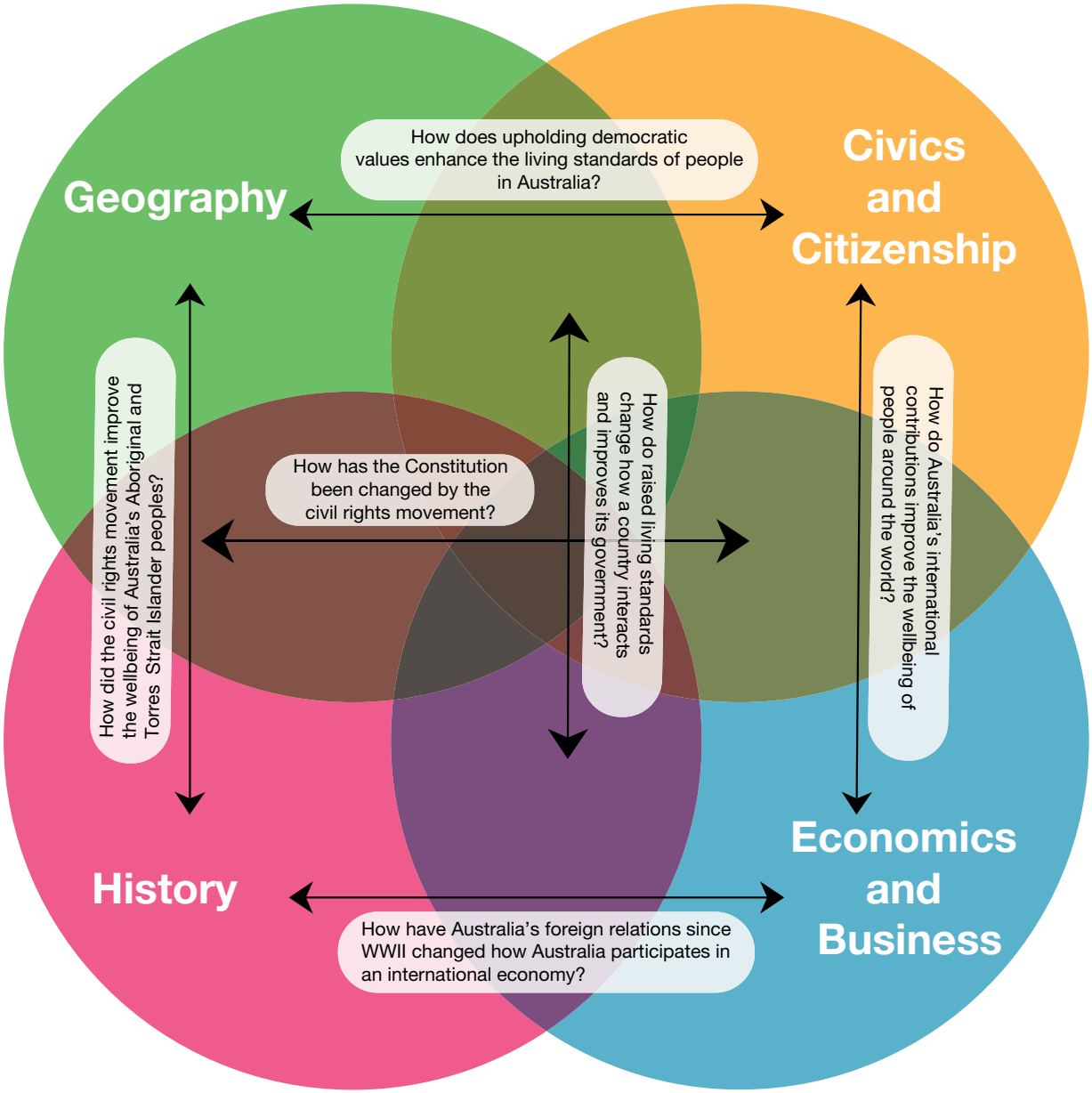
FIGURE 2 shows the HASS key concepts. You will know them well by now as you will have been learning about them in increasing detail from primary school to now.

FIGURE 2 The main concepts in HASS for each subject



The subjects in HASS are all closely connected. For example, this year, you will explore some of the following connections.

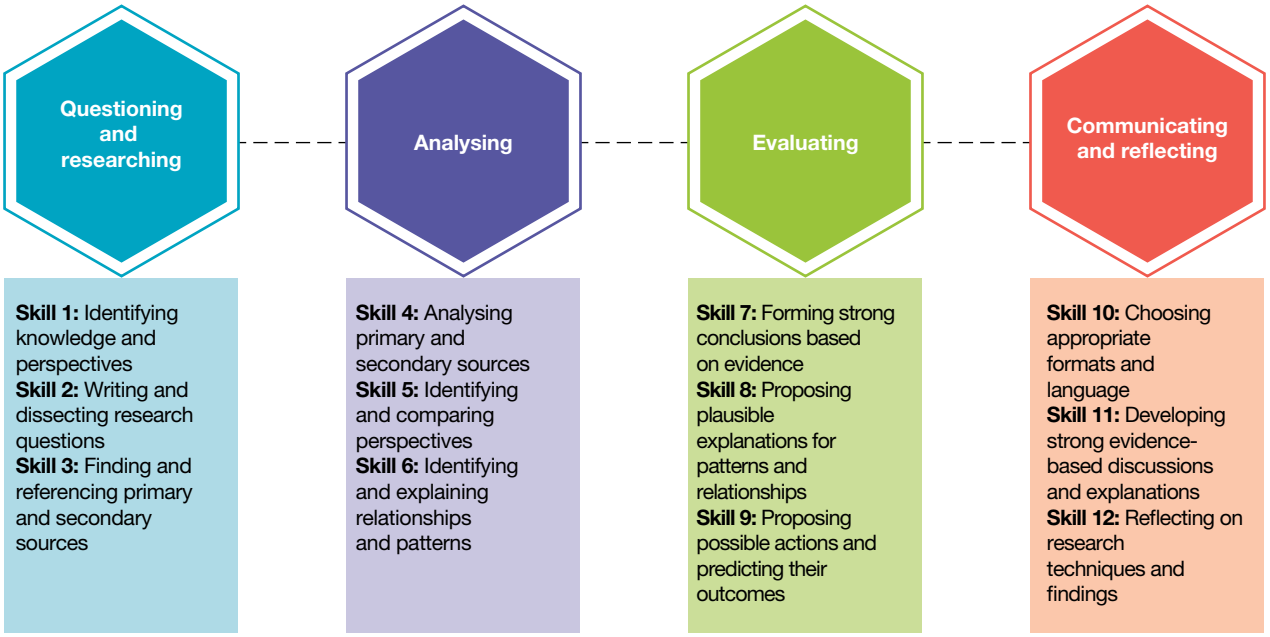
FIGURE 3 The different subjects in HASS are all connected.



1.2 Key skills in HASS

1.2.1 What are the HASS skills?

FIGURE 1 The HASS skills you will learn in year 10.



The wonderful thing about learning about HASS is that just by attending class you are learning about the world around you. You are doing this by learning specific content in class and researching things that are of interest to you. To do this you use your HASS skills. Since primary school you have been using these skills to find out what you know, what you need to know and then finding out the answers to fill in your gaps.

In Year 9 it became more important to see that other people had their own viewpoints and understanding why they had these perspectives. It was also important to see how events and ideas can have an impact on something and how this change can affect everything else.

In Year 10 you will continue to refine these skills and get ready to utilise these skills in the various upper school HASS subjects.

1.2.2 Questioning and researching



When you are given an event or an issue to research the first thing you should do is plan what you need to do. Planning is important because it helps guide the rest of your research and helps you stick to a time limit. The first part of your plan should always be developing questions to answer. Again, the purpose of this is to help figure out what you need to know to proceed with your task. It is really important to have relevant questions that will help guide your research.

Once you are happy with your questions you need to do some research. You need to research so that you can find information, but also to find sources that help prove any theories or ideas you may wish to communicate at the end of your project. As you will have learned in previous years, it is really important to find a variety of sources but also to ensure the information is reliable and valid — this brings us back to the importance of your questions. Really good questions make it easy to find good sources.

1.2.3 Analysing



Analysing sources is looking at the sources for information. In Year 10 you can't just rely on a Wikipedia page (and as you know from previous years in HASS, you should never rely on *only* using a Wikipedia page) or an up-to-date encyclopedia entry (even though you can rely on it to be reliable as a published and fact-checked document).

This year, you will be expected to analyse a wider range of sources in more depth. This can be data, maps, photos and cartoons. The more sources you have, and the more thoroughly you analyse them to see how all of the parts of the issue form a bigger picture, the more thorough your analysis will be.

1.2.4 Evaluating



Evaluating is about examining your information and evidence and drawing solid conclusions based on the evidence at hand. Basically, you need to make a decision about what you think about what you have been asked to research.

You do this by gathering all your information and seeing how it matches up with your hypothesis. If there are any gaps or things you can't explain, then go back and do a bit more research. A strong evaluation has lots of evidence to back it up. In fact, for every statement you make you should have a piece of evidence to solidify the statement.

1.2.5 Communicating and reflecting



Communicating and reflecting are important because you need to tell people what you learned. That's the communicating part. A vital part of researching is reflecting. This is when you look back at what you learned and how well you learned it.

If you think back on what you learned, it helps you think about the world and your place in the world. You reflect on how you learned so that you can improve for the future. HASS inquiry skills are lifelong skills that you will use in your future jobs, at university or TAFE, but also every time you read a news headline. By consistently reflecting on your learning processes you refine these skills until they become second nature.

1.2.6 HASS skills focus in Year 10

Once you have built these skills and become a more curious and independent researcher, you will be able to make choices about what interests you, what issues you want to be passionate about and how you fit into the world around you. These skills are what we call 'transferable' skills too. That means that they don't just apply to HASS and related careers. The ability to think critically, consider the perspectives of other people and understand the world are very useful and sought after skills in the workplace, no matter what industry or type of job you want.

To return to our swimming analogy, remember that people learn to swim at different rates. Some of you will have learned these early swimming techniques easily while you were still in primary school, others of you might not feel confident in the water yet. The same applies to HASS skills. Others in your class might be ready to move on to swimming time trials, but if you're not confident swimming out of your depth yet you should always ask for a little more coaching. For many of the tasks in this resource, you will find three different pathways or choices are supplied for the one task.

- Level 1 steps through a task in detail, step by step. It's a 'swimming lesson' for those of you who might feel like your technique still needs more work.
- Level 2 gives you some structure and help, perhaps some hints to refine your technique at the end of each lap.

- Level 3 is for students who are ‘confident swimmers’ who feel that their technique is strong and they’d like to train more independently.

Some of you might easily breeze through a ‘level 3’ pathway in backstroke but need the support of a ‘level 1’ pathway in butterfly — the same applies to HASS skills. You might need more support with some skills, and less support with others. It’s about finding the right balance of challenge to move you up to the next level. You can always ask for a little more coaching. For many of the tasks in this resource, you will find three different pathways or choices are supplied for the one task.

- Level 1 steps through a task in detail, step by step. It’s a ‘swimming lesson’ for those of you who might feel like your technique still needs more work.
- Level 2 gives you some structure and help, perhaps some hints to refine your technique at the end of each lap.
- Level 3 is for students who are ‘confident swimmers’ who feel that their technique is strong and they’d like to train more independently.

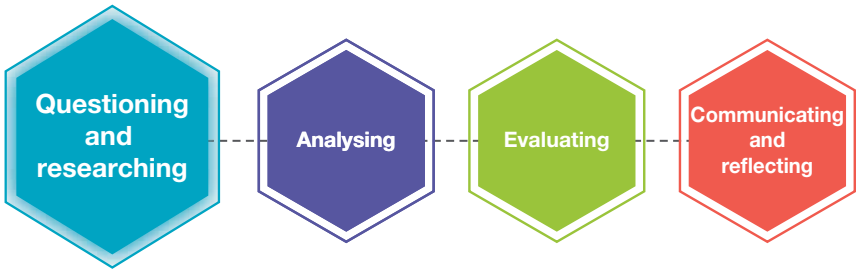
FIGURE 2 Your HASS skills will build in complexity across years 7-10.



1.3 SkillBuilder: Identifying knowledge and perspectives

1.3.1 When to use this SkillBuilder

This SkillBuilder develops your questioning and researching HASS skills. Use this SkillBuilder at **the start** of your inquiry process.



1.3.2 Tell me

Once you know what you are researching, you need to think about what you already know. Write down as many things as you can think of about the topic. Do you have a view or opinion on this topic? Write that down as well.

An important part of your research in Year 10 HASS is thinking about what other people believe or feel about an issue too. Consider who else might have a view on this issue; write down any other perspectives that come to mind.



In Year 10 HASS, the focus of this skill moves beyond identifying and explaining what you already know and think about your topic. You also need to identify what other people think about the topic and understand the reasons why perspectives differ.

1.3.3 Show me

The point of this process is finding out what you need to know to improve your understanding of the issue. This isn't just about filling in gaps in your factual knowledge, you should also investigate other people's differing perspectives or views on the issue.

Step 1: Identify any misconceptions in your knowledge

A misconception is something that you thought you knew as a fact, but was based on misleading information. Maybe you thought Australia didn't provide international aid because someone told you that a while ago. This is incorrect; it is a misconception.

Brainstorm what you already 'know'. Imagine you have been asked to investigate ways in which Australia helps other countries in the world.

You might list that Australia provides developing countries with aid to help improve the people's wellbeing.

Is this true? In practice? All the time? For all developing countries? Is it also given to developed countries? Is this the reason all of the time or only some of the time or only in theory? Examine your own 'knowledge' critically.

- List what you believe to be true about the topic.
- Spend a few minutes fact-checking your knowledge.
- Find evidence to support what you know is correct; if there is no evidence, perhaps what you thought was a fact was actually a misconception.

Step 2: Identify the gaps in your knowledge

Based on your examination of your existing knowledge base, what don't you know? These are the gaps, or the things that are missing in your knowledge. What question arose?

Brainstorm what you *might* not know, or questions that arose for your personal fact-check, as well as things that you could already identify as gaps in your knowledge.

Your brainstorm might include some of the following questions:

- What is a developing country?
- Why does Australia help other countries?
- Is our aid effective?
- What are the reasons why we give aid?

Step 3: Identify your personal perspectives and compare them with other people's

Do you have a viewpoint on the issue? Do you think Australia should give aid, but give less money, or have more of a say in where the money goes? This is your perspective. Write it down as a really clear sentence; being able to clearly and concisely explain your view will help you focus on assessing whether your view is justified during your research process.

> *Australia should give aid to help other countries improve their wellbeing because everyone deserves to have a good life.*

FIGURE 1 Without considering your existing views or knowledge of international aid, it's hard to research the topic with an open mind.



Consider what other people might think of your view. Who has thoughts on this? Your parents will and so might your friends. Politicians have views on this issue and the people who receive the aid also have a view. Write down what you think these views might be. By doing this you are able to guide your research and fine tune your own perspective as you gather your information.

WHAT IF I DON'T KNOW WHO MIGHT HAVE A DIFFERENT VIEWPOINT?

If you're not sure who the key stakeholders are regarding an issue, begin by writing down the possible views in a more abstract way but focusing on the factors that might influence people's opinions.

- How would economic factors influence people's opinions?
- How would environmental factors influence people's opinions?
- How would social factors influence people's opinions?
- How would political factors influence people's opinions?

In terms of Australia's aid commitments, some of your brainstorm of perspectives might include:

- **Economic factors:** people who are worried about and believe in reducing government spending might want us to give less aid.
- **Environmental factors:** people who are concerned about the environment might want us to give different types of aid that allows people to grow their own food and access their own water, so that it is more sustainable.
- **Social factors:** people who are concerned about social factors might want to see more aid given to poorer communities within Australia rather than overseas.
- **Political factors:** people who are concerned about political factors might consider aid to be an important international obligation.



1.3.4 Let me do it

Practise your skills at identifying perspectives and knowledge using the following activities.

- Follow the short version of the steps in the **Review** section at the end of this topic.
- Use the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Brainstorm what you know and think about Australia's system of government and compare and contrast the main elements of Australia's system with the system of either Indonesia, India or Japan. Identify what you do and don't know about this topic, and the different points of view that might exist about how the systems compare.

Economics and Business

Brainstorm what you know and think about Australia's economic performance and standard of wellbeing. Compare these with another country that has poorer economic performance and a lower standard of wellbeing. You need to research the traditional indicators of economic performance, as well as access some of the wellbeing measurement tools. Identify what you do and don't know about this topic, and the different points of view that might exist about how the places compare.

Geography

Select one of the following types of environments and conduct a comparative study of environmental change for Australia and another country.

- Land
- Inland water
- Coast
- Marine
- Urban

Identify what you do and don't know about this topic, and the different points of view that might exist about how the places compare.

History

Brainstorm what you know about the Universal Declaration of Human Rights. Choose three articles to learn more about. You will be investigating how Australia meets the criteria for these articles, or what we are doing to improve our performance in them. Choose another country and compare their performance with Australia's. Identify what you do and don't know about this topic, and the different points of view that might exist about how the places compare.

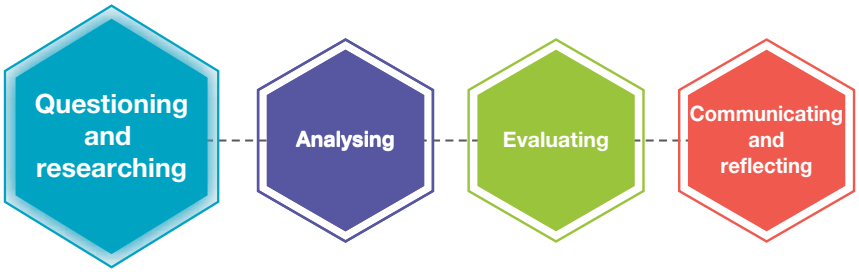
on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-5982), Level 2 (ewbk-5983), Level 3 (ewbk-5984)
Economics and Business: Level 1 (ewbk-5985), Level 2 (ewbk-5986), Level 3 (ewbk-5987)
Geography: Level 1 (ewbk-5988), Level 2 (ewbk-5989), Level 3 (ewbk-5990)
History: Level 1 (ewbk-5991), Level 2 (ewbk-5992), Level 3 (ewbk-5993)

1.4 SkillBuilder: Writing and dissecting research questions

1.4.1 When to use this SkillBuilder

This SkillBuilder develops your questioning and researching HASS skills. Use this SkillBuilder **after** you have closely examined your task and your existing knowledge, and identified the range of possible perspectives on the topic. Use this SkillBuilder **before** you start looking for sources of information.



1.4.2 Tell me

Having identified your gaps and misconceptions on an issue you need to fill them. You do this by writing good research questions so that you can find well-targeted and reliable information. As you have learnt in previous years of HASS, if a question is too broad you will find too much information and you will have to wade through it all to decide what is accurate and reliable. If a question is too narrow you may not find all of the information you need to address all parts of your task.



In Year 10 HASS, the focus of this skill is to write, test and refine your research questions to maximise their effectiveness.

1.4.3 Show me

The best way to start a research project is to have a good plan. You might only have a certain amount of time and so it is important to plan your time accordingly. It will help you target where to look for information and the kinds of questions you need to be able to find that information.

FIGURE 1 A good plan helps you organise your time.



Step 1: Design an organised and purposeful research plan

As stated above, the first thing to do is make a plan. Your teacher will have given you a set amount of time. If you have six in-class lessons to research, you need to divide up your time accordingly. Make each lesson count.

If your task is to research the economic performance indicators and how Australia's economy is performing at this point in time, for example, you might plan to create a PowerPoint presentation with one indicator per slide.

You could plan your six lessons as shown in **FIGURE 2**.

As you can see this is a tight timeline and may require some homework. However, if you stick to the plan and use your time effectively, you'll be fine.

FIGURE 2 Plan what you will do during each lesson.

Lesson 1
- Plan and write research questions.
- Write down what you already know and what you need to find out.
- If you have time, start your research.

Lesson 2
- Double check your research questions. (Sometimes it can be hard to see how to refine an idea without a little time away from thinking about it.)
- Begin researching GDP and Australia's GDP.

Lesson 3
- Research unemployment and Australia's current unemployment rate.

Lesson 4
- Research inflation and Australia's current inflation rate.

Lesson 5
- Research other economic indicators and begin writing slides.

Lesson 6
- Continue writing your slides. Refine the information and submit.

Step 2: Write questions to investigate relationships, patterns and trends

Now that you have a plan and you understand your task, you need to develop research questions. You can have some literal questions, (who, what, when, where); however, the important questions in Year 10 are the inferential (coming to a reasonable conclusion based on evidence) and evaluative (based on assessing value or likely outcome) questions. These are the questions where you find information but then need to find links in the information, such as relationships, patterns and trends, and the different perspective on an issue.

If we look at the economic indicator task in **FIGURE 2**, we can develop some interesting questions that will make learning easier and give your responses to tasks more depth.

For example:

1. How does the GDP of a nation indicate a strong or weak economic performance?

As you can see, you are looking for the relationship between the information you will find on GDP and the impact it has on a country's economy.

Step 3: Review your focus questions to test their usefulness

Take your questions out for a test run. Is it easy to use these questions to find relevant and accurate sources or are they too broad or narrow in focus?

If the question makes your ability to research difficult then you need to re-think it. Often this means breaking it down into more specific questions.

1. How does the GDP of a nation indicate a strong or weak economic performance?

A better approach would be:

1. How is the GDP of a country calculated?
2. What is Australia's current GDP and what does this show about Australia's economy?

Even though it has become a two-part question it is much more structured, and you will be able to find reliable sources quickly, which cuts down on your research time.

WHAT IF I DON'T HAVE TIME TO DO THAT?

It might seem like it wastes valuable time planning your research and refining your questions, but you should always plan the time to do this. In the long run it will make your life easier because you will be more likely to find the type and depth of information you need, rather than having to go back to fill in gaps.



1.4 ACTIVITY

As a class, develop a series of research questions on a topic you are currently studying. (You could use one of the suggestions at the end of this subtopic.) When you have a complete list, divide your questions into three categories:

1. literal (fact and information finding); for example, 'What is Australia's GDP?'
2. inferential (coming to a reasonable conclusion based on evidence); for example, 'How does the GDP of a nation relate to its economic performance?'
3. evaluative (based on assessing value); for example, 'Which is the most important factor influencing GDP?'

Is there a balance between the types of questions? Explore ways to transform some of your literal questions into inferential or evaluative questions.

You could try using sentence starters that suggest inference (e.g. how does … why did …) or evaluation (e.g. what would happen if …, which is the most/least …). **HASS skills: Questioning and researching**

1.4.4 Let me do it

Practise your skills collecting, recording and organising information using the following activities.

- Follow the short version of the steps in the **Review** section at the end of this topic.
- Use the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Write a series of well-targeted research questions to help you compare Australia's system of government with the system of either Indonesia, India or Japan.

Economics and Business

Write a series of well-targeted research questions to help you compare Australia's economic performance and standard of wellbeing with another country that has poorer economic performance and a lower standard of wellbeing.

Geography

Write a series of well-targeted research questions to help you conduct a comparative study of environmental change for Australia and another country for one of the following types of environments.

- Land
- Inland water
- Coast
- Marine
- Urban

History

Write a series of well-targeted research questions to help you investigate how Australia meets the criteria for three articles from the Universal Declaration of Human Rights, or what we are doing to improve our performance in these. Choose another country and compare them.

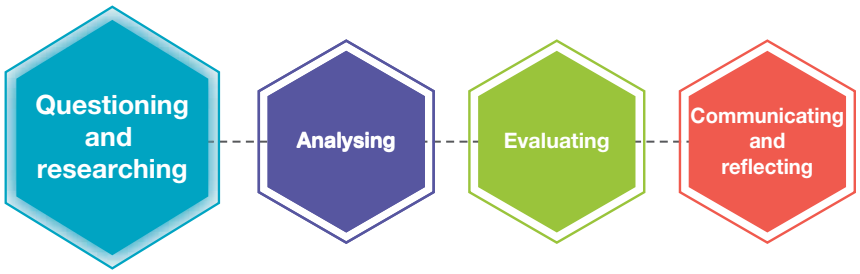
on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-5982), Level 2 (ewbk-5983), Level 3 (ewbk-5984)
Economics and Business: Level 1 (ewbk-5985), Level 2 (ewbk-5986), Level 3 (ewbk-5987)
Geography: Level 1 (ewbk-5988), Level 2 (ewbk-5989), Level 3 (ewbk-5990)
History: Level 1 (ewbk-5991), Level 2 (ewbk-5992), Level 3 (ewbk-5993)

1.5 SkillBuilder: Finding and referencing primary and secondary sources

1.5.1 When to use this SkillBuilder

This SkillBuilder develops your questioning and researching HASS skills. Use this SkillBuilder **after** you have refined your list of focused research questions and collected sources. Use this SkillBuilder **before** you start to make detailed notes from each source.



1.5.2 Tell me

Reliable and accurate sources help you find reliable and accurate information. As you know primary sources are directly related to the event or issue you are investigating. In history it means they were made at a specific time and in the other subjects it means the source is directly about the issue, such as a map. A secondary source is created when an author takes primary sources and evaluates them to draw conclusions. Essentially your final product could be considered a secondary source.



In Year 10 HASS, the focus of this skill is using and correctly referencing more complex primary and secondary sources that contain accurate and reliable information.

1.5.3 Show me

Step 1: Collect data from reliable and relevant sources

Imagine your task is to investigate different ways humans interact with the environment around them. This includes how we use the land and how we have changed the land. You need to find sources that demonstrate this, and discover this diagram in your textbook.

FIGURE 1 is a secondary source as it has been created using information directly from other sources.

Consider the diagram carefully. What does it tell you about how humans use the land? It tells you that humans use the land in lots of different ways and that they have changed the land permanently.

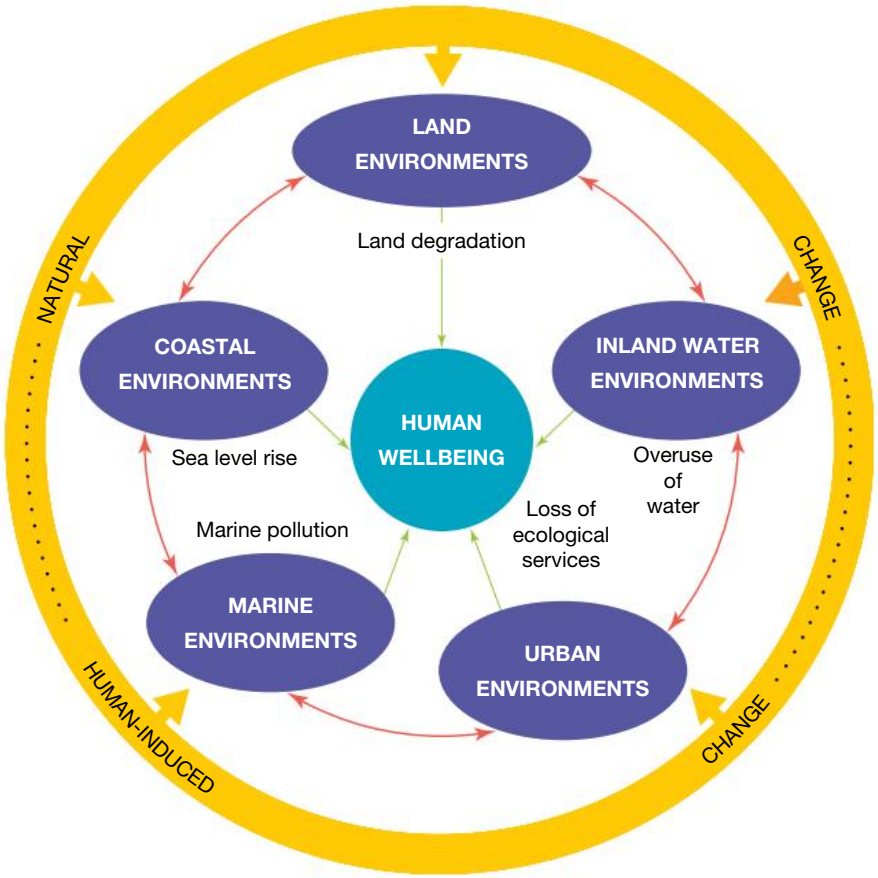
Is this source reliable and accurate? The safe assumption is that it is. It has come from your textbook so you know the source is reliable as textbooks are well researched and you know it is accurate as your textbook has been written using information that is as up to date as possible. Publishers also have reviewing and checking processes that mean the information they publish has been checked for its reliability.

Step 2: Identify the origin, purpose and context of sources

When you have found your sources. you need to think about when they were made and why. You also need to think about their **context**.

context the situation or circumstances (time period, place, writer, purpose etc.) in which a source or data set was created

FIGURE 1 Interaction of environmental change with human wellbeing.



If you look at **FIGURE 1**, the origin of the source is a textbook and the purpose of it is to educate Year 10 students on how humans have changed the environment. The context is that humans have affected the environment and by educating you about this you can help bring about change by understanding what was done in the past.

WHAT IF A SECONDARY SOURCE HAS A STRONG POINT OF VIEW?

When you have found a potentially useful source and examined its origin, purpose and context carefully but find that it is presenting a one-sided argument, this doesn't mean that the factual information in the piece is not useful. If you have a strong understanding of those factors, then you may still have a useful source of information for your research; but you will need to verify the facts using other sources. Even sources with very narrow perspectives on an issue can be useful in research, but only if you are aware of any bias and treat the information accordingly. You will learn more about analysing sources for forms of bias in the next SkillBuilder, and as you look at sources in each of your HASS subjects.



Step 3: Reference your information accurately and appropriately

You already know from your previous years of HASS study that you need to reference your sources properly. This is because you can't take credit for other people's work and it shows you have found a variety of sources. It also means people could use your reference list to further investigate the sources.

Your school will have a preferred way of referencing but a common template in HASS is the Harvard referencing system. By now, you will be very familiar with how to use this template to reference.

TABLE 1 Harvard referencing format

Common reference	Harvard referencing format
Books	Author family name, author first name initial (Year published). *Title of book*. City: Publisher, Page(s) **Example:** Darlington, R., Price, J., Phelan, S. & Richardson, M. (2018). *Humanities and Social Sciences for Western Australia 10.* Milton: John Wiley & Sons Australia
Websites with the author listed	Family name, first initial. (Year published). *Page title.* [online] Website name. Available at: URL [Accessed Day Mo. Year] **Example:** Smith, A. (2021). *Developing my skills in HASS*. [online] HASS in WA. Available at: www.HASSEmporiumWA.com.au [Accessed 21 February 2020]
Website without an author listed	Website name (Year published). *Page title*. [online] Available at: URL [Accessed Day Mo. Year] **Example:** OECD Better Life Index (2020). OECD Better Life Index. [online] Avaliable at: www.oecdbetterlifeindex.org [Accessed 21 February 2020]

In Year 10, you will also be expected to do in-text citations and footnotes. This allows you to reference quotes and data you have obtained from your sources. You also need to do this if you are paraphrasing the work of other people.

You will also become familiar with common short forms of Latin terms that you will come across (and use) in referencing:

- **et al.**, which means and others
- **ibid.**, which means in the same place (notice the full stop).

You can use et al. as follows.

Summarising or quoting from a source	Finish summarising your source and then put the author's name and year it was published in brackets. For example, International relations between Australia and Indonesia soured in April 2015, when two Australian citizens convicted of drug trafficking in Indonesia were executed by firing squad. Many high Australians including politicians, lobbied the Indonesian government to overturn their sentence to lesser sentence of life imprisonment. The Indonesian President, Joko Widodo, was defiant and offended that Australia and other countries would intervene in their system of law (Darlington et al. 2018).
When quoting page numbers	(Darlington et al. 2018, pp. 2)

- If you are citing one author, you put their name and the year of publication.
- If you are citing a text with more than one author, you write 'et al.' to show there are more than one author. The full reference will be in your reference list.

Some referencing systems, such as the Oxford system, use footnotes. This is a note that appears at the bottom of the page about a reference you have made on the page. The reason for this is so the reader can see the reference they are looking for really easily.

To create a footnote put a number at the end of your quote in superscript font like this[1]. (There is a button for this in the font tools of most word-processing software.) Then put the same number with your reference at the bottom of the page. You can do this in the footnote section of your document.

1.5 ACTIVITY

Find a primary source such as a map or a photo that shows how humans have changed the land. It could be a map of your local area showing built-up environments (places with buildings) and areas of bush. The information you would be looking for would be things such as how much of the area is built up compared to how much is bushland. Are there any areas where bushland is being re-planted or preserved in any way?

Find a secondary source that describes or refers to the changes that are shown in your first source.

- What information do they have in common?
- What differences are evident?
- How might the perspective or point of view of the person who created the secondary source have influenced the way they interpreted the changes to the land?

HASS skills: Questioning and researching

FIGURE 2 Two Rocks Marina, north of Perth. Consider how different people creating secondary sources about plans to upgrade the marina might view the existing facility.



1.5.4 Let me do it

Practise your skills of collecting, recording and organising information using the following activities.

- Follow the short version of the steps in the **Review** section at the end of this topic.
- Use the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Collect reliable primary and secondary sources to help you research Australia's system of government and compare and contrast the main elements with the system of either Indonesia, India or Japan.

Economics and Business

Collect reliable primary and secondary sources to help you research Australia's economic performance and standard of wellbeing, and compare these with another country that has poorer economic performance and a lower standard of wellbeing. You need to research the traditional indicators of economic performance, as well as access some of the wellbeing measurement tools.

Geography

Collect reliable primary and secondary sources to help you research one of the following types of environments and conduct a comparative study of environmental change for Australia and another country.

- Land
- Inland water
- Coast
- Marine
- Urban

History

Collect reliable primary and secondary sources to help you research your three chosen articles from the Universal Declaration of Human Rights and how Australia and your other chosen country meet the criteria for these.

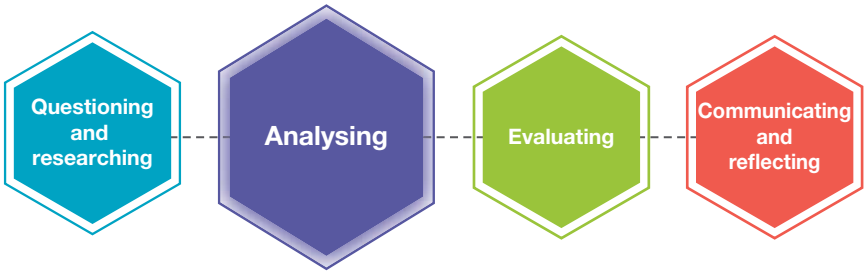
on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-5982), Level 2 (ewbk-5983), Level 3 (ewbk-5984)
Economics and Business: Level 1 (ewbk-5985), Level 2 (ewbk-5986), Level 3 (ewbk-5987)
Geography: Level 1 (ewbk-5988), Level 2 (ewbk-5989), Level 3 (ewbk-5990)
History: Level 1 (ewbk-5991), Level 2 (ewbk-5992), Level 3 (ewbk-5993)

1.6 SkillBuilder: Analysing primary and secondary sources

1.6.1 When to use this SkillBuilder

This SkillBuilder develops your analysing HASS skills. Use this SkillBuilder **after** you have collected sources that appeared to be reliable and useful. Use this SkillBuilder **before** you start to look for patterns and connections.



1.6.2 Tell me

Analysing is a process of carefully examining and comparing information. When we analyse data or sources, we are looking for connections between ideas and events, or how things have changed over time. When you analyse you:

- identify the facts included in a source
- identify whether there is any relationship (e.g. a connection, such as cause and effect) between the ideas and/or facts
- suggest what relationships or connections the data show
- suggest what trends or patterns the data show
- suggest what different or similar views (perspectives) are shown or suggested.



In Year 10 HASS, the focus of this skill is to examine and compare information from a variety of sources to understand the stated and implied information in light of the context, bias and currency.

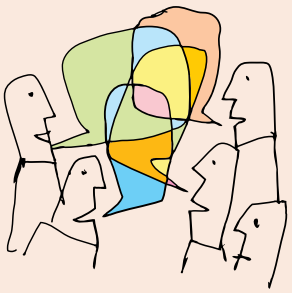
1.6.3 Show me

Step 1: Analyse primary and secondary sources for reliability and usefulness

If you plan to use information that you collect from a source, that source must be reliable. You will have completed a quick check for reliability when collecting your sources and making your initial notes, but before you start drawing any firm conclusions or making any comparisons, examine the sources in more detail. The more information you gather, the better understanding you will have of the topic – the nuances or less obvious parts of the debate. You need to know that the information is correct and that you can rely on it to prove your argument. If you can do that then the source is also useful.

DO I REALLY HAVE TO EXAMINE A SOURCE MORE THAN ONCE?

If you decide a source is reliable, accurate and useful after your first basic assessment, you will need to critically examine it to extract the information you need. To critically examine a source means to think carefully about it, to consider all the information analytically and in depth.



Taking shortcuts with this part of the process means you might misunderstand or misuse the information you have found, especially if it was one of the earliest sources you found. Now that you have more information to compare and contrast, you can develop a more solid understanding of the commonly agreed 'fact' about an issue or event, if there are any. Good research is all about considering whether the information you plan to use could be contested (debated) in any way.

Consider the following **FIGURE 1**, a timeline from topic 20.

Your context is that you are learning about the causes of World War II.

On a first look what do you learn?

- Europe after World War I was a turbulent time with lots of uncertainty and revolution.
- The Great Depression began in 1929.
- In the years leading up to World War II, Hitler expanded his military and started taking back land lost in the Treaty of Versailles.

This is a good beginning. Do some quick additional research about these events to fill in the gaps.

Why was Europe such a turbulent place?

- People were hungry and poor and did not trust their current governments.
- The Great Depression made the people even hungrier and poorer and the governments were seen as contributing to this. Men like Hitler used this time to gain power.

Review the timeline again now that you have this knowledge. Upon further analysis you can see that Hitler creating armies when he wasn't allowed to helped increase employment and allowed people to earn money. By taking back the lands lost after WWI he was showing that those people were important to Germany.

If we look closer still and do a bit more research, we can find out that by taking back this land Hitler was breaking rules and other countries were not happy about that and over time the leaders of these countries declared war on Germany, creating World War II. Because all of the other information we found supported the claims in the timeline, we can judge it as being reliable and useful. This however, doesn't mean that it does not reflect any bias.

Step 2: Analyse sources for bias

One of the key parts of analysis is identifying bias. Every source has some form of bias, even a timeline from a textbook — which reveals bias in the events that are included, the events that were left out and sometimes the language or image choices.

Bias occurs when an author reveals their point of view in what they have written or demonstrated. They are trying to persuade you to think the same way they do — even if what they think is considered to be the main or accepted interpretation.

For some sources it is easy to find the bias. Consider the primary source in **FIGURE 2,** a political poster from when Hitler was running for government in Germany in the 1930s.

The bias in this source is that Hitler is the right man to lead Germany. Because this is a political advertisement, it is very obvious what the bias is. Hitler is shown shaking hands with Hindenburg, who has previously formed a coalition government with the SA and invited Hitler to become Chancellor. Both men are shown standing very upright and proud, and with a large number 1 emphasising their handshake.

FIGURE 1 A timeline of the modern world, 1918–1939

CE

1918



1919
The Treaty of Versailles is signed. Revolutionary outbreaks occur across Europe.

1920

1921
The Bolsheviks win the Russian Civil War

1922

1922
Mussolini and his fascists take power in Italy. The former Russian Tsarist Empire becomes the Union of Soviet Socialist Republics (USSR).

1923
Hitler attempts to seize power in Germany in the unsuccessful Munich Putsch.

1924



1924
The Nazis win only 3 per cent of votes in German elections.

1926

1928

1929
The Great Depression begins.



1930

1931
Japan invades Manchuria

1932

1932
Unemployment reaches its peak in the worst year of the Great Depression.

1933
Hitler and the Nazis gain power in Germany. Germany and Japan withdraw from the League of Nations.

1934

1935
Germany announces rearmament and conscription. Fascist Italy invades Abyssinia (Ethiopia).

1937
Japan invades China.

1936

1936
German troops re-enter the Rhineland. Germany and Italy support Franco in the Spanish Civil War and become allies. Germany and Japan become allies. Stalin purges his opponents in the Communist Party and the military in the USSR.

1938
Germany annexes Austria. At the Munich Conference, Germany gains the Sudetenland from Czechoslovakia.

1938

1939
Germany invades and takes the remainder of Czechoslovakia. Germany invades Poland and World War II begins.

1940

CE

In contrast, consider **FIGURE 3**, a poster that takes the other point of view. Hitler is being ridiculed and made to look comical and unprepared.

FIGURE 2 The text on this Nazi poster translates as 'In the deepest need Hindenburg chose Adolf Hitler for Reich Chancellor. You too should vote for List 1.'



FGURE 3 World War II poster of a cartoon Adolf Hitler with his pants down, showing his boxer shorts covered in swastika



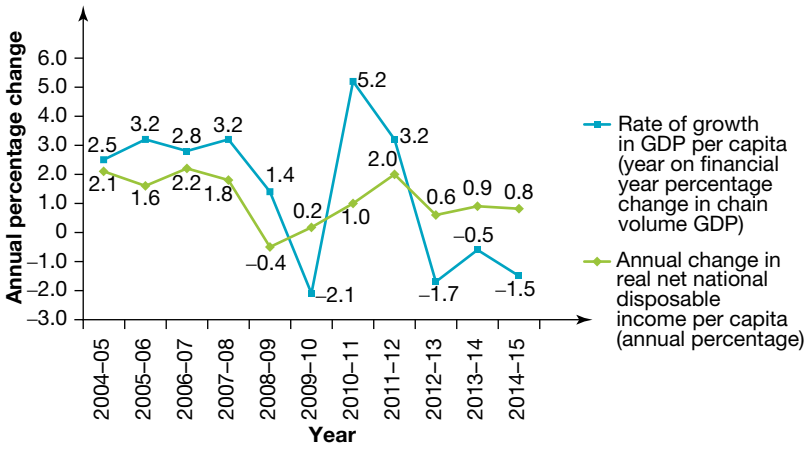
Step 3: Analyse sources for currency

Finally, it is important to determine whether a source is current, in relation to the issue you are examining. For example, if you are looking for sources to explain the effects of World War II, you don't want to start with a book from 1900.

The issue of currency becomes particularly important when you are examining the usefulness of data sources. Consider the graph in **FIGURE 4**.

This data may be accurate and relevant to your research, but if you are looking at current changes in GDP and real net national disposable income, this graph will not be a useful source of information because the latest inclusion was 2014–15. The context of this data makes it irrelevant to your research about current trends. Similarly, looking at data from 2020 will not provide you with any clear indication of long term trend — both because the set of data is too small to assess long-term trends, and because 2020, in many ways, was an anomaly due to the impact of COVID-19.

FIGURE 4 Changes in Australia's GDP per capita and real net national disposable income per capita as indicators of changes in living standard (annual percentage)



Currency can be easy to determine in data sets like this, when the years or dates are included. With images, cartoons and written sources it might be a little harder to determine. One sign of a reliable source of information is that it includes the date of publication, or additional footnotes to give you this important contextual information.

Step 4: Analyse hierarchies of information (categories and subcategories)

When people write a source, they generally structure their information in a way that shows the most important or relevant information first. This is so that you, the reader, knows that it is important. Sometimes this will be demonstrated as a heading. If there is a heading, you know that what you are reading next will be relevant and important. If you are being asked to look for key or important points you know to look for sentences related to the heading.

When you are analysing a source to look for the writer's perspective, consider the order in which the information is presented. It may be chronological, like the World War II timeline, or it may be presented in an order that favours some ideas by placing them earlier and giving them greater significance.

1.6 ACTIVITIES

If you look at the timeline example in **FIGURE 1** can you see if there is a bias? Perhaps, it could be that Germany was the main contributor to World War II as the events on the timeline are primarily what was happening in Germany. It is a very weak bias and you may need to look very closely at the source, but you can always find some way that the creator has made decisions or omissions that reflect their perspective. This isn't always done maliciously or even knowingly.

1. Discuss the idea of unconscious bias or expressing prejudice knowingly. Is this something we all do? Brainstorm the different ways it can manifest in the selection of information in terms of currency, hierarchies and headings.
2. What strategies can we put in place to be able to better see and hear our own bias and to recognise it in the information we read and view?

HASS skills: Analysing
General capabilities: Critical and creative thinking, Literacy

1.6.4 Let me do it

Practise your skills analysing sources using the following activities.

- Follow the short version of the steps in the **Review** section at the end of this topic.
- Use the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Analyse the sources you found about Australia's system of government and how it compares and contrasts with either Indonesia, India or Japan.

Economics and Business

Analyse the sources you found about Australia's economic performance and standard of wellbeing, and how this compares with the other country you chose to research.

Geography

Analyse the sources you found about your chosen environment and the environmental change in Australia and your other chosen country.

History

Analyse the sources about your three chosen articles from the Universal Declaration of Human Rights and how Australia and your other chosen country meet the criteria for these articles.

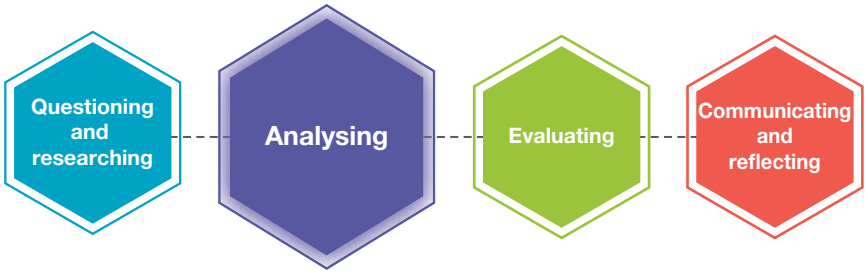
on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-5982), Level 2 (ewbk-5983), Level 3 (ewbk-5984)
Economics and Business: Level 1 (ewbk-5985), Level 2 (ewbk-5986), Level 3 (ewbk-5987)
Geography: Level 1 (ewbk-5988), Level 2 (ewbk-5989), Level 3 (ewbk-5990)
History: Level 1 (ewbk-5991), Level 2 (ewbk-5992), Level 3 (ewbk-5993)

1.7 SkillBuilder: Identifying and comparing perspectives

1.7.1 When to use this SkillBuilder

This SkillBuilder develops your analysing HASS skills. Use this SkillBuilder **after** you have carefully read and extracted relevant information from your sources. Use this SkillBuilder **before** you start to look for patterns of connections.



1.7.2 Tell me

In Year 10 you need to find different types of sources to support the same information. You need to do this because you need to demonstrate a greater depth of analysis and this is easier to do with a variety of sources. Comparing sources that are similar can be quite easy — you are comparing like for like; it can be more complex, however, to compare sources that are presenting information in very different formats. This is especially the case when the sources are conveying complex ideas or include subtle bias that makes it difficult to identify objective and subjective information.



In Year 10 HASS, the focus of this skill is to be able to compare and contrast information presented in different formats to identify potential interpretations or perspectives on an issue.

1.7.3 Show me

Step 1: Understand factors that influence people's points of view

As we've discussed it is important to understand the different points of view that people can bring to an issue. It's important to consider not only the different perspective expressed within a source, but also how people might come to different viewpoints *about* a source. People will all come to an information source with their own agendas and perspectives.

Consider the issue of tourism on Fraser Island.

FIGURE 1 Alternative responses to the question 'Should tourist numbers on Fraser Island be limited?'

A special environment

The island's special features include:

- long surf beaches and rocky headlands
- about 40 crystal-clear freshwater lakes. Some of these are perched lakes (that is, they sit, or perch, on an impermeable layer of rock or hardened organic matter lying above the watertable). There are also 'window' and barrage lakes. Window lakes appear when depressions in the land surface dip below the watertable, thus exposing part of it. Barrage lakes form when shifting sand dunes block running water and cause it to pool.
- many streams and creeks
- coloured sand cliffs, some 35 kilometres in length
- salt pans, lagoons, mangrove forests and wetlands
- thick rainforests, some of which are so dense that sunlight does not penetrate the canopy
- offshore seagrass beds to support colonies of dugong
- over 25 species of mammals, including dingoes thought to be the purest strain of the species in Australia
- over 350 species of birds. One of Australia's rarest birds, the endangered ground parrot, is found on the island.
- vast sandblows (that is, tracts of sand moved by the wind) and lofty sand dunes.

Past land uses

Fraser Island once had a sand-mining industry (mining its tracts of mineral-rich black sand). This was stopped in 1976 following a Federal Government inquiry. There was also a timber industry, disbanded in December 1991 by the Queensland Government after a separate inquiry.

Tourists

Hundreds of thousands of tourists now visit the Fraser coast region every year, injecting some $366 million into the region in 1999. It is estimated that 32 per cent of this visitor expenditure was contributed by tourists to Fraser Island itself. The most obvious risks that tourism brings to the national park have to do with land-clearing, waste, increased traffic and disturbance of the island's flora and fauna.

Ecotourism facilities

The island's Kingfisher Bay Resort and Village has the highest level of accreditation as an ecotourism facility. An environmental impact statement was prepared before the proposed facility was approved for construction.

Dingo management

In the past, many tourists fed the dingoes that roam the island. In April 2001, however, a young boy was tragically killed by dingoes. Tourists are now provided with a 'Dingo Smart' brochure, and are heavily fined if caught feeding a dingo or trying to encourage its attention. Any dingoes known to be a problem are culled.

Managing camping facilities

There are six government-owned camps — at Central Station, Lake Boomanjin (the largest perched lake in the world), Lake McKenzie, Dundubara, Waddy Point and Wathumba — and two that are privately owned. People can also camp on a restricted number of beach areas, but not within 50 metres of a creek, stream or lake. Beach camping areas are temporarily closed sometimes to allow vegetation to regrow or to halt erosion.

Managing four-wheel drive vehicles

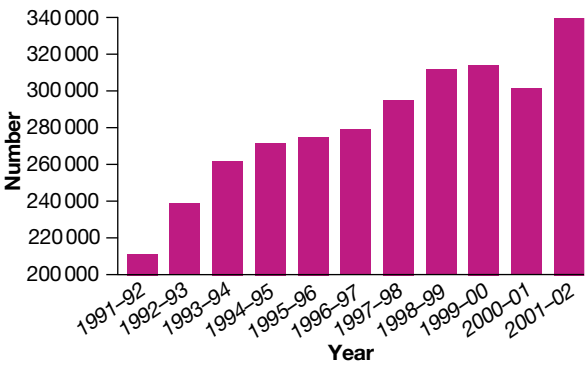
Four-wheel drive vehicles are needed to travel around the island. Left unmanaged, these large vehicles could have a significant impact on the island's flora and fauna and on levels of erosion, especially because touring parties tend to drive in the same areas. It is the most attractive parts of the island that are often the most vulnerable.

All vehicles travelling on the island have to display a purchased permit and, more recently, driving and parking on sand dunes have been made illegal. The Environmental Protection Agency has started a campaign to educate four-wheel drivers about the impacts their vehicles have on the island's environment.

Government funding

In 2004, the Australian Government's Natural Heritage Trust granted $300 000 to reduce road-related erosion, provide environmentally friendly amenities and better direct pedestrian movement around Fraser Island. Barriers along the sides of the island's roads and better planning have reduced the degree of erosion from run-off. The idea was partly to make pedestrian travel a more attractive option, as well as draw pedestrians away from the island's vulnerable dunes. To do this, boardwalks were built along the banks of Eli Creek (see the photograph on page 26). Stretches of dunes are also regularly closed for rehabilitation. Although the potential threat from tourism-related erosion remains, the stability of the island's sand dun es is improving.

Visitor numbers to Fraser Island



Source: Fraser Island Travel Guide, 17 October 2008.

Please tourists, don't pee in the lake

So, we're sure your momma told you not to pee in the swimming pool — but did she also tell you it's bad to pee in a lake? Down in Australia, the beautiful Basin Lake on Fraser Island off Queensland isn't doing well these days, and one of the causes is high levels of urine in the water. The official word is that too many tourists are using the lake as a toilet and that's led the Queensland Parks and Wildlife Service to consider closing one of the access tracks to reduce visitor numbers. Right now 35 000 people visit the lake every year and since there's no in- or outflow from the lake; whatever goes in, stays in. Our alternative suggestion is to simply stick up a big notice advertising the current urine levels in the lake. We're fairly sure most people would skip the swim.

FIGURE 2 An evaluation of the alternative responses to the Fraser Island tourism question in figure 1

After considering the impacts of tourists on Fraser Island, I consider that tourist numbers should be limited, especially during the peak tourism season (*evaluation*). The risk of damage to the special environment that may be caused by tourists, such as destruction of the rainforest and pollution of lakes, outweighs the economic gains made by the tourism industry. (More than 23 per cent of tourism in the region revolves around Fraser Island.) With the government acknowledging this special environment by making greater funding available, particularly to reduce road-related erosion, I believe that limiting the tourist numbers (340 000 tourists in 2001– 02) will ensure that the ecosystem is not put under pressure, that dingoes and people can co-exist along with camping facilities and that four-wheel drive vehicles can be managed with driver education and specific regulation for Fraser Island. Fraser Island in the past has not always been well managed but I believe restricting tourist numbers will allow this special environment to be sustained into the future.

Why do people have these different views? Often this is decided by what each group or individuals needs and wants. This is a concept you will be familiar with already from HASS. Consider the questions in **TABLE 1** to assess why certain people might have developed specific views.

TABLE 1 Analysing stakeholders' needs and wants

Key questions	Examples	What do they need/want?
Who are the stakeholders (people interested or invested in the issue)?	Residents	To enjoy their neighbourhood and homes
	Workers	To have employment and do their jobs
	Tourists	To access the area To enjoy exploring the area To have facilities to use during their holidays
	Conservationists	To protect and preserve the environment and wildlife by reducing tourism

None of the perspectives are more important than the other but they do need to be taken into account when researching, analysing and evaluating your findings. These needs and wants will shape a perspective on an issue, and the outcomes or changes each stakeholder would like to see accomplished.

Step 2: Identify different potential interpretations of a source

Sometimes, the point of view or a perspective in a source is ambiguous (unclear). Sources can be interpreted in different ways depending on your viewpoint and interest in the issue. A tourist will interpret warmer sea water temperatures (as great for swimming) differently to a conservationist (as problematic for sea-life sustainability). If you have a stake in an issue, it will be much harder to analyse the information in a source that presents a different viewpoint.

When you are looking for different interpretations of a source you need to analyse it. Here are some hints.

TABLE 2 Identifying the perspective of a source

Source type	What to look for
Written text	Look for words that suggest specific perspectives (e.g. dictator vs leader). Look for the use of data/statistics rather than vague estimations or generalisations (e.g. 25 per cent agreed vs many agreed). Look at the date of the text. A primary source may have a different interpretation to a secondary source where the author has been able to interpret information from different source over time.

Source type	What to look for
Images	Who is at the centre of the image? What expressions do people have? Can you see any signs that the image might not be authentic? Look at the colours; for example, images such as Nazi propaganda will have lots of red and black as they were the Nazi colours as they were seen to be strong. In a cartoon how are the people drawn? For example, Nazi propaganda drew Jewish people to look unattractive and like criminals, to encourage others to view them in the same way.
Maps	Look for scale. Does it show the bigger picture or only a small segment (e.g. showing only European battle fronts and not the Pacific or elsewhere in a map showing conflict during World War II)? Look for currency. Borders of countries have changed over the years and you need to make sure a map is current and up to date, so you can make sure you have the names and boundaries of countries correct. If you look at maps from before 2002, you wouldn't find any references to the countries of South Sudan or Timor-Leste. In terms of historical maps, check that the maps have accurate borders and names for the time period. Some maps may even label countries that are not internationally recognised because the map was created somewhere that is fighting for independence and considers itself an independent nation. You may also discover disputed borders or names of features that are contested or have been renamed.
Charts	Look at the scale/timeframe. Has any data set that might provide the whole picture been left off? For example, does the data compare like for like or compare things on different scales to purposely show a contrast/similarity? Or is it comparing Europe with the United States (continent vs country)?

Step 3: Explain why information/data might be interpreted differently in different situations

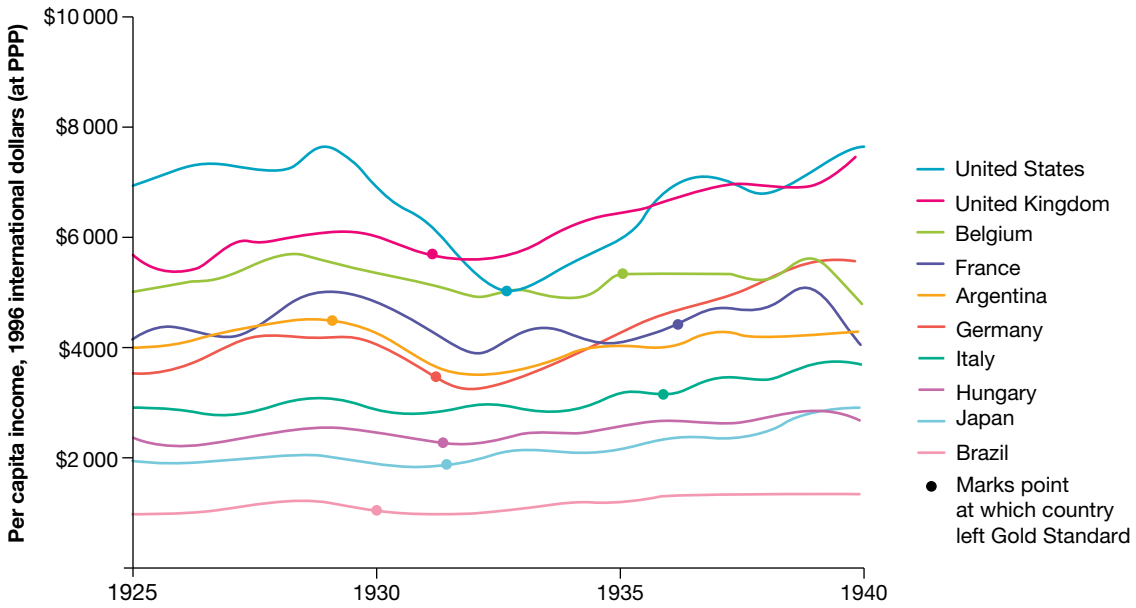
When you have identified the potential interpretations of a source, consider why a person might take that view. Begin with the different perspectives people bring to an issue: their needs and wants.

For example, graphs, diagrams and photos can all convey similar information but in different ways. Consider this graph of unemployment during the Great Depression **(FIGURE 2)**. We have looked at picture sources and a timeline about Germany between the world wars. What information does the graph tell us about Germany and their inter-war years?

We can see that Germany had high unemployment compared to countries such as the United States. This is because Germany had to pay back debts from the Treaty of Versailles and there was a loss of production as a result. We have discussed that the German people resented the World War I reparations that had been agreed to, and didn't really trust their current government. This distrust was one of the factors that allowed Hitler to gain power, as he promised increased employment and food for the German citizens.

We know from our timeline that Hitler gained power in 1933 and if you look at the graph you can see that employment did improve after that time in Germany. For Germans at the time, this rise in employment would have been welcomed and seen as a positive change. For us, knowing what transpired in the years that followed, we might interpret the figures in a very different way.

FIGURE 2 Per capita income 1925–1940



1.7 ACTIVITIES

1. In small groups, collect one example of each of the following types of data related to a current issue in the media:
   - a graph or chart
   - a map
   - a news article or report
   - an image (photo, cartoon or illustration).
2. Identify each of the stakeholders in the issue and allocate the role of a specific stakeholder to each person in the group.
3. From the perspective of your stakeholder, analyse the data you have collected, making notes on your view of the way the issue is presented. (You could be a general stakeholder (for example, a local resident) or a specific person (for example, the Minister for Health).
4. Bring your group back together to discuss the information, with each group member playing the role of their stakeholder. Discuss:
   - Is the information objective?
   - What are your concerns about the data?
   - Based on this information, what do you believe is the best way to resolve the issue?
5. At the end of your discussion, identify the parts of the information that were the most fiercely contested. Discuss each group's findings as a class.

HASS skills: Analysing
General capability: Critical and creative thinking

1.7.4 Let me do it

Practise your skills identifying and comparing perspectives using the following activities.

- Follow the short version of the steps in the **Review** section at the end of this topic.
- Use the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

In comparing Australia's system of government with the system of either Indonesia, India or Japan, list and analyse the point of view that each of the main stakeholders would have of the information you collected. What would they agree or disagree with?

Economics and Business

In comparing Australia's economic performance and standard of wellbeing with another country, list and analyse the point of view that each of the main stakeholders would have of the information you collected. What would they agree or disagree with?

Geography

In conducting your comparative study of environmental change in Australia and another country list and analyse the point of view that each of the main stakeholders would have of the information you collected. What would they agree or disagree with?

History

In assessing how well Australia and your other chosen country is meeting the criteria for the three articles from the Universal Declaration of Human Rights, list and analyse the point of view that each of the main stakeholders would have of the information you collected. What would they agree or disagree with?

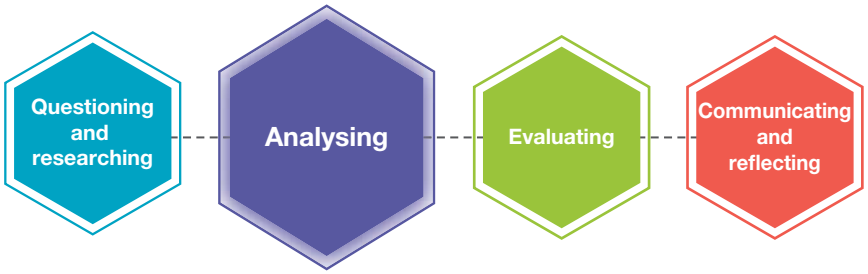
on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-5982), Level 2 (ewbk-5983), Level 3 (ewbk-5984)
Economics and Business: Level 1 (ewbk-5985), Level 2 (ewbk-5986), Level 3 (ewbk-5987)
Geography: Level 1 (ewbk-5988), Level 2 (ewbk-5989), Level 3 (ewbk-5990)
History: Level 1 (ewbk-5991), Level 2 (ewbk-5992), Level 3 (ewbk-5993)

1.8 SkillBuilder: Identifying and explaining relationships and patterns

1.8.1 When to use this SkillBuilder

This SkillBuilder develops your analysing HASS skills. Use this SkillBuilder **after** you have critically examined and made notes about all of your sources. Use this SkillBuilder **before** you start to form your conclusion.



1.8.2 Tell me

An important part of analysis is being able to identify *and* explain relationships and patterns. In years 7 and 8 you needed to know only that they were there, in Year 9 you needed to know *why* they exist and in Year 10 you will be expected to explain the connections and their effects over time and place.



In Year 10 HASS, the focus of this skill is to identify and explain patterns and relationships. You need to know why one thing can have an impact on another and if these relationships have positive, negative or neutral effects on different stakeholders or places over time.

1.8.3 Show me

By now it is easy to see the relationships and patterns one thing can have with another. What you need to do is explain why these relationships and patterns exist and how they can have an impact on the issue, but also how they have an impact on your learning and thoughts on the topic at hand.

Step 1: Compare information in different formats to identify change over time

By now you will have a variety of sources with lots of different information. You also need to use this information to see how things have changed over time.

Think back to your work about how humans have changed environments. Using your sources, identify the changes that have happened over time. These can be cleared land, land degradation, endangered species. However, further research can also show that in a lot of places people are trying to fix these problems and over time the land can regenerate and animal numbers can rise. This is a change over time too.

Step 2: Identify and explain cause and effect relationships

Cause and effect relationships are the impact one thing can have on another. That cause is the 'thing', such as an event, a law or even a person. The effect is the change or impact that occurs. Being able to identify patterns of **cause and effect** is an essential skill that allows us to explain how and why things happened, happen or might happen in the future.

cause and effect an event or action that leads to other events or actions

Remember, however, that not all causes leading to a specific event are as equally significant as each other — some causes may have more influence than others.

To test the significance of a cause, see how the events and effects would have transpired if that specific cause was removed from the process. Would the outcome have changed dramatically? A little? Not at all?

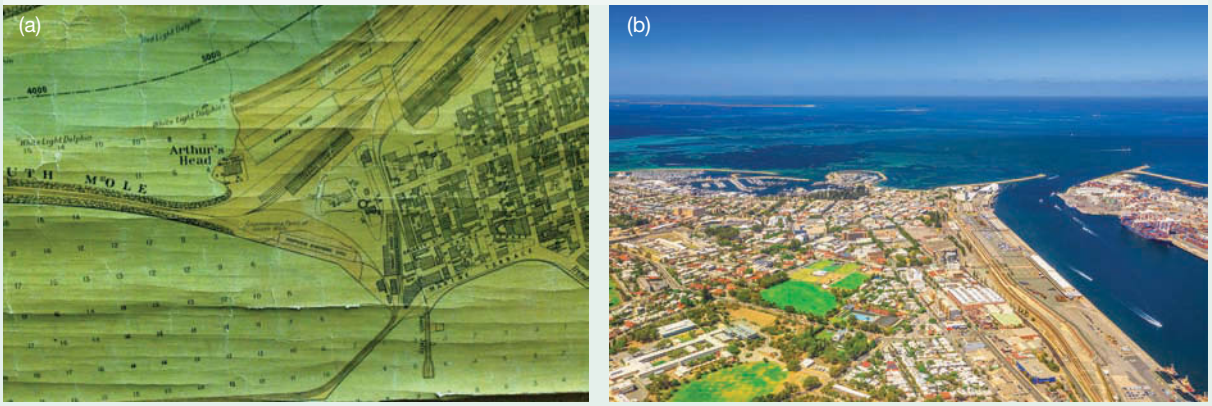
For example the clearing of vegetation of an area (the cause) will lead to land degradation such as salinity (the effect). If the clearing of vegetation had never occurred, it is far less likely that the salinity would have increased: the cause is a significant one.

1.8 ACTIVITIES

Analyse **FIGURE 1** to determine how sections of Fremantle Harbour have changed since 1900.

FIGURE 1a shows a small part of the south-west corner of a Public Works Department Plan of Fremantle from about 1900, when plans were being made to improve the harbour. **FIGURE 1b** is a photograph showing a wider and more recent view.

FIGURE 1 (a) Fremantle Harbour, Public Works Department Plan, c. 1900 (b) An aerial view of Fremantle, 2018



1. Identify the approximate area in the photograph that the map represents.
2. Identify changes that have occurred, and draw up a table to suggest who or what might have experienced positive, negative or neutral impacts because of each of the changes. (Consider the environment, people/culture and the economy in your answer.)
3. What additional information would you need to determine whether your suggestions about the impact were correct? Collect additional resources in different formats to test your ideas. For example, if you suggested that one neutral impact was a population boom in the area, research population statistics for the area to find out if this was the case.

HASS skills: Analysing
General capability: Critical and creative thinking

1.8.4 Let me do it

Practise your skills identifying and explaining relationships and patterns using the following activities.

- Follow the short version of the steps in the **Review** section at the end of this topic.
- Use the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Draw up a table or diagram to compare and contrast the main elements of the Australian system of government with that of either Indonesia, India or Japan. In your comparison, consider some of the causes influencing the development of the systems, and the related effects those decisions had in the short and long terms. Were they negative, neutral or positive? For whom and/or what — for example, people, the environment, the economy, justice or democracy?

Economics and Business

Draw up a table or diagram to compare and contrast Australia's economic performance and standard of wellbeing with another country that has poorer economic performance and a lower standard of wellbeing. In your comparison, consider some of the causes influencing the economies and standards of wellbeing, and the related effects in the short and long terms. Were they negative, neutral or positive? For whom and/or what — for example, specific people, the environment, the economy?

Geography

As part of your comparative study of environmental changes in Australia and another country consider the causes of the change and the related effects in the short and long term. Were they negative, neutral or positive? For whom and/or what — for example, people, the environment, the economy?

History

As part of your investigation into how Australia and one other country meet the criteria for three articles in the Universal Declaration of Human Rights, consider the causes of why each place does/does not meet their obligations and the related effects in the short and long term. Were they negative, neutral or positive? For whom and/or what — for example, people, the environment, the economy?

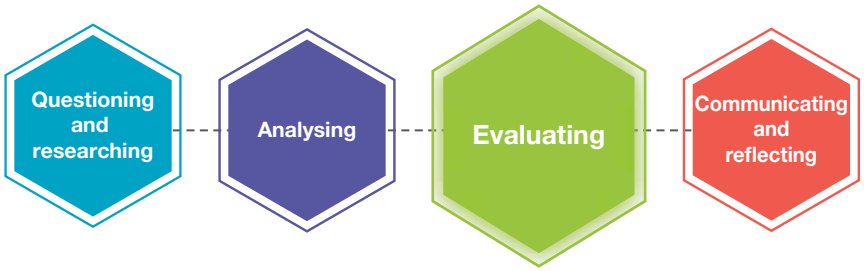
on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-5982), Level 2 (ewbk-5983), Level 3 (ewbk-5984)
Economics and Business: Level 1 (ewbk-5985), Level 2 (ewbk-5986), Level 3 (ewbk-5987)
Geography: Level 1 (ewbk-5988), Level 2 (ewbk-5989), Level 3 (ewbk-5990)
History: Level 1 (ewbk-5991), Level 2 (ewbk-5992), Level 3 (ewbk-5993)

1.9 SkillBuilder: Forming strong conclusions based on evidence

1.9.1 When to use this SkillBuilder

This SkillBuilder develops your evaluating HASS skills. Use this SkillBuilder **after** you have identified and explained the reasons for any patterns or relationships in your information. Use this SkillBuilder **before** you start writing or constructing a draft response.



1.9.2 Tell me

To form a conclusion, you need evidence. If you just make a statement you are essentially voicing an opinion. Add some well-selected, relevant, reliable evidence to it and all of a sudden you have a strong conclusion.



In Year 10 HASS, the focus of this skill is to look at your evidence and evaluate it to write a strong evidence-driven conclusion.

1.9.3 Show me

In this section we will look at a simple yet solid way to evaluate your sources and develop a conclusion.

Step 1: Consider the evidence to form a conclusion

Make sure you have all your evidence in front of you. This includes your information, your sources of evidence, your notes on relationships and patterns and anything else you have found to fill the gaps in your knowledge. Now, have a look and see if there is an obvious conclusion. Write it down. Next to it write down the information from your sources that supports your conclusion.

Have another look at your evaluation. Can you add anything to it? If so, write it down. Write down the next piece of evidence that supports your conclusion. Keep doing this until you know exactly what it is you want to say and have evidence for each of your ideas.

Step 2: Consider the possible ambiguities and gaps in the perspectives

You have practised identifying different gaps in information and can now put those skills into practice identifying similar issues with points of view. Consider this part of the process like forming a rebuttal in debating. Weigh up whether the other views are persuasive enough to change your mind or be similarly reasonable conclusions to make. Depending on the wording of your topic, you may be expected to include an explanation of why other views are less plausible than your own. If so, add these to your mind map or plan.

The term **ambiguities** refers to something can have more than one interpretation depending on how the source is viewed or there is a gap in the information that makes it hard to form a firm conclusion. Does your evaluation have any of these? Are you missing anything that can change how other people view your conclusion? If so, write those down as well.

Step 3: Reconsider your conclusion

Now that you have your findings and the broad strokes of your conclusion put it into paragraph form, if you are writing a report or an essay. For every statement that you make, your next sentence must be evidence from your findings. This is so that your reader can follow your logic and know that your judgements are evidence – based and sound.

Once you have done this read back over it. Drafting is a vital part of writing, and refining your core idea – your contention or argument – is perhaps the most important part. It's this set of ideas that underpin your whole response. Is your argument clear? Can you add anything that will strengthen your argument?

Once you have re-written your evaluation go through it once more or, if possible, ask your teacher to review it. This is helpful because they haven't been involved in your research, so may see gaps that you haven't considered. Change your evaluation based on their advice and feedback.

ambiguities information that has more than one interpretation or is unclear

1.9 ACTIVITY

Consider the evaluation of whether Fraser Island tourist numbers should be reduced.

After considering the impacts on Fraser Island by tourists, I consider that tourist numbers should be limited, especially during the peak tourism season (*evaluation*). The risk of damage to the special environment that may be caused by tourists, such as destruction of the rainforest and pollution of lakes, outweighs the economic gains made by the tourism industry. (More than 23 per cent of tourism in the region revolves around Fraser Island.) With the government acknowledging this special environment by making greater funding available, particularly to reduce road-related erosion, I believe that limiting the tourist numbers (340 000 tourists in 2001– 02) will ensure that the ecosystem is not put under pressure, that dingoes and people can co-exist along with camping facilities and that four-wheel drive vehicles can be managed with driver education and specific regulation for Fraser Island. Fraser Island in the past has not always been well managed but I believe restricting tourist numbers will allow this special environment to be sustained into the future.

1. Can you see the different perspectives? Highlight them.
2. Write a couple of sentences to explain your view of the issue, or which perspective you find the most persuasive.
3. For each perspective or different interpretation, identify if there are any gaps in the point of view.
   - What have they not considered?
   - What have they misunderstood?
   - What key information have they not addressed?

HASS skills: Evaluating

1.9.4 Let me do it

Practise your skills forming strong conclusions using the following activities.

- Follow the short version of the steps in the **Review** section at the end of this topic.
- Use the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

How does Australia's system of government compare with the system of either Indonesia, India or Japan?

Economics and Business

How does Australia's economic performance and standard of wellbeing compare with the other country you chose?

Geography

How do the environmental changes in your chosen environment compare between Australia and the other country you chose?

History

How well do Australia and the other country you chose meet the three articles you selected from the Universal Declaration of Human Rights? Is enough being done to ensure they are upheld in the future?

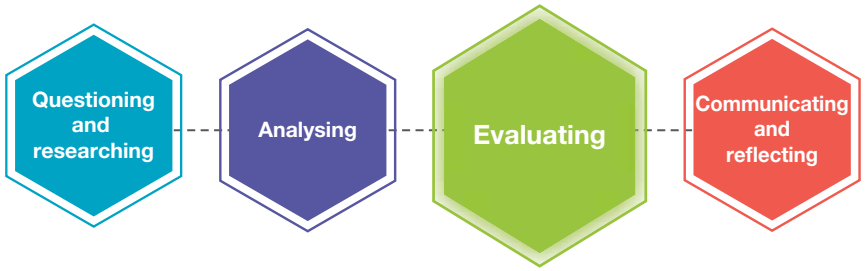
on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-5982), Level 2 (ewbk-5983), Level 3 (ewbk-5984)
Economics and Business: Level 1 (ewbk-5985), Level 2 (ewbk-5986), Level 3 (ewbk-5987)
Geography: Level 1 (ewbk-5988), Level 2 (ewbk-5989), Level 3 (ewbk-5990)
History: Level 1 (ewbk-5991), Level 2 (ewbk-5992), Level 3 (ewbk-5993)

1.10 SkillBuilder: Proposing plausible explanations for patterns and relationships

1.10.1 When to use this SkillBuilder

This SkillBuilder develops your evaluating HASS skills. Use this SkillBuilder **during** your evaluation. Use this SkillBuilder **as** you consider possible solutions or action.



1.10.2 Tell me

Proposing **plausible** explanations means suggesting possible reasons for patterns and relationships you have observed. You need to explain these possible reasons and then provide the evidence to back up your explanation. You have already done this when you discovered the relationships and patterns in the first place. This stage involves looking for common features that might provide a bigger picture view of the social, political, environmental or economic drivers (or causes) that connect the patterns you have observed.



In Year 10 HASS, the focus of this skill is to always provide detailed, evidence-based, plausible reasons for relationships and trends.

1.10.3 Show me

Step 1: Clarify the relationships and patterns you have found

Gather the notes you took on relationships and patterns and your map of the key ideas and evidence. Do any of these have similar causes? Can you discover other possible relationships and patterns – not just for each idea, but between your ideas?

Step 2: Identify and explain anomalies

An **anomaly** is something in the data that is different to what you expected – essentially, a break in a pattern or an outlier. Have you discovered any events, data sets, opinions or sources that do not fit the typical trends or patterns you have discovered? If you have, how might they affect your conclusion?

Once you have identified an anomaly you also need to explain why it is an anomaly and the ways this should be taken into account. For example, researching land degradation, you may have come across a sustainability strategy that was supposed to be effective, such as planting salt resistant bushes in salt-affected areas. You would expect that the bushes would grow well but you have discovered they haven't. Why? The anomaly is the plants were expected to grow but didn't.

plausible a likely or reasonable statement or argument based on strong, reliable evidence

anomaly something that falls outside expected patterns

Possible explanations could be that the plants were planted:

- in an area with too much salt
- in an area with not enough salt
- in a year with unusually high (or low) rainfall
- just before a natural disaster struck
- in an area where there is a species of animal that eats small saltbush plants
- in an area that was affected by a disease that killed the bushes
- on private land without permission and the landowner removed them.

FIGURE 1 When you discover an anomaly you need to look for an explanation as to why it occurred.



Step 3: Make plausible inferences

A plausible inference is a reasonable idea why there is a relationship or an anomaly; it can't be made up, it must be evidence based. There may be a number of explanations for the example of the salt bushes not growing in step 2, but you will need to find data to demonstrate which is the most likely. This is part of the circular nature of research; sometimes, the more you learn, the more questions you have to answer. Having to answer more questions at this stage doesn't mean your initial research was flawed or too vague; it is often a sign that you are still curious and thinking carefully about your topic. You are following the path of your clues carefully data on salt levels in the soil and resistance levels of salt bush. Many inferences are plausible, so part of this process is weighing up which are the most likely based on the given evidence.

Step 4: Form conclusions based on your inferences

Add significant anomalies that raise important questions or influence your perspective to your mind map plan. As with your other points, include evidence that demonstrates what the anomaly is, and explain the impact it has on any considerations of the topic.

1.10.4 Let me do it

Practise your skills proposing plausible explanations for anomalies using the following activities.

- Follow the short version of the steps in the **Review** section at the end of this topic.
- Use the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

In your research of Australia's system of government and that of either Indonesia, India or Japan, what anomalies arose in the patterns of information? For example, does a government not seem to operate in practice the way its system is structured in theory?

Economics and Business

In your comparison of Australia's economic performance and standard of wellbeing with another country, what anomalies arose in the patterns of information? For example, are there groups of people for whom the usual patterns of wellbeing do not apply? Or are there periods of time when there was an unusual economic boom or slump?

Geography

In researching your comparative study of environmental change for Australia and another country what anomalies arose in the patterns of change? For example, was there a period of significant or no change within a generally consistent trend?

History

Based on your research of your chosen three articles from the Universal Declaration of Human Rights, what anomalies arose in the way each country meets their obligations? For example, are there specific examples of a country not meeting the criteria in a historical pattern of upholding them?

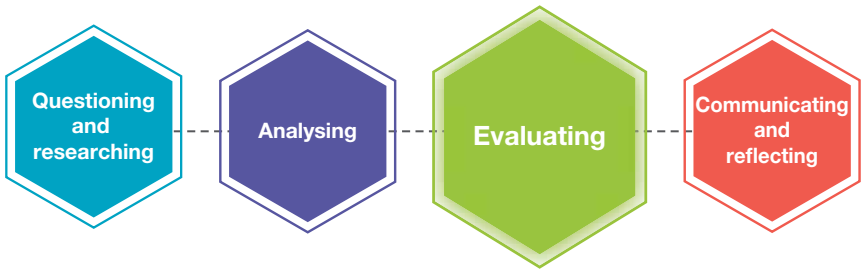
on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-5982), Level 2 (ewbk-5983), Level 3 (ewbk-5984)
Economics and Business: Level 1 (ewbk-5985), Level 2 (ewbk-5986), Level 3 (ewbk-5987)
Geography: Level 1 (ewbk-5988), Level 2 (ewbk-5989), Level 3 (ewbk-5990)
History: Level 1 (ewbk-5991), Level 2 (ewbk-5992), Level 3 (ewbk-5993)

1.11 SkillBuilder: Proposing possible actions and predicting their outcomes

1.11.1 When to use this SkillBuilder

This SkillBuilder develops your evaluating HASS skills. Use this SkillBuilder **after** you have formed your opinions about a topic. Use this SkillBuilder **as** you start to draft your assessment or report.



1.11.2 Tell me

For many tasks in Year 10, you also need to suggest possible actions to resolve the issues and predict their outcomes. You need to evaluate whether the outcomes will have a positive effect for all concerned or a negative effect. You then need to decide if the effect is worth the action.



In Year 10 HASS, the focus of this skill is to examine a range of possible actions to resolve issues or situations, in order to recommend the best ways to respond.

1.11.3 Show me

Step 1: Identify the component parts of the change, challenge or event that is needed

Once you have identified a change you need to think about the steps or the parts that are required to implement this. If you have decided that planting trees is a good way to improve the quality of farming land you need to look at what is needed to implement it. It's not simply 'We need trees'.

Rather, your proposed change might require:

- the trees
- the people to plant the trees
- permission from the landowner or custodians
- permission from the government
- an implementation plan
- the money to pay for it all.

In your evaluation of this action you also need to weigh whether the outcome will be positive and/or positive enough to be worth the time and money it will take to implement.

Consider whether:

- the land will improve with the planting of the trees or stay the same
- there is a better, cheaper, quicker or easier solution.

HOW DO I KNOW WHAT IS THE 'BEST' WAY TO RESPOND?

With complex issues, there are often a whole range strategies that will make a difference to a problem, and they might operate on different levels, time-frames and scales. There may not be one 'right' answer, but it is your job to suggest which is the best based on the criteria and effects you decide are the most important – and that will depend on your own values and priorities. For example, if your problem is that a fire swept through your property and you don't have enough cleared land or feedstock to support your beef cattle, you could:



a. clear some bushland that wasn't burnt
b. sell the cattle and farm something else
c. leave the farm find a new job in the city
d. buy a new farm that wasn't burnt
e. sell most of your cattle and become a subsistence farmer
f. agist cattle elsewhere
g. buy feed until the pasture grows back.

Some solutions value economic factors over lifestyle (moving into town), some value long-term factors over short (buying a farm). The best solution simply means you have valued what that solution protects over what needs to be sacrificed.

Step 2: Identify the type of action required to implement the change

Now that you have the components, consider what needs to be done to bring all the components together. Develop a plan for action.

- Is it people coming together to resolve an issue? What steps would this require?
- Is it educating people to improve their practices? How could you do this?
- Does the government need to be involved? Which part and how would you get them involved?

Make sure you articulate what you think is the best course of action to improve the issue at hand and how your plan will solve the problems.

Step 3: Predict plausible outcomes of the action

You then need to predict what the outcomes could be. Because you are putting the idea forward it stands to reason that you won't have any hard and fast data to show the outcome of the action. That's where you predict what could happen. Write down your positive, neutral and negative outcomes as possible suggestions. Provide a brief explanation about why you think these are possible outcomes.

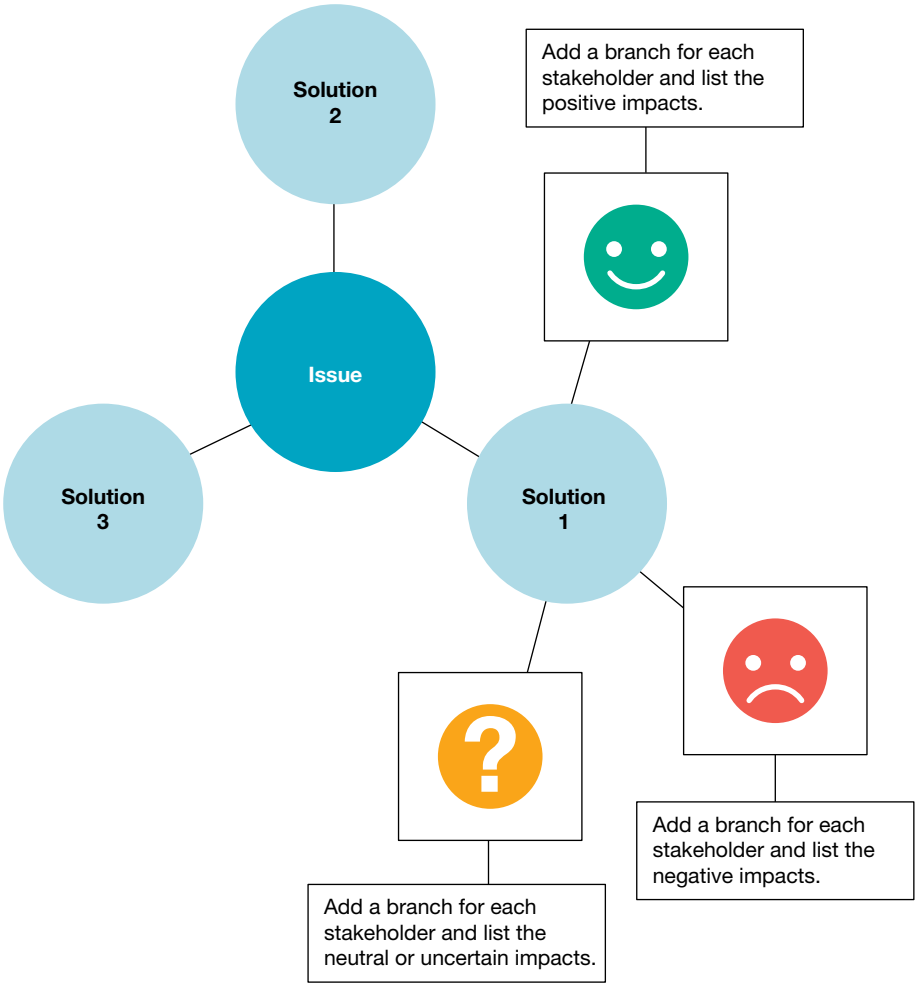
Sometimes, you might not decide on a course of action until you have determined potential consequences of each different option. This is where a concept map, as shown in **FIGURE 2**, can be helpful.

1.11.4 Let me do it

Practise your skills proposing plausible explanations using the following activities.

- Follow the short version of the steps in the **Review** section at the end of this topic.
- Use the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

FIGURE 1 Exploring the potential positive, negative and uncertain outcomes of a proposed solution



Civics and Citizenship

Based on your research of Australia's system of government compared with the system of either Indonesia, India or Japan, identify what each country would suggest is a weakness in the other's system, what changes they might propose to 'fix' the problem, and what the likely outcomes would be of such changes.

Economics and Business

Based on your research of Australia's economic performance and standard of wellbeing compared with another country, suggest ways that each of the countries could improve their economic performance and the effects this would likely have on wellbeing, and ways that each country could improve wellbeing and the likely effects on their economy.

Geography

Based on your comparative study of environmental change for Australia and another country, suggest what strategies might help to mitigate (make less negative) the impacts of the changes that you have found. For each strategy you suggest, outline what negative or neutral impacts this might have on other aspects of the country.

History

Based on your research of the Universal Declaration of Human Rights, suggest what changes might help to improve how well each country adheres to your chosen articles. For each strategy you suggest, outline what negative or neutral impacts this might have on other aspects of the country or the global community.

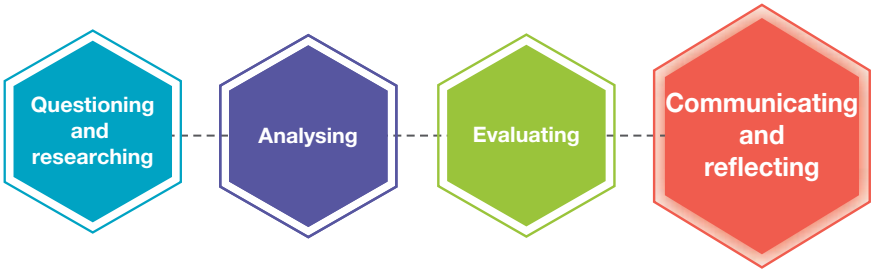
on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-5982), Level 2 (ewbk-5983), Level 3 (ewbk-5984)
Economics and Business: Level 1 (ewbk-5985), Level 2 (ewbk-5986), Level 3 (ewbk-5987)
Geography: Level 1 (ewbk-5988), Level 2 (ewbk-5989), Level 3 (ewbk-5990)
History: Level 1 (ewbk-5991), Level 2 (ewbk-5992), Level 3 (ewbk-5993)

1.12 SkillBuilder: Choosing appropriate formats and language

1.12.1 When to use this SkillBuilder

This SkillBuilder develops your communicating HASS skills. Use this SkillBuilder **after** you have researched and considered your topic from all angles.



1.12.2 Tell me

An appropriate format is *how* you present your information. There are a lot of conventions (or expectations) for academic work, especially how writing should be structured. These conventions have several purposes such as making the type of writing clear to the audience (in the same way that you can recognise a horror movie by the soundtrack, you should be able to recognise an essay or report by its title and structure) and to make the flow of ideas clearer (if we can predict where an argument of discussion is heading, it is much easier to follow) — hence why you have been taught to use topic sentences for your paragraphs. Unless you are specifically told to break conventions, part of your assessment is to show that you both understand and can use the conventions of your task-type well.

Appropriate language depends on knowing your audience and making sure you pitch your language to those people. You don't want the language to be too simple if your teacher is reading it, and you don't want it to be too difficult if you are writing something Year 7s might be asked to read.



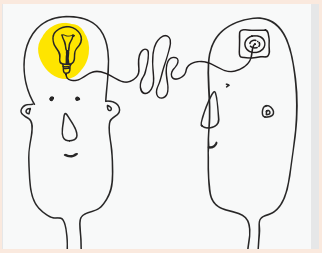
In Year 10 HASS, the focus of this skill is to choose how you will present your information and know the conventions of your chosen format, and the language that is appropriate to the topic and easy for your audience to understand.

1.12.3 Show me

In some cases, you will be given a specific format to use, other times you will be given options. Make sure you know the structures that are needed; for example, make sure you know the report format you may be asked to use.

BEFORE YOU BEGIN, CHECK YOUR LANGUAGE

Review the language in your research. Are there words you don't understand? If so, look them up and make sure you know what they mean. Never use words you don't know the meaning of because you may be asked to define them, or you may use them incorrectly.



Step 1: Review the task instructions

Go back over the task. Has your teacher given you a specific format to follow? If so, that is part of your assessment — know the expectations and use the appropriate format. These formats and conventions can change in different subjects, so ensure that the structures and rules you are following are for the subject in which you are completing the assignment.

If you have been given a variety of formats choose one that will fit with your information. Make sure you understand what is expected of you so you can produce a final product that fits the brief and allows you to show as much information as possible.

Step 2: Determine the appropriate format and its conventions

If you have lots of data and diagrams choose a format that allows you to show them, such as a PowerPoint, website or infographic. If you have lots of analysis and evaluation, an oral presentation or essay may be the best option. Whichever format you have been given make sure you understand the conventions for it. If you do not know, ask your teacher what they expect, or refer to your assessment criteria.

An essay has a very specific structure so make sure you have an introduction and body paragraphs, as well as a strong conclusion. When you plan your essay make sure your information is in some kind of order that makes sense to you and the reader. For example, if you are writing an essay on the causes of World War II, you generally won't begin the essay with what ended World War II, you start before the war and go from there. Information that is presented in a logical and predictable sequence is much easier to understand.

Step 3: Plan the overall structure of your response to the task

As we have discussed, planning is vital. It helps you make sure your information is in order and if there is anything else you need to include. It can be a simple plan of the key ideas and evidence, but it is good to have something to refer back to as you are writing.

An essay plan on the causes of World War II can be as simple as the following.

- Introduction — brief outline of causes
- Body paragraph 1 — Treaty of Versailles
- Body paragraph 2 — The rise of Fascism and Hitler
- Body paragraph 3 — Appeasement
- Conclusion — sum up.

You can also go back and add some more information to keep you on topic once you have written this outline.

1.12 ACTIVITY

One of the most important parts of a question, but one that students often overlook, is the verb. In a topic or assignment task description, you will be given specific things that you have to do, and the verbs are the key to how you provide the information required in the format that is required.

TABLE 1 Common verbs in HASS tasks and exercises

Task verb	What the task/ exercise requires you to do	Example	What you need to provide to answer the question
Apply	Use, utilise, employ in a particular situation	Apply your understanding of employment trends over the last 10 years to predict what will happen to employment rates in the next ten years.	Data about employment trends, a discussion of the trends, predicted trends for the next 10 years, explanation /evidence of connection between past and predictions
Contrast	Show how things are different or opposite	Contrast the policies and platforms of the ALP and Liberal Party.	A point of view/contention (thesis statement), list of differences, evidence

Task verb	What the task/ exercise requires you to do	Example	What you need to provide to answer the question
Deduce	Draw conclusions based on inference	The number of people employed in the mining industry in the Kimberley region of Western Australia declined 65% between 2011 and 2016, but the population stayed stable at around 35,000 people. What can you deduce from this data?	A point of view about what the data means, an explanation of why the data implies what you suggest
Demonstrate	Show by example	Demonstrate how a resolution passes through the United Nations.	Step-by-step examples of a process or event
Determine	Decide, find out	Determine whether your favourite clothing brand produces their products ethically.	A point of view/contention (thesis statement), supporting explanations and evidence
Distinguish	Recognise or note/indicate as being distinct or different from; note differences between	Distinguish between macro- and microconomic policy options.	Facts and definitions of each, discussion of key differences
Extrapolate	Infer from what is known	What can you extrapolate from available data on the fishing industry in Albany?	A point of view about what the data means, an explanation of why the data implies what you suggest
Interpret	Draw meaning from	Interpet the latest ABS Census data from your town or region to provide an overview of the trends in employment.	Statement/s about what the information means, supporting evidence connecting each statement back to the information

Definitions from 'Glossary of key words in the formulation of questions', WA School Curriculum and Standards Authority

1. In pairs or small groups, write a series of questions using the verbs in table 1 based on the topic you are studying at the moment.
   a. Brainstorm what kinds of information you would expect a student to provide in answer to that question (an expanded version of the right-hand column in table 1).
   b. Swap your questions (not the brainstorm) with another group and ask them to provide you with an outline of how they would answer the question.
   c. Join together and discuss your brainstorms, or share them with the class.
   d. Write a short reflection: what were the things you missed in your brainstorm that you should be careful to include with assessment tasks?

General capability: Literacy

1.12.4 Let me do it

Practise presenting information in a way that suits your purpose using the following actvities.

- Follow the short version of the steps in the **Review** section at the end of this topic.
- Use the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Research Australia's system of government and compare and contrast the main elements with the system of either Indonesia, India or Japan. Choose the best way to present this information, and plan your structure.

Economics and Business

Research Australia's economic performance and standard of wellbeing. Compare these with another country that has poorer economic performance and a lower standard of wellbeing. You need to research the traditional indicators of economic performance, as well as access some of the wellbeing measurement tools. Choose the best way to present this information, and plan your structure.

Geography

Select one of the following types of environments and conduct a comparative study of environmental change for Australia and another country.

- Land
- Inland water
- Coast
- Marine
- Urban

Choose the best way to present this information, and plan your structure.

History

Research the Universal Declaration of Human Rights. Choose three articles to learn more about. Investigate how Australia meets the criteria for these articles, or what we are doing to improve our performance in these. Choose another country and compare them. Choose the best way to present this information, and plan your structure.

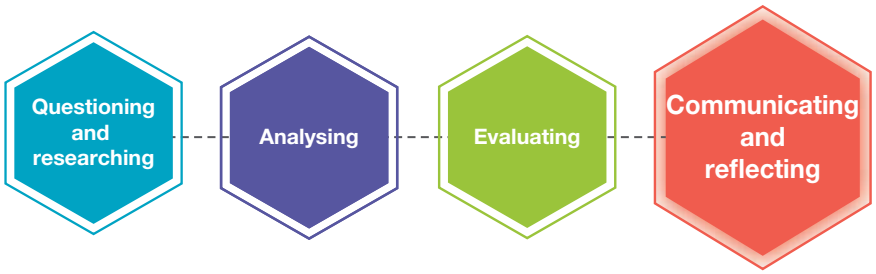
on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-5982), Level 2 (ewbk-5983), Level 3 (ewbk-5984)
Economics and Business: Level 1 (ewbk-5985), Level 2 (ewbk-5986), Level 3 (ewbk-5987)
Geography: Level 1 (ewbk-5988), Level 2 (ewbk-5989), Level 3 (ewbk-5990)
History: Level 1 (ewbk-5991), Level 2 (ewbk-5992), Level 3 (ewbk-5993)

1.13 SkillBuilder: Developing strong evidence-based discussions and explanations

1.13.1 When to use this SkillBuilder

This SkillBuilder develops your communicating HASS skills. Use this SkillBuilder **after** you have planned or drafted your writing or task response.



1.13.2 Tell me

A strong evidence-based discussion or explanation is one that presents highly accurate and detailed information, and/or a reasonable conclusion, suggestions or predictions about an issue, and backs this up with reliable, specific evidence. It is also beneficial to explain everything you have learned in a way people find interesting and informative. You want them to engage with what they are learning and continue to think about it long after they finish reading or watching you present.



In Year 10 HASS, the focus of this skill is making sure that you use sufficient, reliable evidence to sustain your evaluation and that your writing of these explanations is clear and concise.

1.13.3 Show me

This is the section where you take your plan and put it into action. If you have followed the previous steps in the process, you know what you are saying and how you are going to say it — it is time to draft and craft your response.

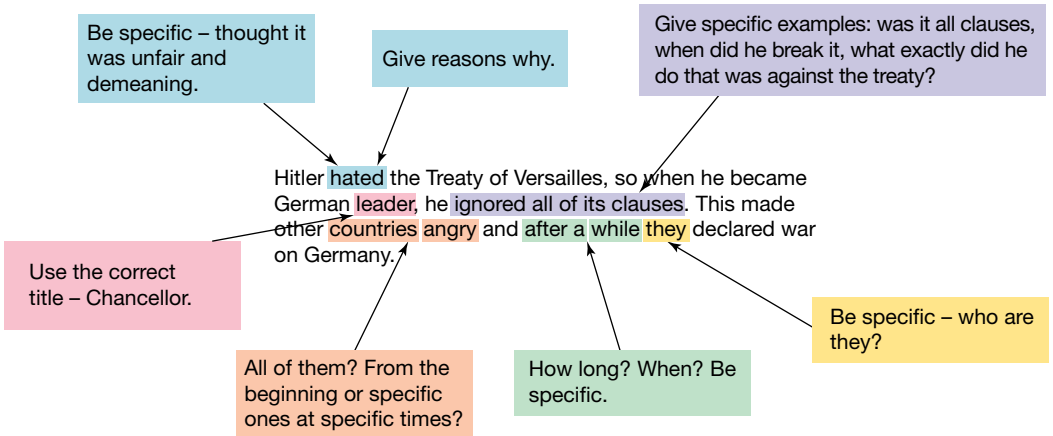
Step 1: Select strong and appropriate evidence and language to support your conclusions

You have found reliable information but it's important to match the right evidence with the right idea. Don't use statistics when a picture conveys more meaning, or vice versa.

Supporting arguments or ideas with evidence is like completing a jigsaw. You can't just force any two pieces together; they have to fit, to build the same part of the image together. Look for the strongest evidence that supports each claim; never leave a claim unsupported.

Consider the example in **FIGURE 1**. It makes very broad claims that are imprecise and includes no supporting evidence or facts. (It has been annotated to show you how it might be improved.)

FIGURE 1 As you sharpen your analysis skills, practise analysing your own writing for how it could be improved. When you have finished a draft, read it carefully and look for some of these common flaws.



Step 2: Cross-check the evidence with the sources (quotes and facts)

As you are writing your evidence go back over your sources and make sure you have interpreted everything correctly. Is your data accurate and is your analysis of a political cartoon accurate? Have you seen the different perspectives and biases? If you have not double checked your sources, you could potentially be giving someone some misleading or ambiguous evidence.

Step 3: Justify the links between your evidence and your conclusions

It's not sufficient to simply state your point of view and list evidence. You have to show the connection between the two — explain how you came to your conclusions based on the evidence at hand. How did you decide from the timeline of pre-World War II that Hitler's actions were responsible for starting World War II? By saying something like, 'based on the evidence in the timeline it has been shown that...' you are justifying how you came to that conclusion. Everything comes back to linking your evaluation to the evidence.

1.13 ACTIVITIES

1. In a paragraph arguing that the actions and events in Germany between 1919 and 1939 contributed greatly to the start of World War II, you may need to provide evidence or an example to support the following claim:

After the signing of the Treaty of Versailles in 1919 Germany was left with little money and high unemployment.

Which of the following is the strongest evidence to back up that claim? Assess the strength of each and determine which (and it might be more than one) provides the strongest support for this claim.

Germany's employment rate started to rise in the mid-1930s after Hitler came to power.	The League of Nations imposed a series of restrictions on Germany, which Hitler later ignored.	Germany lost control of significant fields of natural resources, such a coal and other raw materials that were central to rebuilding.
Germany owed substantial reparations to other countries, which reduced their capacity to repair their own economy.	The German people were angry that their government had signed the Treaty of Versailles.	Limitations were placed on the size and capabilities of the German armed forces.

General capability: Literacy

2. Compare the following paragraphs (one includes the example from **FIGURE 1**). Identify the differences between the two examples, and describe which sample demonstrates each of these features the most successfully:

- **a.** linking claims to evidence
- **b.** providing specific details
- **c.** using clear and effective language
- **d.** making the sources of evidence clear
- **e.** using accurate terminology

SAMPLE 1

The actions and events in Germany contributed greatly to the start of World War II. After the signing of the Treaty of Versailles in 1919, Germany was left with little money and high unemployment. They also had to repay debts to other countries. The German population felt betrayed by their government for signing the Treaty because they felt it unfairly laid the blame for the war on their nation. Over time, this anger and the impacts of the Great Depression on Germany's economy were key factors that allowed Hitler to become the Führer. In obtaining complete control over the country and its Constitution, Hitler defied the Treaty of Versailles clauses and the edicts of the League of Nations and eliminated many of his opponents. Consequently, when he ordered Poland to be invaded in 1939, Neville Chamberlain, the Prime Minister of Britain, saw it as a significantly hostile action and declared war.

SAMPLE 2

The actions and events in Germany between 1919 and 1939 contributed significantly to the start of World War II. After the signing of the Treaty of Versailles in 1919, Germany was left with little money and high unemployment.

They also had to pay back debts to other countries — 132 billion gold marks. The German population felt betrayed by their government for signing the Treaty because they felt it unfairly laid the blame for the war on their nation. Over time, this resentment and the impacts of the Great Depression on Germany's already struggling economy were key factors that allowed Hitler to gain power. We can see from the propaganda poster (**SOURCE 1**) that Hitler was telling the German people he was a superior ruler to the current leader, Hindenburg, because he had called on Hitler to form a government. As we can see from the timeline, this support allowed Hitler to become the Führer in 1933, and obtain complete control over the country and its Constitution. Hitler then defied the Treaty of Versailles clauses and the edicts of the League of Nations by beginning to rebuild the armed forces and eliminating many of his political opponents. Consequently, when he ordered Poland to be invaded in 1939, Neville Chamberlain, the Prime Minister of Britain, saw it as a significantly hostile action and declared war. **General capability: Literacy**

1.13.4 Let me do it

Practise writing a strong, evidence-based responses using the following activities.

- Follow the short version of the steps in the **Review** section at the end of this topic.
- Use the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Research Australia's system of government and compare and contrast the main elements with the system of either Indonesia, India or Japan. Review your draft response, or swap with a friend, and highlight the areas that you need to strengthen.

Economics and Business

Research Australia's economic performance and standard of wellbeing. Compare these with another country that has poorer economic performance and a lower standard of wellbeing. You need to research the traditional indicators of economic performance, as well as access some of the wellbeing measurement tools. Review your draft response, or swap with a friend, and highlight the areas that you need to strengthen.

Geography

Select one of the following types of environments and conduct a comparative study of environmental change for Australia and another country.

- Land
- Inland water
- Coast
- Marine
- Urban

Review your draft response, or swap with a friend, and highlight the areas that you need to strengthen.

History

Research the Universal Declaration of Human Rights. Choose three articles to learn more about. Investigate how Australia meets the criteria for these articles, or what we are doing to improve our performance in these. Choose another country and compare them. Review your draft response, or swap with a friend, and highlight the areas that you need to strengthen.

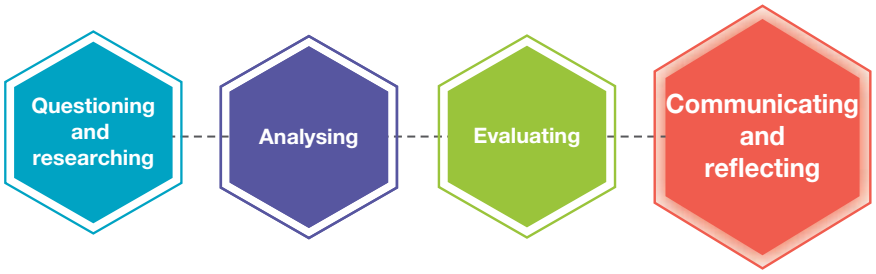
on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-5982), Level 2 (ewbk-5983), Level 3 (ewbk-5984)
Economics and Business: Level 1 (ewbk-5985), Level 2 (ewbk-5986), Level 3 (ewbk-5987)
Geography: Level 1 (ewbk-5988), Level 2 (ewbk-5989), Level 3 (ewbk-5990)
History: Level 1 (ewbk-5991), Level 2 (ewbk-5992), Level 3 (ewbk-5993)

1.14 SkillBuilder: Reflecting on research techniques and findings

1.14.1 When to use this SkillBuilder

This SkillBuilder develops your reflecting HASS skills. Use this SkillBuilder **after** you have completed your inquiry task.



1.14.2 Tell me

Now that you are at the end of your inquiry it is time to reflect on what you have learned. Look back over everything from your questioning, researching, analysing, evaluating and communicating. While you do this ask yourself three questions:

1. What did I learn?
2. How well did I learn?
3. How can I improve my skills for next time?

This reflection doesn't need to be lengthy, but be honest with yourself.



In Year 10 HASS, the focus of this skill is to think about your strengths and weaknesses as a researcher and reflect on what you learnt about the issue you were researching. You should also think about how these issues have impacted on your view of the world and your place in it

CAN'T I TELL FROM MY MARKS HOW WELL I DID?

Now that you have finished put your entire task in front of you from start to finish and see what you knew at the beginning and the gaps in your knowledge that needed to be filled. Through your research and analysis have you filled in those gaps? Your teacher can provide you with feedback on what you did well and what could be improved in your final product, but no-one knows what you did throughout the process better than you do. Taking a moment to note down or just think about how the process went — and being both blunt with and kind to yourself — can help you identify a few things you can improve each time you complete an assignment.



1.14.3 Show me

Step 1: Consider how research techniques change (with time and experience)

When you are reflecting on how you learned, identify the steps you found easy. If it was easy to write research questions but difficult to evaluate your sources and develop a conclusion then you know for next time you should focus on that. The chances are in Year 7 you probably needed your teacher to give you your research questions. You should be pleased that this is now an easy thing to do.

Step 2: Consider how your personal values and beliefs affect your learning

When you are reflecting on what you learned consider what you already believed about the issue. Do you think this influenced your judgement on your evidence analysis? It is okay if it did, but you do need to make sure that you didn't put your own bias — unacknowledged and challenged — into your evaluation.

Conversely, did what you learned change your beliefs about the issue and has this change made you re-think other things as well? It is good to challenge what you already know about something. This is how we grow and learn as human beings.

1.14.4 Let me do it

Think about how your research techniques are developing using the following activities.

- Follow the short version of the steps in the **Review** section at the end of this topic.
- Use the detailed steps in the **Show me** section.
- Complete a step-by-step **Worksheet** from your online Resources.

Civics and Citizenship

Your task was to research Australia's system of government and compare and contrast the main elements of Australia's system of government with that of another country. You could choose from Indonesia, India or Japan. Reflect on how you completed this task.

Economics and Business

Your task was to research Australia's economic performance and standard of wellbeing and then research another country that has poorer economic performance and a lower standard of wellbeing. You needed to research the traditional indicators, as well as access wellbeing measurement tools. Reflect on how you completed this task.

Geography

Your task was to conduct a comparative study of environmental change for Australia and another country the following areas.

- Land
- Inland water
- Coast
- Marine
- Urban

Reflect on how you completed this task.

History

Your task was to research the Universal Declaration of Human Rights and choose three articles to learn more about. You were then to investigate how Australia meets the criteria for these articles, or what we are doing to improve our performance in these, then choose another country and compare them. Reflect on how you completed this task.

on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-5982), Level 2 (ewbk-5983), Level 3 (ewbk-5984)
Economics and Business: Level 1 (ewbk-5985), Level 2 (ewbk-5986), Level 3 (ewbk-5987)
Geography: Level 1 (ewbk-5988), Level 2 (ewbk-5989), Level 3 (ewbk-5990)
History: Level 1 (ewbk-5991), Level 2 (ewbk-5992), Level 3 (ewbk-5993)

1.15 Review

1.15.1 Key knowledge summary

Questioning and researching

1. Identify what other people think about the topic and understand the reasons why perspectives differ.
   - Step 1: Identify any misconceptions in your knowledge.
   - Step 2: Identify the gaps in your knowledge.
   - Step 3: Identify your personal perspectives and compare them with other people's.
2. Write, test and refine your research questions.
   - Step 1: Design an organised and purposeful research plan.
   - Step 2: Write questions to investigate relationships, patterns and trends.
   - Step 3: Review your focus questions to test their usefulness.
3. Use and correctly reference more complex primary and secondary sources.
   - Step 1: Collect data from reliable and relevant sources.
   - Step 2: Identify the origin, purpose and context of sources.
   - Step 3: Reference your information accurately and appropriately.

Analysing

4. Examine and compare information, and understand context, bias and currency.
   - Step 1: Analyse primary and secondary sources for reliability and usefulness.
   - Step 2: Analyse sources for bias.
   - Step 3: Analyse sources for currency.
   - Step 4: Analyse hierarchies of information (categories and subcategories).
5. Compare and contrast information in different formats to identify interpretations or perspectives.
   - Step 1: Understand factors that influence people's points of view.
   - Step 2: Identify different potential interpretations of a source.
   - Step 3: Explain why information/data might be interpreted differently in different situations.
6. Identify and explain patterns and relationships and identify if they have positive, negative or neutral effects.
   - Step 1: Compare information in different formats to identify change over time.
   - Step 2: Identify and explain cause and effect relationships.

Evaluating

7. Look at your evidence and evaluate it to form conclusions.
   - Step 1: Consider the evidence to form a conclusion.
   - Step 2: Consider the possible ambiguities and gaps in the perspectives.
   - Step 3: Reconsider your conclusion.
8. Provide detailed, evidence-based, plausible reasons for relationships and trends.
   - Step 1: Clarify the relationships and patterns you have found.
   - Step 2: Identify and explain anomalies.
   - Step 3: Make plausible inferences.
   - Step 4: Form conclusions based on your inferences.
9. Examine a range of possible actions and recommend the best ways to respond.
   - Step 1: Identify the component parts of the change, challenge or event that is needed.
   - Step 2: Identify the type of action required to implement the change.
   - Step 3: Predict plausible outcomes of the action.

Communicating and reflecting

10. Choose your format and follow appropriate conventions of format, language and audience.
    - Step 1: Review the task instructions.
    - Step 2: Determine the appropriate format and its conventions.
    - Step 3: Plan the overall structure of your response to the task.

11. Use sufficient, reliable evidence and write clear and concise explanations.
    - Step 1: Select strong and appropriate evidence and language to support your conclusions.
    - Step 2: Cross-check the evidence with the sources (quotes and facts).
    - Step 3: Justify the links between your evidence and your conclusions.
12. Identify your strengths and weaknesses as a researcher and explain the impact of your personal views.
    - Step 1: Consider how research techniques change (with time and experience).
    - Step 2: Consider how your personal values and beliefs affect your learning.

1.15.2 Key terms

ambiguities information that has more than one interpretation or is unclear
anomaly something that falls outside expected patterns
cause and effect an event or action that leads to other events or actions
context the situation or circumstances (time period, place, writer, purpose etc.) in which a source or data set was created
plausible a likely or reasonable statement or argument based on strong, reliable evidence

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5995)
Reflection (ewbk-5994)
Student learning matrix (ewbk-5981)

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 1 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

1.3 SkillBuilder: Identifying knowledge and perspectives

eWorkbook
- Civics and Citizenship: Level 1, Level 2, Level 3
- Economics and Business: Level 1, Level 2, Level 3
- Geography: Level 1, Level 2, Level 3
- History: Level 1, Level 2, Level 3

1.4 SkillBuilder: Writing and dissecting research questions

eWorkbook
- Civics and Citizenship: Level 1, Level 2, Level 3
- Economics and Business: Level 1, Level 2, Level 3
- Geography: Level 1, Level 2, Level 3
- History: Level 1, Level 2, Level 3

1.5 SkillBuilder: Finding and referencing primary and secondary sources

eWorkbook
- Civics and Citizenship: Level 1, Level 2, Level 3
- Economics and Business: Level 1, Level 2, Level 3
- Geography: Level 1, Level 2, Level 3
- History: Level 1, Level 2, Level 3

1.6 SkillBuilder: Analysing primary and secondary sources

eWorkbook
- Civics and Citizenship: Level 1, Level 2, Level 3
- Economics and Business: Level 1, Level 2, Level 3
- Geography: Level 1, Level 2, Level 3
- History: Level 1, Level 2, Level 3

1.7 SkillBuilder: Identifying and comparing perspectives

eWorkbook
- Civics and Citizenship: Level 1, Level 2, Level 3
- Economics and Business: Level 1, Level 2, Level 3
- Geography: Level 1, Level 2, Level 3
- History: Level 1, Level 2, Level 3

1.8 SkillBuilder: Identifying and explaining relationships and patterns

eWorkbook
- Civics and Citizenship: Level 1, Level 2, Level 3
- Economics and Business: Level 1, Level 2, Level 3
- Geography: Level 1, Level 2, Level 3
- History: Level 1, Level 2, Level 3

1.9 SkillBuilder: Forming strong conclusions based on evidence

eWorkbook
- Civics and Citizenship: Level 1, Level 2, Level 3
- Economics and Business: Level 1, Level 2, Level 3
- Geography: Level 1, Level 2, Level 3
- History: Level 1, Level 2, Level 3

1.10 SkillBuilder: Proposing plausible explanations for patterns and relationships

eWorkbook
- Civics and Citizenship: Level 1, Level 2, Level 3
- Economics and Business: Level 1, Level 2, Level 3
- Geography: Level 1, Level 2, Level 3
- History: Level 1, Level 2, Level 3

1.11 SkillBuilder: Proposing possible actions and predicting their outcomes

eWorkbook
- Civics and Citizenship: Level 1, Level 2, Level 3
- Economics and Business: Level 1, Level 2, Level 3
- Geography: Level 1, Level 2, Level 3
- History: Level 1, Level 2, Level 3

1.12 SkillBuilder: Choosing appropriate formats and language

eWorkbook

- Civics and Citizenship: Level 1, Level 2, Level 3
- Economics and Business: Level 1, Level 2, Level 3
- Geography: Level 1, Level 2, Level 3
- History: Level 1, Level 2, Level 3

1.13 SkillBuilder: Developing strong evidence-based discussions and explanations

eWorkbook

- Civics and Citizenship: Level 1, Level 2, Level 3
- Economics and Business: Level 1, Level 2, Level 3
- Geography: Level 1, Level 2, Level 3
- History: Level 1, Level 2, Level 3

1.14 SkillBuilder: Reflecting on research techniques and findings

eWorkbook

- Civics and Citizenship: Level 1, Level 2, Level 3
- Economics and Business: Level 1, Level 2, Level 3
- Geography: Level 1, Level 2, Level 3
- History: Level 1, Level 2, Level 3

1.15 Review

eWorkbook

- Reflection (ewbk-5994)
- Student learning matrix (ewbk-5981)

To access these online resources, log on to **www.jacplus.com.au**.

CIVICS AND CITIZENSHIP

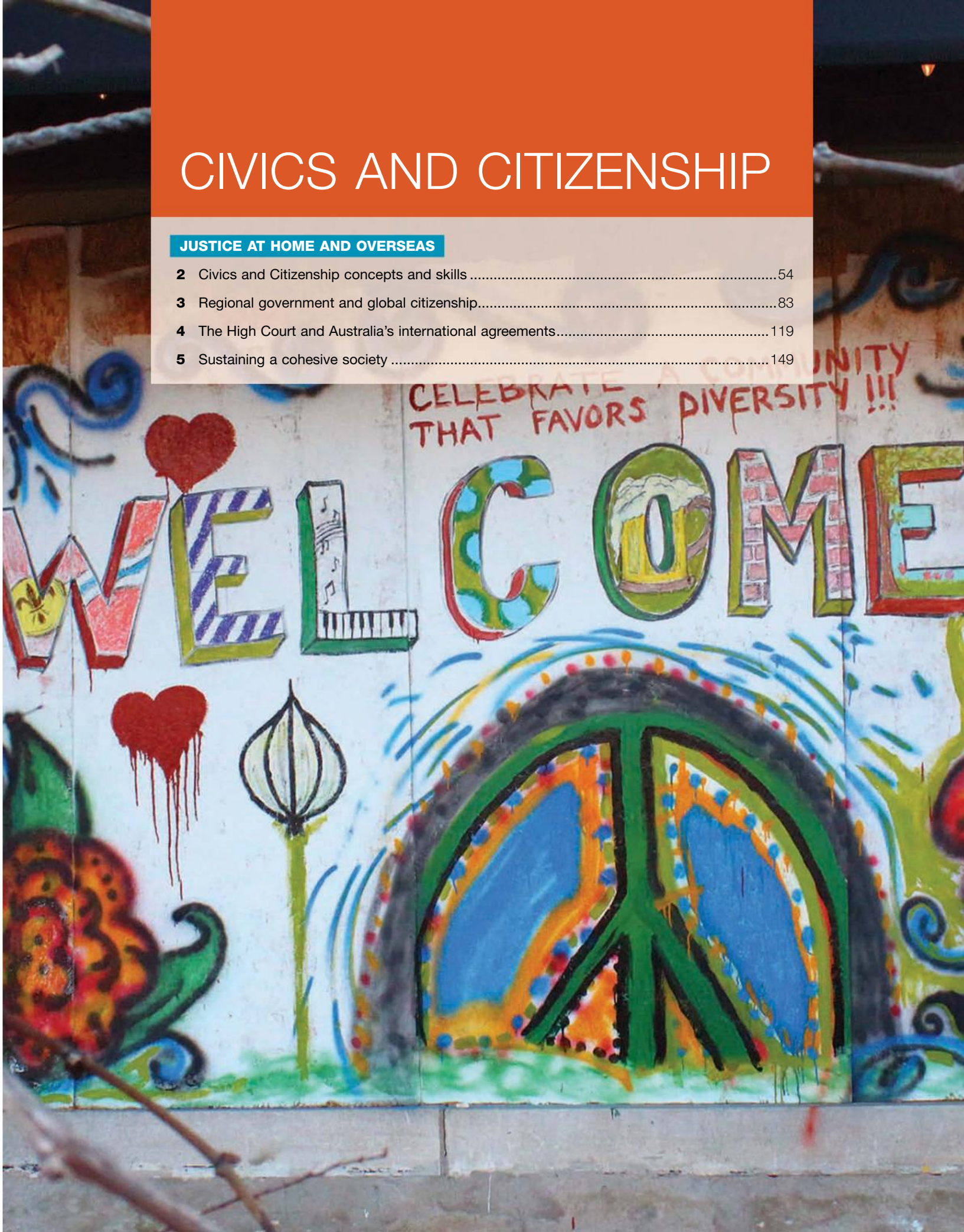
JUSTICE AT HOME AND OVERSEAS

2 Civics and Citizenship concepts and skills 54

3 Regional government and global citizenship..... 83

4 The High Court and Australia's international agreements..... 119

5 Sustaining a cohesive society 149



2 Civics and Citizenship concepts and skills

2.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

2.1.1 Introduction

As a student in Civics and Citizenship, you are developing the knowledge and skills that will be needed by you and society now and into the future. In your study of Civics and Citizenship, you will cover topics about Australia's democratic systems of government, and the justice system. Studying Civics and Citizenship may be necessary for your chosen career, or help indirectly by giving you broader knowledge and skills, especially in understanding government and legal systems.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6013)

FIGURE 1 Membership of the UN is part of Australia's global role and responsibilities.



2.2 Concepts in Civics and Citizenship

LEARNING INTENTION

By the end of this subtopic you will be able to identify the six Civics and Citizenship concepts and explain why they are important.

Australia is a relatively safe society by global standards. We have laws enforced by police that apply to the whole community; public facilities are maintained by local councils and state governments; and many essential services are provided by government. Most of these factors are dependent on having a stable and secure government and parliamentary representatives, who are accountable to the people who elected them.

Government decisions and laws passed by parliament affect many areas of your life. The political ideologies or beliefs that influence government policies will continue to affect you, and the society in which you live, into the future. You have a responsibility to care about these issues and to engage with the society that your vote will help shape in the future.

2.2.1 Civics and Citizenship concepts

Democracy

Democracy is a political system in which citizens choose the way in which they are governed. In Australia we have a representative democracy because we elect representatives to make decisions on our behalf.

Democratic values

Democratic values are the ideals that shape a democracy. In Australia these include free and fair elections, a separation of powers. You have already learned about the basic meaning of these values in years 7 and 8; this year you will begin to explore some of the more complicated impacts of these values — both positive and negative.

> *Many forms of Government have been tried, and will be tried in this world of sin and woe. No one pretends that democracy is perfect or all-wise. Indeed it has been said that democracy is the worst form of Government except for all those other forms that have been tried from time to time.* — Winston S Churchill, 11 November 1947

Do you agree with Winston Churchill (British Prime Minister during World War II) that democracy is the best form of government — even though it also has flaws? What alternatives exist? Should political leaders be allowed to express negative views about the fundamental basis and structure of our political systems?



The Westminster system

In HASS this year, you will learn more about the structure and processes of the Westminster system and begin to critically evaluate the ways it operates in Australia.

Rights and responsibilities

The study of Civics and Citizenship is not only about what the government or legal system provides or protects for us as citizens, but also about your responsibilities as a citizen. One of these key responsibilities is participation, the most basic form of which is voting. This year you will examine some of the ways in which people can participate in the political process to both express and influence opinions.

Justice

The idea of justice is that people are treated fairly and in a way that is morally right in the eyes of the law. This year you will examine the principles and processes of Australia's court system, including how laws are interpreted and potential ways those values and processes might be corrupted. In Civics and Citizenship, you will learn how our justice system works, and examine the ways in which it does or does not achieve its aims.

Participation

The concept of participation is about how you as an individual can be involved in the political and legal systems in Australia. This year you will study how your rights and freedoms are protected in Australia through the Constitution, international law and Australian law. You will learn how you can participate as a change maker within Australian society, becoming aware of threats to Australia's democracy and the safeguards that protect our society, including the right to dissent within the bounds of the law.

2.2.2 Your focus in Year 10

This year in Civics and Citizenship, you will be learning about the design of our political and legal system. In particular, you will learn about:

1. Australia's system of government and its key features, including democratic elections and the separation of power. You will also compare Australia's system of government with the government of a country in Asia
2. how Australia has a global role and the responsibilities that come with this including being a part of the UN, giving foreign aid and peacekeeping
3. the High Court and its role, which includes, importantly, interpreting the Constitution
4. how international agreements influence government policies in areas such as the environment, discrimination, children's rights and the rights of Aboriginal and Torres Strait Islander peoples
5. how Australia's democracy can be threatened by organised crime, corruption and vested interests
6. how the democratic system and our society is protected and strengthened by shared values and the right to dissent.

2.2.3 Where can Civics and Citizenship skills lead?

Careers that draw on Civics and Citizenship skills are many and varied. For some careers, these skills are essential, with further education and experience helping to develop these skills for work. These types of roles include:

- lawyer
- Member of Parliament
- ministerial adviser
- lobby groups
- public relations
- local government staff
- public service
- police
- marketing
- Electoral Commission
- human rights organisations
- foreign diplomats.

Civics and Citizenship skills are also *transferrable* skills that are helpful in a variety of workplaces and industries, in addition to industry-specialist skills. These types of roles include:

- management
- project management (architects, engineers, project managers)
- journalism
- dramatic arts
- military

- security services
- intelligence services
- import/export businesses
- emergency services
- disaster management
- environmental management.

2.3 Skills in Civics and Citizenship

LEARNING INTENTION

By the end of this subtopic you will be able to name the key Civics and Citizenship skills and explain why they are important.

2.3.1 What skills will you build this year?

This year, you will continue to build your ability to use the four broad categories of skills in the Humanities and Social Sciences. In particular this year you are expected to examine sources of information with a more critical eye. The following summaries are to remind you of these four key skills.

Questioning and researching

Questioning and researching involves locating relevant and detailed information and/or data from a range of appropriate sources.

Analysing

Analysing involves interpreting information to identify the main features or ideas, then examining the information closely to determine how the parts relate to the whole.

Evaluating

Evaluating means examining your interpretations of information to draw evidence-based conclusions. It requires taking into account ambiguities and multiple perspectives in a source and proposing potential responses to contemporary challenges or issues.

Communicating and reflecting

Communicating your ideas means presenting information in a range of formats to suit the intended audience and purpose. This includes essays, oral presentations, debates, tables and cartoons. Reflecting on your skills is also an important part of the process.

2.3.2 Practical skills in the topic

In addition to these broad skills, there is a range of essential practical skills that you will learn, practise and master as you study Civics and Citizenship. The SkillBuilder topics in this section will tell you about the skill, show you the skill and let you apply the skill to the topics covered.

The SkillBuilders you will use in Year 10 are as follows:

1. Using the inquiry approach for research
2. Using the deconstruct/reconstruct method
3. Conducting an interview
4. Using and referencing quotes
5. Analysing political cartooons
6. Writing essays
7. Writing a feature article (news story)
8. Debating an issue.

2.4 SkillBuilder — Using the inquiry approach for research

LEARNING INTENTION

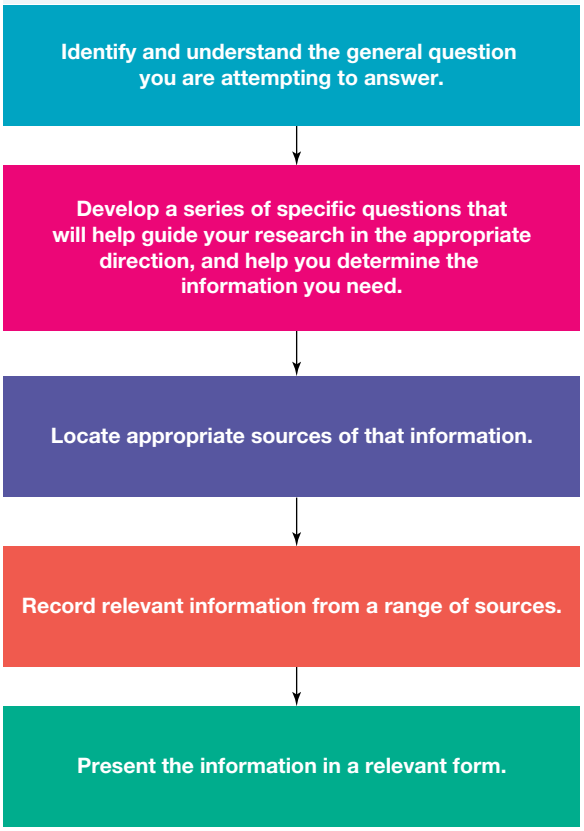
This SkillBuilder shows you how to use an inquiry approach for research. Conducting research is an integral part of the Questioning and researching HASS skill.

The inquiry approach is the foundation of Questioning and researching in HASS. In years 7 to 9, you have learned each of the parts of this process in detail. At a Year 10 level, you should be able to locate relevant and detailed information and data from a range of appropriate sources. You should then be able to analyse and evaluate this information, to help you form an argument or hypothesis, and choose relevant information to support this hypothesis.

2.4.1 Tell me

The inquiry approach is a process to help you research and answer questions or address issues in HASS. When you are asked to 'do research' you need to investigate a particular topic or event. To do this investigation well it is important to have a series of questions to guide your investigation (inquiry). You already have skills in using this process; Year 10 is your chance to examine and refine those skills.

FIGURE 1 The steps in the inquiry process



2.4.2 Show me

Imagine you have been asked to investigate into the potential threats to Australia's democracy through either vested interests, organised crime or corruption.

You need to plan your investigation and break it into some clear steps. This process will be familiar from previous years of HASS study.

Step 1

Your first step is to clearly identify the essential key question. For the topic organised crime, this could be expressed as:

What is the level of threat of organised crime in Australia?

Step 2

Break this down into a series of inquiry questions. These could include:

1. What is organised crime?
2. How much organised crime exists in Australia? In each of the states?
3. Has the level of organised crime changed? How?
4. Discuss the reasons for organised crime in the community?

Step 3

Locate appropriate sources. There is a wide variety of sources that can be used for research, including textbooks, websites and books written by experts in the subject.

You need to ensure that the sources of information you use are relevant to your topic, and reliable. To do this start with sources from trusted educational institutions or official organisations. For example, this textbook or the National Crime Authority or Institute of Criminology.

Internet searches can bring up a huge list of information sources, but not all are reliable. You need to carefully select a small number of sources that are reliable. Remember also that crowd-sourced or publicly edited information may not always be reliable.

Step 4

Record your information. A recommended way to record your research information is by using a formal note-taking method, such as Cornell Notes.

Another method is to select and print some text, and highlight those sentences or paragraphs that provide answers to your questions. Sometimes a complete answer to a question may be found in several places in a piece of text. Be sure to highlight all relevant text and indicate with a number which question the information answers. When you are satisfied that you have found the answers to all the questions, write the answers in order, making sure to use your own words or clearly mark quotations and include the full source details. (Doing this at the note-taking stage means you won't have to come back to the source to find the details later.)

2.4.3 Let me do it

Practise the skill of using inquiry questions for research by completing a step-by-step **worksheet** from your online resources.

2.5 SkillBuilder — Using the deconstruct/reconstruct method

LEARNING INTENTION

This SkillBuilder shows you how to use an deconstruct/reconstruct method for research. Using the deconstruct/reconstruct method is part of the Questioning and researching HASS skill.

The deconstruct/reconstruct method is part of the Questioning and researching skill in HASS. At a Year 10 level you should be able to accurately and effectively make notes from a source, without plagiarising. This includes knowing how to reference your sources.

2.5.1 Tell me

Copying another person's work without acknowledging the author is plagiarism, whether it is intentional or accidental. For many students, the act of plagiarism occurs simply because they do not know how to read information and then use it appropriately in their own work. The deconstruct/reconstruct method teaches you how to use another person's work appropriately.

2.5.2 Show me

The deconstruct/reconstruct method is a way to use existing information to create original work. This academic technique helps you better understand information and allows you to organise your thoughts more clearly. By implementing this strategy, you will create unique pieces of writing that still have the same meaning as the articles and books you have read in your research.

There are three steps to the deconstruct/reconstruct method.

Step 1
Read

Make sure you read the entire source from start to end. There is no need to highlight or take notes during this stage. You want to simply read and take in the meaning of the author's work.

When you finished your first read-through, think about the text. Note down any questions you have after your first read-through. In some circumstances, you might also decide after the first read that this text is not relevant to your task or research, or that it is clearly an unreliable or inaccurate source of information. In this case, do not proceed; find another source of information.

Step 2
Re-read

Remember: the more times you watch a movie, the better you can see the elements that the director wants you to see. Similarly, the more times you read a source, the better you can see the elements that the author wants you to see. A second reading is to help you extract and begin paraphrasing the information relevant to your task, and to identify quotes you might wish to use.

When re-reading a source, you should use a table like the following to help you collect information and organise your own thoughts.

Quotes/facts	Notes
• Factual information • Direct quotes from authors or other people • Statistics	• Ideas and questions you might think of while reading the source • Dot points and/or whole sentences

- In the 'Quotes/facts' column, write only factual or statistical information.
- The 'Notes' section is for any ideas and questions you might have after reading the quote. You can write this section in dot points or full sentences — whatever makes sense to you. You do not necessarily need to comment on each quote or fact you record; similarly, you may write notes that do not relate to a specific quote. Completing this section is crucial as these notes will form the basis of your writing.
- Instead of copying out the whole quote in the left column, you might also note the quote's location in the text and highlight it in your text or article. (You may not be able to do this if you are working with online resources, so having this column is useful.)

Let us use text from topic 3 of this textbook to practise the deconstruct/reconstruct method.

The system of government in the Empire of Japan was a military and absolute monarchy. This changed at the end of World War II, when the Constitution of Japan was drawn up and the post-war country ceased to be an empire and became modern Japan. Enacted on 3 May 1947, Japan's Constitution is based on three principles: sovereignty of the people, respect for fundamental human rights and renunciation of war.

Japan's system of government is based on the idea of democracy. Japan is an independent country governed by a constitutional monarchy, with a parliamentary system of government. Japan's Constitution has remained unchanged since it came into force in 1947. The emperor is the head of state but only has a symbolic role.

FIGURE 1 The National Diet Building in Tokyo, the home of Japan's national parliament



The people of Japan choose the members of the Diet, and the members of the Diet elect the Japanese prime minister from among themselves.

Notice in the following table example:

- Quotes are formatted to show omissions (with an ellipsis …) and additions (with square [brackets] around the added words).
- Quotes listed in the table are highlighted in the text for future checking/reference.
- Notes are not in full sentences and use abbreviations.

Quotes/facts	Notes
• 'The Empire of Japan was based on a military and absolute monarchy.' • Constitution drawn-up after WWII, during Allied occupation • '[The] Constitution … based on three principles: sovereignty of the people, respect for fundamental human rights and renunciation of war.' • Const. enacted: 3 May 1947 • Govt based on democracy • Constitutional monarchy • Parliamentary govt. • Parliament called 'Diet' • Emperor head of state, only symbolic • Political system based on Westminster system. • Bicameral parliament • Japanese people elect Diet members, who then elect prime minister.	• Who had more power, the military or emperor? • Was this forced or welcome? • Which human rights are clearly specified, what else is in the constitution? • Who was involved in writing it? • How many members are there in the Diet? • What powers does the Emperor have now? • Are the powers of each house equivalent? • How many political parties are there in Japanese politics?

Step 3
Re-write

Put away the book, close the website page and rewrite what you have just read. The best way to do this is by using only the table that you created in **step 2**. The notes column should contain your own interpretation of what the author has said, and the quotes/facts column will provide the evidence you need to support your arguments and assumptions.

Once you have completed the table, you can use the information to create your original piece of writing. The following paragraph has been written using the information summarised in the practice table. Extra research has also been completed to answer some of the questions written in the notes column.

SAMPLE STUDENT ANSWER

Japan has a democratic system of government that is based on the British Westminster system. The Japanese emperor is technically the head of state, but this is largely a symbolic position. Japan has a parliamentary style of government, which means that the people elect representatives to the national parliament, called the *Diet*, and these Members of the Diet then elect the prime minister, who heads up the government. Like British Parliament, this Diet is divided into two houses, making Japan's Diet a bicameral parliament.

Japan is a constitutional monarchy, with a written constitution outlining the form and powers of the government. This constitution was drawn up during the Allied occupation of Japan after World War II, and enacted on 3 May 1947. Prior to this, Japan's system of government was based on a powerful military and absolute monarchy. The current constitution instead has three key principles: sovereignty of the people, respect for fundamental human rights and renunciation of war.

As you can see, the meaning of the paragraph created by the deconstruct/reconstruct method and the one upon which it is based is exactly the same. Both paragraphs discuss the system of government in Japan, and both paragraphs use similar information in this discussion. However, because the deconstruct/reconstruct method has been used, the written text itself is completely different. The author has synthesised information and created an original piece of writing.

2.5.3 Let me do it

2.5 ACTIVITY

Practise the skill of using the deconstruct/reconstruct method by choosing any paragraph from this resource and applying the three steps of the process. To do this complete the step-by-step **worksheet** from your online resources.

2.6 SkillBuilder — Conducting an interview

LEARNING INTENTION

This SkillBuilder shows you how to conduct an interview. Conducting an interview is part of the Questioning and researching HASS skill.

Conducting interviews is part of the Questioning and researching, and Communicating and reflecting skills in HASS. In Year 10 conducting interviews can help you understand an issue or problem from different perspectives, so that you can better understand which strategies or actions might provide the best outcome for everyone involved.

2.6.1 Tell me

An interview is a conversation with some sort of purpose between two or more people. Questions will be asked by the interviewer(s) to obtain information, facts or statements from the person(s) being interviewed. Interviews can be conducted face-to-face between two people or in small groups, or by some form of communications technology such as the telephone or internet.

Why is conducting an interview useful?

An interview is important because it allows the interviewer to gather a wide range of views and facts. Interviews can reveal information about people's values, motivations, attitudes and feelings.

FIGURE 1 Interviewing a person allows the interviewer to gather a wide range of views and facts.



2.6.2 Show me

Step 1

Establish your goal

What do you want to find out from the person?

If you are interviewing someone well-known, do some preliminary research so that your questions are well targeted. Learn the basic facts about the topic you're interviewing the person about; try to discover a topic that you either can't find any information about or that might have been reported in slightly different ways. These areas of ambiguity or differing perspective about a person might provide interesting directions for questioning.

If you are interviewing someone who is not well known, you may need to ask more questions in the interview to get this basic information.

Step 2

Plan your line of questioning

Plan the questions you will need to ask the person at an interview. You could use the 5W and 1H approach to help formulate your questions. Often, people who have a public profile will want to see the questions you plan to ask in advance, sometimes before they agree to the interview.

Step 3

Schedule your interview

If you are interviewing a specific person, organise a time in advance for the interview. Be prepared to negotiate the time and place. When you ask them if they will agree to be interviewed, let them know what you are interviewing them for: the final product you will produce and who will read or view it.

Before your interview day and time, send a confirmation to the person you are interviewing. Include the day, time and place you are meeting. Thank them for agreeing to the interview.

Generally, it is best to interview people in person, but you can also conduct phone or video-chat interviews. If you are interviewing a person that you do not know well, and you want to interview them in person, organise to meet in a public location, like a café or public library.

Step 4

Conducting your interview

A good interview is more like a conversation than a series of questions and answers. Always use your questions to keep the conversation on track, but don't be afraid to ask follow-up questions or ask for more information if your subject tells you something interesting and relevant that you don't anticipate.

Make eye contact as your subject answers your questions. Use positive and friendly body language.

There are a few ways that you can record the details of your interview, each has benefits and drawbacks. If you are required to submit a transcript, you will need to either audio or video record it.

Method	Positives	Negatives
Writing notes	Quick to review	Potential to misquote Hard to record a lot of information and talk at the same time
Audio recording	Easier to record Can review and replay to get quotes exact	Slower to review and find specific information May have technical issues (power, sound quality)
Video recording	Easier to record Can review and replay to get quotes exact	Can be intimidating or off-putting for some people Slower to review and find specific information May have technical issues (power, quality, etc.)

Etiquette for interviews

- Be polite.
- Be on time.
- Dress appropriately for the situation. If you are meeting someone in their office, you should be dressed neatly (if in doubt, wear your school uniform).
- Before you ask any questions, remind them why you are doing the interview and what will happen to their responses (how you will be using the information).
- Always thank the person for their time.

Step 4

If you have recorded the interview and need to submit a transcript, write out the interview (word for word) using proper sentences and headings. Present the transcript so that it is easy to read.

2.6.3 Let me do it

2.6 ACTIVITY

Practise the skill of conducting an interview by completing the following activities. To do this you can also complete a step-by-step **worksheet** from your online resources.

1. Conduct an interview with a person with connections to a country in the Asia region. Use the following questions to guide your interview. You should add more to enhance the information you collect in the interview:
   a. What country in the Asia region do you have connections to?
   b. In what country do you currently live?
   c. What values do you associate with Australia's system of government?
   d. What values do you associate with the country in the Asia region that you have connections to?
   e. Can you see any similarities or differences between the values of Australia's system of government and those of the country in the Asia region that you have connections to?
   f. How much do you think Australia should spend on foreign aid?
2. After completing your interview, write a transcript of it. Decide whether your transcript will follow a simple question-and-answer format, or be written like a narrative (a written account of the interview). Create a heading for the transcript, then write a short introductory paragraph preceding the transcript outlining who you interviewed, when the interview took place and what the interview was about (a summary of your main questions).

FIGURE 2 Make sure you take notes in the interview and then transcribe them afterwards.



2.7 SkillBuilder — Using and referencing quotes

LEARNING INTENTION

This SkillBuilder shows you how to use and reference quotes. Using and referencing quotes is part of the Questioning and researching HASS skill.

Using and referencing quotes accurately is part of the Questioning and researching skill in HASS and is important for communicating your ideas effectively. At a Year 10 level you are expected to know and use appropriate ethical protocols, including specific formats for acknowledging other people's information, and understand that these formats vary between organisations.

2.7.1 Tell me

Why is it important to reference quotes?

When writing an essay, assignment or report, you need to include evidence to support your arguments. If this evidence takes the form of a quote or includes the use of statistics, then you must show the reader where this information came from. This can be done through the use of a referencing system.

There are many different referencing systems used throughout the academic world. Some systems were developed at the world's leading universities and so bear their names. The Harvard and Oxford systems are examples of these, and they happen to be the two most widely used referencing systems.

- The Harvard system uses in-text references in the form of parentheses, or brackets, containing the author's name and the year of publication, like this: (Smith, 2014).
- The Oxford referencing system uses numbered footnotes. A footnote lists bibliographical information at the foot (bottom) of a page and the number corresponding to that footnote at the end of the relevant section of text, usually a sentence, like this.[1] (***Note:*** The footnote here does not actually reference anything but is just used as an example of what a footnote number looks like.)

The Harvard referencing system has its origins in the scientific field. A simple and direct system, it was later adopted by the wider academic community. Due to its simplicity and ease of use, the Harvard system has become more widely used than its Oxford counterpart.

The HASS skills chapters of this series teach you how to use the Harvard system to create lists of references for your research. In this subtopic you will learn the next part of the system: how to incorporate quotes into your written work.

2.7.2 Show me

Step 1

There are four techniques for incorporating other people's ideas and information into your work, and you should choose the one that works best for a particular information and the way you are communicating your ideas. News articles may rely more on direct quotes, an essay may include more paraphrased ideas.

	Definition	Example	Ethical protocols
Direct quote	A direct quote is an exact copy of the words and structure of the author shown in quotation marks.	'The Harvard system is far better than its Oxford counterpart.' (Smith, 2020, p. 12)	Always ensure you quote exactly, word-for-word
Edited quote	A slightly edited version of what the author has written, either taking words out or adding them in.	Smith (2014, p. 12) claims that '… Harvard is [a] far better [system] than its Oxford counterpart.'	Use only to make the quote fit the grammar of a sentence. Ensure that the original idea or message of the author is reflected in your quote; twisting their words to change the meaning is unethical Always show where you have made edits. Three dots show you have taken words out. Square brackets show you have added words.
Paraphrased information	A paraphrased idea has been rewritten in completely new words and structure.	It has been suggested that Oxford referencing is inferior to the Harvard style (Smith, 2014, p. 12).	Do not use their words or structure. The meaning of the information must be the same.

Does it count if I replace a few words with the thesaurus?

Using someone else's words and writing structure, but swapping in a few synonyms here and there, is still plagiarising even though the text is not exactly the same. You are using another writer's basic structure and most of their words without acknowledging it. Many teachers and publications use software or web services to detect exactly this kind of plagiarism. Do the right thing: cite your sources.

Step 2

Each of the different types of reference requires different types of in-text referencing. Understanding the different types and the rules for citation will help you to include the information correctly.

Methods of in-text referencing for each type of quote

Type of citation	How to reference it	Example
Paraphrase (simple)	Include the author's surname and the year the source text was published in parentheses at the end of a sentence.	The information was easy to find; social media sites were publishing it (Smith, 2019).
Paraphrase (using the author's name in your sentence)	Include the year of publication in parenthesis directly after your rewriting of the information.	The information was easy to find, as Smith (2019) demonstrated, many social media sites were publishing it.
Direct quotes (less than three lines of your writing)	• Add the author's surname and the year the source was published in parentheses at the end of a sentence *and* page number of the reference. • Write the whole quote in quotation marks.	'Social media sites published this information' (Smith, 2019, p. 12).
Direct quotes (more than three lines of your writing)	• Add the author's surname and the year the source was published in parentheses at the end of a sentence *and* page number of the reference. • Include substantial quotes as a separate paragraph. To differentiate the quote from the regular text, this paragraph is usually indented from the left and right and written with a slightly smaller font or different line spacing.	The information that influenced voters was easy to find. Social media sites published this information widely in a number of countries. The course of the original posts, however, were impossible for us to trace. (Smith, 2019, p. 12)

Type of citation	How to reference it	Example
Using the author's name in your sentence	Include the year of publication directly after this, again in parentheses.	The information was easy to find, as Smith (2019) demonstrated, many social media sites were publishing it.

2.7.3 Let me do it

2.7 ACTIVITY

Practise the skill of using and referecing quotes by completing the following activities. To do this you can complete a step-by-step **worksheet** from your online resources.

a. Choose three separate sources of information about an issue in federal politics this week. (Try to use different kinds of sources.)
b. Write your own point of view about this issue, incorporating four references to your sources — one using each of the techniques shown above (direct quote, edited quote, substantial quote and paraphrased quote).

2.8 SkillBuilder — Analysing political cartoons

LEARNING INTENTION

This SkillBuilder shows you how to analyse a political cartoon. Analysing a cartoon is part of the Analysing HASS skill.

Analysing political cartoons is an important way of engaging with and examining current political issues. In Year 10 you should be able to identify, explain and provide a contrary perspective to those presented in texts.

2.8.1 Tell me

Political cartoons are created to critique and sometimes ridicule political decisions, views and politicians themselves using caricature (pictures of people that have had some of their features or mannerisms purposely distorted or exaggerated for comic effect). They also use visual and language tools such as exaggeration, irony and absurdity.

Bias is where a person presents information based on their own views, rather than facts. It may be done on purpose as the author is trying to persuade the reader, but it could be unconscious — the author presents information according to their views but they are not doing it on purpose. This is not always an issue but it is necessary to be able to identify when this happens as it could have serious consequences particularly in the application of the law and the potential to undermine justice. Identifying bias occurs through examining the language that the author uses as well as the data they present to support their views. The data could be based on flawed surveys or have been manipulated to support a particular viewpoint.

The examples in this subtopic relate to analysing bias in cartoons, but the same process applies to any source of information.

2.8.2 Show me

Step 1

Look closely at the visuals. The colours, facial expressions of the people, symbols and style will give clues about the message and help you to interpret the point of view perspective. Drawing up a table to collect your observations will help with the next stage of the process.

For example, some of the notes you might make about the cartoon in **FIGURE 1** are included in the left column.

Feature	Description	Possible interpretations
Rubbish on the ground	Seems to be how to vote cards — shown as litter.	
Brown 'fumes' coming from political party booths	Political parties all have the same bad smell.	
Voter holding his nose	Political parties all have the same bad smell.	

FIGURE 1 2019 Australian federal election cartoon



Source: https://saltbushclub.com/2019/04/28/how-to-vote.

Step 2

Then look at the language used in the image or the caption, if there is one. This will give another clue about the reaction the author is trying to illicit in the reader. For example, is it designed to make the reader feel angry, sad, victimised or to take a certain viewpoint? The language used by an author can be very subtle — it may not be obvious what the author wants the reader to feel as some terminology is not as emotive as others.

Add your observations to your table of notes. At this stage, you might also add questions to consider as well as observations.

Feature	Description	Possible interpretations
Rubbish on the ground	Seems to be how to vote cards — shown as litter.	
Brown 'fumes' coming from political party booths	Political parties all have the same bad smell.	
Voter holding his nose	Political parties all have the same bad smell.	
Text on how to vote cards	Writing is indistinguishable.	
Party booths all labelled with their name and party colour	All lettering and booths are the same, only the colours are different.	

Step 3

Cartoons will generally represent one main viewpoint of an issue rather than show the broad range of points of view. Connect what you see with the overall perspective of the cartoon. **FIGURE 1** is suggesting that none of the four political parties represented in the cartoon are worth the voter's consideration — they all 'stink'.

Complete your table by explaining how what you see helps to support the message of the cartoon. This might help you to answer some questions, but will probably raise many others. Try to think of as many possible, plausible interpretations of what you see. This is a good way of practising thinking how different images or words can mean a variety of different things, and reveal a range of perspectives if used in a slightly different context.

Political cartoons also often operate on multiple levels (different layers of meaning) so don't feel that you have to come up with one, definitive 'correct' interpretation. There is often more than one message that can be taken from a political cartoon. For example, some of the possible interpretations you could make based on **FIGURE 1** include the following.

Feature	Description	Possible interpretations
Rubbish on the ground	Seems to be how to vote cards — shown as litter.	• The advice about voting given by parties is rubbish. • They are polluting the streets with their ideas.
Brown 'fumes' coming from political party booths	Political parties all have the same bad smell.	• The four main political parties are rotting. • They smell like sewerage (the booths look like old outdoor toilets).
Voter holding his nose	Political parties all have the same bad smell.	• Reinforces the politicians are 'on the nose'. • Voter is not interested in their ideas.
Text on how to vote cards	Writing is indistinguishable.	• Their messages might as well all be the same.
Party booths all labelled with their name and party colour	All lettering and booths are the same, only the colours are different.	• Reinforces the parties are all different variations of the same thing.

Are the people in this cartoon caricatures? Or are they symbols representing a type of person? Is there a difference?

How might the cartoon be changed to show the opposite perspective?

Step 4

You may be asked to write an extended response analysing a political cartoon. In this case, use your table to structure your response paragraphs. For example:

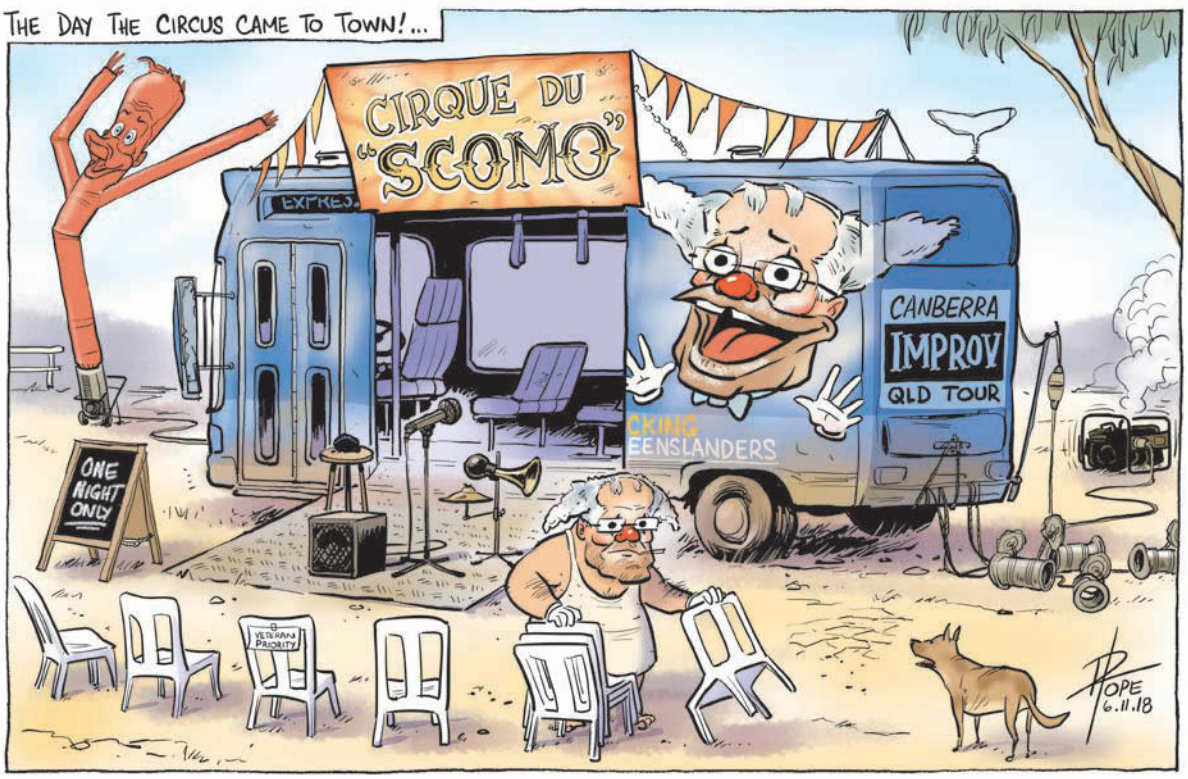
- Identify a feature (visual or text).
  This cartoon shows the ground outside a polling booth covered in discarded how-to-vote cards.
- Give a description.
  The cards are indistinguishable from each other and are spread across the ground in front of all of the candidates.
- Provide an interpretation.
  This suggests that the election materials might as well all contain the same 'rubbish' or pointless, wasted message. It might also be hinting that the messages and ideas of political parties — as explained in their election materials — are polluting the streets, that is, making the country messier and uglier.
- Conclude by stating how these observations support your interpretation of the cartoon as a whole.
  This reinforces the cartoonist's perspective that none of the four major Australian political parties are worth voting for, and the message that voters should ignore them when it comes time to vote.

2.8.3 Let me do it

2.8 ACTIVITY

Practise the skill of analysing using the political cartoon in **FIGURE 2**. To do this you can complete a step-by-step **worksheet** from your online resources.

FIGURE 2 The day the circus came to town, from *The Canberra Times*, 6 November 2018



2.9 SkillBuilder — Writing essays

LEARNING INTENTION

This SkillBuilder shows you how to write an essay. Writing an essay is part of the Communicating and reflecting HASS skill.

Writing essays is part of the Communicating and reflecting skill in HASS. Extended response and essay writing are important skills in Civics and Citizenship. It is important to be able to explain information in detail and present evidence that supports the ideas in an objective and unbiased way. This subtopic focusses on refining the structure of your essays, and ensuring you answer the question or topic that has been given.

2.9.1 Tell me

As you have learned in earlier years, an effective essay has three main three parts:

- introduction (outline of the essay)
- body (multiple paragraphs each with a clear structure and addressing a different, single idea in detail
- conclusion (overview of the essay).

These elements link together to present the information to the reader. Overall, an essay should clearly explain the background of an issue, contain evidence and examples and, most importantly, answer the question that has been asked. This might seem obvious, but many students fall into the trap of writing about what they know in an essay, rather than answering the specifics of the question that has been asked. The connection between what you are writing and the question should be clear at every stage of your essay.

2.9.2 Show me

Step 1

Refining your introductions

An introduction is a paragraph that outlines the direction of the essay. It usually includes reference to the question or topic, two or three key definitions and an outline of the evidence used to support the points. It should also include a thesis statement; this is a sentence that addresses the question and makes the general direction of the essay clear.

FIGURE 1 The United Nations brings the countries of the world together. Why do you think all the flags are on display?



For example:

- Question: The United Nations is an important body in managing international relations. Discuss this statement.
- Thesis: The statement 'The United Nations is an important body in managing international relations' is extremely valid.
- Thesis: The United Nations is a body of enormous influence and has contributed significantly to international co-operation.

The rest of the introduction should outline the evidence and examples used to support the thesis. It should also follow a full paragraph structure.

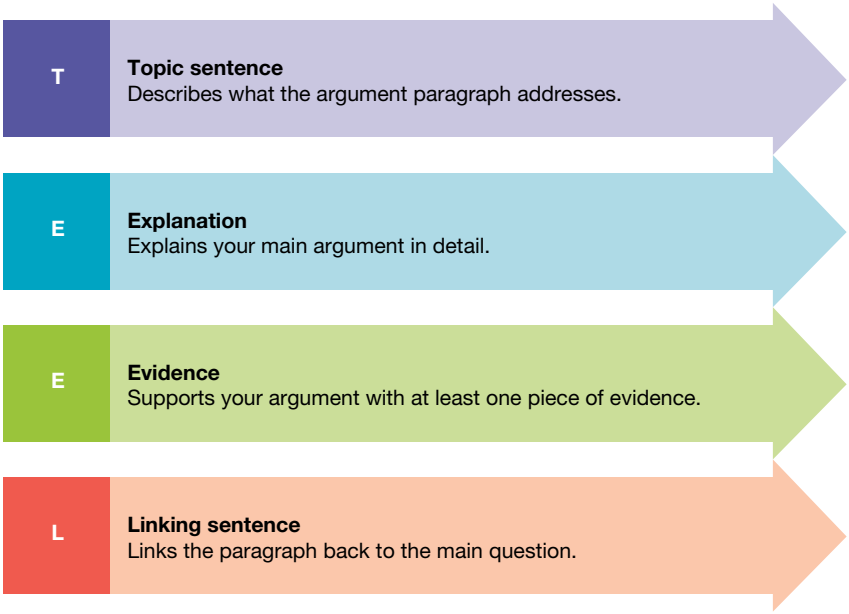
A clear introduction also helps you to show that you will answer the question in the way that is being asked. In the following example, students are being asked to 'discuss'. A 'discuss' extended response requires you to identify and give arguments for and/or against. This means you can answer with an essay that agrees, disagrees or provides some points each way. Remember: some of the most thoughtful and well-supported views in Civics and Citizenship show that you understand there are many different perspectives on an issue. A 'discuss' question helps you to show the 'grey areas' of an issue. In contrast, if the question was reworded to 'Argue that the United Nations is an important body in managing international relations' (or make a case that …) you are being asked to defend a specific point of view — you can only show the other side to explain why it is wrong.

Step 2
Clear argument paragraphs

An argument paragraph is a section of an essay that presents a point of view. Beginning with a topic sentence, the paragraph will then explain the point of view and support it with evidence. Finally, a linking sentence will draw the reader's attention back to the key questions being discussed. In this way, an argument paragraph follows the TEEL structure.

This structure will already be familiar from previous years of HASS. As your essay writing becomes more sophisticated and your ideas more complex, you might need to move away from this rigid structure a little to be able to explain and support your ideas effectively.

FIGURE 2 The TEEL structure for writing an essay



Imagine that, after completing this topic, your teacher asks you to write an essay on the following:

Discuss the potential for foreign interference in elections in a country such as Australia.

The following paragraph is an example of the kind of paragraph you would find in this essay; however, the structure blends together the 'two Es' of TEEL to provide a more fluid and connected piece of writing.

Australia is a democratic country and has a number of measures in place to protect the integrity of the system; however, there is the potential for foreign powers to interfere in the democratic process. They may, for example, attempt to influence the outcome of an election with a view to gaining power and influence in the decision-making process. This could include reviewing foreign investments, building major infrastructure projects or gaining seats in parliament in an attempt to subvert procedures. Evidence of how easily this influence might occur in Australia has been seen in other democratic country's recent electoral campaigns. In the 2016 US presidential election, it was claimed that Russian operatives tried to influence voter opinion through social media, posing as Americans and sharing propaganda that criticised Hilary Clinton. Currently, Australia has no laws governing truth in political advertising, high levels of social media use and no online advertising black-out law. These factors combine to provide an easy opportunity for foreign entities to interfere in the Australian electoral process in the same way — right up until the final vote is cast.

How many paragraphs should an essay have?



Have you ever heard the saying 'how long is a piece of string'? There is no definite answer; an essay can be long or short — depending on the question and the quality of the answer. At Year 10 level you should aim to be writing essays with a clear introduction, three or four main body paragraphs and a conclusion.

Step 3
Conclusion

A conclusion is a paragraph that summarises the essay. It is sometimes described as a re-working of the Introduction but with slightly different language so it 'finishes' the argument. Don't forget that each part of your essay should reflect the direction and intention of the question you have been asked. This should be the focus of your conclusion too.

Step 4

Check the details. Never submit an essay or extended response without checking over your work carefully. Look for:

- a clear and logically structure
- correct spelling (especially with names and subject-specific terms)
- accurate and well-referenced quotes
- strong evidence that supports your ideas.

Finally, look at the question you have been asked again:

- Have you answered all of the parts in the way you have been asked?
- Have you addressed all parts of the content referred to in the question?
- Have you answered in the right way (e.g. don't give an argument when you have been asked for a discussion)?

2.9.3 Let me do it

2.9 ACTIVITY

Practise the skill in writing an essay by addresing the following:

Discuss the potential for foreign interference in elections in a country such as Australia.

You will need to do some research before writing your practice paragraphs. You can also complete a step-by-step **worksheet** from your online resources to help you with this task.

2.10 SkillBuilder — Writing a feature article

LEARNING INTENTION

This SkillBuilder shows you how to write a feature article. Writing a feature article is part of the Communicating and reflecting HASS skill.

Writing feature articles is part of the Communicating and reflecting skill in HASS. In Year 10 you are expected to write a variety of extended pieces to present arguments and information, and tailor them specifically to suit an audience and purpose.

2.10.1 Tell me

A feature article is a news article that is written to present more in-depth information or analysis of an issue. They are often written by experts in a particular topic or journalists with specialist knowledge gained through detailed investigation or analysis.

2.10.2 Show me

The steps for writing a feature article uses examples from this piece, published by UNICEF.

STILL 'A LONG WAY TO GO' IN CORONAVIRUS BATTLE, WHO CHIEF WARNS

A lone pedestrian in Piazza Del Duomo, a space normally crowded with thousands of visitors.



Source: © UNICEF/Francesco Spighi/The Florentine 22 April 2020.

Health

The head of the World Health Organization (WHO) has warned against complacency as countries continue to confront COVID-19 and citizens grow weary of stay-at-home measures aimed at preventing the spread of the disease.

Speaking on Wednesday, WHO chief Tedros Adhanom Ghebreyesus reported that most countries are still in the very early stages of their epidemics, while some that had been affected earlier are now starting to see a resurgence in cases.

"Make no mistake: we have a long way to go. This virus will be with us for a long time", he stated.

The global COVID-19 caseload has reached nearly 2.5 million, and more than 160,000 deaths.

While most of the epidemics in Western Europe appear to be stable or declining, "worrying upward trends" are visible in Africa, Central America, South America and Eastern Europe, despite low case numbers.

"There's no question that #StayHome orders and other physical distancing measures have successfully suppressed transmission in many countries.

But this virus remains extremely dangerous"-@DrTedros #COVID19 — World Health Organization (WHO) (@WHO) April 22, 2020

Tedros told journalists that although lockdowns and physical distancing have helped suppress transmission in many countries, the virus remains "extremely dangerous".

Most of the global population continues to be highly susceptible, which means epidemics can easily re-ignite.

Tired of being home

"One of the greatest dangers we face now is complacency. People in countries with stay-at-home orders are understandably frustrated with being confined to their homes for weeks on end", he said.

"People understandably want to get on with their lives, because their lives and livelihoods are at stake. That's what WHO wants too. And that's what we are working for, all day, every day."

However, Tedros said moving forward will have to mean accepting "a new normal", and forging a world that is healthier, safer and better prepared.

He underlined the six public health measures WHO has been advocating since the pandemic started, which centre around detection, isolation, testing, treatment and quarantine

The last step involves educating and empowering the public.

"Countries that don't do these six central things, and do them consistently, will see more cases, and more lives will be lost", said Tedros.

Mobile message initiative

Telecommunications companies across the world are being encouraged to support a WHO initiative to provide COVID-19 information via mobile text messages, announced earlier this week in conjunction with sister UN agency, the International Telecommunication Union (ITU).

The goal is to help reach the half of the global population that lacks internet access, starting in the Asia-Pacific region before a global rollout.

"We also issued a call with the World Trade Organization, calling on countries to ensure the normal cross-border flow of vital medical supplies and other goods and services, and to resolve unnecessary disruptions to global supply chains", Tedros further reported.

"We need to ensure these products reach those in need quickly, and we emphasize the importance of regulatory cooperation and international standards."

Solidarity, not stigma

In addition to fighting the new coronavirus disease, WHO is also working to stamp out related stigma and discrimination.

There have been "disturbing reports" about COVID-19 discrimination in many countries, and in all regions, according to Tedros.

"Stigma and discrimination are never acceptable anywhere at anytime, and must be fought in all countries", he said, adding, "as I have said many times, this is a time for solidarity, not stigma".

Strain on the brain

The UN agency has also been addressing the pandemic's impact on mental health.

WHO has produced technical guidance for individuals and health workers, who are under enormous strain at this time.

Meanwhile, a free children's book about COVID-19, which the agency recently launched, is being used among Rohingya refugee children in Bangladesh, and children in Syria, Yemen, Iraq, Greece and Nigeria.

WHO has also received requests to translate the book into more than 100 languages.

The book, *My Hero is You: How kids can fight COVID-19*, uses a fantasy creature called Ario who explains how children can not only protect themselves from the disease but also how to manage difficult emotions that may arise as a result of the pandemic.

Source: https://news.un.org/en/story/2020/04/1062372

Step 1

Understanding the point of view

Feature articles are usually written in a mixture of first- and third-person point of view.

- First person (I, me, my, we, us, our) may be used to establish a relationship with the reader, in direct quotes or to provide anecdotes.
  - 'And that's what we are working for, all day, every day.'
  - 'One of the greatest dangers we face now is complacency…'
- Third person (he, she, they, their or referring to people/organisations by name) sounds more objective and detached; it is generally used where the author is providing a general overview, history or outlining details of the issue and events.
  - 'He underlined the six public health measures WHO has been advocating since the pandemic started, which centre around detection, isolation, testing, treatment and quarantine.'

Step 2

Using language features purposefully

Depending on the topic, the language used in a feature article can vary significantly. This is because a feature article is not as formal as a written report or an essay so the rules for perspective, bias and opinion are much more relaxed.

Some of the language choices you might make are outlined in the following table.

Language choice	Use to create	Examples (modified) from the UNICEF article
Formality	Informal language (colloquial, relaxed) creates a personal tone Formal language sounds more authoritative and knowledgeable	WHO is also working to stamp out related stigma and discrimination. WHO is also working to irradicate related stigma and discrimination.
Tense	**Present tense**: to make thing sound immediate and current (the most common for most feature articles) **Past tense**: to explain what happened **Future tense**: to suggest possibilities or predictions	WHO is receiving requests to … WHO has also received requests to … WHO will receive requests to …
Sentence length	**Short**: gives an urgent tone (or using parts of sentences) if used as a one-off but can be monotonous if used in a row **Varied**: more fluid to read **Long**: can be confusing if not well written, but can better show the complexity of an idea or issue	Most of the epidemics in Western Europe appear to be stable or declining. There are worrying upward trends visible. These are occurring in Africa, Central America, South America and Eastern Europe. This is despite the low case numbers. While most of the epidemics in Western Europe appear to be stable or declining, 'worrying upward trends' are visible in Africa, Central America, South America and Eastern Europe, despite low case numbers.
Jargon	Technical language used by people in a specific field, emphasises expertise and gives a sense of authority	COVID-19 caseload global supply chains
Contractions	Sounds more conversational and relaxed, if used Sounds formal or academic if full words used	That's what WHO wants too. And that's what we are working for, all day, every day. That is what the World Health Organization wants too. And that is what we are working for, all day, every day.

Language choice	Use to create	Examples (modified) from the UNICEF article
Anecdotes	Used to add interest and personalise the writer	There are no examples in this article, but an anecdote about a child reading *My Hero is You: How kids can fight COVID-19* would not be out of place at the end of the article.
Evidence and facts	Used to validate and support the writer's perspective	COVID-19 caseload has reached nearly 2.5 million, and more than 160 000 deaths.
Humour	Adds entertainment value, engages reader, can be used to emphasise with exaggeration; humour should be used very carefully in articles about serious issues	
Rhetorical questions	Used to force readers to think in a specific way — only one way to respond	There are no examples in this article, but examples generally, include: What else are we to do but keep fighting?
Emotive language	Provokes a personal response in the reader	under enormous strain at this time
Direct quotes	Can often personalise the topic, especially if the article relates to a particular person or subject	"Stigma and discrimination are never acceptable anywhere at anytime, and must be fought in all countries", he said, adding, "as I have said many times, this is a time for solidarity, not stigma."
Figurative language	Used to engage the reader's imagination (eg. imagery, simile, description)	epidemics can easily re-ignite

Step 3

Creating a clear structure

The structure of a feature article can generally be divided into three main sections.

- Introductory section
  - Headline: identifies the focus of the article; usually attention grabbing
  - Subheading: provides a point of view or insight into the perspective
  - By-line: identifies the expert or journalist writing the report
  - Hook: interesting first sentence that 'hooks' readers' attention and establishes a point of view through a direct statement, example or hypothetical question
  - Introductory paragraph: expands on the hook and establishes the writer's tone and focus
- Body
  - Paragraph 2: the first main point
  - An explanation of how this person/issue has contributed to society. It should be an interpretation of events in the author's own words.
  - Paragraph 3 onwards: further main points to explain events or achievements about the person/issue to inform the reader or perhaps to delve into the issue in more detail
    - Facts, evidence, quotes, challenging questions to the reader, opinions included in these paragraphs
  - Photographs, tables, diagrams and graphs often used to provide facts or evidence to support the author's explanation and interpretation of the person/issue/events
  - May include highlighted pieces of text or quotes to emphasise specific events or quotes
- Conclusion
  - Leaves an impression on the reader by:
    - summarising the article's main idea
    - suggesting an appropriate course of action, or
    - encouraging a change of attitude or opinion.

2.10.3 Let me do it

2.10 ACTIVITY

Practise the skill of writing a feature article using one of the following topics:

- Australia's level of foreign aid
- Australia's compliance with an international treaty
- An international organisation (eg UNICEF).

Ensure the article includes relevant graphics (e.g. pictures, photos, tables or graphs) and sources are correctly referenced.

You can also complete a step-by-step **worksheet** from your online resources to help you with this task.

2.11 SkillBuilder — Debating an issue

LEARNING INTENTION

This SkillBuilder shows you how to debate an issue. Debating an issue is part of the Communicating and reflecting HASS skill.

Debating an issue is part of the Communicating and reflecting skill in HASS. In Year 10 you are expected to deliver arguments and information as oral presentations tailored to engage and/or persuade a specific audience.

2.11.1 Tell me

What is a debate?

Debating turns arguing into a sport, complete with set positions, rules and a points system. In a regular debate, two teams of three debaters argue opposing sides of an issue. This issue is presented as a statement that can be researched, analysed and then debated. For example: 'Stereotypes decrease social cohesion'. After hearing all six speakers, judges decide which side spoke the best and presented the most convincing arguments.

FIGURE 1 Debates are often used in politics, particularly during elections. What purpose do they serve during this time?



Why is debating useful?

Formal debating is not like a discussion you may have with your family or friends. A debate requires that you properly investigate an issue and consider both sides of the argument. Debating not only develops your communication skills, it also teaches you the importance of research and preparation. Many politicians, lawyers and businesspeople often remark that their involvement in school debating competitions helped develop skills and confidence that they use today.

2.11.2 Show me

How to prepare for a debate

A formal debate follows a set of rules. In a debating contest (for example, in school) there are two teams of three speakers, each of whom plays a defined role. One team argues in favour of the topic (the affirmative team) and the other team argues against the topic (the negative team). You can prepare for a debate by using the following steps.

Step 1

Form a team of three people. Find out whether your team is to debate in favour of or against the topic. As a team, examine the topic carefully and discuss what you think it is about. You may need to use a dictionary to find a definition of key words contained in the topic statement.

Step 2

Work out what arguments support your team's case. List them in order of importance.

Step 3

Work out what arguments do not support your team's case. This will help you to anticipate what your opponents will say.

Step 4

Carry out research to help fully develop your arguments. As part of your research, consider interviewing other students and the adults you know to learn their attitudes to the issue.

Step 5

1. Divide the arguments you have collected among the members of the team.
2. Decide which team members will be the first, second and third speaker. Agree on what each member will say.

Conduct of the debate

The members of each team take it in turn to present their arguments in three to four minutes. The affirmative team's first speaker starts the debate. The following case study illustrates how a formal debate is conducted.

Affirmative team

The first speaker should:

1. greet the audience
2. state which team they are representing and what the topic is
3. introduce the other members of their team, their role and the team's view
4. argue the team's case and state how the second speaker will build on this case.

The second speaker should:

1. explain how his or her speech will build on the affirmative team's view
2. argue against (rebut) the first speaker from the negative team
3. add new examples to support the affirmative team's view.

The third speaker should:

1. argue against (rebut) the negative team's case
2. summarise the main arguments of the debate
3. restate the affirmative view, explaining why it is the stronger case
4. avoid introducing new arguments.

Negative team

The first speaker should:

1. introduce the team members, describe their role and the team's view
2. state that the negative team doesn't accept the affirmative team's view of the topic
3. argue against (rebut) the points made by the first speaker of the affirmative team
4. state how the second negative speaker will build on the team's case.

The second speaker should:

1. explain how his or her speech will build on the negative team's view
2. argue against (rebut) the two previous speakers from the affirmative team
3. add new examples to support the negative team's view.

FIGURE 2 It's important to state your arguments clearly and confidently.



The third speaker should:

1. argue against (rebut) the affirmative team's case
2. summarise the main arguments of the debate
3. restate the negative view, explaining why it is the stronger case
4. avoid introducing any new material.

Elements of a good debate

A good debate:

- has members from each team taking turns to present their cases
- starts with the first speaker from each team introducing their team and their team's view
- continues with the second speakers rebutting the previous speakers and adding new examples to support their team's view
- finishes with the third speakers rebutting the other team's case, summarising the main arguments and restating their team's view
- has arguments that only take three to four minutes.

2.11.3 Let me do it

2.11 ACTIVITY

With the assistance of your teacher, your class will participate in a series of debates.

1. Divide your class into teams, each containing three debaters. Ensure that there is an even number of teams.
2. Competing teams will then choose a topic from the following list.
   a. Australia is not giving enough foreign aid in the Asia–Pacific region.
   b. The costs of peacekeeping missions for Australia have far outweighes the gains.
   c. Australia should cut ties with the United Nations for our national interest.
   d. There have been limited, if no benefit, in signing treaties in the last ten years.
3. Prepare for your debate, ensuring that each speaker's role is clearly defined as explained in this subtopic.
4. Conduct your debates over a series of classes, with your fellow classmates filling the role of adjudicators.

You can also complete a step-by-step **worksheet** from your online resources to help you with this task.

2.12 Review

2.12.1 Key knowledge summary

2.2 Concepts in Civics and Citizenship

- Democracy is a political system in which citizens choose the way in which they are governed.
- Democratic values are the standards or instructions that shape a democracy. In Australia these include free and fair elections, and a separation of powers.
- Australia's system of government is based on the British system, which is known as the Westminster system.
- The study of Civics and Citizenship is about what the government or legal system provides or protects for us as citizens (rights) and the responsibilities that come with these rights.
- The idea of justice is that people are treated fairly and in a way that is morally right in the eyes of the law.
- Participation in the political and legal system is how individuals can help make decisions and create change in society.

2.3 Skills in Civics and Citizenship

- The skills you will develop across all of your HASS subjects fall into four main groups.
  - Questioning and researching involves locating relevant and detailed information and/or data from a range of appropriate sources.
  - Analysing involves interpreting information to identify the main features or ideas, then examining the information closely to determine how the parts relate to the whole.
  - You will learn to draw evidence-based conclusions by evaluating information and/or data.
  - The ability to communicate and share your ideas with other people is also an important part of Civics and Citizenship.

on Resources

eWorkbook
Customisable worksheets for this topic (ewbk-6013)
Reflection (ewbk-6012)
Student Learning Matrix (ewbk-6004)



RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 2 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

2.4 SkillBuilder — Using the inquiry approach for research

eWorkbook
- SkillBuilder — Using the inquiry approach for research (ewbk-4164)

2.5 SkillBuilder — Using the deconstruct/reconstruct method

eWorkbook
- SkillBuilder — Using the deconstruct/reconstruct method (ewbk-6006)

2.6 SkillBuilder — Conducting an interview

eWorkbook
- SkillBuilder — Conducting an interview (ewbk-6007)

2.7 SkillBuilder — Using and referencing quotes

eWorkbook
- SkillBuilder — Using and referencing quotes (ewbk-6008)

2.8 SkillBuilder — Analysing political cartoons

eWorkbook
- SkillBuilder — Analysing political cartoons (ewbk-6850)

2.9 SkillBuilder — Writing essays

eWorkbook
- SkillBuilder — Writing essays (ewbk-6009)

2.10 SkillBuilder — Writing a feature article

eWorkbook
- SkillBuilder — Writing a feature article (ewbk-6010)

2.11 SkillBuilder — Debating an issue

eWorkbook
- SkillBuilder — Debating an issue (ewbk-6011)

2.12 Review

eWorkbook
- Reflection (ewbk-6012)
- Student Learning Matrix (ewbk-6004)

To access these online resources, log on to **www.jacplus.com.au**.

3 Regional government and global citizenship

3.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

How does Australia's government compare to our neighbours' governments? Should we provide aid to our neighbours if needed?

3.1.1 Australia and democracy

Australia is an important member country within the Asia region. Our system of government is similar to those of other Asian democracies such as Japan, India and Indonesia, but there are also some differences. One of the key features of the system of government in Australia is democracy, which means that sovereignty lies with the people. It is the Australian people who determine how they will be governed. Australian democracy has certain values. These include freedom of election and being elected, freedom of assembly and political participation, freedom of speech, freedom of expression, support for parliamentary democracy, freedom of religious belief, support for the rule of law and support for other basic human rights.

Governments have a responsibility to keep their constituents safe, to provide them with essential services and to protect their human rights.

In this topic we compare the values associated with the system of government in Australia with the values associated with other countries in the Asia region and investigate the role Australia plays in our region and the world.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6023)

Video eLesson Values of governments in our region (eles-2374)

FIGURE 1 Australia's democracy has values that include freedom of speech and freedom of expression.



3.2 Key features of Australia's system of government

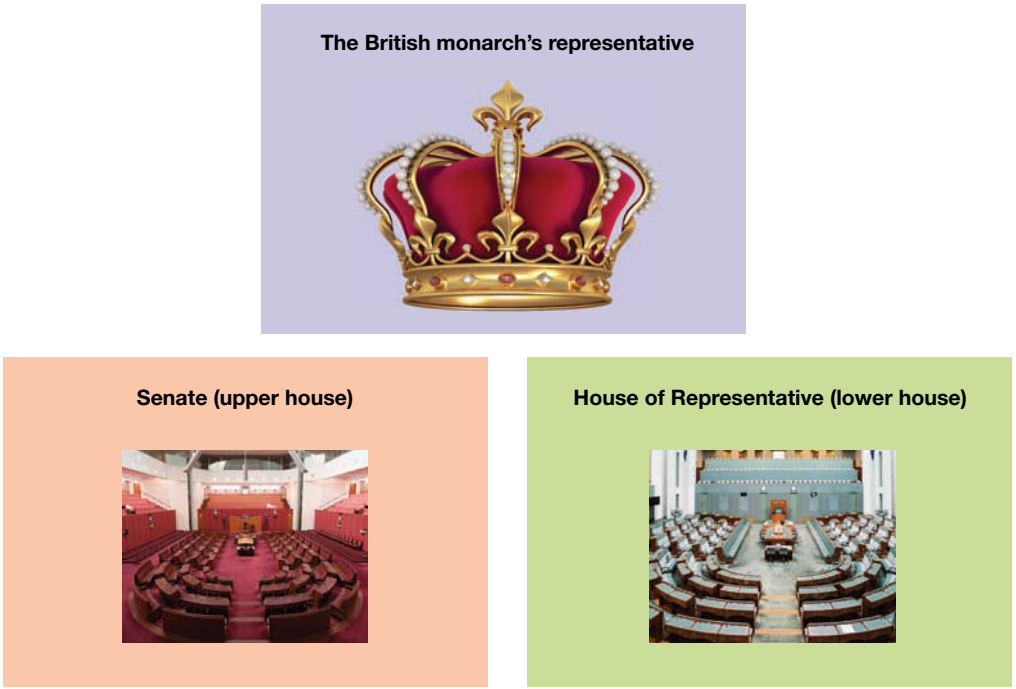
LEARNING INTENTION

By the end of this subtopic you will be able to identify the key features Australia's system of government.

3.2.1 Australia's system of government

As you learned in Year 7, before **Federation**, Australia consisted of six colonies: New South Wales, South Australia, Queensland, Tasmania, Victoria and Western Australia. Each colony had its own government and the power to make laws under the control of the British monarch. During the late 1880s and 1890s, there was increasing support for the idea of the six self-governing colonies joining together to become one united nation. The Commonwealth of Australia was formed on 1 January 1901. The colonies — now called states — agreed to keep some of their law-making powers and hand over others to the new Commonwealth Parliament.

FIGURE 1 Australia's federal parliament comprises the Crown (the reigning British monarch or the monarch's representative, the governor-general), the upper house (the Senate) and the lower house (the House of Representatives).



Australia's system of government is based on the idea of democracy. Australia is an independent country governed by a **constitutional monarchy**, with three levels of government — federal, state and local (see **FIGURE 3**). The Australian **Constitution**, which came into force on 1 January 1901, defines the powers and authority of the federal and state governments. The *Commonwealth of Australia Constitution Act 1900* is an Act of British Parliament that sets out the framework for the government of Australia. The law-making powers of the Commonwealth Parliament are listed in the Australian Constitution, and there is a division of powers between the Commonwealth and the states. Some law-making powers are passed to local governments.

Federation the joining of the six Australian colonies to establish the federal and state parliaments

constitutional monarchy a type of government based on a constitution with a queen or king as its head of state

constitution a set of fundamental principles according to which a nation or state is governed

The political system in Australia is based on Britain's **Westminster system**. This means that the Commonwealth Parliament and all state parliaments except Queensland are **bicameral**: they each have two houses. These bicameral parliaments consist of a lower house and an upper house. The parliaments of Queensland and the territories are **unicameral**: they each have one house. The reigning British monarch, or **Crown**, is the head of each parliament. (This is currently Queen Elizabeth II.) The Crown is represented by the governor-general in the Commonwealth Parliament and by a governor in each state parliament. All of Australia's self-governed territories, except the Australian Capital Territory, have administrators.

The people of Australia choose the members of the lower house and the upper house. The members of the winning party or coalition in a federal election choose the Australian prime minister.

FIGURE 2 Parliament House in Canberra, the home of the Commonwealth Parliament



3.2.2 Separation of powers

The governments of democracies like Australia have three arms or branches: legislative, executive and judicial. In Australia, the framework for the operation of government is the Constitution. It provides for the idea of the **separation of powers**. This allows each arm of government to check and balance the powers of the others and thereby maintain a fair and just society.

The legislative arm

The legislative arm (or legislature) refers to parliament's function to make new laws or change or remove existing ones. Under the Constitution, parliament is the supreme law maker. Commonwealth Parliament consists of the House of Representatives (the lower house) and the Senate (the upper house), as well as the Crown (the governor-general as the representative of the British monarch). Any draft law is known as a Bill. To become a law, the Bill must be read, debated and voted on by both houses of parliament and then approved by the governor-general. A law that has been passed by parliament is called legislation, a statute or an Act.

Westminster system the democratic parliamentary system based on the British system of parliament

bicameral a parliament consisting of two legislative houses, or chambers

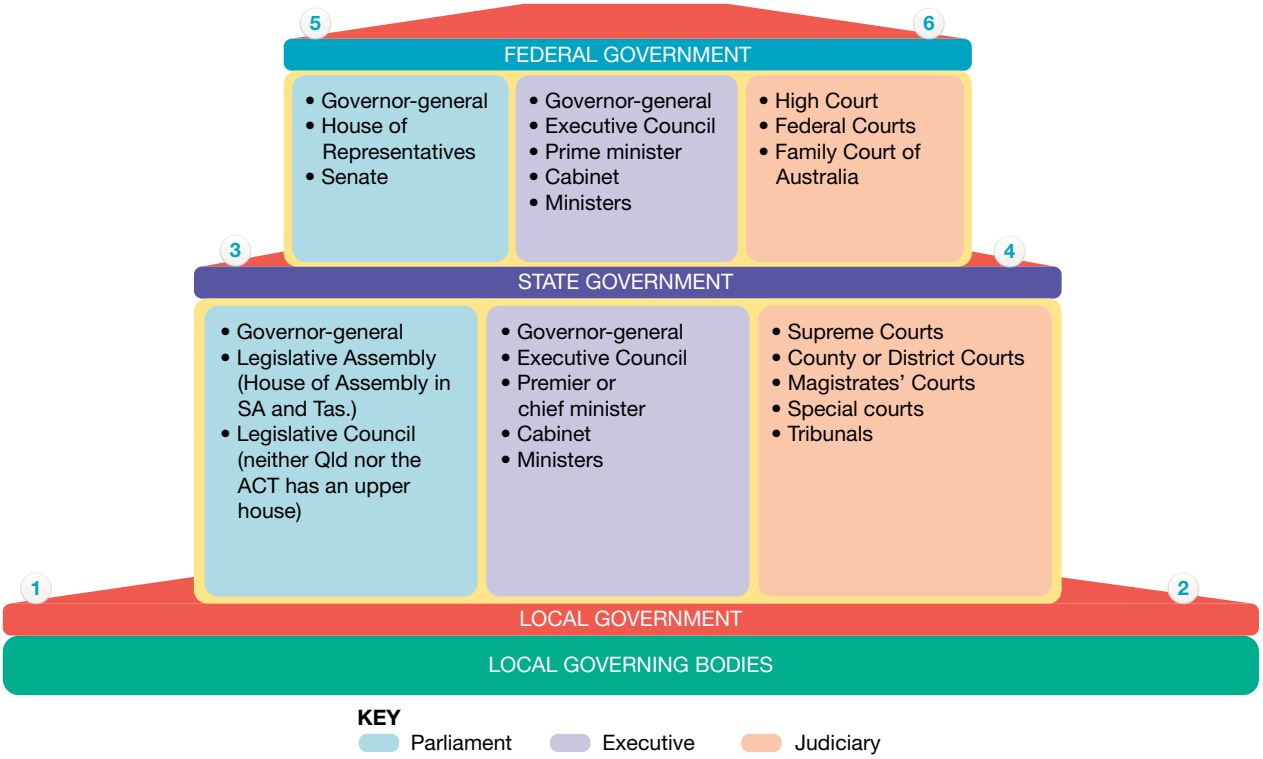
unicameral a parliament consisting of one legislative house, or chamber

Crown the Queen's authority in the Australian parliament, represented by the governor-general at the federal level and a governor at the state level

separation of powers the division of government into the legislature (parliament), executive (ministers and the public service) and judiciary with the aim of providing a system of checks and balances that prevents the excessive concentration of power in one group

int-7990

FIGURE 3 The division and separation of powers in Australia



1 **Local government**
There are around 900 local government bodies in Australia (usually called councils).

Council members are called aldermen or councillors. The head of the council is called a mayor or a shire president.

Councils operate under state laws. They make rules, called by-laws, on local issues.

Local governing bodies

Local governing bodies service the needs of cities, towns and communities in municipalities and shires.

2 **Local government responsibilities**
Town planning, streets and bridges, sewerage, water supply, swimming pools, public libraries, education (kindergartens) and rubbish collection

3 **State government**
Each of Australia's six states and two territories has its own parliament. All parliaments have lower houses. All but Queensland and the two territories have upper houses (legislative councils). The process of government is similar to that of the federal government. However, the head of government is the premier (or chief minister in the territories) and the head of state (who represents the British monarch) is the governor.

4 **State government responsibilities**
Health (hospitals), police services, tourism, housing, state roads, education (primary and secondary schools) and environmental protection

5 **Federal government**
There are two houses of federal parliament — an upper house and a lower house.

The prime minister is the head of government. Ministers are appointed to look after particular government portfolios or departments.

The Cabinet, which includes the prime minister and a group of senior ministers, makes the key government decisions.

The Executive Council is chaired by the governor-general, who represents the British monarch as head of state.

6 **Federal government responsibilities**
Employment, trade, defence, airports, immigration, pensions, taxation, shipping, foreign affairs, health (Medicare) and education (universities, colleges, grants to schools)

The executive arm

The **executive** arm administers the legislation passed by parliament. Executive power officially lies with the governor-general or the governor, representing the Crown, but government ministers and the public service actually exercise this power. For example, the Department of Health is an Australian public service department that administers the running of Australia's health system. The head of this department reports to the Minister for Health.

The judicial arm

The judicial arm (consisting of the **judiciary** and the courts) makes judgements about the law. It is responsible for settling disputes and enforcing the law. The High Court of Australia is responsible for interpreting and applying the Constitution. It ensures that the other arms of government do not act in a way that is outside the powers granted by the Constitution. The judiciary can, for example, declare that laws passed by Parliament are unconstitutional, or require particular actions if they believe that a branch of government is not performing a constitutional duty.

executive another name for the government

judiciary the collective name given to the judges who preside over law courts

preferential system a system in which voters are required to number all candidates on the ballot paper in order of preference. If no candidate wins more than 50 per cent of the vote, the preferences are distributed until one candidate has a majority of votes.

absolute majority half the number of votes received in an election plus one

formal vote a ballot paper that has been filled out correctly

3.2.3 Elections in Australia

As you learned in Year 7, one of the key features of Australia's democratic system of government is that every few years Australians are given the opportunity to choose who they want to represent them in elections. This occurs at all three levels of government:

- The people of Australia vote to elect members into both houses of federal parliament.
- The people of a state or territory vote to elect members into their state or territory parliament.
- The residents or property owners in a local council area are eligible to vote for local council representatives.

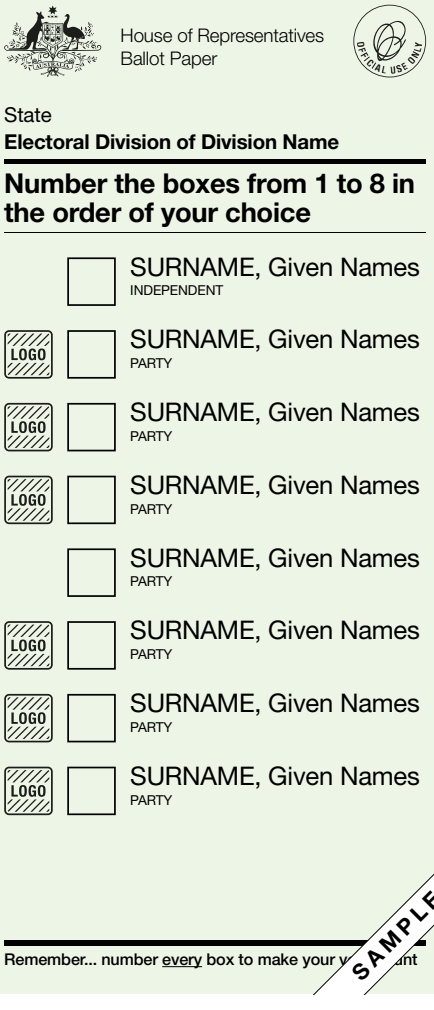
Voting in Australian elections is compulsory for all citizens over 18 years of age.

The House of Representatives

When you vote for the House of Representatives in a federal election, you are given a green ballot paper like the one shown in **FIGURE 4**. You must place a number in the box beside each candidate. You write the number 1 beside the name of the candidate you most prefer. This is your first-preference vote. You write the number 8 (if there are eight candidates) beside the name of the person you least prefer. For your vote to be formal you must place a number, in your preference order, in every box. The voting system for the House of Representatives in Australia is called a **preferential system**.

To win a seat in the House of Representatives, a candidate must get an **absolute majority** — half the number of **formal votes** plus one. Some candidates are fortunate; they get an absolute majority with first-preference votes. When no candidate has an absolute majority of first-preference votes, voter preferences are counted.

FIGURE 4 Ballot paper for a House of Representatives seat



This system is different from the **first-past-the-post** voting method used in many other countries. Also known as the simple plurality or simple majority system, the first-past-the-post method requires voters to simply mark their preferred candidate. In countries that use this voting system — including Canada, Japan, India, the United Kingdom and the United States — the candidate receiving the largest number of votes (plurality) is elected to office. There is no requirement that the winner of an election should gain an absolute majority of votes. He or she must only gain the largest number of votes.

The Senate

When you vote for the Senate in a federal election, you are given a white ballot paper like the one shown in **FIGURE 5**. You can vote in one of two ways:

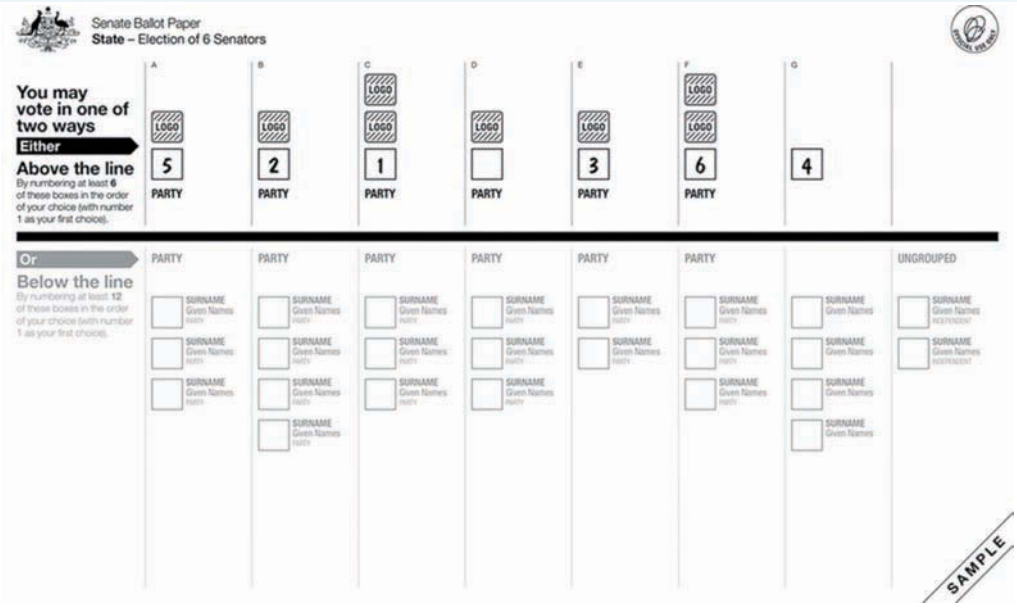
1. Above the line. If you elect to vote above the line, you need to number at least six boxes, from 1 to 6. In the top section of the form, above the line, you need to place a number 1 in the box above the party or group that is your first preference, a number 2 in the box above the party or group that is your second choice, and so on. If you wish, you can continue to number as many boxes above the line as you like, but must fill in at least 1 to 6.
2. Below the line. If you elect to vote below the line, you need to number at least 12 boxes, from 1 to 12. In the section below the line, you need to place a number 1 in the box beside the candidate that is your first preference, the number 2 in the box beside your second choice, and so on. You may continue to place numbers in the order of your choice, but must fill in at least 12 boxes.

To win a seat, senators have to win a set proportion (or quota) of the votes. This is why the Senate voting system in Australia is called a **proportional representation** system.

first-past-the-post a voting system where a candidate wins by receiving more votes than any other candidate

proportional representation a system where candidates are elected according to the proportion (or quota) of the vote achieved by their party

FIGURE 5 Part of a Senate ballot paper for Western Australia



3.2 ACTIVITY

Research the names of the people who currently occupy the following positions in Australia.

a. Governor-general
b. Prime minister
c. Western Australia's governor
d. Western Australia's premier

HASS skills: Analysing
Civics and citizenship concept: The Westminster system

3.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 5, 8	Questions 3, 9, 10	Questions 6, 7, 11, 12

Check your understanding

1. When did Federation occur?
2. List the three levels of government in Australia.
3. Using **FIGURE 3**, outline the role of the three arms of government in Australia, providing an example of each.
4. Who is eligible to vote in Australian elections?
5. What is the difference between the 'division of powers' and the 'separation of powers'?
6. Outline the difference between the preferential system and the proportional representation system of voting.
7. Explain how the first-past-the-post system of voting works.

Apply your understanding

8. Consider **FIGURES 4** and **5**. Analyse how a person is elected to the Commonwealth Parliament's House of Representatives and how a person is elected to the Senate.
9. Out of the two voting systems — the preferential system and the proportional representation system — which is more effective? Justify your response.
10. Australia is a constitutional monarchy with democratic elections and separation of powers. What changes to Australia's system of government would you recommend? Justify your answer.
11. In what ways are the values of freedom of election and support for parliamentary democracy associated with the system of government in Australia? Provide reasons for your answer.
12. In your opinion, what might happen if Australia did not have separation of powers?

For sample responses to every question, go to www.jacplus.com.au.

3.3 Key features of Japan's system of government

LEARNING INTENTION

By the end of this subtopic you will be able to identify the key features of Japan's system of government.

3.3.1 Japan's system of government

The system of government in the Empire of Japan was a military and **absolute monarchy**. This changed at the end of World War II, when the Constitution of Japan was drawn up and the post-war country ceased to be an empire and became modern Japan. Enacted on 3 May 1947, Japan's Constitution is based on three principles: **sovereignty of the people**, respect for fundamental human rights and renunciation of war.

absolute monarchy a form of government where the monarch (a king, queen or emperor) wields unrestricted political power over his or her sovereign state and its people

sovereignty of the people the principle that a government's authority resides with its people through their elected representatives

Japan's system of government is based on the idea of democracy. Japan is an independent country governed by a constitutional monarchy, with a parliamentary system of government. Japan's Constitution has remained unchanged since it came into force in 1947. The emperor is the head of state but only has a symbolic role.

The political system in Japan is based on Britain's Westminster system. This system was introduced into Japan by the new Constitution, which established a bicameral parliament called the National Diet. It consists of a lower house and

FIGURE 1 The National Diet Building in Tokyo, the home of Japan's national parliament



an upper house. The people of Japan choose the members of the Diet, and the members of the Diet elect the Japanese prime minister from among themselves.

3.3.2 Separation of powers

The Constitution of Japan specifies the independence of the three branches of government: legislative (the Diet), executive (the Cabinet) and judicial (the courts). These arms of government operate in a system of checks and balances.

The legislative arm

Under Japan's Constitution, legislative power lies with the National Diet. This is Japan's national parliament. The Diet comprises the House of Representatives (the lower house) and the House of Councillors (the upper house). Any draft law is known as a Bill, and it is submitted to the Diet by the Cabinet or a law maker. It is then considered separately in the two houses. A Bill becomes a law after both houses approve it. In any case of disagreement in vital matters, the lower house's decisions are upheld. For some legislation, the House of Representatives can overrule a House of Councillors' rejection by passing a Bill a second time.

The executive arm

Executive power lies with the Cabinet formed and led by the Japanese prime minister. The members of Cabinet are collectively responsible to the Diet in exercising this power. The prime minister and a majority of Cabinet members must

FIGURE 2 The National Diet of Japan consists of the House of Representatives (the lower house; top) and the House of Councillors (the upper house; bottom).



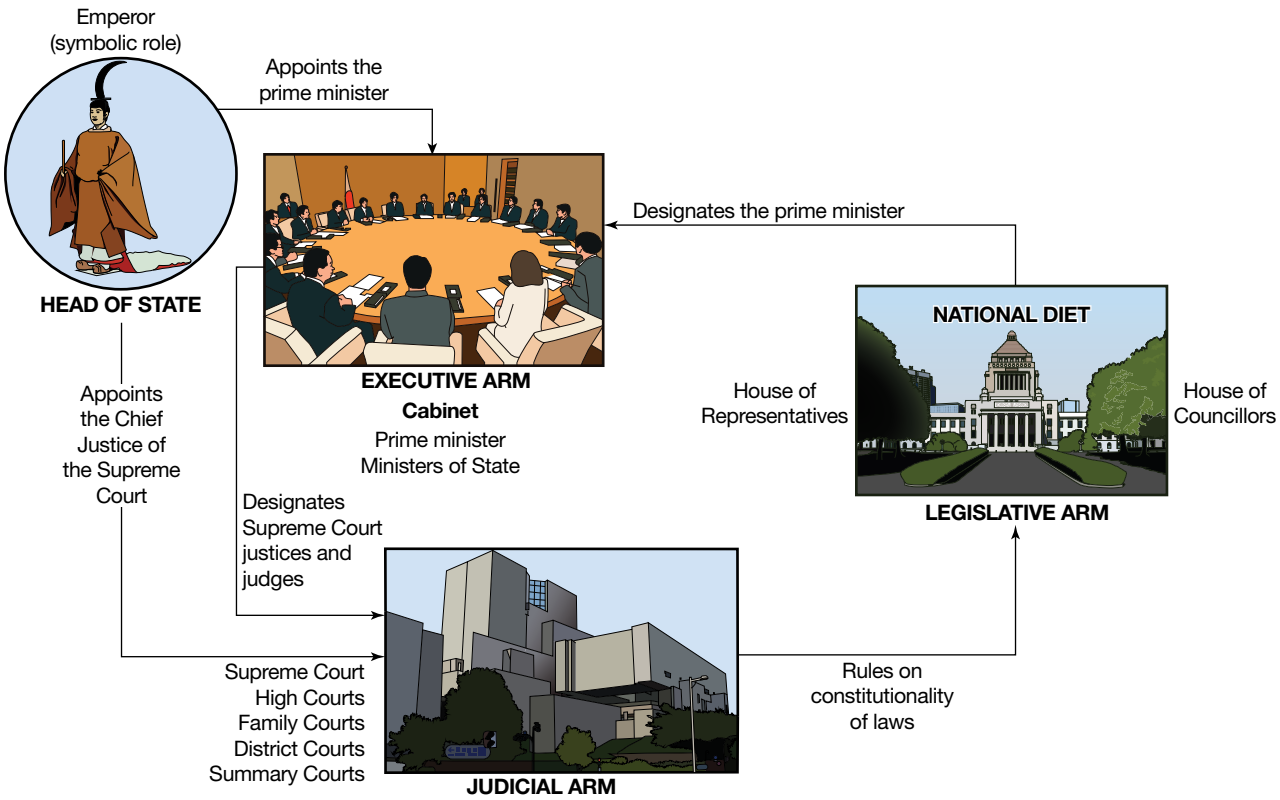
be members of the Diet. They have the right as well as the obligation to attend Diet sessions. The Cabinet has the power to dissolve the House of Representatives and call for a general election. The Cabinet members are called ministers, and the departments they head are mostly called ministries (for example, the Ministry of Finance).

The judicial arm

Judicial power lies with Japan's Supreme Court and the lower courts established by law, including high courts, family courts, district courts and summary courts. The Supreme Court consists of a chief justice and 14 other justices, all of whom are chosen by the Cabinet. It is responsible for interpreting and applying the Constitution of Japan. The Supreme Court can declare that laws passed by the National Diet are unconstitutional.

int-5674

FIGURE 3 The separation of powers in Japan



3.3.3 Elections in Japan

All Japanese citizens can vote in elections once they reach the age of 18. The National Diet consists of the House of Representatives with 465 members and the House of Councillors with 242 members. The people directly elect the members of both houses of the National Diet. Elections for the House of Representatives are held every four years and half the members of the House of Councillors are elected every three years. Local elections are also held every four years for elected positions in Japan's prefectures (regions), cities and villages.

The House of Representatives

Of the 465 members of the House of Representatives, 289 members are in single-member constituencies (electoral districts). These members are elected using the first-past-the-post method. This means that the candidate receiving the largest number of votes in each constituency is elected to office. The other 176 members of the House of Representatives are in 11 multimember districts, referred to as electoral blocs.

These blocs differ in size and contribute between six and 30 members. Using a proportional representation system, the bloc seats are awarded to party candidates according to a highest average method. To win a seat, parties have to win a set proportion (or quota) of the votes.

Ultimately each Japanese voter casts two ballots for the House of Representatives: one for a candidate in a local single-seat constituency, and one for a political party. The political parties all field candidates for each electoral bloc.

FIGURE 4 Election posters covering a building in Chiba City, Japan



The House of Councillors

Again, voters cast two ballots for the House of Councillors: one for an individual candidate in a constituency using single non-transferable votes, and one for a political party or candidate using proportional representation. Of the 242 members of the House of Councillors, 146 members are in 47 prefectural constituencies. The prefectural constituencies differ in size and return between 2 and 10 members. These members are elected by a single non-transferable vote. This means that Japanese citizens cast a ballot for an individual candidate, and the candidates with the largest number of votes in each constituency (up to the number of seats that need to be filled) are elected to office. The remaining 96 members of the House of Councillors are elected on a nationwide basis through proportional representation.

3.3 ACTIVITIES

1. Using internet resources, find the names of the people who currently occupy the following positions in Japan.
   a. Emperor
   b. Prime minister

   HASS skills: Analysing
   Civics and Citizenship concept: Democracy
2. Using internet resources, answer the following questions.
   a. What political party does the Japanese prime minister belong to?
   b. Analyse the ways in which winning seats in the lower house and the upper house benefits the Japanese prime minister's party.

   HASS skills: Analysing
   Civics and Citizenship concept: Democracy

3.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 6	Questions 3, 7, 8	Questions 5, 9, 10

Check your understanding

1. When was the Constitution of Japan enacted?
2. What is the role of the emperor in Japan?
3. Referring to **FIGURE 3**, outline the role of the three arms of government in Japan, providing an example of each.
4. **FIGURE 4** shows election posters in Japan. Who is eligible to vote in Japanese elections?
5. Explain how the first-past-the-post system of voting works in Japan.

Apply your understanding

6. Compare and contrast the key features of Japan's system of government with those of Australia by copying and completing the following table.

	Similarities between Japan and Australia	Differences between Japan and Australia
System of government		
Separation of powers		
Elections		

7. Japan is a constitutional monarchy with democratic elections and separation of powers. What changes to Japan's system of government would you recommend? Justify your answer.
8. In what ways are the values of freedom of election and support for parliamentary democracy associated with the system of government in Japan?
9. In your opinion, what might happen if Japan did not have separation of powers?
10. Suggest reasons why Japan's Constitution is based on three principles (sovereignty of the people, respect for fundamental human rights and renunciation of war).

For sample responses to every question, go to www.jacplus.com.au.

3.4 Key features of India's system of government

LEARNING INTENTION

By the end of this subtopic you will be able to identify the key features of India's system of government.

3.4.1 India's system of government

With a population of more than one billion people, India is the world's largest democracy. India's political system dates back to the country's independence from Britain. From 1857 to 1947 the British ruled the Indian subcontinent (a region comprising India and land that now belongs to other countries, among them Pakistan and Bangladesh). During the early twentieth century, the local populace increased their demands for India to be self-governed. On 15 August 1947, India ceased to be a dominion of the British Empire and became a sovereign democratic **republic**. The Republic of India, as it is officially known, is a federal union of 29 states and 7 union territories. India's Sansad Bhavan (Parliament House) is shown in **FIGURE 1**.

FIGURE 1 Sansad Bhavan, in New Delhi, is the home of India's national parliament.



India's system of government is based on the idea of democracy. The Republic of India is an independent country with a parliamentary system of government. The Constitution of India is the longest written constitution of any of the world's sovereign countries, containing 448 articles and 12 schedules. It is also one of the most heavily amended national documents in the world — more than 100 changes have been made to the Constitution since it was first enacted in 1950. The president is the head of state, elected for a five-year term by the members of the federal and state parliaments. The president appoints the prime minister as well as the state governors.

republic a form of government where supreme power is held by the people and their elected representatives rather than by a monarch

The political system in India is based on Britain's Westminster system. The federal parliament is bicameral: it is made up of a lower house and an upper house. The states have either unicameral or bicameral parliaments. The people of India elect the members of parliament, and the members of the lower house of the Parliament of India elect the prime minister (who is usually the leader of the majority party or coalition).

3.4.2 Separation of powers

The Constitution of India specifies the independence of the three branches of government: legislative (the parliament), executive (the Cabinet) and judicial (the courts). These arms of government operate in a system of checks and balances.

FIGURE 2 Indian Prime Minister Narendra Modi (right) speaking in the Lok Sabha



The legislative arm

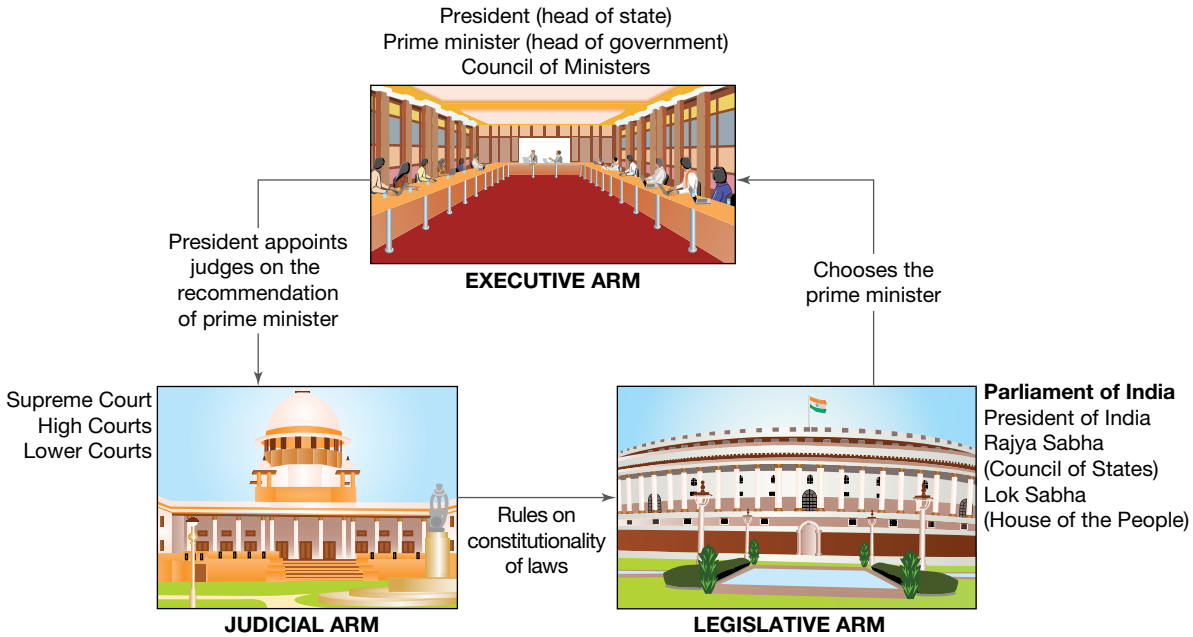
Under the Constitution of India, parliament is the supreme law maker. Parliament consists of the lower house, or Lok Sabha (House of the People), and the upper house, or Rajya Sabha (Council of States), as well as the president of India. The two houses of parliament share legislative powers. Any draft law is known as a Bill. To become a law, the Bill must be read, debated and voted on by both houses of parliament and then approved by the president. A law that has been passed by parliament is called legislation, a statute or an Act.

The executive arm

Executive power officially lies with the president who is elected by an electoral college comprising the Indian parliament and the legislative assemblies of each state and territory. However, executive power is actually

int-5675

FIGURE 3 The separation of powers in India



exercised through the Council of Ministers of the Republic of India, consisting of a group of ministers headed by the prime minister. The prime minister is officially appointed by the president after being nominated by the majority party in the lower house. On the recommendation of the prime minister, the president then appoints ministers. These ministers collectively comprise the Council of Ministers.

The judicial arm

Judicial power lies with India's Supreme Court, the High Courts in the states and the lower courts at the district level. The Supreme Court is responsible for interpreting and applying the Constitution of India. It ensures that the other arms of government do not act in a way that is outside the powers granted by the Constitution. The Supreme Court consists of up to 31 judges, including the Chief Justice of India. They are appointed by the president on the recommendation of the prime minister. The Supreme Court can declare that laws passed by the Parliament of India are unconstitutional.

3.4.3 Elections in India

Officials are elected at the national, state and local levels. Because of India's large population, the organisation of any election is a massive and complicated task. More than 800 million people in India are eligible to vote, and in national elections over 900 000 polling booths must be set up for voters. National elections do not take place on a single day but run over the course of several weeks.

The House of the People (Lok Sabha)

According to the Constitution, the maximum size of the Lok Sabha is 552 members. Of the 545 current members of the Lok Sabha, 543 are elected for five-year terms. The other two members are nominated by the president to represent the Anglo-Indian community if, in the president's opinion, that community does not have adequate representation in the house. The 545 members are elected using the first-past-the-post method.

The Council of States (Rajya Sabha)

According to the Constitution, the maximum size of the Rajya Sabha is 250 members. Of the 245 current members of the Rajya Sabha, 233 are representatives of the states and union territories. They are elected for a six-year term using the proportional representation system and one-third of them retire every two years. The other 12 members are nominated members. These people are chosen by the president for their special knowledge or practical experience in fields such as art, literature, science and social service.

FIGURE 4 Indian women stand in a queue with their voter ID cards during an election.



3.4 ACTIVITIES

1. Using internet resources, find the names of the people who currently occupy the following positions in India.
   a. President
   b. Prime minister

HASS skills: Analysing
Civics and Citizenship concept: Democracy

2. Using internet resources, answer the following questions for India's most recent election.
   a. How many Indian voters participated in the election?
   b. How many people are employed by the Election Commission?
   c. How is government formed in India?

HASS skills: Analysing
Civics and Citizenship concept: Democracy

3.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 6	Questions 3, 7, 8	Questions 5, 9, 10

Check your understanding

1. When was the Constitution of India enacted?
2. What is the role of the president of India?
3. Referring to **FIGURE 3**, outline the role of the three arms of government in India, providing an example of each.
4. **FIGURE 4** shows Indian women with their voter ID cards ready. Who is eligible to vote in Indian elections?
5. Explain how the first-past-the-post system of voting works in India.

Apply your understanding

6. Identify the benefits of India's use of the first-past-the-post system of voting for the Lok Sabha (House of the People), as well as its limitations.
7. Compare and contrast the key features of India's system of government with those of Australia by copying and completing the following table.

	Similarities between India and Australia	Differences between India and Australia
System of government		
Separation of powers		
Elections		

8. India is a democratic republic with democratic elections and separation of powers. What changes to India's system of government would you recommend? Justify your answer.
9. In what ways are the values of freedom of election and support for parliamentary democracy associated with the system of government in India?
10. In your opinion, what might happen if India did not have separation of powers?

For sample responses to every question, go to www.jacplus.com.au.

3.5 Key features of Indonesia's system of government

LEARNING INTENTION

By the end of this subtopic you will be able to identify the key features of Indonesia's system of government.

3.5.1 Indonesia's system of government

The Republic of Indonesia was declared in 1945 following its independence from a long period of Dutch colonial rule and Japanese wartime occupation. The Constitution was written while Indonesia emerged from Japanese control at the end of World War II. A centralised form of government was established to unify the many ethnic, religious and cultural groups of a nation spread across nearly one thousand permanently settled islands. Since then, Indonesia's political transition to a democracy has been turbulent. The original Constitution of 1945 was replaced by the Federal Constitution of 1949 and then the Provisional Constitution of 1950. Indonesia's first election after independence was not held until 1955.

FIGURE 1 Part of the DPR/MPR complex in Jakarta, the home of Indonesia's national parliament



President Sukarno, Indonesia's first president, dissolved the elected parliament in 1959 and introduced a form of government called guided democracy. The 1945 Constitution of Indonesia was reintroduced. Sukarno's successor, President Suharto, was **authoritarian** and Indonesia entered a new political era, officially called the New Order. During this period, which lasted for more than 30 years, the parliament served as a mere formality for approving decisions made by the executive arm of government. The end of Suharto's presidency came about due to pressure for a less-centralised system of government. An era of reform and amendments to the Constitution followed. New election laws were introduced and, in 1999, elections were held for the first time since 1955. Significant amendments were made to the 1945 Constitution of Indonesia in the early twenty-first century, resulting in changes to all arms of government.

Indonesia's system of government is based on the idea of democracy. Indonesia is a republic with sovereignty vested in the hands of its people and exercised through law. The amended 1945 Constitution of Indonesia regulates the responsibilities of state officials and the rights and responsibilities of citizens. It also governs relations between state institutions — legislative, executive and judicial. Since 2004 Indonesia's parliament (the People's Consultative Assembly) has been bicameral, with a lower house and an upper house. The president is both the head of state and the head of government, and is chosen through direct popular election. The people of Indonesia also choose the members of parliament.

Indonesia is divided into provinces, which are in turn divided into regencies and cities. Each province, regency and city has its own local government and legislative body. A governor heads each government at the provincial level, and a regent or mayor heads each government at the regency and city levels.

authoritarian a form of government characterised by absolute obedience to the state, an authority figure or group

3.5.2 Separation of powers

The amended 1945 Constitution of Indonesia provides for the idea of the separation of powers. This allows each arm of government (legislative, executive and judicial) to check and balance the powers of the others and thereby maintain a fair and just society.

The legislative arm

Under the amended 1945 Constitution of Indonesia, legislative power lies with parliament — the People's Consultative Assembly (Majelis Permusyawaratan Rakyat, or MPR). It consists of the People's Representative Council (Dewan Perwakilan Rakyat or DPR — the lower house) and the Regional Representatives Council (Dewan Perwakilan Daerah or DPD — the upper house). The DPD was created through an amendment to the 1945 Constitution of Indonesia in 2001 but does not have the revising powers of an upper house such as Australia's Senate. It was established with the intention of increasing the role of the regions in making laws.

FIGURE 2 Indonesia's parliament (the People's Consultative Assembly or MPR)



The DPR drafts Bills and passes laws. The DPD can draft Bills related to regional issues that will be considered by the DPR, but it does not have independent legislative authority. A Bill can only be passed if there is joint agreement on the Bill by both the DPR and the president.

The executive arm

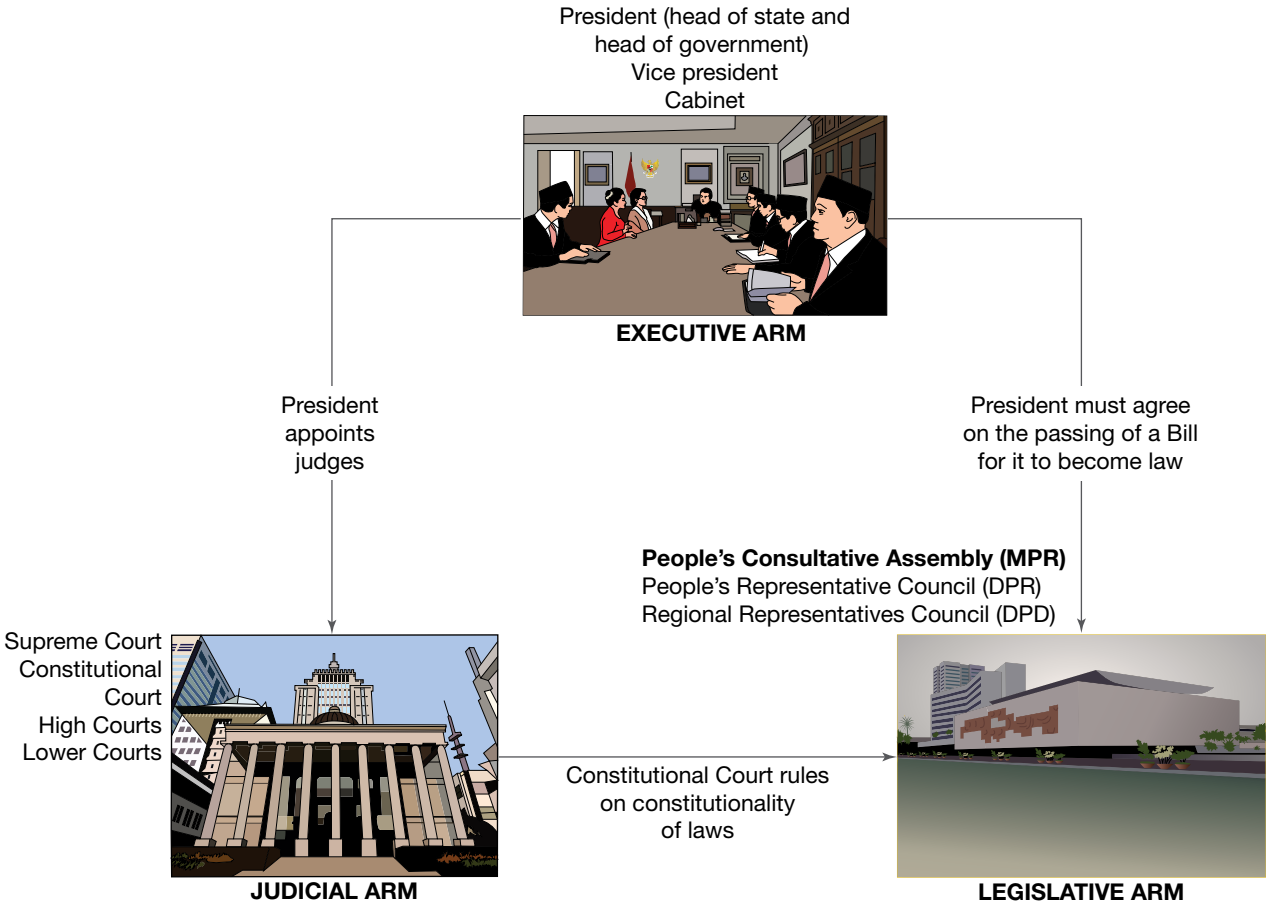
The 1945 Constitution invested most of Indonesia's power in the executive arm of government. This has been reduced through the amendments to the Constitution. Until 2002, the members of the MPR elected the president and vice-president every five years. From 2004, both leaders have been directly elected. Legislation also limits the president to two five-year terms. The president carries out his or her tasks assisted by the vice-president and Cabinet. Cabinet ministers are appointed by the president to manage areas of government responsibility such as economic affairs, foreign affairs, defence and education. Cabinet ministers do not have to be elected members of the MPR.

The judicial arm

In Indonesia, the Supreme Court (Mahkamah Agung) is the highest judicial institution. It forms the judicial arm of government together with the lower legal bodies. These include high courts, located in the provinces, and district courts. There are approximately 50 justices (including a chief justice) sitting in the Supreme Court, with more than 7000 judges employed in other courts across Indonesia. According to the original 1945 Constitution, the Supreme Court does not have the power to interpret and apply the Constitution. However, the Constitutional Court (Mahkamah Konstitusi) was established by a group of justices in 2003 with the power to review the Constitution and resolve constitutional disputes between state institutions. It can also resolve disputes over electoral results, dissolve political parties, and review and rule on cases involving charges against the president.

int-5676

FIGURE 3 The separation of powers in Indonesia



3.5.3 Elections in Indonesia

All Indonesian citizens who have reached the minimum age of 17 or who are married may vote in general elections. More than 190 million people in Indonesia are eligible to vote. Presidential elections occur every five years. As mentioned, the Indonesian parliament (MPR) consists of two houses:

- the People's Representative Council (DPR), made up of representatives of political parties. It currently has 560 members with representatives from ten political parties. Every member comes from one of the 77 multimember electoral districts. Each electoral district is represented by three to ten seats, depending on the population of the district.
- the Regional Representatives Council (DPD), made up of representatives from each province in Indonesia. Four members are elected from each of the 34 provinces on a non-partisan basis. This means that members are not officially affiliated with any political party.

Elections for the DPR and the DPD are held simultaneously every five years.

The president

Indonesian citizens vote for a ticket including a president and a vice-president. Whichever pair receives the most votes (more than 50 per cent nationally, with 20 per cent from more than half the provinces) will rule over the next term. If no clear winner emerges, the two tickets that received the highest percentage of the national vote compete in a run-off election.

The People's Representative Council (DPR)

FIGURE 4 A woman casts her vote during elections in Indonesia.



Members of the DPR are elected through an open-list proportional system. When voting, an Indonesian citizen receives a ballot listing the candidates from each party who are running for a seat in the voter's electoral district. The voter selects his or her preferred candidate. The process allows the voter to cast a ballot for an individual candidate or a particular party, or for both. The Election Commission then calculates a quota for each electoral district by dividing the total number of valid votes obtained by political parties that must be received to secure parliamentary representation (currently 3.5 per cent of the national vote) by the total number of seats in that electoral district. The political parties then receive a seat for each quota they meet and are required to allocate these seats to the candidates who received the most votes. Any party that fails to obtain a 3.5 per cent share of the national vote is eliminated from the election.

Some parties will have votes left over. These remaining votes are used to distribute unallocated seats. Unallocated seats are awarded to the parties with the largest numbers of remaining votes one by one until all seats are allocated.

The Regional Representatives Council (DPD)

The members of the DPD are elected using a much simpler system. Voters in each province select one candidate on their ballot forms. The four candidates who win the most votes in each province represent that province at the DPD.

DISCUSS

In a small group of 3–4 students choose one of the following countries: Japan, India or Indonesia. In what ways are the values of freedom of election and support for parliamentary democracy associated with the system of government in this country? Discuss with your group and write a response.

General capability: Intercultural understanding

3.5 ACTIVITIES

1. Research the names of the people who currently occupy the following positions in Indonesia.
   a. President
   b. Vice-president

   HASS skills: Analysing
   Civics and Citizenship concept: Democracy
2. Using internet resources, answer the following questions for Indonesia's most recent presidential election.
   a. How many voters cast ballots in the presidential election?
   b. What are some of the reasons the people of Indonesia elected the president?
   c. Outline the background of the president. How is their background different to that of past presidents of Indonesia?

   HASS skills: Analysing
   Civics and Citizenship concept: Democracy

3.5 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 7	Questions 3, 6, 8	Questions 5, 9, 10

Check your understanding

1. When was the Constitution of Indonesia originally enacted?
2. What is the role of the president of Indonesia?
3. Referring to **FIGURE 3**, outline the role of the three arms of government in Indonesia, providing an example of each.
4. **FIGURE 4** shows a voter in the Indonesian election. Who is eligible to vote in Indonesian elections?
5. Outline how voting works in Indonesia for:
   a. the People's Representative Council
   b. the president.

Apply your understanding

6. Analyse the changes to the Constitution of Indonesia following its original enactment.
7. Compare and contrast the key features of Indonesia's system of government with those of Australia by copying and completing the following table.

	Similarities between Indonesia and Australia	Differences between Indonesia and Australia
System of government		
Separation of powers		
Elections		

8. Indonesia is a democratic republic with democratic elections and separation of powers. What changes to Indonesia's system of government would you recommend? Justify your answer.
9. In what ways are the values of freedom of election and support for parliamentary democracy associated with the system of government in Indonesia?
10. In your opinion, what might happen if Indonesia did not have separation of powers?

For sample responses to every question, go to www.jacplus.com.au.

3.6 Foreign aid from governments and NGOs

LEARNING INTENTION

By the end of this subtopic you will be able to explain how foreign aid works and identify where Australia's foreign aid goes.

3.6.1 Helping those in need

Picture this scenario: it is lunchtime at school when you suddenly realise that you have not brought any lunch and do not have any money to buy some. Your best friend says they'll buy you lunch from the canteen so that you don't go hungry. They tell you that they're happy to do you a favour and there is no need for repayment. The provision of foreign aid is similar to this situation. Instead of one friend buying another

lunch, richer countries assist poorer countries. They may do this for **humanitarian** reasons following a natural disaster or other crisis, or for development reasons (to encourage the long-term development of the recipient country). Australia provides foreign aid through both government and non-government bodies. In this subtopic, we discuss Australia's past, present and future contributions to foreign aid programs.

on Resources

Video eLesson What is global citizenship? (eles-2375)

3.6.2 How does foreign aid work?

A significant and unfortunate gap exists between the world's richer and poorer countries. Some countries have been blessed with an abundance of natural resources, while others are relatively barren. Some countries have been sheltered from the devastation of war, while others have been torn apart by bloodshed. As a result of these and other factors, global wealth is divided unequally. Richer countries have continued to develop steadily while poorer countries lag behind in terms of **infrastructure**, education and medical services. Foreign aid is provided with the aim of improving the living standards of people in less developed countries.

FIGURE 1 A Nepali girl carries a bag of food given by aid workers in Baluwa Village in the Gorkha district, Nepal, following the deadly earthquakes that destroyed villages and killed thousands in 2015.



3.6.3 Australian governments and foreign aid

Foreign aid may be provided by governments or independent bodies, such as non-government organisations (NGOs). Both Australian government and non-government aid has been crucial to the development of many countries around the world, particularly those in the Asia region.

Aid can be divided into two categories:

- development aid — for long-term programs to support the general development of a country
- emergency aid — for natural disasters and other crises.

Development aid

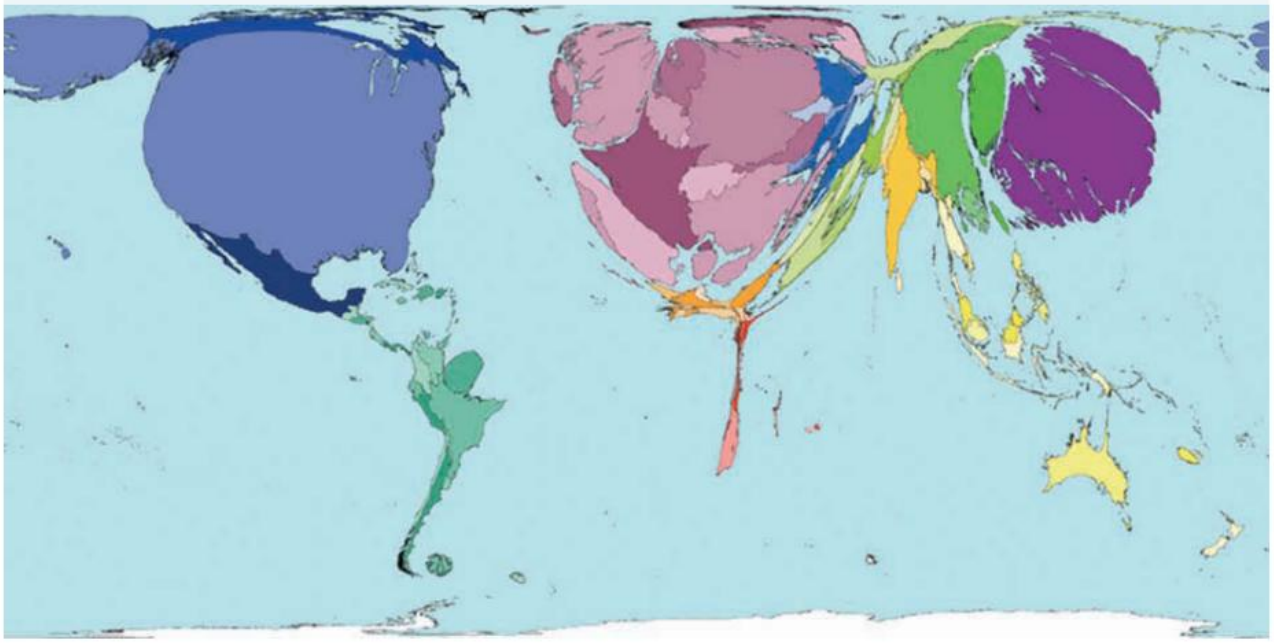
Development aid is focused on alleviating poverty in the long term. As members of the global community and one of the most developed countries in our region, Australia has a responsibility to provide assistance to our less fortunate neighbours. Australian governments have been involved in foreign aid programs since 1950, when development grants of $100 000 were issued to Papua New Guinea.

Australian foreign aid programs are administered by the Department of Foreign Affairs and Trade (DFAT). As can be seen in **FIGURE 3**, although Australian aid contributes to programs in Africa, the Middle East, Latin America and the Caribbean, activities centre on South-East and East Asia and the Pacific. Many of these programs focus on the provision of medical care, such as vaccinations. Vaccinations against common diseases can be hard to find in some countries or expensive to buy. By organising mass immunisations, the Australian government has sought to improve the

humanitarian concerned with the welfare of a social group

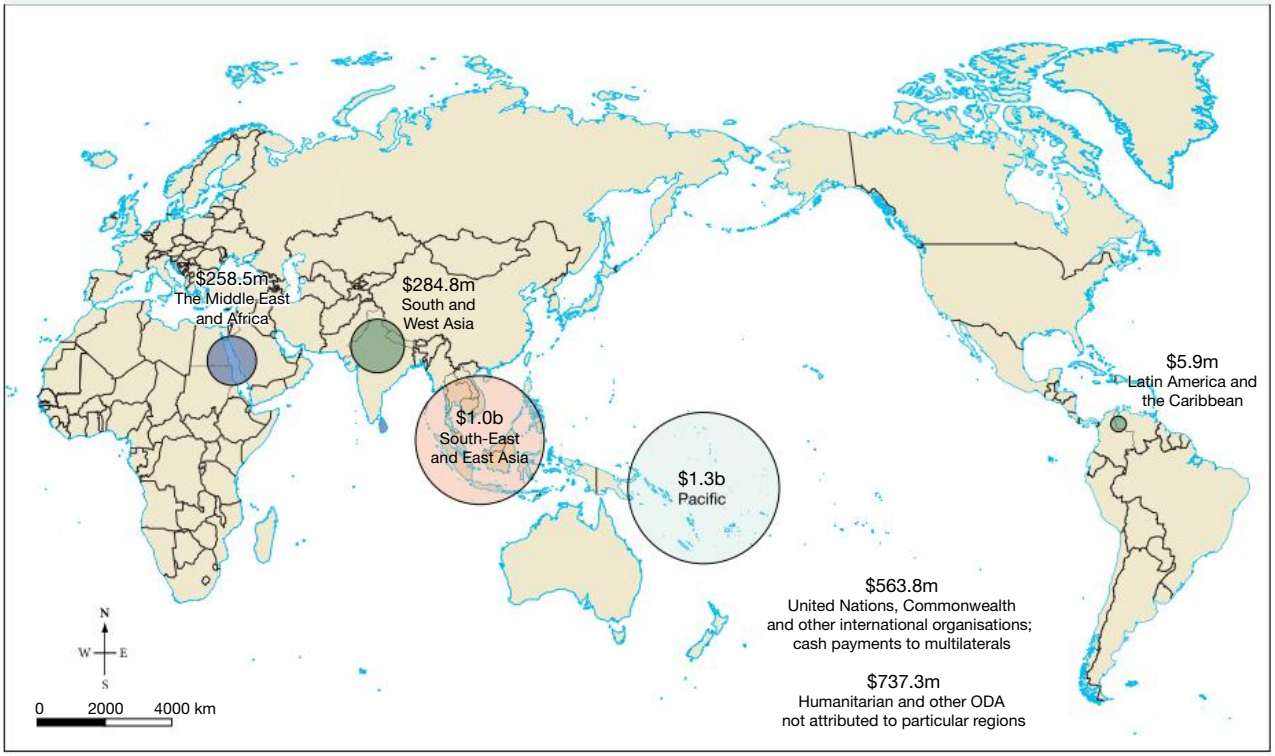
infrastructure the basic physical and organisational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society

FIGURE 2 Gross domestic product (GDP) per country. Countries with a high GDP appear swollen, while countries with a low GDP are shrunken in size.



Source: Worldmapper.

FIGURE 3 Australian aid spending around the world, 2018–19



Source: Data from © Commonwealth of Australia, DFAT, Australian Aid Budget Summary 2018–19. Map drawn by Spatial Vision.

health and wellbeing of disadvantaged nations. Australian Aid has also been involved in development programs in locations such as Indonesia, contributing funds to education and infrastructure projects.

A number of organisations, including Oxfam, Save the Children and World Vision, have criticised the Australian government over cuts to Australian foreign aid programs. They claim that reducing aid limits the

provision of immunisation, education, healthcare, infrastructure and clean water programs — all of which help people in poorer countries to build a better future. Additionally, programs such as immunisation benefit the whole region (including Australia) by reducing the spread of some diseases. Cutting funding for such programs may lead to an increased risk to Australia.

Emergency aid

Emergency aid is provided for humanitarian purposes in response to unexpected events such as natural disasters and other crises. Many of our neighbouring countries are located within geographically volatile areas. Countries such as Indonesia, Papua New Guinea and many Pacific Island nations often find themselves faced with the deadly consequences of natural disasters such as floods and earthquakes. Australian governments and their aid departments are well known for having swift and effective emergency aid responses. They send their staff to manage aid responses in these situations, both during the initial devastation and in the aftermath of the disaster. Disaster assistance response teams (DART) are multi-disciplinary groups that include medical, logistics and urban search and rescue (USAR) specialists. These teams are rostered to deploy at short notice to disasters within Australia or across our region.

FIGURE 4 When natural disasters strike, governments and aid agencies spring into action to provide emergency aid.



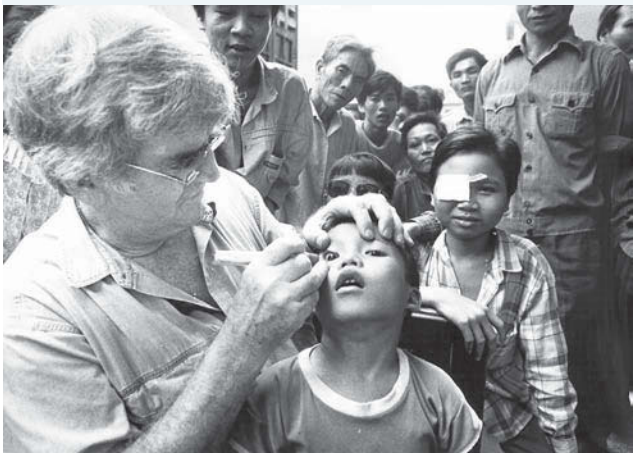
In 2018, a series of natural disasters resulted in widespread loss of life and damage in three different regions in Indonesia. In August, an earthquake struck Lombok Island, followed by a number of aftershocks. In September, an earthquake and tsunami hit Central Sulawesi Province. In December, a tsunami following the eruption of the Anak Krakatau volcano struck coastal communities along the Sunda Strait between West Java and Sumatra. The Australian Defence Force supported the Indonesian government response through the provision of supplies and equipment. The Australian government also committed millions of dollars of aid to support the Indonesian government and humanitarian partners in responding to the needs of those communities impacted by the earthquakes and tsunamis.

multinational describes an organisation operating in several countries

3.6.4 Australian NGOs and foreign aid

A non-government organisation (NGO) is one that runs independently of any government control. Although NGOs may be partially funded by governments, they remain free to develop and implement their own policies and programs. Australia has a vast range of aid NGOs. Some, such as Care Australia and Oxfam Australia, are local divisions of large **multinational** organisations. Others, such as The Fred Hollows Foundation, were created locally.

FIGURE 5 The late Dr Fred Hollows working with children in Vietnam



Free from government and politics, NGOs often have the opportunity to reach and assist a broader range of people. For example, a government's aid priorities may be influenced by foreign policy, whereas an NGO is free to act in whatever community it sees as needing its assistance. NGOs often rely heavily on public donations to fund their operation and are staffed largely by volunteers. They also provide vital support to government aid programs and can often implement more effective programs.

3.6 ACTIVITY

Examine **FIGURE 2** to answer the following questions.

a. List the countries in this map that appear 'swollen' and those that appear 'shrunken'.
b. Research and explain what high GDP means and how this affects a country's economy.
c. How does low GDP affect a country's economy?
d. Choose one country in each category and explain the political and economic reasons why you think this country has either a high or low GDP.

HASS skills: Questioning and researching, Analysing
Civics and Citizenship concept: Rights and responsibilties

3.6 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions	Questions	Questions
1, 2, 4, 8	3, 7, 9, 10	5, 6, 11

Check your understanding

1. What are the two categories of foreign aid?
2. Who administers foreign aid programs in Australia?
3. Where has the majority of Australia's foreign aid activities been focused? Refer to **FIGURE 3** in your answer.
4. **FIGURE 1** shows a recipient of emergency aid. What is emergency aid?
5. **FIGURE 5** shows Fred Hollows, founder of the Fred Hollows Foundation NGO. Explain how an NGO differs from aid provided by governments. Use examples in your answer.
6. **FIGURE 2** shows a world map distorted in size by each countries GDP. Explain how some countries are more economically developed than others.

Apply your understanding

7. In your opinion, why does Australia have a larger responsibility to provide foreign aid than other countries in our region?
8. Using **FIGURE 3**, answer the following questions.
   a. Describe the geographic pattern of Australia's foreign aid programs.
   b. Why do you think the majority of aid programs follow this pattern?
9. Do you think that Australia should increase its provision of foreign aid? Give reasons for your answer.
10. Suggest what might happen if the Australian government refused to provide emergency aid to a neighbouring country in need.
11. Consider what you have studied so far in this topic. Using examples, explain the responsibility that the Australian government has at a global level.

For sample responses to every question, go to www.jacplus.com.au.

3.7 Australia and the UN

LEARNING INTENTION

By the end of this subtopic you will be able to outline what the UN is, and explain Australia's role in it.

3.7.1 Australia's role in founding the UN

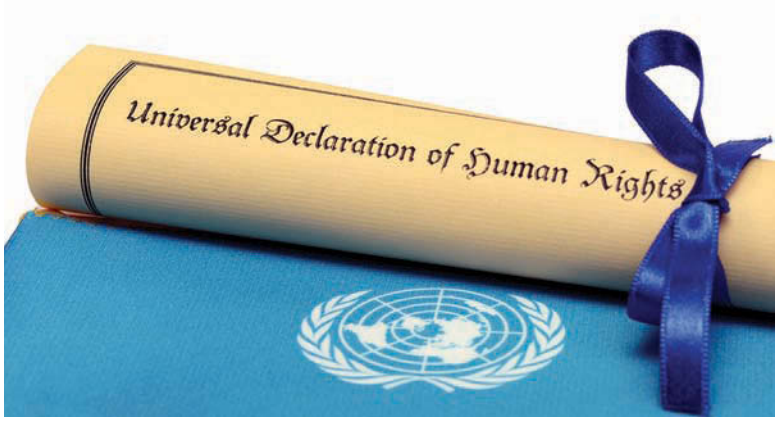
The United Nations (UN) was born out of the pain and suffering of World War II. After witnessing the horrors of war for the second time within 30 years, the nations of the world were desperate to prevent another world war. For this reason, 51 countries united in 1945 with the goals of maintaining global peace and protecting the safety and rights of global citizens. At the time the UN was formed, Australia was still relatively inexperienced in global politics. Despite this, our country was one of the founding members of the UN and heavily involved in the organisation's establishment. Australia continues to play a significant role in this important **multilateral** organisation.

Given Australia's relative inexperience in foreign policy, the significance of our involvement in the early years of the UN may appear surprising. Australia's delegation was led by Dr H.V. ('Doc') Evatt, who had previously held several high-profile legal and political positions in Australia. As the operational guidelines of the UN were being documented in its **Charter**, Evatt recognised a problem. The larger and more diplomatically experienced countries (such as the United States, the United Kingdom, France, the Soviet Union and China) had started to dominate discussions. Evatt worried that the interests of smaller countries with less experience in foreign policy would be overlooked.

FIGURE 1 The United Nations was officially founded in 1945, with Australia as one of the original 51 member states.



FIGURE 2 The Universal Declaration of Human Rights was adopted by the UN in 1948.



To overcome this problem, Evatt enlisted the support of the other smaller nations and successfully lobbied for the power of the UN General Assembly (consisting of all members of the UN) to be increased. This would act as a balance to the power wielded by the larger countries that ran the Security Council (consisting of only five members of the UN).

Evatt was also a key figure in the development of the Universal Declaration of Human Rights. His leadership on this task led to Evatt being elected president of the General Assembly in 1948. To this day, no other Australian has ever held this position.

multilateral describes a policy or program that involves three or more countries or parties

charter an official document describing the goals and principles of an organisation

3.7.2 Australia's increasing role in the UN

Since the founding of the United Nations, Australia has been a small but significant contributor to the organisation and its various programs. Involvement in peacekeeping missions, participation in policy development and donations to the UN budget are all examples of Australian contributions. As Australia's standing and influence have increased, so too has our role in the UN.

FIGURE 3 A vote taking place in relation to a draft resolution at a UN Security Council meeting



One of the most powerful and influential arms of the UN is the Security Council. It is responsible for the organisation of peacekeeping missions, the imposition of **international sanctions** and the authorisation of military action. The Security Council consists of five permanent members — the United States, the United Kingdom, France, Russia and China — and ten non-permanent members who serve two-year terms. Including our most recent term (2013–14), Australia has served as a non-permanent member of the Security Council five times in the history of the UN. Australia's membership of the UN Security Council can be seen as evidence of our increasing role in the global community.

3.7.3 Australia's contribution to global citizenship

Australian representatives to the United Nations have used our country's increased standing to call for change regarding a number of global issues. One specific Australian focus has been gender equality and the rights of women. Australia was heavily involved in UN forums addressing these topics and continues to promote true gender equality. Whaling is another issue on which Australia has taken a stance, leading a case that successfully convinced one of the UN's highest courts, the International Court of Justice, to ban Japan from conducting its annual whale hunt.

FIGURE 4 Australian students at a protest rally demanding urgent action on climate change



Despite these positive actions, there are still many ways in which our country can further contribute to the global community. Recent years have seen issues such as climate change slip down our nation's list of priorities. Despite ratifying the Paris Agreement (an agreement within the United Nations Framework Convention on Climate Change) in 2016, Australia's efforts to reduce the impact of climate change have stalled. Our treatment of refugees and asylum seekers has also received widespread criticism from the global community. Such criticisms need to be viewed constructively and used to make positive changes for Australian and global citizens alike.

international sanctions actions or penalties — usually economic but also diplomatic or military — imposed on a country by a group of other countries

3.7 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 7	Questions 3, 6, 8	Questions 5, 9, 10

Check your understanding

1. The United Nations was formed after which global event?
2. What issue worried 'Doc' Evatt during the development of the UN Charter?
3. Describe Australia's involvement in the early years of the United Nations.
4. Explain the responsibilities of the UN Security Council.
5. Explain how Australia has contributed to global citizenship through its involvement with the UN.

Apply your understanding

6. Outline the significance of Australia's five terms as a non-permanent member of the UN Security Council.
7. For what reasons do you believe Australia needs to be a member of the UN? Justify your response.
8. Is there a better solution to maintaining global peace and protecting the safety and rights of global citizens than the UN? Justify your response.
9. What would have happened if 'Doc' Evatt had not lobbied for the power of the UN General Assembly to be increased?
10. What do you think would happen if Australia had no involvement with the UN?

For sample responses to every question, go to www.jacplus.com.au.

3.8 Keeping the peace

LEARNING INTENTION

By the end of this subtopic you will be able to describe the role of UN peacekeepers, including Australia's contribution.

3.8.1 Role of UN peacekeepers

In many ways, the League of Nations can be seen as the first version of the UN. Formed after World War I, the League of Nations was charged with the responsibility of maintaining global peace. Its major shortcoming, however, was that it lacked mechanisms through which it could fulfil this role. After watching the failure of the League of Nations — ultimately it could not stop the outbreak of World War II — the founding members of the UN sought to avoid similar criticism. The UN discharges its responsibility of maintaining global peace through the use of peacekeepers and military observers.

Australia has been involved in UN peacekeeping missions from the first envoy sent in 1948. In this subtopic, we examine the role of UN peacekeepers and the contribution Australians have made to these missions.

FIGURE 1 A squad of Indonesian peacekeepers conducting duty near El Fasher Airport in Sudan, guarding civilians as they are heading back to their houses in early 2018



The role of United Nations peacekeepers is exactly that — to develop and maintain peaceful interactions between social, ethnic or political groups. Since 1948, the UN has deployed peacekeeping missions across the globe. The specific activities of the mission depend on the nature of the conflict. Missions may involve enforcing a **ceasefire** between previously warring parties, or helping a country to conduct a democratic election that would otherwise be problematic.

Peacekeepers are instructed to operate using non-violent methods wherever possible. According to the UN Charter, peacekeepers are allowed to use military force only in self-defence or if the essential goal of the mission is under threat (see **FIGURE 2**). Often known as Blue Berets, due to their distinctive blue hats and helmets, UN peacekeepers can include soldiers of national armies as well as police officers and political staff. Australia has sent 65 000 personnel to various UN peacekeeping missions. Australian doctors, engineers, diplomats, and military servicemen and women have all played their part in the establishment and maintenance of peace in countries around the world.

ceasefire a temporary or permanent suspension of fighting

FIGURE 2 Principles of UN peacekeeping: non-use of force except in self-defence and defence of the mandate

A UN peacekeeping operation should only use force as a measure of last resort. It should always be calibrated in a precise, proportional and appropriate manner, within the principle of the minimum force necessary to achieve the desired effect, while sustaining consent for the mission and its mandate. The use of force by a UN peacekeeping operation always has political implications and can often give rise to unforeseen circumstances.

Judgments concerning its use need to be made at the appropriate level within a mission, based on a combination of factors including mission capability; public perceptions; humanitarian impact; force protection; safety and security of personnel; and, most importantly, the effect that such action will have on national and local consent for the mission.

Source: United Nations.

DISCUSS

Australia and other affluent countries have a responsibility to assist countries that are much less well off. What do you think are the most important global issues facing the world today: child slavery, war, child marriage, violence against women, poverty, lack of education and employment opportunities, or other? Choose the one issue you think is the most important to address, explain why and give some suggestions as to how Australia can help. Are there any global problems that Australia should not get involved in? Why?

General capabilities: Intercultural understanding, Ethical understanding

3.8.2 Australian peacekeeping missions

Australians have been involved in UN military observations since 1947, a year before the first official peacekeeping mission. Although civilian personnel have contributed to peacekeeping missions, military and police officers have traditionally played a more significant role. Australian peacekeepers have served in several key conflicts around the world including the:

- Indonesian War of Independence (1947)
- prelude to the Korean War (1950)
- various conflicts in Israel and the Middle East (since 1956)
- Iran–Iraq War (1988–91)
- Rwandan Civil War (1993–96)
- East Timorese independence crisis (1999–2012)
- Sudanese Civil War (since 2005).

FIGURE 3 An Australian peacekeeper greets an East Timorese child in Dili.



One of the best-known examples of Australian peacekeeping efforts was our involvement in the East Timorese independence crisis. A small country located to Australia's north-west, East Timor has endured a volatile history. Unlike much of the area, which was settled by the Dutch, East Timor was **colonised** by the Portuguese. In 1975, East Timor became an independent state, although it was soon invaded by neighbouring Indonesia in the same year. The Indonesian rule over East Timor was brutal and unjust, but Australian governments during this time were reluctant to criticise Indonesia. They feared such a move would damage political relations between the two countries.

After decades of civil unrest, two UN programs were launched to deal with the East Timor crisis. Australia had considerable involvement with both the UN mission in East Timor (UNAMET) and the International Force for East Timor (INTERFET). The former mission successfully organised and conducted a referendum which resulted in East Timorese independence. Organised and led by Australian forces under Major General Peter Cosgrove, INTERFET then helped develop more effective military and law enforcement strategies in East Timor. The Australian contribution to East Timorese independence is an excellent example of the positive contributions Australia has made to our region.

colonised describes a country or region whose government has been replaced by one from another country

on Resources

Weblinks Peace is a full-time job

3.8 ACTIVITIES

1. Construct a flowchart explaining East Timor's journey towards independence.
   HASS skills: Communicating and reflecting
   Civics and Citizenship concept: Rights and responsibilities
2. Choose one of the seven conflicts from the bullet point list in section 3.8.2. Research the conflict and provide a summary paragraph which includes these points:
   a. a brief summary of the conflict
   b. the role played by Australia
   c. the number of Australian peacekeepers involved
   d. the outcome of the event.

   HASS skills: Questioning and researching, Analysing
   Civics and Citizenship concept: Rights and responsibilities

3.8 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 6	Questions 4, 7, 8	Questions 5, 9, 10

Check your understanding

1. What was the major criticism of the League of Nations?
2. What is the key role of UN peacekeepers?
3. When was Australia first involved in UN military observations and peacekeeping missions?
4. Explain who may be included as UN peacekeepers.
5. **FIGURE 3** shows an Australian soldier in East Timor. Describe East Timor's journey towards independence.

Apply your understanding

1. List three challenges you might face as a UN peacekeeper.
2. Which of the challenges faced by a UN peacekeeper do you believe would be the most difficult to overcome and why?
3. Do you think peacekeeping is a good or a bad thing? Explain your response.
4. What does Australia's participation in peacekeeping suggest about the Australian government's role and responsibilities at a global level?
5. Examine the principles of UN peacekeeping in **FIGURE 2**. Explain why you think there is a need for the principle of non-use of force.

For sample responses to every question, go to www.jacplus.com.au.

3.9 Thinking Big research project — Humanitarian aid proposal

Scenario

There are a number of ways in which Australia exercises its civic responsibility on a global scale. Through government and non-government agencies, Australia is directly involved in humanitarian projects across the world. How do these agencies decide which country, which community and which project will be their focus? These decisions are not easy and require the consideration and evaluation of a range of factors. The criteria involved in making this decision may include the demand for the project, the significance of its expected outcomes, the duration of the project and of course its cost. Once an agency has made its decision, it can begin planning and then implementing the aid project.



Task

For this task, you will choose an issue relating to Australia's global civic responsibility. As a class, you will use democratic processes to reach a consensus. Once this has been achieved, you will plan for the action relating to your chosen issue.

Process

- Before the class can decide on its civic focus, as a group you will need to consider on what basis to make the decision. You might consider these examples:
  - For the non-government agency Oxfam Australia, this decision is made by using its guiding principles and goals. If a prospective project meets one of Oxfam's six key goals, the project progresses to the next stage of the process. Oxfam then considers secondary criteria such the cost of the project and the resources needed to enable its completion.
  - The Direct Aid Program (DAP) is a small grant program run by the federal government. Like Oxfam, it uses a selection program based on set criteria. The most important of these criteria is the correlation between the proposed project and the goals of the DAP. Sustainable projects that do not require additional funding are also preferred by the DAP.

These examples demonstrate the importance of using agreed criteria to decide on the suitability of a project.



Once a suitable project has been chosen, the planning process can begin. For agencies such as Oxfam and DAP, this process is extensive. Developing an understanding of the problem the project seeks to address is the first step in the planning process. By understanding the problem, a clear solution is often easier to identify. Stakeholders must also be involved, ensuring that proper community consultation takes place.

- Begin the process of planning by establishing a set of class goals. Answers to the following questions will help determine these goals:
  - What are the global issues with which you are most concerned?
  - What are the most serious threats to the global community?

The class can discuss these questions as a large group, or break into smaller groups and document the various responses, then formalise these into a set of clear goals. Oxfam Australia's strategic plan may assist in formulating goals (see the weblink in the ProjectsPLUS **Media centre**).

- The next step is to design selection criteria. As you may have seen from the Oxfam and DAP examples, one of these should be the correlation of the proposed project with the stated goals of your class. You may suggest other criteria to use when making a decision. You might ask questions such as:
  - Will cost be an issue?
  - Is the length of time the class has to plan and implement the project a concern?

  Again, a group discussion is a simple way to develop the selection criteria.
- Once the previous steps have been completed, form pairs or groups of three. Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group. This will allow you to work collaboratively online. Save your settings and the project will be launched.
- In your group, select a potential aid project for the class.
  - After choosing a project, each group will need to prepare a five-minute presentation on the project to explain why it should be chosen as the focus of the class's civic action.
  - Conduct research and work as a group to prepare an engaging presentation that clearly addresses the key goals and selection criteria that have just been established.
  - You may choose to create a slide presentation with images and key points to guide your presentation to the class.
- Once all groups have presented their proposals, the class should decide which one best fits the goals and selection criteria. The best and most democratic way to do this is to hold a secret ballot. Once the winning proposal has been identified, the class can begin the planning stage and, by doing so, actively participate in the global community.
- In the **Media centre** you will find an assessment rubric and some helpful weblinks for your participation in this task.



on Resources

ProjectsPLUS Thinking Big research project — Humanitarian aid proposal (pro-0221)

3.10 Review

3.10.1 Key knowledge summary

3.2 Key features of Australia's system of government

- Australia is a constitutional monarchy, with a Commonwealth Parliament consisting of two houses (the House of Representatives and the Senate) and the Crown (represented by the governor-general).
- Australia's government is based on the idea of democracy. This means that sovereignty lies with the Australian people, and values such as freedom of election and support for parliamentary democracy are associated with our system of government.
- Australia's system of government is characterised by democratic elections and the separation of powers.
- There are similarities and differences between Australia's system of government and the systems of government found in other countries in the Asia region, in particular Japan, India and Indonesia.

3.3 Key features of Japan's system of government

- Japan is a constitutional monarchy, with its parliament (the National Diet) consisting of the House of Representatives and the House of Councillors. The emperor plays only a symbolic role as Japan's head of state.
- The government of Japan is also based on the idea of democracy. This means that sovereignty lies with the people, and values such as freedom of election and support for parliamentary democracy are associated with their system of government.
- Japan's system of government is also characterised by democratic elections and the separation of powers.

3.4 Key features of India's system of government

- India is a republic, with the Parliament of India consisting of the House of the People (Lok Sabha) and the Council of States (Rajya Sabha) as well as the president, who is India's head of state.
- The government of India is also based on the idea of democracy. This means that sovereignty lies with the people, and values such as freedom of election and support for parliamentary democracy are associated with their system of government.
- India's system of government is also characterised by democratic elections and the separation of powers.

3.5 Key features of Indonesia's system of government

- Indonesia is a republic. Its parliament, the People's Consultative Assembly (the Majelis Permusyawaratan Rakyat, or MPR), consists of the People's Representative Council (Dewan Perwakilan Rakyat, or DPR — the lower house) and the Regional Representatives Council (Dewan Perwakilan Daerah, or DPD — the upper house). The president is both the head of state and the head of government.
- The government of Indonesia is also based on the idea of democracy. This means that sovereignty lies with the people, and values such as freedom of election and support for parliamentary democracy are associated with their system of government.
- Indonesia's system of government is also characterised by democratic elections and the separation of powers.

3.6 Foreign aid from governments and NGOs

- The world's nations have experienced uneven rates of development. This has created substantial gaps between economies and given rise to numerous humanitarian issues.
- In an attempt to alleviate the pressures caused by this gap, foreign aid is provided by wealthier countries to those countries that are less developed.
- As one of the strongest economies and most developed countries in its region, Australia finds itself with tremendous responsibilities to assist its neighbours.
- The Australian government can provide both development aid (for long-term programs to support the general development of a country) and emergency aid (for natural disasters and other crises).
- Non-government organisations (NGOs) also play a critical role in the provision of foreign aid.

3.7 Australia and the UN

- Since the founding of the UN, Australia has played a significant role in developing UN policies and participating in its programs.
- Australia has served as a non-permanent member of the Security Council five times in the history of the UN.
- Australian representatives to the United Nations have used our country's increased standing to call for change regarding a number of global issues, including gender equality, the rights of women and whaling.

3.8 Keeping the peace

- Australia has been involved in UN military observations and peacekeeping missions since 1948.
- UN peacekeepers can include soldiers of national armies as well as police officers and political staff.
- Peacekeeping missions may involve enforcing a ceasefire between previously warring parties, or conducting democratic elections that would otherwise be problematic.

3.10.2 Key terms

absolute majority half the number of votes received in an election plus one

absolute monarchy a form of government where the monarch (a king, queen or emperor) wields unrestricted political power over his or her sovereign state and its people

authoritarian a form of government characterised by absolute obedience to the state, an authority figure or group

bicameral a parliament consisting of two legislative houses, or chambers

ceasefire a temporary or permanent suspension of fighting

charter an official document describing the goals and principles of an organisation

colonised describes a country or region whose government has been replaced by one from another country

constitution a set of fundamental principles according to which a nation or state is governed

constitutional monarchy a type of government based on a constitution with a queen or king as its head of state

Crown the Queen's authority in the Australian parliament, represented by the governor-general at the federal level and a governor at the state level

executive another name for the government

Federation the joining of the six Australian colonies to establish the federal and state parliaments

first-past-the-post a voting system where a candidate wins by receiving more votes than any other candidate

formal vote a ballot paper that has been filled out correctly

humanitarian concerned with the welfare of a social group

infrastructure the basic physical and organisational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society

international sanctions actions or penalties — usually economic but also diplomatic or military — imposed on a country by a group of other countries

judiciary the collective name given to the judges who preside over law courts

multilateral describes a policy or program that involves three or more countries or parties

multinational describes an organisation operating in several countries

preferential system a system in which voters are required to number all candidates on the ballot paper in order of preference. If no candidate wins more than 50 per cent of the vote, the preferences are distributed until one candidate has a majority of votes.

proportional representation a system where candidates are elected according to the proportion (or quota) of the vote achieved by their party

republic a form of government where supreme power is held by the people and their elected representatives rather than by a monarch

separation of powers the division of government into the legislature (parliament), executive (ministers and the public service) and judiciary with the aim of providing a system of checks and balances that prevents the excessive concentration of power in one group

sovereignty of the people the principle that a government's authority resides with its people through their elected representatives

unicameral a parliament consisting of one legislative house, or chamber

Westminster system the democratic parliamentary system based on the British system of parliament

3.10.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

How does Australia's government compare to our neighbours' governments? Should we provide aid to our neighbours if needed?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6023)
Reflection (ewbk-6022)
Crossword (ewbk-6021)
Student Learning Matrix (ewbk-6018)

Interactivity Regional government and global citizenship crossword (int-7679)

3.10 Review exercise

Multiple choice

1. Australia's democratic values include which of the following?
   - **A.** Freedom of speech
   - **B.** Support for the rule of law
   - **C.** Freedom of election and being elected
   - **D.** All of the above
2. The system of parliamentary government in Australia is based on which of the following?
   - **A.** Australian Constitution
   - **B.** Westminster system
   - **C.** Crown
   - **D.** Constitutional monarchy
3. Elections for the House of Representatives in Australia use which system?
   - **A.** Preferential system of voting
   - **B.** First-past-the-post voting method
   - **C.** Show of hands
   - **D.** All of the above
4. What is the Senate voting system in Australia called?
   - **A.** Absolute majority
   - **B.** First-past-the-post voting method
   - **C.** Preferential system of voting
   - **D.** Proportional representational system
5. The Japanese National Diet is composed of which of the following?
   - **A.** A lower house and an upper house
   - **B.** Two branches of government
   - **C.** The prime minister and chief ministers
   - **D.** The chief justice and other justices

6. All Japanese citizens can vote in elections once they reach what age?
   - **A.** 18
   - **B.** 20
   - **C.** 25
   - **D.** 21

7. Who appoints whom in India?
   - **A.** The parliament appoints the chief justice.
   - **B.** The prime minister appoints the president.
   - **C.** The chief justice appoints the president.
   - **D.** The president appoints the prime minister.

8. The Parliament of India consists of which of the following?
   - **A.** The House of Representatives and the House of Councillors
   - **B.** The House of Representatives and the Senate, as well as the Crown
   - **C.** The House of the People (Lok Sabha) and the Council of the States (Rajya Sabha), as well as the president
   - **D.** The People's Representative Council (Dewan Perwakilan Rakyat) and the Regional Representatives Council (Dewan Perwakilan Daerah)

9. What is Indonesia's system of government?
   - **A.** A republic
   - **B.** A constitutional monarchy
   - **C.** An absolute monarchy
   - **D.** All of the above

10. How often do elections for the Indonesian presidency occur?
    - **A.** Every three years
    - **B.** Every five years
    - **C.** Every seven years
    - **D.** Every nine years

Short answer

11. What values do you associate with the system of government in Australia?
12. Choosing a country in the Asia region that you have studied, what values do you associate with the system of government in that country?
13. How similar or different are the values associated with Australia's system of government to those of the country in the Asia region that you have studied?



RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 3 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

3.1 Overview

Video eLesson
- Values of governments in our region (eles-2374)

3.2 Key features of Australia's system of government

Interactivity
- The division and separation of powers in Australia (int-7990)

3.3 Key features of Japan's system of government

Interactivity
- The separation of powers in Japan (int-5674)

3.4 Key features of India's system of government

Interactivity
- The separation of powers in India (int-5675)

3.5 Key features of Indonesia's system of government

Interactivity
- The separation of powers in Indonesia (int-5676)

3.6 Foreign aid from governments and NGOs

eWorkbook
- Escaping conflict to protect wellbeing (ewbk-6019)

Video eLesson
- What is global citizenship? (eles-2375)

3.8 Keeping the peace

eWorkbook
- Conflict impacts human wellbeing (ewbk-6020)

Weblink
- Peace is a full-time job

3.9 Thinking Big research project — Humanitarian aid proposal

ProjectsPLUS
- Thinking Big research project — Humanitarian aid proposal (pro-0221)

3.10 Review

eWorkbook
- Reflection (ewbk-6022)
- Crossword (ewbk-6021)
- Student Learning Matrix (ewbk-6018)

Interactivity
- Regional government and global citizenship crossword (int-7679)

To access these online resources, log on to **www.jacplus.com.au**.

4 The High Court and Australia's international agreements

4.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

Do we really need laws, high courts and treaties? Can't everyone just get along without them?

4.1.1 Introduction

FIGURE 1 The High Court of Australia building is located in Canberra but the justices travel to capital cities around the country settling disputes.



As citizens we are all subject to the rules and laws set by society — by the organisations and groups we associate with and by the governments we elect. When governments create laws, they also create a mechanism for dealing with situations where an individual, group or organisation breaches one of these laws. The mechanism used is our system of courts. Courts deal with different types of disputes depending upon the jurisdiction they are provided with by parliament. The most serious disputes are dealt with by the highest court in our legal system — the High Court of Australia. The High Court of Australia is unique. It is the only court in Australia established and specifically mentioned in our Constitution, and it is also the only court with a set number of justices who sit on the court at any one time. We are also a part of the global community, and therefore need laws that set standards of acceptable behaviour for nations and their citizens when dealing with issues that cross borders or issues of concern to society in general. In the seven decades since the end of World War II there has not been another world war, but that does not mean the world has been peaceful. Conflicts of varying size and longevity have been fought across the world almost since the end of that war. These conflicts often stem from religious, ethnic or historical disputes and sometimes cross borders. Whatever the cause, these conflicts have left us with a less than peaceful world. While many of these conflicts are internal disputes between ethnic groups of a country or region, they can spill over into other areas and affect other nations and people, many of them innocents. An example was the internal conflict in the Ukraine in 2014 — on 18 July 2014 the world was brought into that conflict when Air Malaysia flight MH17, flying from Amsterdam to Kuala Lumpur, was shot down.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6033)

Video eLesson Living in a cohesive society (eles-2378)

4.2 Resolving disputes between state and federal governments

LEARNING INTENTION

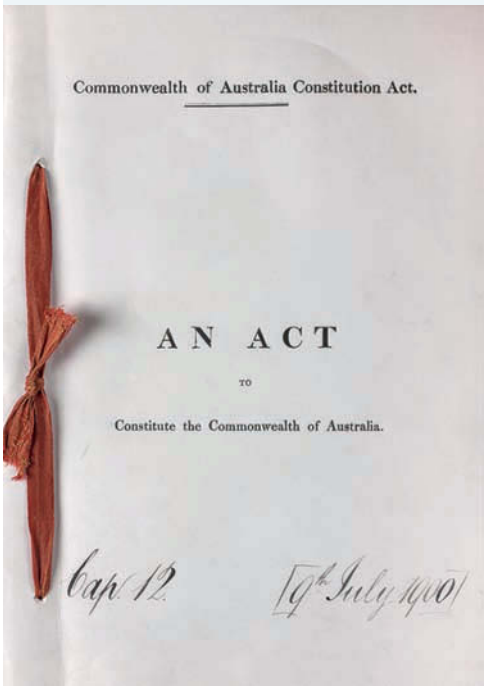
By the end of this subtopic you will be able to explain how the Australian court system allows for the resolution of disputes between state and federal governments.

4.2.1 Specific, residual and concurrent powers

A system of courts is needed to help maintain social cohesion. In Australia we have courts at a state level, but we also have a federal court system. At the top of this federal court system is the High Court of Australia. Located in Canberra, the court is presided over by seven High Court justices, who are appointed by the governor-general on the advice of the federal government. Justices are appointed for a period that expires when they turn 70; they cannot be removed from office except on the grounds of proven misbehaviour or incapacity.

When the Constitution established the Commonwealth of Australia (effective 1 January 1901), it granted the Commonwealth Parliament the power to make laws in certain areas. These are known as specific powers. They are called 'specific' because they are specified in sections of the Constitution. It also allowed the colonial parliaments (known as state parliaments after Federation) to retain their individual constitutions and some of their law-making powers, known as residual powers. It further provided some areas of law making where both the states and the federal parliaments could make laws, referred to as concurrent powers. Having concurrent powers made it likely that some conflict would develop between laws made by the Commonwealth and laws made by the states. In these circumstances it is the role of the High Court to settle such disputes.

FIGURE 1 *The Commonwealth of Australia Constitution Act 1900* establishes the law-making powers of the federal and state parliaments.



4.2.2 Concurrent powers

Section 51 of our Constitution identifies 40 areas where the Commonwealth (or federal) Parliament 'shall, subject to this Constitution, have power to make laws for the peace, order, and good government of the Commonwealth'. As noted earlier, these powers are referred to as specific powers. They are also referred to as 'concurrent', which means both the state and the federal parliaments are free to make laws in these areas. These 40 powers include the power to make laws in the areas of taxation, marriage, naturalisation and aliens, external affairs and acquiring property on just terms.

The framers of the Constitution were aware that, by creating these concurrent powers, there was potential for conflict to arise between a law made by a state parliament and a law made by the federal parliament. To that end, the framers put in place a mechanism for resolving such a conflict — section 109.

Section 109 of the Constitution states that '[w]hen a law of a State is inconsistent with a law of the Commonwealth, the latter shall prevail, and the former shall, to the extent of the inconsistency, be invalid'. A problem arises when the state doesn't believe that an inconsistency exists or believes that the Commonwealth didn't have the power to create a law in this area. It is at this point that the High Court is often called upon to resolve the dispute.

The original version of the Constitution included only 39 specific powers and they were referred to as the '39 heads of power'. An additional power was added after the 1946 referendum.

FIGURE 2 The popular Australian film *The Castle* involved a family fighting a large company who wanted the government to compulsorily acquire their house. Section 51 of the Constitution was mentioned in the film.



4.2.3 Resolving conflicts between state and federal laws

The framers of the Constitution recognised that the members of the state governments would be more familiar with their own citizens and circumstances, and so the state governments were left with the power to make laws in certain areas. The framers also recognised that there were certain areas where it would be in the national interest for citizens to recognise only one law.

Discrepancies exist between states and territories in certain areas of law; for example, each state and territory has its own laws about learner drivers' permits and probationary licenses. Study **FIGURE 3** to discover the different laws that exist in each state and territory in relation to obtaining a learner's permit or probationary license. In which state or territory does it take the least amount of time to obtain a probationary license?

One area where laws have conflicted in recent years is marriage. In 1961 the Commonwealth Parliament passed the *Marriage Act 1961* (Cwlth). This act of parliament codified the law to explicitly state that marriage means:

> the union of a man and a woman to the exclusion of all others, voluntarily entered into for life.

In 2004 the Commonwealth Parliament passed the *Marriage Amendment Act 2004* (Cwlth) that further extended the existing law to define marriage as:

> a union of a man and a woman; and clarify that same-sex marriages entered into under the law of another country will not be recognised in Australia.

In 2013 the government of the Australian Capital Territory passed a new law, the *Marriage Equality (Same Sex) Act 2013* (ACT), which allowed for same-sex marriage in the ACT. After it was proclaimed, a challenge was raised in the High Court in December 2013 in the case of *Commonwealth v. Australian Capital Territory* 2013 HCA 55.

FIGURE 3 Learner permit and probationary licence laws around Australia

B Northern Territory
A learner's permit can be obtained at the age of 16 after passing a road rules test and an eyesight test. Learner drivers are allowed to drive at a maximum speed of 80 kilometres per hour, and can apply for their probationary licence after holding a learner's permit for at least 6 months.

C Queensland
A learner's permit can be obtained at the age of 16 after passing a written road rules test. A driver must complete at least 100 hours of driving, including 10 hours of night driving, and have held their learner's permit for at least 12 months before applying for their probationary licence.

D New South Wales
A learner's permit can be obtained at the age of 16 after completing a computerised road rules test and eyesight test. Learner drivers need to do 120 hours of driving, including 20 hours of night driving, and can drive at a maximum speed of 90 kilometres per hour. Learner drivers can apply for their probationary licence after holding a learner's permit for 12 months and completing their required driving hours.



A Western Australia
A learner's permit can be obtained at the age of 16 after passing a theory test and an eyesight test. The learner must have at least 50 hours of driving practice and hold their learner's permit for their probationary licence.

H Australian Capital Territory
A learner's permit can be obtained at the age of 15 years and 9 months after completing a road safety program called 'Road Ready' and passing a computerised road rules test. In order to apply for a probationary licence, a driver must be at least 17 and have held a learner's permit for at least 6 months.

F South Australia
A learner's permit can be obtained at age 16 after completing a theory test. Learner drivers can drive at the normal speed limit and must complete at least 75 hours of driving practice. A learner driver must hold a learner's permit for 12 months before applying for their probationary licence.

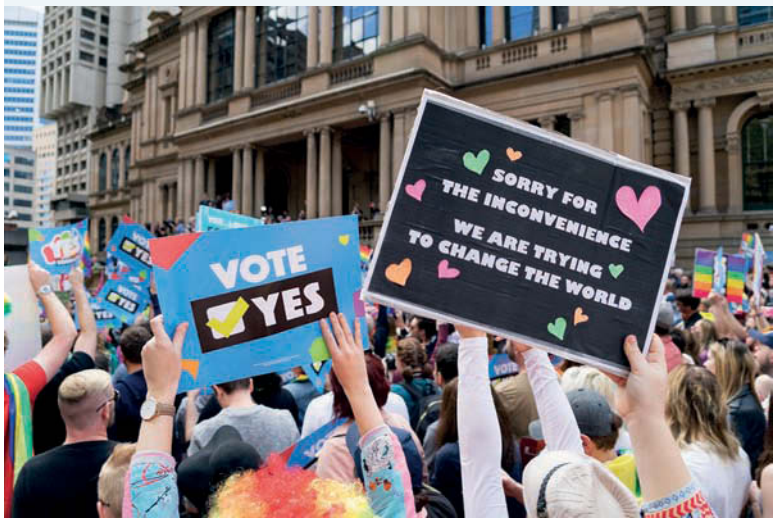
E Victoria
A learner's permit can be obtained at age 16 after passing a computerised knowledge test and an eyesight test. Learner drivers can drive at the normal speed limit and must complete at least 120 hours of driving practice. A learner driver must have had a learner's permit for 2 years before applying for their probationary licence.

G Tasmania
A learner's permit can be obtained at age 16 after passing a driver knowledge test. Learner drivers are required to drive at a lower speed than is posted when speed limits are over 90 kilometres per hour. After 3 months of holding an L1 permit, a learner driver sits a driving assessment to get an L2 licence. After a further 9 months and at least 50 hours of driving experience the learner can apply for their probationary licence.

The High Court was asked to decide whether section 51(xxi) and section 51(xxii) of the Constitution, which relate to marriage and divorce, allowed the ACT government to pass a law that was contrary to the federal law identifying marriage as a union between a man and a woman. On 12 December 2013 the High Court ruled that the ACT law legalising same-sex marriage was inconsistent with the federal law passed under section 51(xxi) of the Constitution. Hence, the ACT law was deemed to be invalid, and it was subsequently repealed. The High Court was able to resolve a conflict between two laws on the same topic and has therefore provided for a consistent law in this area.

After this High Court decision, debate continued in Australia. The growing level of support for same-sex marriage resulted in a postal survey, to gauge the level of support for a change in the law. The Australian Marriage Law Postal Survey, which took place between September and November 2017, was conducted by the Australian Bureau of Statistics through a postal survey rather than through ballot boxes at polling booths. Over 79 per cent of eligible voters returned the postal survey form (participation was not compulsory as it normally is in Australian elections). Nearly 62 per cent of voters supported a change in the law, so the federal government then passed a law legalising same-sex marriage, which came into effect in December 2017.

FIGURE 4 Australians took to the streets in large numbers to show their support for legalising same-sex marriage.



4.2.4 Influencing state governments

The High Court not only resolves disputes over Commonwealth and state laws; it is also asked to review decisions made in state courts. As part of its jurisdiction, the High Court has the ability to hear appeals from the Supreme Courts of each state and territory, and to comment on legislation passed by the states. In making its judgements the court, and the justices sitting on a particular case, will offer comments on the validity and suitability of the laws in question. The state parliaments often act on these comments.

The case of *Trigwell v. State Government Insurance Commission* (1979) is an example of such a case. A woman was driving along a road at night when she swerved to avoid a sheep that had strayed onto the road. In doing so, she crossed onto the other side of the road and hit an oncoming car. The woman was killed and the people in the other vehicle were injured. The injured parties sued the farmer for negligence, stating that the farmer was at fault for not maintaining the fence through which the sheep escaped. The High Court was unable to find the farmer liable as the court was bound by a decision made in the House of Lords in England that still applied to Australian courts. In making their decision, the justices noted that the parliaments of the various states had known of this **precedent** for some time but had not acted. Following this decision, many state governments passed legislation to amend the Wrongs Act so this decision could not occur again. Farmers would henceforth be liable for their animals escaping and causing harm or damage.

precedent an action or decision on which later actions or decisions might be based; a law made by a superior court that must be applied by lower courts in future cases with the same or similar facts

FIGURE 5 Animals straying onto a road can cause a hazard for other road users — sometimes leading to accidents, as occurred in the Trigwell case.



4.2 ACTIVITY

The same-sex marriage debate is considered to be finished as the law has now been changed. Society has evolved sufficiently to accept same-sex marriage. The challenge for society is to remedy the next 'big' social issue.

In small groups, discuss and identify what you consider to be the next big social issue. Research what the issue is about and what the pros and cons are of changing the law in this area. Prepare a speech, poster or slide presentation to present your group's findings and views to the class.

Some possibilities might be:

- legalising some or all drugs
- voluntary euthanasia.

General capability: Ethical understanding

4.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 4, 6	Questions 2, 7, 8	Questions 5, 9, 10

Check your understanding

1. Where is the High Court located?
2. Which sections of the Constitution establish the High Court of Australia and its jurisdiction?
3. How many justices sit on the High Court at any one time?
4. At what age do High Court justices retire?
5. Explain the difference between specific, residual and concurrent powers.

Apply your understanding

6. Why could concurrent powers lead to conflict?
7. Analyse why it is better in some instances for Australia to have one law for the whole country on a given issue.
8. Analyse why the High Court is the appropriate venue to resolve disputes between two or more states.
9. The High Court hears appeals from other courts. Analyse why the High Court should be able to do this.
10. Some areas are not mentioned in the Constitution, such as the environment or euthanasia. Describe the role the High Court could play in disputes in these areas.

For sample responses to every question, go to www.jacplus.com.au.

4.3 Interpreting the Constitution

LEARNING INTENTION

By the end of this subtopic you will be able to explain why the Australian Constitution needs to be interpreted, and describe how this occurs.

4.3.1 The power to interpret the Constitution

The Commonwealth of Australia Constitution was passed by the British Parliament in 1900 after ten years of negotiations and drafting by the premiers of the six colonies and a number of constitutional conventions. This process served to develop a constitution that served the interests of all the states and the citizens of Australia at that time. It also aimed to provide a framework for governing that would serve Australia into the future by including in the Constitution provisions to take future changes in society into account. Of course, the framers could not envisage all possible future changes such as technology (see **FIGURE 1**). By establishing the High Court, they provided a means for interpreting the Constitution that allows the document to take into account future circumstances, thereby bringing the law-making powers into the twenty-first century and beyond.

FIGURE 1 When the Constitution was drafted in the late 1890s, its creators could not anticipate the changes brought about by technology.



The High Court obtains its jurisdiction from sections 75 and 76 of the Constitution (see **FIGURE 2**). Effectively it has the power to hear and determine 'all matters' that are listed below, such as matters arising under any treaty and matters in which the Commonwealth is a party. Since its first case in 1903, the High Court has played a significant role in interpreting the words and phrases of the Constitution to determine whether a law or a decision is valid.

The Constitution contains clear rules about the law-making powers of both the state and Commonwealth parliaments. However, as noted above, there are still occasions when conflicts over law-making power arise between the Commonwealth and the state parliaments. It is also possible for individuals to challenge whether or not a particular law made by the Commonwealth is constitutional.

FIGURE 2 Sections 75 and 76 of the Constitution give the High Court its jurisdiction to hear cases and interpret the Constitution.

Section 75 of the Constitution gives the High Court jurisdiction to hear cases

In all matters:

i. arising under any treaty
ii. affecting consuls or other representatives of other countries
iii. in which the Commonwealth, or a person suing or being sued on behalf of the Commonwealth, is a party
iv. between states, or between residents of different states, or between a state and a resident of another state
v. in which a writ of mandamus or prohibition or an injunction is sought against an officer of the Commonwealth the High Court shall have original jurisdiction.

Section 76 of the Constitution further elaborates on the High Court's powers

The parliament may make laws conferring original jurisdiction on the High Court in any matter:

i. arising under this Constitution, or involving its interpretation
ii. arising under any laws made by the parliament
iii. of admiralty and maritime jurisdiction
iv. relating to the same subject matter claimed under the laws of different states.

When called upon to interpret the Constitution, the High Court is actually making common law, as the decision made will be followed by other courts and parliaments in all future cases and legislation. This is an important function of the High Court because it provides for consistency and certainty in laws across Australia.

4.3.2 CASE STUDY: Interpreting the Constitution

Section 51(v) of the Constitution gives the Commonwealth the power to make laws with respect to 'postal, telegraphic, telephonic, and other like services'. At the time the Constitution was written, this section related to controlling telegraph services, telephones (still in their infancy) and the issuing of stamps for letters and packages. The 1880s saw the development of the telegraph and the telephone, and so it was foreseen that technology would continue to evolve and other means of communication might develop. It is possible that this thought encouraged the framers of the Constitution to include the phrase 'other like services' in this section, indicating that they knew some form of technology would develop but were not sure what that might be. The meaning of this phrase has been tested a number of times, with the most commonly sourced case being *R v. Brislan* (1935).

R *v. Brislan*

In 1905 the Commonwealth Parliament passed the *Wireless Telegraphy Act* (1905). This Act allowed the government, through the Postmaster-General, to issue licences to those who transmitted or listened to wireless broadcasts. It also allowed the government to collect fees from those who were issued with licences (see **FIGURE 4**).

In 1934 Dulcie Williams purchased and had installed an electric wireless receiving set. A week after installation she was visited by officers of the Postmaster-General's department and was charged, convicted and fined £1 in the Court of Petty Sessions for failure to have a licence. Williams challenged the law on the basis that the Commonwealth did not have the power under the Constitution to impose the requirement of the licence. Brislan, the inspector who initially charged Williams, was also a party to the case as his actions were being questioned. It was argued that the term 'other like services' did not cover wireless sets and licences to use such sets. The High Court decided that section 51(v) included the power to regulate radio broadcasting and so the 1905 legislation was valid law. In a majority decision, the justices found radio to be an item covered by section 51(v) and that the phrase 'other like services' should encompass developments in technology not anticipated at Federation and therefore not explicitly listed in the Constitution.

FIGURE 3 When wireless sets (radios) were introduced, it was necessary for people to have a licence to own and use one.

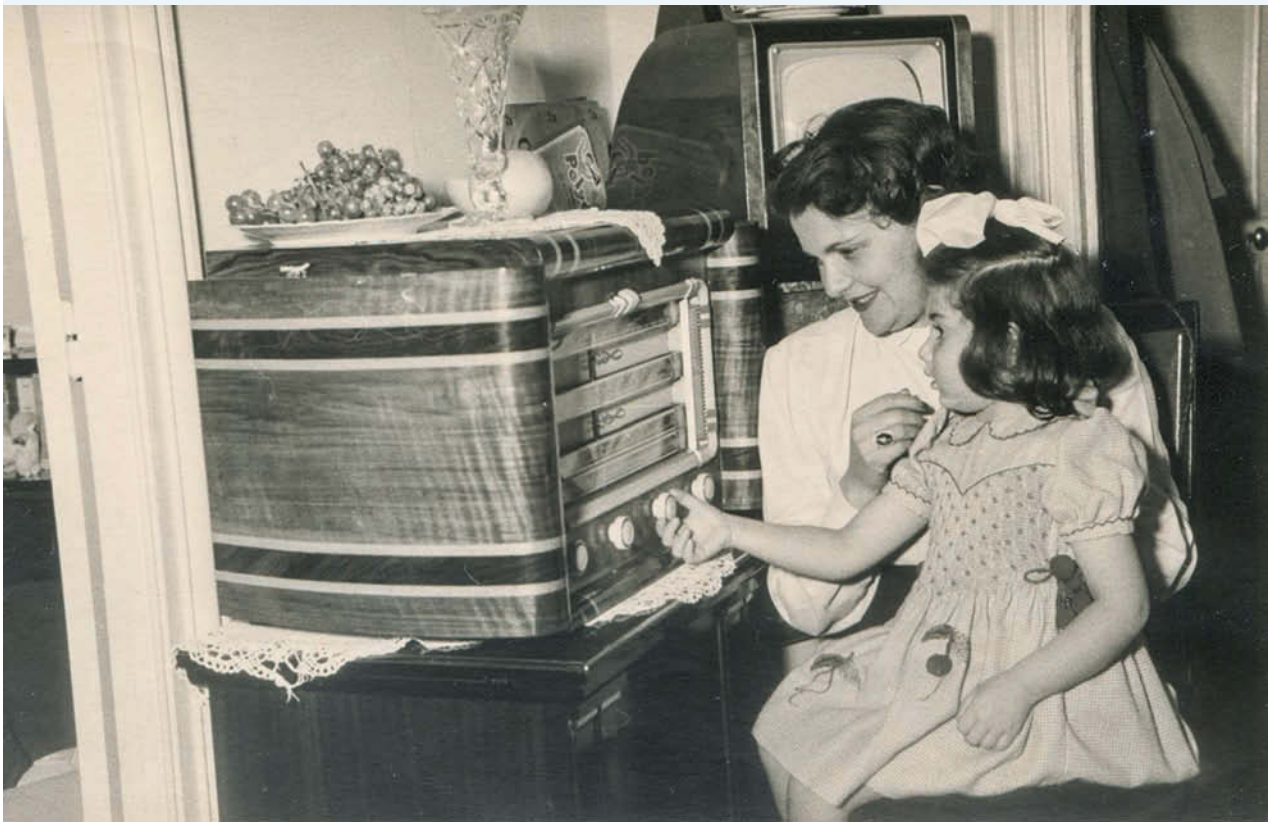


FIGURE 4 Section 5 of the Wireless Telegraphy Act allowed the Postmaster-General to collect licence fees from those who listened to a wireless.

BE it enacted by the King's Most Excellent Majesty, the Senate, and the House of Representatives of the Commonwealth of Australia, as follows:—

1. This Act may be cited as the *Wireless Telegraphy Act* 1905.
2. In this Act,—
   "Australia" includes the territorial waters of the Commonwealth and any territory of the Commonwealth;
   "Wireless telegraphy" includes all systems of transmitting and receiving telegraphic messages by means of electricity without a continuous metallic connexion between the transmitter and the receiver.
3. This Act shall not apply to ships belonging to the King's Navy.
4. The Postmaster-General shall have the exclusive privilege of establishing, erecting, maintaining, and using stations and appliances for the purpose of—
   a. transmitting messages by wireless telegraphy within Australia, and receiving messages so transmitted, and
   b. transmitting messages by wireless telegraphy from Australia to any place or ship outside Australia, and
   c. receiving in Australia messages transmitted by wireless telegraphy from any place or ship outside Australia.
5. Licences to establish, erect, maintain, or use stations and appliances for the purpose of transmitting or receiving messages by means of wireless telegraphy may be granted by the Postmaster-General for such terms and on such conditions and on payment of such fees as are prescribed.

Television, fax machines and the internet all developed after the Brislan case was heard, and at times the High Court has had to expand upon the judgement in *R v. Brislan* to determine whether these items are covered by the Constitution. The result of the judgement in the Brislan case is that these words in the Constitution have been interpreted and a meaning has been given to them.

4.3.3 A question of rights

The Constitution not only provides for our system of government and the division of law-making powers between the states and the Commonwealth; it also provides citizens of Australia with certain **rights**. These rights are referred to as express rights because they can be clearly identified in the words of the Constitution. Through its ability to interpret the Constitution, the High Court, as the guardian of the Constitution, therefore protects our rights as well. If a person or a group feels that an act of a government infringes upon their rights, they may ask the High Court to declare the action unconstitutional or the law ***ultra vires***.

The High Court may also determine that other rights exist within the words of the Constitution even though those words do not expressly provide that right. The High Court can still **infer** that a right exists and that the words imply that right. There are a number of cases that involve the determination of implied rights by the High Court. All but one of these cases revolve around the implied right to freedom of political communication.

Theophanous v. Herald and Weekly Times (1994)

Dr Andrew Theophanous was a member of the Australian Labor Party (ALP) who had been elected to the House of Representatives in 1980. In 1992, while he was still a member of parliament, the *Sunday Herald Sun* published a letter written by Bruce Ruxton, the president of the Victorian branch of the Returned and Services League (RSL). This letter raised some concerns about the qualities of Dr Theophanous as a politician. Theophanous sued Ruxton and the Herald and Weekly Times (publishers of the *Sunday Herald Sun*) for **defamation**.

In resolving this dispute the High Court was required to look at the words of the Constitution, in particular sections 7 and 24, to determine if they allowed for freedom of political speech. The sections themselves state that members of the Senate (section 7) and the House of Representatives (section 24) are to be chosen by the people. The High Court was asked to examine if the requirement of being elected by the people gave the people the right to comment on political matters. The High Court ruled that the Constitution did protect freedom of political speech. Therefore, the fact that Ruxton was expressing a view about a political matter provided him with a defence so that he could not be sued for defamation.

rights those things that a person is entitled to by virtue of being a member of society

ultra vires acting beyond the power of the law maker. It usually refers to situations where parliaments pass a law that is outside their area of authority.

infer to form a conclusion based on evidence

defamation a civil wrong involving a written or verbal communication that lowers a person's reputation in the community

4.3 ACTIVITY

When the Constitution was written, the law makers at the time could not predict the potential future changes to society that would necessitate the passing of new laws. One of the roles of the High Court is to interpret the Constitution and apply it to contemporary society.

a. Do some research to find a recent decision made by the High Court that required a new interpretation of an old law. Briefly outline the issue and the change made to the law.

b. Can you predict any future changes to our society that might require a different application of the law?

General capability: Critical and creative thinking

4.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 4, 7	Questions 2, 6, 8	Questions 5, 9, 10

Check your understanding

1. Why was an Australian Constitution needed?
2. Why was the High Court needed?
3. What sections of the Constitution give the High Court the power to interpret the Constitution?
4. Why do you think the Australian Constitution needs to be interpreted on occasions?
5. Looking at the Brislan case, what changes have occurred in telecommunications to which the decision in Brislan can be applied today?

Apply your understanding

6. What impact does an interpretation of the Constitution have?
7. What is meant by an 'implied right'?
8. Most laws are made by Parliament, whose members are elected by us. Discuss whether you think judges in the High Court should be allowed to make laws through their decisions.
9. Examine the Theophanous case. Do you agree that we should have this right? Justify your answer.
10. Do you believe that a document as important as the Constitution should include vague terms such as 'other like services'? Justify your answer.

For sample responses to every question, go to www.jacplus.com.au.

4.4 International law

LEARNING INTENTION

By the end of this this subtopic you will be able to explain how international laws seek to set standards of behaviour and maintain cohesiveness throughout the world, and describe the means by which international law is enforced.

4.4.1 Standards of acceptable behaviour

As citizens, we are members of a number of communities. We are members of our local community (the suburb or town we live in), the state we live in and the country we live in. As members of these communities, we are expected to abide by the laws that apply to those communities, such as parking laws at our local shopping centres, speed limits when driving on the roads and laws governing taxation when completing our tax return for the Australian government. We are also a part of the global community. Therefore, shouldn't we abide by the laws created for all of us to live in a peaceful world, devoid of international conflict? International law is concerned with setting standards of acceptable behaviour for nations and their citizens when dealing with issues that cross borders or issues of concern to society in general.

4.4.2 What is international law?

International law consists of the rules and principles governing the relations and dealings of nations with each other, relations between states and individuals, and relations between international organisations. There are generally considered to be two types of international law:

- *public international law*, which concerns itself only with questions of rights between several nations, or between nations and the citizens or subjects of other nations
- *private international law*, which deals with controversies between private persons arising out of situations involving more than one nation.

International law has developed from a number of sources, but it is primarily derived from treaties and conventions between countries. A treaty is a form of contract between two parties (two countries or two international organisations from different countries). Perhaps the most famous treaty is the Treaty of Versailles, signed at the end of World War I. It details Germany's culpability for starting the war and its responsibility for

making **reparations** to the countries it waged war upon. The Treaty of Versailles required Germany to pay the equivalent of US$33 billion to the Allied countries (worth about US$400 billion today).

Other sources of international law include the Charter of the United Nations, international customs and the general principles of law that apply in the majority of countries.

The Charter of the United Nations provides a number of chapters that allow international laws to be established:

- Chapter I sets forth the purposes of the United Nations, including the important provisions for the maintenance of international peace and security.
- Chapters III–XV, the bulk of the document, describe the organs and institutions of the UN and their respective powers.
- Chapters XVI–XVII describe arrangements for integrating the UN Charter with established international law.

The following chapters deal with the enforcement powers of UN bodies:

- Chapter VI describes the Security Council's power to investigate and mediate disputes.
- Chapter VII describes the Security Council's power to authorise economic, diplomatic and military sanctions — as well as the use of military force — to resolve disputes.
- Chapter VIII makes it possible for regional arrangements to maintain peace and security within their own region.
- Chapters XIV and XV establish the powers of the International Court of Justice and the United Nations Secretariat, respectively.

One key section of the Charter allows the creation of the International Court of Justice to hear and rule on international disputes.

The United Nations (see FIGURE 1) is responsible for drafting and ratifying international conventions and declarations that seek to establish guidelines for behaviour and the establishment of rights for citizens of the world. These conventions and declarations are drafted by the General Assembly of the United Nations or one of the six main committees of the UN. These committees draft resolutions, conventions and declarations, which are then ratified by a vote of the General Assembly's 193 members.

reparations payment of money or materials by a nation defeated in war, as compensation for damage caused

FIGURE 1 The United Nations is the body responsible for determining international law.



4.4.3 Enforcing international law

It is the role of the United Nations to both establish international laws and enforce them. The United Nations makes use of the International Court of Justice and the UN Security Council, responsible for deploying UN peacekeepers, to assist it in enforcing international law.

The International Court of Justice

The International Court of Justice is the primary judicial branch of the United Nations. It is based in the Peace Palace in The Hague, Netherlands. Its main functions are to settle legal disputes submitted to it by states (member countries of the United Nations) and to provide advisory opinions on legal questions submitted to it by duly authorised international branches, agencies and the UN General Assembly.

FIGURE 2 The International Court of Justice, The Hague



More than 176 cases have been brought before the International Court of Justice since its inception on 22 May 1947. The cases involving Australia are:

- Nuclear Tests Case (*Australia v. France*) 1974
- Certain Phosphate Lands in Nauru (*Nauru v. Australia*) 1992
- East Timor (*Portugal v. Australia*) 1995
- Whaling in the Antarctic (*New Zealand & Australia v. Japan*) 2014
- Seizure of Certain Documents and Data (*Timor-Leste v. Australia*) 2015.

Perhaps the most well-known case involved Australia and New Zealand, who brought a case to the court accusing Japan of exceeding its limits on whaling for research purposes in the Antarctic. This case was resolved in 2015 with the court ruling that Japan's whaling program was not in accordance with international law.

on Resources

Weblinks Whaling
UN peacekeeping missions
UN peacekeeping mission video

4.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 2, 3, 4, 6	Questions 1, 7, 8	Questions 5, 9, 10

Check your understanding

1. Individual countries have laws. Why do you think we need international laws?
2. How many countries are currently in the United Nations?
3. Why was the United Nations established?

4. Where is the International Court of Justice?
5. What is meant by 'international law'?

Apply your understanding

6. In your opinion, do we still need the United Nations?
7. Distinguish between public and private international law.
8. Explain the role of the International Court of Justice.
9. Describe how the United Nations helps achieve social cohesion in the world.
10. 'The members of the United Nations do not have to abide by decisions of the International Court of Justice.' Describe how this statement may reflect a weakness in the way the United Nations operates.

For sample responses to every question, go to www.jacplus.com.au.

4.5 Applying international treaties

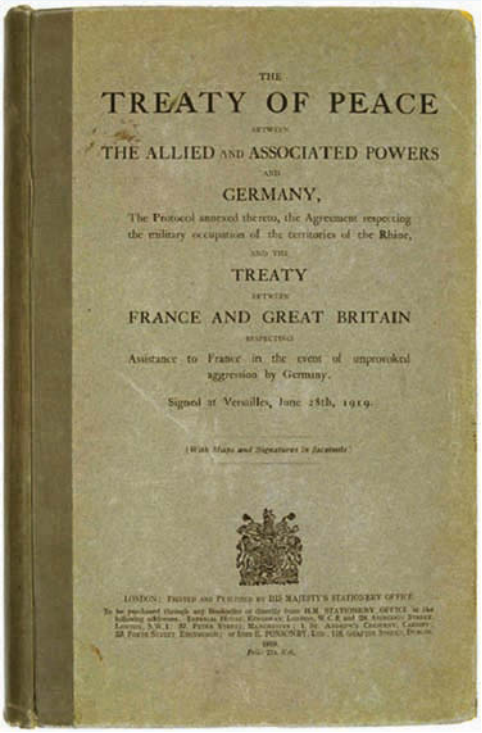
Aboriginal and Torres Strait Islander readers are advised that this topic may contain photos of or references to people who have died.

LEARNING INTENTION

By the end of this subtopic you will be able to explain what an international treaty is, and describe their purpose.

4.5.1 Reasons for treaties

FIGURE 1 The Treaty of Versailles. Treaties are signed between countries to formalise agreements.



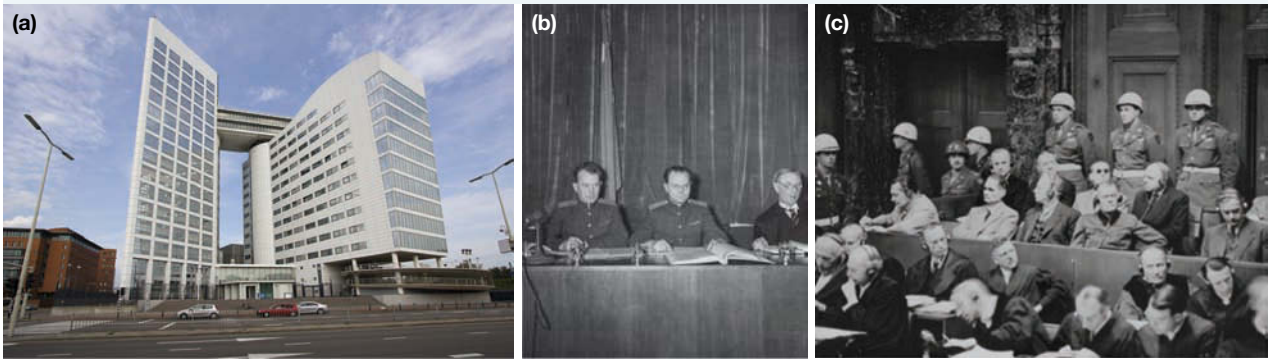
As noted in subtopic 4.3, the High Court of Australia is empowered to make decisions in relation to any disputes relating to an international **treaty**. Australia is a signatory to many international treaties, and the Australian parliament may be required to pass laws that support or confirm the application of a treaty within Australia. Treaties are signed for a number of reasons:

- A peace treaty is signed to formally end a conflict or war. In 1919, six months after the end of World War I, the Treaty of Versailles was signed, setting out the provisions for peace.
- Trade agreements are signed between two or more countries that agree to trade certain goods on certain conditions. It is common for these trade agreements to be 'free trade agreements' — that is, to have no taxes or conditions imposed on them.
- International conventions are agreements drafted by the United Nations or other world bodies and signed (or ratified) by a majority of the countries of the world. The Universal Declaration of Human Rights (discussed in topic 20) is an example.

The signing of international treaties can lead to international disputes that require international courts to resolve them. International treaties can also lead to internal or domestic disputes, and the High Court will be asked to resolve these disputes.

treaty an agreement between two or more sovereign states (countries) to undertake a particular course of action. It usually involves matters such as human rights, the environment or trade.

FIGURE 2 (a) The International Criminal Court at The Hague, in the Netherlands (b) The International Military Tribunal at the Nuremberg war crimes trials in Germany after World War II, with judges from Russia (left and centre) and Britain (right) (c) Defendants listening to translations via headphones as the prosecution begins introducing documents at the international Military Tribunal on war crimes in Nuremberg.



DISCUSS

Australia has received criticism for its treatment of asylum seekers, particularly for the practice of processing asylum seekers offshore and detaining them for lengthy periods of time. What do you believe Australia's obligations towards asylum seekers are? Do you believe that the Australian government treats asylum seekers appropriately? Give examples to support your response. **General capability: Intercultural understanding**

4.5.2 The Universal Declaration of Human Rights

Following the end of World War II and the creation of the United Nations (UN) in 1945, the UN General Assembly adopted the Universal Declaration of Human Rights in 1948. Australia was one of the 48 countries to **ratify** the Declaration out of the 58 countries that made up the United Nations. Since then, nearly every country in the world has signed this document. The Declaration lists 30 rights that are afforded to all citizens of the world. These rights attempt to provide a structure and protection for the citizens of the world no matter where they live, where they travel, or what race, sex or religion they are. Despite the adoption of these rights by most countries, disputes still arise from perceived breaches of the Declaration or as a result of attempts to enforce the terms of the Declaration within a domestic environment.

In this regard Australia is no different. The High Court has been asked to rule on the application of the Declaration to events in Australia that are believed to have infringed on the rights of a citizen or a group of citizens.

Koowarta v. Bjelke-Petersen & Ors (1982)

In 1974 John Koowarta, a Wik elder from the Cape York region in Queensland, collaborated with a group of fellow traditional owners with a view to purchasing an extensive tract of land being used as a cattle station. The owner of the station agreed to the sale and had contracts drawn up. As Koowarta was using funds from the Aboriginal Land Fund Commission, the intended purchase was brought to the attention of the Queensland Government. Before the sale could be completed, it was blocked by the state government.

Joh Bjelke-Petersen was the premier of Queensland. His government had an official policy that Aboriginal and Torres Strait Islander peoples should not be able to buy large areas of land, so he directed the Queensland minister of lands not to approve the sale. Koowarta made a complaint to the Human Rights and Equal Opportunity Commission on the basis that blocking the sale was discriminatory. (The Human Rights and Equal Opportunity Commission was established under the Commonwealth *Racial Discrimination Act 1975* as a result of Australia ratifying the Universal Declaration of Human Rights in 1948 and then

ratify to formally consent to and agree to be bound by a treaty, contract or agreement

signing the UN Convention on the Elimination of All Forms of Racial Discrimination (CERD) on 13 October 1966.) The commission upheld Koowarta's complaint, but the Queensland Government appealed to the Supreme Court of Queensland, and the case subsequently reached the High Court.

The argument put forward by Bjelke-Petersen, and the issue before the High Court, was that the Racial Discrimination Act was invalid because the Commonwealth did not have the power to pass such a law as it was not a concurrent or specific power — the Commonwealth had interfered in a state matter. He also argued that the constitutional provisions regarding external affairs did not apply because the Racial Discrimination Act only applied to Australians and so was not 'external' in nature. The Commonwealth Government and Koowarta argued that the external affairs provisions of section 51(xxix) meant the Commonwealth could pass laws that would give effect to Australia's international obligations as a signatory to the CERD.

The High Court agreed with Koowarta, and the decision to block the land sale was deemed discriminatory. In 1988 the Queensland Supreme Court was allowed to rule on the original case, and it allowed the sale to go ahead. The High Court had upheld an international treaty and its domestic application.

FIGURE 3 Aboriginal and Torres Strait Islander peoples have had to protest to gain land rights.



on Resources

Video eLesson Land rights demonstration (eles-2428)

4.5.3 Australia's commitment to global citizenship

Treaties are designed to formalise agreements between countries. The Department of Foreign Affairs and Trade identifies 21 areas in which treaties can be categorised. These areas include:

- atmosphere and outer space
- criminal matters
- defence and security
- human rights
- international trade
- labour.

As a good global citizen, Australia adopts these treaties in good faith, intending to abide by them and to assist in bringing countries that breach these treaties to account. This can lead to Australia passing its own laws to bring these international treaties into effect in Australia. However, adoption of these treaties can cause conflict in Australia, as governments attempt to pass laws that enforce the treaties and hence dictate the direction of government policy. An example of such a scenario was Australia's signing of the World Heritage Convention in 1972. The signing of this Convention led to a High Court case, a change in government policy and an election.

4.5.4 *The Commonwealth v. State of Tasmania*

In 1972 the United Nations ratified the World Heritage Convention, a document drafted by UNESCO (United Nations Educational, Scientific and Cultural Organization). This document aimed to establish a process for countries to identify significant natural or cultural sites with a view to protecting them from damage, destruction or any other form of harm. Using the terms of the Convention, which is an international treaty, the Commonwealth nominated for World Heritage listing specific areas in Tasmania that the Tasmanian Government had planned to dam for the purposes of generating hydroelectricity.

FIGURE 4 Protests at the Franklin River gained widespread media coverage and provoked such a public response that the Hawke government subsequently nominated the area for World Heritage listing under the terms of an international treaty.



The areas concerned — the Franklin and Gordon rivers — contained unique flora and fauna as well as significant First Nations places and artefacts that would be destroyed by the dam. To ensure their protection, the Commonwealth Parliament passed the *World Heritage Properties Conservation Act 1983*. This ensured the protection of much of the south-west wilderness regions of Tasmania.

The Tasmanian Government challenged the Commonwealth law on the basis that the Commonwealth didn't have the power to make laws in this area because it was an area of law-making belonging to the states. The Commonwealth argued that a section of the Constitution gave it the power to make laws under the heading 'external affairs'. It successfully claimed that 'external affairs' allowed it to sign treaties and so by default pass domestic laws that supported those international treaties. The Commonwealth case was started by the Labor government, led by Bob Hawke. He had been elected prime minister only recently, having campaigned to 'Stop the dam'.

Further developments

Australia signed the International Covenant on Civil and Political Rights in 1972 and ratified it in 1980. This Covenant is a multilateral treaty that commits its parties to respect the civil and political rights of individuals. These include the right to life, freedom of religion, freedom of speech and freedom of assembly, as well as electoral rights and rights to due process and fair trials. Article 17 of the Covenant has been implemented by the federal *Privacy Act 1988*, and the Covenant's equality and anti-discrimination provisions are supported by the federal *Disability Discrimination Act 1992*.

One outcome of the Tasmanian Dam Case was that some laws made by the states could be declared invalid if they contradicted laws made by the Commonwealth as a result of Australia signing a treaty. The Commonwealth passed the *Human Rights (Sexual Conduct) Act 1994* with the express purpose of overturning two sections of the Tasmanian Criminal Code that outlawed certain consensual adult behaviour conducted in private.

on Resources

Video eLesson Tassie's Franklin River — 20 years on (eles-0636)

4.5.5 International trade

All countries trade goods and services because trading brings many benefits. These include:

- access to a wider variety of goods and services
- increased incomes as goods sold overseas bring income into the country
- higher living standards as people gain access to better quality goods and services
- falling prices from access to cheaper goods and services and increased competition between sellers
- higher employment as more goods need to be produced for export.

FIGURE 5 International trade involves treaties and agreements between countries.



Consequently, many treaties signed by Australia and other countries are **trade** agreements. Such agreements establish rules and guidelines for the trade of goods and services between countries. Some trade agreements are merely contracts between countries to supply certain goods and services at certain prices. Other trade agreements are significant international agreements that affect how governments operate in the area of international trade. Most trade agreements are regulated by the World Trade Organization (WTO) framework, which replaced the General Agreement on Tariffs and Trade (GATT) on 1 January 1995. The WTO framework involves an agreement between most of the countries of the world to continue improving trade relations and reducing trade barriers.

However, not all countries trade freely. They erect trade barriers to make it difficult for foreign products to enter the country and compete with local goods. GATT and the WTO have sought to rectify this issue by encouraging countries to move towards free trade. They have done this by advocating the signing of free trade agreements between countries or regions, and the removal of trade barriers such as **tariffs**.

As a result of the free trade efforts of GATT and the WTO, Australia has reduced tariffs in a number of areas, including the manufacture of motor vehicles.

trade the activity of buying, selling or exchanging goods and services between producers and consumers and/ or countries

tariffs taxes imposed on imported goods and services to make them more expensive

Tariffs on imported cars have been steadily reduced since the 1980s, with the last reduction occurring in 2010 when the tax on imported cars fell from 10 per cent to 5 per cent. This reduction was part of government policy established in the 1980s to reduce protection for Australian car manufacturers. The tariff reductions have resulted in lower prices for imported cars and reduced sales for Australian-made cars. The overall outcome was the closure of the Ford, Holden and Toyota car manufacturing plants in Australia in 2017 with the loss of thousands of jobs. While this may seem to be a negative outcome, we must remember that other countries have also reduced their tariffs, allowing our goods to better compete in those countries and creating jobs in Australia.

FIGURE 6 Tariff reductions have resulted in cheaper imported cars but also job losses and car plant closures in Australia.



4.5.6 ANZUS

Some of the most important treaties have arisen from armed conflict. (One of these was the Treaty of Versailles, discussed in section 4.4.2.) During World War I Australia fought with British, New Zealand and US troops on various battlefields across Europe. When World War II commenced in the Pacific, Australia was threatened — the Japanese had bombed Darwin and sent their mini-submarines into Sydney Harbour. Our strong ties with the United States led the Americans to provide aid and support during this time, and to fight with us to push back the Japanese forces.

This conflict strengthened our ties with both the United States and New Zealand, culminating in the signing in 1951 of the ANZUS (Australia, New Zealand, United States Security) agreement. This treaty bound the three nations to cooperate on defence matters in the Pacific Ocean region. Although the treaty was modified in 1984 due to New Zealand's objections to nuclear warships entering its ports, the agreement is still in effect and annual meetings are held to confirm the relationship. The treaty also allows for joint defence installations to be operated on Australian soil.

FIGURE 7 Security treaties such as ANZUS provide Australia with military support if needed.



4.5.7 The International Labour Organization

Australia is a member of the International Labour Organization (ILO), an agency of the United Nations that deals with labour issues among member states. The 86th International Labour Conference in 1998 adopted the Declaration on Fundamental Principles and Rights at Work. This declaration contains four fundamental policies:

1. the right of workers to associate freely and bargain collectively
2. the end of forced and compulsory labour
3. the end of child labour
4. the end of unfair discrimination among workers.

The ILO asserts that its members have an obligation to work towards fully respecting these principles, which are embodied in relevant ILO conventions. As a signatory, Australia has adopted these policies and many of them are reflected in our labour laws.

Resources

Weblink Rights of the child

4.5 ACTIVITY

As a human being you have certain rights.

a. Provide a list of the basic rights you believe you are entitled to.
b. Use the **Rights of the child** weblink in the Resources tab to research the Convention on the Rights of the Child. Provide a summary of the rights outlined in this Convention.
c. Prepare a table comparing the rights you identified in part (a) with the rights provided in the Convention.

General capability: Ethical understanding

4.5 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 6	Questions 4, 7, 8	Questions 5, 9, 10

Check your understanding

1. What is a treaty?
2. Give two reasons why a treaty could be signed.
3. Why do you think the High Court should be allowed to resolve disputes involving international treaties?
4. Why do you think not all countries in the world would sign the Universal Declaration of Human Rights?
5. Identify three different types of treaties.

Apply your understanding

6. Outline three benefits of free trade.
7. What other areas do you think might be covered by the external affairs provisions of section 51(xxix) of the Constitution?

8. Explain how signing a treaty can affect the laws of Australia.
9. Choose one of the treaties mentioned in this subtopic and explain how it benefits Australian citizens.
10. 'Social cohesion can be advanced by having a bill of rights. Australia does not have its own bill of rights, instead relying on laws and the courts to provide cohesion.' Use this statement as a springboard to discuss whether or not Australia should have a bill of rights.

For sample responses to every question, go to www.jacplus.com.au.

4.6 International law and Indigenous Australians

Aboriginal and Torres Strait Islander readers are advised that this topic may contain photos of or references to people who have died.

LEARNING INTENTION

By the end of this subtopic you will be able to explain Australia's obligations to Aboriginal and Torres Strait Islander peoples through international law.

4.6.1 Racial discrimination

As discussed in previous topics, Australia is a signatory to the Universal Declaration of Human Rights. The Declaration establishes certain rights that all citizens in all countries are entitled to. By signing the document, a country agrees to abide by the provisions of the Declaration and not engage in any conduct that infringes upon those rights.

A further declaration passed by the United Nations and ratified by Australia is the International Convention on the Elimination of All Forms of Racial Discrimination. This Convention was ratified in 1965 and came into effect in 1969. It contains 25 articles (or sections) that define racial discrimination and the various types of racial discrimination that exist in the world. Article 5 includes the following:

> In compliance with the fundamental obligations laid down in article 2 of this Convention, States Parties undertake to prohibit and to eliminate racial discrimination in all its forms and to guarantee the right of everyone, without distinction as to race, colour, or national or ethnic origin, to equality before the law, notably in the enjoyment of the following rights …

One impact this Convention (and this article in particular) has had on government policy can be seen in the passing of the Commonwealth *Racial Discrimination Act 1975*. The preamble and long title of the Act clearly outline the reasons for passing this legislation:

> **Long title**
> An Act relating to the Elimination of Racial and other Discrimination
>
> **Preamble**
> … it is desirable, in pursuance of all relevant powers of the Parliament, including, but not limited to, its power to make laws with respect to external affairs, with respect to the people of any race for whom it is deemed necessary to make special laws and with respect to immigration, to make the provisions contained in this Act for the prohibition of racial discrimination and certain other forms of discrimination and, in particular, to make provision for giving effect to the Convention …

Despite these positive aims, there have been instances where the treatment of Aboriginal and Torres Strait Islander peoples has fallen short of our obligations under the Declaration and the Convention.

One particular area of conflict is land rights. Having occupied the country for at least 40 000 years before the arrival of Europeans, Aboriginal and Torres Strait Islander peoples have a valid claim to land across Australia. Weighed against this is the English-based legal system of land and property ownership imposed

here since 1788, under which both urban and rural Australians believe they have legal title to land they occupy. Finding a legal balance between these conflicting claims while ensuring fairness and justice is clearly a challenge for our legal system. It was this issue that was at the heart of a long-running legal dispute over rights and Australia's obligations: the Mabo Case (see also topic 22).

4.6.2 The Mabo Case

In August 1770, Captain James Cook claimed all of the east coast of what is now Australia as British territory. Under the internationally recognised law of the time, Cook could claim land on any one of the three following legal grounds:

- If the land was uninhabited, any country could claim ownership and settle the land under the principle of ***terra nullius***.
- If the land was inhabited, another country could ask the leaders of the inhabitants for permission to make use of some of the land. This could involve making a land purchase or coming to some other arrangement such as a treaty, but the arrangement had to be agreeable to the existing population.
- A country already inhabited could be conquered through invasion and war, defeating the existing population in battle. International law at the time created an expectation that the conquered inhabitants still had rights that had to be respected.

FIGURE 1 When the British arrived in Australia, they considered the land to belong to no-one.



FIGURE 2 Eddie Mabo challenged the state of Queensland in the High Court, resulting in changes to the law concerning land rights.



Although the land was inhabited, Cook claimed it under the principle of *terra nullius*. The British did not recognise the Aboriginal and Torres Strait Islander peoples as having any legal title over the land because they had no written laws of **tenure** as existed in European countries.

In 1982 Eddie Mabo, a Meriam man of Mer Island (which was renamed by Europeans as Murray Island) in the Torres Strait, began legal action against the State of Queensland, claiming that he and his people were the legal owners of the island. Mabo was an active campaigner for Aboriginal and Torres Strait Islander peoples' rights. He discovered that, contrary to what he had believed all his life, his people did not legally own the land they always believed was theirs. Mabo was joined in this action by a number of other inhabitants of Mer Island. The action was brought largely as a test case. The Mer Islanders believed they owned the land because their people had occupied it for centuries, long before European settlement of Australia, but Queensland law appeared to designate the Torres Strait Islands as being under the ownership and control of the Queensland Government.

The Mabo decision

The Full Bench of the High Court decided in favour of the Mer Islander plaintiffs and declared that '[t]he Murray Islanders of the Torres Strait are entitled, as against the whole world, to possession, occupation and enjoyment of the lands of '[t]he Murray Islands'.

terra nullius ('land belonging to no-one') in Australia, the legal idea that since no-one was 'using' the land when the first Europeans arrived, it could be claimed by the British Crown

tenure a system by which particular individuals or groups are given a legally recognised right to occupy a defined area of land

The basis for this decision rested on the following:

- The principle of *terra nullius* had been incorrectly applied. Australia had never been an empty land, and so the British were wrong to use it as the legal basis for their occupation of the land.
- In the absence of *terra nullius*, it was appropriate to apply principles relating to native title to land occupied and used by its traditional Aboriginal and Torres Strait Islander owners.
- Native title can be recognised and included in the Australian system of property law and common law.

The Meriam people could claim native title because they were able to demonstrate continuing occupation and use of their land. Their system of family ownership and land usage was significant because it could be clearly demonstrated that these had operated continuously since before white colonisation. In other parts of Australia, where Aboriginal and Torres Strait Islander peoples have been dispossessed, the issue was not so clear. In his judgement, Chief Justice Brennan indicated that: 'there may be other areas of Australia where an Aboriginal people, maintaining their identity and their customs, are entitled to enjoy their native title'. Future claims by other Aboriginal and Torres Strait Islander groups would need to demonstrate clearly that a high level of traditional occupation and land usage would be necessary to support such a claim. Individual claims would have to be decided on a case-by-case basis.

Native title legislation

Western Australia was the first state to respond to the Mabo Case with legislation. The state parliament passed the *Land (Titles and Traditional Usages) Act 1993*. Its aim was to extinguish the common law right of native title throughout the state and replace it with a statutory right of 'traditional usage', which could itself be extinguished by the government at any time. This Act was a deliberate attempt to favour mining and pastoral companies in any dispute with Aboriginal and Torres Strait Islander occupants over rights to the land.

Commonwealth governments had previously avoided entering into conflict with state governments over Aboriginal and Torres Strait Islander peoples' land rights, but the Keating Labor government wished to find a way to support those rights. The risk that some other state governments might try to legislate to extinguish Aboriginal and Torres Strait Islander peoples' land rights as Western Australia had done led the Commonwealth to propose its own legislation. The *Native Title Act 1993* (Cwlth) was passed in late December 1993 and came into force on 1 January 1994. This Act included the following principles:

- legislative recognition and protection for the previous common-law concept of native title
- the extinguishment of native title rights over freehold land
- no extinguishment of native title rights by any processes other than those contained in the Act
- the rights of Aboriginal and Torres Strait Islander peoples to claim native title over Crown land if they could prove a traditional and continuing attachment to that land
- procedures for claiming native title through the establishment of a Native Title Tribunal.

Western Australia v. Commonwealth

In the case *Western Australia v. Commonwealth* 1995 HCA 47, the Western Australian Government challenged the validity of the Native Title Act in the High Court. At the same time communities from Western Australia, such as the Worora and Martu peoples, challenged the validity of that state's legislation.

The High Court heard all three cases together, and declared the Western Australian legislation invalid under section 109 of the Constitution because it was inconsistent with both the Native Title Act and the Racial Discrimination Act. This case reinforced the jurisdiction of the Commonwealth Parliament over native title matters.

By 1995, the legal principle of native title was clearly established in Australia. *Terra nullius* no longer had application in Australian law, and a process for determining Aboriginal and Torres Strait Islander peoples' land rights claims was in operation. If a native title claim is contested by any other party, the Federal Court and the High Court have ultimate jurisdiction to determine the matter. The Native Title Tribunal was established to help determine the validity of native title claims and to provide mediation services to help resolve disputes over native title. No state could introduce laws relating to land rights that were inconsistent with the Commonwealth Native Title Act.

4.6 ACTIVITIES

1. There are other issues relating to Australia's treatment of Aboriginal and Torres Strait Islander peoples. Using internet resources, explain what is meant by the term 'Stolen Generations' and describe how Australia has responded to this issue to date (see also topic 22).
   HASS skills: Analysing
   Civics and citizenship concept: Justice
2. The Mabo Case was followed eight years later by the Wik Case. Using internet resources, research the Wik Case and provide a brief summary of the case and its link to the Mabo Case.
   Civics and citizenship concept: Justice
3. One country that has approached its relationship with the Indigenous population differently is New Zealand. Research and provide a summary of the Treaty of Waitangi.
   Civics and citizenship concepts: Justice, Rights and responsibilities
4. Research the UN and racial discrimination to help you complete the following:
   a. How does the United Nations define racial discrimination?
   b. Select two rights found in Article 5 of the International Convention on the Elimination of All Forms of Racial Discrimination, and explain what they mean.
   c. Read Article 7 of the Convention and explain whether you believe Australia has complied with this article. Give reasons for your answer.
   d. If your answer to part (c) was 'No', outline what Australia could do to comply with the conditions set out in Article 7.
   HASS skills: Analysing
   Civics and citizenship concepts: Justice, Rights and responsibilities

4.6 EXERCISE

To answer questions online and to receive immediate feedback and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 7	Questions 5, 6, 8	Questions 4, 9, 10

Check your understanding

1. What is meant by the term 'terra nullius'?
2. On what grounds did Captain Cook claim Australia as a British colony?
3. Explain what is meant by the term 'native title'.
4. What were the principles behind the decision of the High Court in the Mabo case?
5. Explain in your own words why you think it took so long for a case like the Mabo case to come to the High Court.

Apply your understanding

6. What influence do you believe the Universal Declaration of Human Rights had on the decision to grant native title? Explain your answer.
7. Explain what is meant by the term 'racial discrimination'.
8. The decision in the Mabo case has been challenged in the courts. Why do you think this decision may have been challenged?
9. Decisions by the High Court in cases like Mabo often lead to the parliament making laws. Explain why you think this may occur.
10. In 2019, the movement for a constitutional change to formally recognise Aboriginal and Torres Strait Islander peoples gained momentum. Suggest how a constitutional change in this area might assist social cohesion.

For sample responses to every question, go to www.jacplus.com.au.

4.7 Thinking Big research project— Create a bill of rights

4.7.1 Scenario

In June 2019 the Australian Federal Police raided the home of a journalist and the offices of the Australian Broadcasting Corporation (ABC). They were searching for information regarding leaks that may have been related to a series of stories broadcast in 2017 that became known as the 'Afghan Files'. These stories related to operations conducted by Australia's elite special forces that resulted in alleged incidents of unarmed civilians being killed.

These Federal Police raids have renewed calls for Australia to consider the creation of an Australian bill of rights to protect freedom of speech, especially for journalists.



4.7.2 Task

Your task is to research and prepare a report on another country's bill of rights and then draft one for Australia. Then, as a class, work together to combine ideas into one cohesive bill that the whole class agrees upon.

4.7.3 Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group if you wish to. You can work independently or with a partner, which will allow you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.
- Select a country that has a bill of rights, then conduct research into the elements included in the bill. Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. In the **Media centre** you will find an assessment rubric and some weblinks that will provide a starting point for your research.

- Make notes of your research and remember to record details of your sources so you can create a bibliography to include in your report. Add your research notes and source details to the relevant topic pages in the Research forum. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Prepare a brief report detailing the history of the bill of rights and what it contains.
- Using the information you gained about your selected country, draft a bill of rights for Australia. For each element in your draft bill, provide a brief explanation as to why you think it should be included.
- Submit your report and proposed bill to your teacher (along with your bibliography), and/or present it to the class.
- Once all groups have submitted or presented their proposals, the class should discuss the various proposals and draft a bill of rights that all the class agrees on, which Australia could adopt. This could then be created in poster form for display in the classroom.



on Resources

ProjectsPLUS Thinking Big research project — Create a bill of rights (pro-0222)

4.8 Review

4.8.1 Key knowledge summary

4.2 Resolving disputes between state and federal governments

- One role of the government is to establish a system of dispute resolution bodies to deal with conflict.
- In Australia the High Court is the highest court, charged with resolving the most serious disputes that arise.

4.3 Interpreting the constitution

- The High Court has been given the jurisdiction to allow it to:
  - hear appeals from decisions in cases heard in state and territory Supreme Courts
  - settle disputes between the states
  - interpret the Constitution to determine law-making power
  - interpret the Constitution to infer rights for the citizens.
- The High Court guards our Constitution and our rights, and provides a check on the government.

4.4 International law

- The continuing development of technology has necessitated the need for a global body to oversee and attempt to regulate the interactions between countries.
- The aim of such a global body is to minimise the incidence of conflict among peoples and nations.
- The International Court of Justice is the primary judicial branch of the United Nations that settles legal disputes submitted to it by states (member countries of the United Nations).

4.5 Applying international treaties

- Treaties play an important part in establishing rules for behaviour in a range of areas:
  - economics and trade
  - labour laws
  - military and defence
  - economic development
  - human rights.
- The High Court resolves disputes arising from international treaties.
- As a member of the global community, Australia has played a role in the development of global laws and treaties, and the bodies responsible for drafting and enforcing these rules.
- Australia recognises its obligations at home and applies the terms of international treaties and agreements at home to improve the lives of its citizens.

4.6 International law and Indigenous Australians

- Australia's role as a signatory to the Universal Declaration of Human Rights led to the legal principle of native title being established.

4.8.2 Key terms

defamation a civil wrong involving a written or verbal communication that lowers a person's reputation in the community
infer to form a conclusion based on evidence
precedent an action or decision on which later actions or decisions might be based; a law made by a superior court that must be applied by lower courts in future cases with the same or similar facts
ratify to formally consent to and agree to be bound by a treaty, contract or agreement
reparations payment of money or materials by a nation defeated in war, as compensation for damage caused
rights those things that a person is entitled to by virtue of being a member of society
tariffs taxes imposed on imported goods and services to make them more expensive

tenure a system by which particular individuals or groups are given a legally recognised right to occupy a defined area of land

terra nullius ('land belonging to no-one') in Australia, the legal idea that since no-one was 'using' the land when the first Europeans arrived, it could be claimed by the British Crown

trade the activity of buying, selling or exchanging goods and services between producers and consumers and/ or countries

treaty an agreement between two or more sovereign states (countries) to undertake a particular course of action. It usually involves matters such as human rights, the environment or trade.

ultra vires acting beyond the power of the law maker. It usually refers to situations where parliaments pass a law that is outside their area of authority.

4.8.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

Do we really need laws, high courts and treaties? Can't everyone just get along without them?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question outlining your views.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6033)
Reflection (ewbk-6032)
Crossword (ewbk-6031)
Student Learning Matrix (ewbk-6028)

Interactivity Maintaining justice for a cohesive society crossword (int-8241)

4.8 Review exercise

Multiple choice

1. What did Australia's Constitution establish Australia as?
   - **A.** A monarchy
   - **B.** A Commonwealth
   - **C.** A republic
   - **D.** A constitutional democracy
2. What are the law-making powers which are not listed in the Constitution known as?
   - **A.** Exclusive powers
   - **B.** Concurrent powers
   - **C.** Specific powers
   - **D.** Residual powers
3. The Constitution established how many 'heads of power'?
   - **A.** 41
   - **B.** 40
   - **C.** 39
   - **D.** 38

4. If Commonwealth and state laws conflict, which section of the Constitution resolves this conflict?
   - **A.** Section 109
   - **B.** Section 128
   - **C.** Section 75
   - **D.** Section 24

5. What is a law made by a superior court called?
   - **A.** Statute
   - **B.** Legislation
   - **C.** Precedent
   - **D.** By-law

6. When both state and federal parliaments are free to make laws in the same area, what is the right to do so known as?
   - **A.** *Ultra vires*
   - **B.** A concurrent power
   - **C.** A referendum
   - **D.** An exclusive power

7. Who has the jurisdiction to interpret the Australian Constitution?
   - **A.** Commonwealth Parliament
   - **B.** Governor-general
   - **C.** Senate
   - **D.** High Court

8. When was the United Nations officially formed?
   - **A.** 1929
   - **B.** 1939
   - **C.** 1942
   - **D.** 1945

9. Trade agreements signed by Australia are the responsibility of which of the following?
   - **A.** World Trade Organization
   - **B.** General Agreement on Tariffs and Trade
   - **C.** International Labour Organization
   - **D.** Department of Foreign Affairs and Trade

10. Encouraging fair and free trade between countries is the work of which of the following?
    - **A.** UNESCO and the ILO
    - **B.** UNESCO and the WTO
    - **C.** The ILO and the WTO
    - **D.** GATT and the WTO

Short answer

11. This question requires you to reflect on what child labour means and the impact it can have on an individual child, a generation and a society as a whole.
    Prepare a short written response about child labour. In it you need to address the following.
    - **a.** Define child labour.
    - **b.** Outline your experience of working as a child. (What jobs do you do at home? Do you get pocket money and what do you do to earn it? Do you have a part-time job? If so, what do you do, who do you work for and what are your working conditions?)
    - **c.** Explain the negative impact of child labour on children and society.
    - **d.** Discuss whether children should be allowed to work and the circumstances in which this should be allowed.

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 4 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

4.1 Overview

Video eLesson
- Living in a cohesive society (eles-2378)

4.2 Resolving disputes between state and federal governments

eWorkbook
- Government powers (ewbk-6029)

4.4 International law

Weblinks
- Whaling
- UN peacekeeping missions
- UN peacekeeping mission video

4.5 Applying international treaties

Video eLessons
- Aboriginal demonstration (eles-2428)
- Tassie's Franklin River — 20 years on (eles-0636)

Weblink
- Rights of the child

4.6 International law and Indigenous Australians

eWorkbook
- The Mabo decision (ewbk-6030)

4.7 Thinking Big research project — Create a bill of rights

ProjectsPLUS
- Thinking Big research project — Create a bill of rights (pro-0222)

4.8 Review

eWorkbook
- Reflection (ewbk-6032)
- Crossword (ewbk-6031)
- Student Learning Matrix (ewbk-6028)

Interactivity
- Maintaining justice for a cohesive society crossword (int-8241)

To access these online resources, log on to **www.jacplus.com.au**.

5 Sustaining a cohesive society

5.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

What happens when the social cohesion of Australian society is threatened?

5.1.1 Creating a cohesive society

Democracy is an essential ingredient for a unified community. It allows all voices to be heard and all opinions to be considered, and both promotes and protects individual expression. As a result, democratic societies are often ones that experience a high degree of social cohesion or unity. As citizens we are all subject to the rules and laws set by society — by the organisations and groups we associate with and by the governments we elect. In this topic, we dissect the social cohesion of Australian society. We see what social cohesion looks like, what threatens our communities and the laws and courts that protect them.

on Resources

eWorkbook	Customisable worksheets for this topic (ewbk-6045)
Video eLesson	Living in a cohesive society (eles-2378)

FIGURE 1 Democratic societies are often ones that experience a high degree of social cohesion or unity.



5.2 Living in a cohesive society

LEARNING INTENTION

By the end of this subtopic you will be able to explain what constitutes a cohesive society, and discuss why social cohesion exists within Australia.

5.2.1 The 'lucky country'

Australia is often described as 'the lucky country'. In modern Australian culture, this phrase has come to refer to our abundance of natural resources and our good weather, relatively peaceful history and tolerant society. It is interesting, then, that the man who coined this phrase meant it as an ironic criticism of Australian society. Author and social commentator Donald Horne believed that the positive aspects of Australian life had been gifted to us, rather than earned. Whether you agree with Horne's criticism or not, Australian society can be perceived as lucky. In many ways, our society should not function as well as it does. With so many different cultural and ethnic backgrounds, it is reasonable to assume that civil conflict would regularly occur. However, although Australian society has not been without problems, the level of overall social cohesion within Australia is relatively high in comparison to other societies. In this subtopic, we examine what social cohesion is and how it exists in Australia.

FIGURE 1 Australia is in many respects a lucky country.



DISCUSS

To what extent do you think Australia is a lucky, or fortunate, country? What benefits or drawbacks might being born in a 'fortunate' society have for the individual or the society as a whole?

HASS skills: Communicating and reflecting
General capability: Personal and social capability

5.2.2 What is a cohesive society?

Modern societies are both dynamic and delicate. They can expand and contract, stand together or fall apart.

With nearly all Australian communities containing a complex mix of ethnic and cultural backgrounds, there exists significant potential for civil unrest. What stops this violence from occurring is a concept referred to as **social cohesion**. Often described as the glue that holds society together, social cohesion is defined by an OECD report as 'a force which fights exclusion and **marginalisation**, creates a sense of belonging and promotes trust within communities'. Social cohesion is not an official government policy, nor does it take one specific form. Instead, there are several ways in which it can be demonstrated in Australian communities.

social cohesion the ties within a diverse community that create a sense of connection

marginalisation a social process by which groups or individuals are pushed to the fringes of society

FIGURE 2 Most Australian communities contain many cultures that peacefully coexist.



5.2.3 Social cohesion in Australia

The Australia you have grown up in is a mostly tolerant and **inclusive** society. It is a society that encourages the demonstration of cultural and religious identity. As we see later in this topic, it is a society that uses legal mechanisms to protect individual freedoms and fight against all forms of discrimination. Modern Australian communities are culturally **integrated**. Although some new migrants do prefer to establish themselves in small groups, the majority of Australian communities are composed of a wide variety of ethnicities. The way in which these communities have developed and continued to exist peacefully is itself an example of social cohesion within Australia.

FIGURE 3 The diversity of Australian communities is evident in our market places.



Numerous examples of social cohesion can be seen in everyday Australian life. On a walk around your neighbourhood you might see churches, mosques, synagogues or other religious buildings. There are designated areas in the supermarket for Italian, Asian and Indian food. A crowded city-bound train carries people from countless cultural backgrounds. These examples exist because our communities have developed to be inclusive and tolerant. The sense of belonging that is felt and encouraged in Australian society exists because of the mechanisms that have been put in place to protect individual freedoms.

inclusive behaviours or policies that include all members of a society

integrated describes communities that consist of different cultural groups living in unity

5.2 ACTIVITIES

1. Make a list of the examples of social cohesion you have seen today. For each example, describe how the people involved were demonstrating inclusivity.
2. Describe two personal experiences: one when you experienced social cohesion in your community and one when you experienced a lack of social cohesion.
3. Who do you think should be responsible for maintaining social cohesion? How should it be maintained? Is it something you can enforce? Write a paragraph explaining your view of how social cohesion can be achieved.

HASS skills: Communicating and reflecting
General capability: Personal and social capability

5.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 6, 7	Questions 3, 4, 8	Questions 5, 9, 10

Check your understanding

1. Define social cohesion in your own words.
2. Explain one negative outcome of a lack of social cohesion in society.
3. Identify three examples of social cohesion.
4. Describe a situation, either from your experience or from a news story about your local area, in which community cohesion was shown to be lacking.
5. Explain why the visible presence of different religions' places of worship could be considered evidence of Australia's strong social cohesion.

Apply your understanding

6. What role do you think you should play in maintaining social cohesion?
7. How do you think governments should act to maintain social cohesion?
8. Despite the irony surrounding the phrase's origin, Australia is often referred to sincerely as 'the lucky country'. Do you believe this is a suitable nickname for Australia? Explain your answer.
9. As immigration rates continue to increase, Australian society is at an interesting point in its development. How do you think increased immigration rates will affect social cohesion in Australia?
10. Our current immigration issues have affected social cohesion. Explain these current issues and their affects.

For sample responses to every question, go to www.jacplus.com.au.

5.3 Threats to social cohesion

LEARNING INTENTION

By the end of this subtopic you will be able to identify threats to our society, and describe how they undermine, or have the potential to undermine, social cohesion.

5.3.1 Law-breakers cause harm to members of our community

The threats that a society faces may vary in terms of significance. Some communities around the world are threatened by war and violence, others by poverty and famine. For the majority of Australians, these threats are thankfully not ones we deal with in our daily lives. The threats Australians face are directed at our democratic freedoms and the harmony of our communities. In this subtopic, we examine the threats to social cohesion and the dangers they pose, in particular:

- organised crime
- vested interests
- corruption
- lawlessness.

5.3.2 Organised crime

When discussing organised crime, we must ignore stereotypes created and perpetuated by the media and popular culture. Although it is true that some criminal organisations have significant family connections, not all organised crime occurs in this way. According to the Australian Crime Commission, the major types of organised criminal activity can be classified into three main groups:

- criminal syndicates
- outlaw motorcycle gangs
- professional facilitators.

Although these groups operate in different ways, they can all pose threats to social cohesion in Australia.

Criminal syndicates

Criminal syndicates are responsible for the majority of organised criminal activity in Australia. Varying in size and influence, criminal syndicates are highly structured criminal enterprises. They can operate with structures and characteristics similar to those of regular businesses. Criminal syndicates usually involve large-scale criminal activity including the sale of illicit drugs and firearms, financial crimes, match fixing in sport and money laundering.

Outlaw motorcycle gangs

In recent years, there has been a crackdown on criminal activity among the various motorcycle gangs that operate in Australia. Motorcycle gangs have existed in Australia since the 1960s. Gangs such as the Bandidos and Comancheros do include legitimate motorcycle enthusiasts; however, their membership also includes known criminals and members of criminal syndicates. Some of these gangs are not only involved in criminal activity, but also frequently engage in violent behaviour while undertaking these crimes. The potential impact of outlaw motorcycle gangs on Australian communities was deemed so significant that all states have passed legislation severely restricting gang activity.

FIGURE 1 Recent crackdowns have severely restricted the activities of the outlaw motorcycle gangs.



Professional facilitators

A professional facilitator is an industry professional or person with specific expertise. Such a person is employed by criminal organisations to undertake specialist criminal activity. Professional facilitators are usually involved in crimes related to finance and technology.

Criminal organisations may use a facilitator because they lack the required knowledge and skills, or because they want to distance themselves from the crime being committed. Professional facilitators may engage with criminals for personal gain or they may be forced into such activity through blackmail. The use of professional facilitators is becoming increasingly prevalent in Australian organised crime.

FIGURE 2 Professional facilitators such as IT experts are increasingly being employed by crime syndicates.



DISCUSS

How might social media and widespread internet access have changed the extent of IT-based specialist criminal activity?

Could social media be considered a tool to create more social cohesion, or to undermine it? Does the potential of how it could be used differ from the reality? **General capability: Personal and social capability**

5.3.3 Vested interests

Vested interests or conflicts of interests can occur in a range of professions. Teachers who are employed as tutors can have conflicts of interests if they are paid to tutor students they teach at school, as can a sports commentator who supports a particular team. The conflict of interest that can have the most significant impact on Australian society occurs in our political system. Before beginning their terms of office, politicians must disclose any potential conflict of interest that may interfere with their position and responsibilities. Existing investments, business relationships and personal assets are examples of potential conflicts.

Consider the example of controversial businessman and politician Clive Palmer. Elected as the member for Fairfax in the 2013 federal election, Palmer has amassed a large personal fortune due to his involvement in the mining industry. Although he has disclosed his assets to parliament, his critics claim that Palmer's opinion and eventual vote on government legislation was influenced by his business interests. They argue that there is no clearer example of this conflict of interest than the repeal of the 2011 mining tax (known as the Minerals Resource Rent Tax). Vested interests can be viewed as a threat to Australian democratic processes because instead of representing the interests of their electorate, politicians with vested interests could be accused of merely representing their own interests.

5.3.4 Corruption

In comparison to many governments around the world, Australian politics is relatively free from corruption. Forms of political corruption may include bribery, **embezzlement** and the repression of political opponents. Although these acts are not commonplace in Australian governments, they have been known to occur.

From the Rum Rebellion (1808) to the Loans Affair (1975), political corruption has at times had an impact on the proper functioning of Australian governments. The Rum Rebellion led to the only successful armed revolution against an Australian

embezzlement the theft or misuse of funds belonging to your employer or organisation

government in the history of this country, and the Loans Affair contributed to the sacking of former Prime Minister Gough Whitlam.

More recently, political corruption resulted (directly or indirectly) in the resignation of two New South Wales premiers. Corruption in the New South Wales parliament has also caused Australia to slip in the corruption ratings calculated by independent assessor Transparency International. Political corruption compromises effective government and is therefore a serious threat to democracy and social cohesion in Australia.

5.3.5 Lawlessness

Australian society has never been truly lawless. Indeed, **martial law** has only been invoked once in our nation's history — immediately after the Eureka Stockade. Contemporary Australian society largely follows the rule of law, resulting in the majority of our communities remaining safe and peaceful. There have been times, however, when Australian citizens have pushed the boundaries of civil society; times when hostile groups and individuals have threatened the safety of others.

Freedom of assembly is widely enjoyed in our democratic society. Groups of people are free to congregate in support of a cause, an ideology or event. The vast majority of protests in this country are peaceful in nature, although there have been several episodes of mob violence. The most infamous of recent episodes is the 2005 Cronulla Riots. A beachside suburb of Sydney, Cronulla is (like many suburbs in Australia) characterised by its ethnic diversity. The riots were the result of simmering tension between young men of Lebanese backgrounds and young men of Anglo-Celtic descent. The violence escalated on 11 December after an earlier altercation between the two groups at a Cronulla beach. The riot and retaliations that followed were some of the most graphic examples of violent racism seen in modern Australia. Many people were injured in the bloody violence and over 100 arrests were made during the riots and in the aftermath.

FIGURE 3 A young man clashes with police during the Cronulla Riots in 2005.



Violence on our streets is always a concern, and frequent incidents gain media attention and can force governments to act. Widely publicised and sometimes sensationalised reporting of 'coward punch' attacks, alcohol-fuelled assaults and high-profile murder cases such as the Claremont murders help to create a feeling of lawlessness. Although statistics show that the frequency of such violence is decreasing, their indiscriminate and callous nature shocks Australian communities. State governments continue to work to reduce the incidence of public violence, both through the enforcement of harsh new penalties and through education and awareness programs aimed at young people.

martial law when a country's government/s bring in the military to enforce law in a society and suspend normal legal processes

DISCUSS

In 2008, Western Australia introduced mandatory minimum prison terms for so-called 'one punch deaths', or 'coward's punch manslaughter'. This was in response to a large number of incidents in the state in which someone died as a result of being 'king hit' (a punch delivered without warning) by an intoxicated person. The change to minimum terms increased sentences for offenders, but not everyone is convinced that longer sentences for this type of crime are effective. Research what the mandatory minimum penalties are for this crime in Western Australia. Discuss the advantages and disadvantages of longer sentences for 'coward's punch manslaughter'.

HASS skills: Questioning and researching
General capability: Ethical understanding

Resources

Weblinks Australian Criminal Intelligence Commission
2005 Cronulla Riots

5.3 ACTIVITIES

1. Consider one act of violence you heard about recently through the media.
   a. Describe the act of violence reported.
   b. How did it make you feel?

   HASS skills: Communicating and reflecting
   General capability: Personal and social capability
2. Develop an antiviolence pamphlet or poster aimed at people your age. Your poster or pamphlet could include a scenario where young people are faced with a violent situation.

   HASS skills: Communicating and reflecting
   General capability: Personal and social capability

5.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions	Questions	Questions
1, 2, 6	3, 4, 7, 8	5, 9, 10

Check your understanding

1. Identify three threats to social cohesion.
2. Why might extensive media coverage of a violent event make people feel that Australia is more dangerous than evidence suggests?
3. How can a conflict of interest stop a politician from fulfilling his or her duties?
4. Could hacking be considered a threat to social cohesion? Explain why.
5. Explain what is meant by ‘organised crime’.

Apply your understanding

6. Of the three categories of organised crime, explain the category you believe poses the biggest threat to social cohesion.
7. Consider a recent act of violence you have heard reported. Describe the government’s response (if any) to that act.
8. In 2019 there were disputes over political issues in countries such as Indonesia, Algeria and the Sudan. Research one of these conflicts and explain how internal conflict can have a negative impact on social cohesion.
9. Riots by young people in Algeria led to the resignation of a president. Some people argue that such demonstrations are an act of lawlessness. Comment on these points giving examples from recent events to support your comments.
10. In 2019, students from schools across Western Australia went on strike and protested against climate change inaction. This was a sign that young people are becoming increasingly active in political issues. Comment on whether you believe young people (school students) should be active in political issues and give reasons for your answer.

For sample responses to every question, go to www.jacplus.com.au.

5.4 Protecting social cohesiveness

LEARNING INTENTION

By the end of this subtopic you will be able to explain how we can protect our way of life from threats to social cohesiveness.

5.4.1 Democratic freedom and rights

As we have already discussed, contemporary Australia experiences a high degree of social cohesion. Our cultural differences are celebrated and used to foster unity and tolerance. In order for Australian society to remain unified, we need to protect the very elements that contribute to this sense of social cohesion. Among the most important of these elements are the democratic freedoms and rights of Australian citizens. Australia has no **bill of rights** to officially protect democracy and social cohesion within its borders. Instead, Australian citizens rely on other safeguards and mechanisms to protect their freedoms and rights. The adherence to a system of shared values can also help unify Australian society. In this subtopic, we explore the ways in which social cohesion and democratic rights are protected in contemporary Australia.

FIGURE 1 Australians have the right to gather together to peacefully protest key issues.



5.4.2 Wrong to have no rights?

A bill of rights is a document that lists and describes the individual rights of citizens. It is considered a key feature of democratic society, so it may surprise you to learn that Australia is the only Western democracy that functions without an official national bill of rights. There has been significant social and political debate regarding this issue. The enforcement of an Australian bill of rights would fall to our judicial system. Opponents to such a document claim that it would reduce the rights of citizens because judges are appointed and not democratically elected. Supporters of a bill of rights argue that such a **legally binding** document would officially protect social freedoms and also enhance social cohesion by enshrining the rights of the nation for all to see.

All three attempts to pass a bill of rights through the federal parliament have failed. Instead, the rights of Australian citizens are protected through three other methods on a federal level: our Constitution, legislation (laws made by government) and common law (laws made by the judicial system). Whether a bill of rights eventually becomes part of Australian society remains to be seen.

One Australian state and one territory have enacted their own 'bill of rights'. The ACT has the *Human Rights Act 2004* (ACT) and Victoria has the *Charter of Human Rights and Responsibilities Act 2006* (Vic). In 2007, the WA Government convened a committee to explore the idea of implementing a state act protecting human rights, and released a proposed draft of a possible bill. Even though the committee found that there was support for such a bill in the state, no human rights law was passed. Many of the rights typically included in a bill of rights are still protected through various other laws.

bill of rights a formal declaration of the rights of members of a country or area

legally binding an agreement that is enforceable by law

5.4.3 The right to protest

There have been hundreds of public protests in Australia's history. The causes behind these protests have varied in terms of their significance. The 1907 Sydney protest against bathing costume regulations pales in comparison to the so-called 'Day of Mourning' protest launched on Australia Day in 1938, the anti-war demonstrations of the early 1970s or the Sorry Day marches of 2000. Given the strong history of public protest in Australia, it is interesting to note that Australian citizens are afforded the right to protest by an international convention and not by Commonwealth legislation. There is no current federal law that protects the right of freedom of assembly for Australian citizens, nor is it mentioned in our Constitution. Instead, this right is contained within the International Covenant on Civil and Political Rights (ICCPR), a United Nations treaty which Australia has signed and ratified. Although the ICCPR is not enforceable by law in Australia, it does serve to protect the rights of Australian citizens. Regardless of the nature of the protest itself, people are free to join together to condone or condemn an issue, event or ideology. In this way a key democratic freedom of Australian citizens is protected.

FIGURE 2 Anti–Vietnam War protestors in Australia block a parade during the visit of former US President Lyndon Johnson in 1966.



DISCUSS

As a human being you have certain rights. What are five basic rights you believe you are entitled to? Compare and discuss the choices of the entire class.

Civics and Citizenship concept: Rights and responsibilities
General capability: Ethical understanding

5.4.4 Anti-discrimination laws

In a culturally diverse society such as Australia, the existence of meaningful anti-discrimination laws is essential. All Australians — regardless of race, religion, gender, age or sexual persuasion — should feel safe in their own communities. Since 1975, various state and federal governments have introduced laws against the **discrimination** of people on the basis of their physical, religious or cultural characteristics. You will have learned about some of these previously in HASS, such as the:

- *Racial Discrimination Act 1975*
- *Sex Discrimination Act 1984*
- *Australian Human Rights Commission Act 1986*
- *Disability Discrimination Act 1992*
- *Age Discrimination Act 2004*.

In conjunction with other state and territory laws, these are examples of how individual freedoms and rights are protected in Australian society. Individuals who feel they have been harassed or bullied on these grounds have the opportunity to lodge official complaints. These complaints are then investigated, and if deemed appropriate the parties may be called to attend conciliation sessions. The Australian Human Rights Commission (AHRC) is responsible for handling all such complaints and any actions arising from them. It is funded by the federal government but is run independently of any political influence. Its leadership is made up of a wide range of academic and legal professionals. The role played by the AHRC is crucial in maintaining individual rights and social cohesion in our society.

discrimination the unfair, biased or prejudicial treatment of a person based on a personal characteristic such as race, gender, religion, ability or age

5.4.5 Unity through values

Social cohesion can also be protected by communities following a set of shared values. Serving as ethical guidelines and principles, values can instruct people how to act in our communities. They tell us what is right and wrong, what is acceptable and what is **taboo**. All new Australian visa applicants are required to sign the Australian Values Statement. By signing this document, visa applicants commit to adhering to and demonstrating shared values of the Australian community. These values include:

- respect for individual freedom (including religious freedom)
- commitment to the rule of law, democracy, the equality of men and women, and pursuit of the public good
- tolerance, fair play and compassion for those in need.

By unifying the Australian population behind a set of shared values, individual and collective freedoms and rights are protected. The Sorry Day marches of 2000 provide a clear example of the power of shared values. Sorry Day (held annually on 26 May) was established in 1998. The day commemorates the injustices committed against Aboriginal and Torres Strait Islander peoples throughout Australia's history. To coincide with the ten-year anniversary of the official beginning of the reconciliation process, nationwide marches were organised for the May 2000 Sorry Day. More than 250 000 people participated in Sydney alone, with hundreds of thousands more joining in around Australia. The majority of these people were not Aboriginal and/or Torres Strait Islander peoples, nor had they been personally affected by the crimes committed against our First Nations peoples. Instead, they simply wished to show their support for a cause in which they believed and for values which they held dear. Together with the legal mechanisms of protection discussed earlier, shared values can significantly add to the social cohesion of Australian society. The Sorry Day marches show this cohesion in action.

taboo a topic or issue that is not usually spoken about in a society

5.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 4, 6	Questions 2, 3, 7, 8	Questions 5, 9, 10

Check your understanding

1. What is a bill of rights?
2. If Australia has no official bill of rights, how are individual rights and freedoms protected here?
3. List the positives and negatives of not having an official bill of rights.
4. Explain what a demonstration is and why people use this form of protest.
5. How is the right to protest protected in Australian society?

Apply your understanding

6. Explain the role of the AHRC.
7. If the AHRC is funded by the federal government, how does it remain free from political bias?
8. Explain how adherence to a shared set of values can affect social cohesion.
9. Present two arguments for and two arguments against the statement that Australia needs an official bill of rights.
10. Assume Australia was to create a bill of rights. List and justify the five most important rights you believe should be included in such a bill.

For sample responses to every question, go to www.jacplus.com.au.

5.5 Resolving conflict

LEARNING INTENTION

By the end of this subtopic you will be able to identify and describe the methods available within our society to deal with situations where conflict has arisen.

5.5.1 Mechanisms of dispute resolution

If a dispute is serious enough and breaks federal or state legislation, the opposing parties may eventually end up settling their differences in the court system. This is costly and time consuming for both parties. For these and other reasons, it is often easier to settle disputes outside of court. In Australia, conflict resolution is achieved through four main processes:

- negotiation
- conciliation
- mediation
- arbitration.

In this subtopic, we discover more about the mechanisms of conflict resolution in Australian society and how these processes foster social cohesion.

FIGURE 1 It is usually cheaper and quicker to settle disputes without going to court.



There are many similarities between the strategies used to resolve disputes or conflicts in Australian society. However, there are also distinct differences because each strategy is used for a unique purpose and situation. Each strategy also has its own advantages and disadvantages.

Negotiation

One of the purest forms of **dispute resolution**, negotiation involves the opposing parties dealing directly with each other. By resolving the conflict without the help of a third party, the process is simplified and costs are minimised. Negotiations can be completed by correspondence or through direct meetings.

The first step in this process involves the opposing parties listing their preferred outcomes. Then the actual negotiation takes place and a mutually beneficial outcome is sought. Opposing parties are allowed to employ legal representatives, although this is not an official requirement. Most forms of legal dispute can be resolved through negotiation.

FIGURE 2 Negotiation is an effective way to resolve most forms of legal dispute.



dispute resolution a process involving a group of strategies to settle legal issues outside of court

Conciliation

Not to be confused with reconciliation, this dispute-resolution strategy involves the use of an independent third-party **conciliator**. This person is usually appointed by a formal tribunal such as the AHRC and the Fair Work Commission or the WA Equal Opportunity Commission. If the dispute involves matters requiring specific technical knowledge in a particular area, the opposing parties may request that a suitably qualified conciliator be appointed.

During a conciliation meeting, the opposing parties are allowed to express their views and discuss their perspectives on the dispute. It is the conciliator's role to facilitate this discussion, consider the opposing arguments and rule on the outcome. Similar to negotiations, legal representation is not required during conciliation although participants can request that lawyers are present at any time. Conciliations are frequently used to resolve disputes. More rigorous than a mediation and less intensive than an arbitration, conciliations provide a fair and affordable way to resolve disputes.

Mediation

The words **mediation** and conciliation are often used interchangeably, but the dispute-resolution processes are not identical. According to the Australian Mediation Association, mediation is about promoting understanding between opposing parties and using creative problem solving to seek a preferred outcome.

FIGURE 3 A mediator focuses on the communication between opposing parties rather than the technical aspects of the dispute.



Both processes involve a third party acting to resolve the dispute. In conciliation, however, that third party is usually an expert brought in to rule on a technical dispute. Although they have the necessary legal qualifications, a mediator may lack specific technical expertise on a matter. Unlike an expert conciliator, a mediator focuses on the communication between the opposing parties rather than on the technical nature of the dispute itself.

The lack of this expert knowledge does not detract from a mediator's importance. The difference between the two roles is similar to the difference between a GP and a specialist doctor. Your GP is a qualified doctor who has treated a range of diseases and ailments. A specialist, however, has had more specific training in one particular area.

Any outcome achieved through mediation is not imposed upon the parties. Disputes may even remain unresolved if the opposing parties do not agree on the outcome of the mediation.

Arbitration

Arbitration is used when the opposing parties require a resolution that imposes a legally binding decision. It is the most intense and therefore most expensive method of conflict resolution outside of a courtroom trial. As with mediation and conciliation, arbitration involves the use of an independent third party: the arbitrator. Either an individual arbitrator or a panel of suitably qualified individuals can be used in this process. As this process often requires technical legal knowledge and skills, opposing parties engaged in arbitration usually employ legal representation.

conciliator a person who acts as an independent third party between two disputing parties, often with specialist technical expertise

mediation a dispute resolution process involving a third party who is trained to promote a mutually agreeable outcome

arbitration a dispute resolution process with a legally binding decision from a third party rather than as the result of court proceedings

Arbitration is a more lengthy process than other methods of conflict resolution because the adjudicator requires time to consider the legal implications of the opposing arguments, and may need to review evidence of a technical nature. Due to its lengthy nature and the frequent use of legal representation, arbitration has significantly higher costs than other methods of conflict resolution. Participants in this process also need to be willing to accept the consequences of any legally binding outcome delivered by the arbitrator or panel. For these reasons, the other methods of conflict resolution described are more frequently undertaken.

5.5 ACTIVITY

Use internet resources to discover how a person can become a qualified mediator. Explain the process that they would need to go through and the prior qualification they would need.

HASS skills: Questioning and researching

5.5 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 6, 8	Questions 2, 4, 7	Questions 5, 9, 10

Check your understanding

1. What are the advantages of settling a dispute out of court?
2. Why is negotiation known as the most simple and direct form of conflict resolution?
3. Explain what is meant by ‘mediation’.
4. How does the outcome of arbitration differ from that of the other forms of conflict resolution discussed?
5. Why are courts sometimes needed to resolve disputes?

Apply your understanding

6. Construct a table that explains the similarities and differences of the methods of conflict resolution discussed in this section.
7. Indicate which dispute resolution method you would use for each of the following examples. Include a brief justification for your choice.
   a. You are the manager of a mining company involved in a dispute with an engineering subcontractor.
   b. You work at your local supermarket and you have lodged an official complaint with the AHRC about racist remarks made by your manager.
   c. You are renovating your house and your neighbour has lodged a complaint about the renovation’s impact on your street.
8. Conciliation is often good for resolving a dispute where an ongoing relationship exists. Using an example, explain what this means.
9. The alternative dispute resolution methods outlined in the subtopic are used by courts and other venues. Describe one other venue that can be used to resolve disputes.
10. ‘People who resolve a dispute through conciliation are often better off than if they had used arbitration.’ Discuss this statement.

For sample responses to every question, go to www.jacplus.com.au.

5.6 Thinking Big research project — Celebrating diversity

5.6.1 Scenario

A cohesive society is defined by an OECD report as one that 'fights exclusion and marginalisation, creates a sense of belonging and promotes trust within communities'. But what creates a cohesive society in which people trust and accept each other? How can we create a community where everyone feels they can thrive, knowing their culture, beliefs and traditions are respected by their community?



5.6.2 Task

In pairs or small groups, investigate the main factors that create a cohesive society. Using these factors as a base, design and conduct a survey to determine the level of social cohesion at your school, with a specific focus on determining how the diversity of your school could be celebrated to improve everyone's sense of belonging. Based on your results, you will then plan a celebration of your school community's diversity. Present your findings and your plan to the class.

5.6.3 Process

- Open the ProjectsPLUS application in the Resources for this topic. Click the **Start new project** button to enter the project due date and set up your project group. Working in pairs or small groups will enable you to share responsibility for the project. Save your settings and the project will be launched.
- In the **Media centre** you will find an assessment rubric to guide your work.
- Research what creates social cohesion and as a group decide on the main factors that create a cohesive society. In the **Media centre** you will find some weblinks to guide your research.

- Once you have decided on these factors, design a survey to determine the level of social cohesion at your school. Consider the following when creating your survey:
  - Set a goal for your survey before you begin writing questions, so you have a clear idea of what you are trying to achieve.
  - Asking questions about the demographics of your respondents (age, gender, race, marital status, education level, etc.) allows you to look for patterns in your results based on different groups.
  - Asking closed ended questions allows you to compare results more easily than if you ask open ended questions.
  - Using Likert scale questions are useful when trying to determine a level of agreement (e.g. strongly agree to strongly disagree) rather than just a yes or no response.

  In the Media centre you will find several weblinks with advice on creating effective surveys.
- Conduct the survey with at least one class at your school. Analyse the results to identify the overall level of social cohesion and the levels within any particular groups.
- Create a plan to improve the level of social cohesion that addresses the weak areas you have identified. Consider how to celebrate diversity while maintaining social cohesion.
- Present the results of your survey and plan to the class as an oral presentation, using PowerPoint or similar.
- Check you've completed all steps and refer to the assessment rubric in the **Media centre** to ensure you've met all task requirements, then submit your PowerPoint to your teacher for assessment.

Note: Please consider the following amendments to this task if you are not able to complete it in its current form due to school size or remote learning.

- Your teacher may be able to organise for a class of students to complete your survey online.
- You could research the level of social cohesion in a particular location by analysing media reports, TV shows or podcasts.
- You may survey/interview family or friends in your community instead of a class at your school.
- You may present your findings and plan in a short film/news report instead of an oral presentation.



on Resources

ProjectPLUS Thinking Big research project — Celebrating diversity (pro-0254)

5.7 Review

5.7.1 Key knowledge summary

5.2 Living in a cohesive society

- The vast majority of Australian communities enjoy a level of social cohesion not seen in many countries around the world.
- A cohesive society is tolerant and inclusive.
- Individuals and groups are free to demonstrate their cultural and religious traditions, creating communities rich with diversity.

5.3 Threats to social cohesion

- Threats to the tranquillity and cohesion of Australian society do exist.
- Several threats to the freedom and rights of Australians exist within our communities, and at times in our governments as well.
- Criminal activity, political corruption and lawlessness threaten our communities and can impinge on our democratic rights and freedoms.

5.4 Protecting social cohesiveness

- State and federal governments have developed and implemented strategies to protect social cohesion within Australia.
- Governments aim to protect the freedoms and rights of groups and individuals.
- Governments have the common goal of maintaining and protecting social cohesion in Australian communities.

5.5 Resolving conflict

- It is inevitable that disputes between people will arise.
- Disputes that threaten social cohesion need to be resolved.
- Disputes can be resolved through our court system.
- Disputes can be resolved through negotiation, conciliation, mediation and arbitration.
- Laws are created to set a standard of behaviour and to protect those people.

5.7.2 Key terms

arbitration a dispute resolution process with a legally binding decision from a third party rather than as the result of court proceedings

bill of rights a formal declaration of the rights of members of a country or area

conciliator a person who acts as an independent third party between two disputing parties, often with specialist technical expertise

discrimination the unfair, biased or prejudicial treatment of a person based on a personal characteristic such as race, gender, religion, ability or age

dispute resolution a process involving a group of strategies to settle legal issues outside of court

embezzlement the theft or misuse of funds belonging to your employer or organisation

inclusive behaviours or policies that include all members of a society

integrated describes communities that consist of different cultural groups living in unity

legally binding an agreement that is enforceable by law

marginalisation a social process by which groups or individuals are pushed to the fringes of society

martial law when a country's government/s bring in the military to enforce law in a society and suspend normal legal processes

mediation a dispute resolution process involving a third party who is trained to promote a mutually agreeable outcome

social cohesion the ties within a diverse community that create a sense of connection

taboo a topic or issue that is not usually spoken about in a society

5.7.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

What happens when the social cohesion of Australian society is threatened?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6045)
Reflection (ewbk-6044)
Crossword (ewbk-6043)
Student Learning Matrix (ewbk-6039)

Interactivity Sustaining a cohesive society crossword (int-8242)

5.7 Review Exercise

Multiple choice

1. What is social cohesion?
   - A. A federal government policy
   - B. A state government policy
   - C. A part of the International Covenant on Civil and Political Rights
   - D. The 'glue' that holds society together

2. The Australian Crime Commission's three categories of organised crime are criminal syndicates, outlaw motorcycle gangs and professional what?
   - A. Facilitators
   - B. Mediators
   - C. Conciliators
   - D. Adjudicators

3. What is a vested interest also known as?
   - A. Corruption
   - B. A conflict of interest
   - C. Disclosure
   - D. A hidden agenda

4. What is the name of the independent organisation that monitors global corruption?
   - A. Amnesty international
   - B. Democracy international
   - C. Transparency international
   - D. Corruption international

5. How many times has martial law been declared in Australia?
   - **A.** Once
   - **B.** Twice
   - **C.** Three times
   - **D.** Four times

6. In Australia, the rights of citizens are not protected by which of the following?
   - **A.** A Bill of Rights
   - **B.** The Constitution
   - **C.** Legislation
   - **D.** Common law

7. Which anti-discrimination law was the first to be passed in Australia?
   - **A.** Racial discrimination Act
   - **B.** Sex Discrimination Act
   - **C.** Age Discrimination Act
   - **D.** Disability Discrimination Act

8. What is the simplest form of conflict resolution?
   - **A.** Arbitration
   - **B.** Mediation
   - **C.** Conciliation
   - **D.** Negotiation

9. Which methods of conflict resolution are the most similar?
   - **A.** Mediation and conciliation
   - **B.** Mediation and arbitration
   - **C.** Arbitration and conciliation
   - **D.** Arbitration and negotiation

10. Which method of conflict resolution produces an outcome that is legally binding?
    - **A.** Mediation
    - **B.** Arbitration
    - **C.** Conciliation
    - **D.** Negotiation

Short answer

11. Compared with other countries, Australia is lucky. Discuss this statement by providing arguments both for and against.
12. To what extent does the Australian Constitution protect social cohesion in Australia?
13. Explain the reasons that Australian states banned outlaw motorcycle gangs.
14. Explain why politicians are required to report any conflicts of interest.
15. Describe a hypothetical situation in which a politician might be accused of corruption, and suggest what impacts their corruption might have on society and their ability to do their job effectively.
16. To what extent do you think events such as the Cronulla Riots reflect the majority of Australia's views about race?
17. Should Western Australia enact a bill of rights? Give at least two reasons to support your view.
18. Explain who controls the Australian Human Rights Commission.
19. Compare the processes of conciliation and arbitration.
20. What role do shared values play in maintaining social cohesion? Give one example to demonstrate.

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 5 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

5.1 Overview

Video eLesson
- Living in a cohesive society (eles-2378)

5.2 Living in a cohesive society

eWorkbook
- Mechanisms to maintain a cohesive society (ewbk-6040)

5.3 Threats to social cohesion

eWorkbook
- Threats to social cohesion (ewbk-6041)

Weblinks
- Australian Criminal Intelligence Commission
- 2005 Cronulla Riots

5.5 Resolving conflict

eWorkbook
- Dispute resolution (ewbk-6042)

5.6 Thinking Big research project — Celebrating diversity

ProjectPLUS
- Thinking Big research project — Celebrating diversity (pro-0254)

5.7 Review

eWorkbook
- Reflection (ewbk-6044)
- Crossword (ewbk-6043)
- Student Learning Matrix (ewbk-6039)

Interactivity
- Sustaining a cohesive society crossword (int-5532)

To access these online resources, log on to **www.jacplus.com.au**.

ECONOMICS AND BUSINESS

ECONOMICS AND BUSINESS CONCEPTS AND SKILLS

6 Economics and Business concepts and skills 170

ECONOMIC PERFORMANCE AND LIVING STANDARDS

7 Economic performance and living standards 193

8 Influencing consumers 249

9 Improving business productivity 271



6 Economics and Business concepts and skills

6.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

6.1.1 Introduction to the world of Economics and Business

Have you ever been to a farmer's market? Traded lunch with your friends? Been paid for doing chores around the house? Or have you ever seen an ad for a product from a long time ago where the price was a fraction of what it is now? If you answered yes to just one of those questions, chances are you already know a lot about economics and business.

This topic looks at economics and business concepts including scarcity and the choices we must make as a consequence of this economic problem, allocation of resources and markets, specialisation and trade, the interdependent nature of our economy, and economic performance and living standards. Studying Economics and Business provides you with valuable knowledge for making decisions in everyday life. You will develop skills including questioning and researching, analysing, evaluating, communicating and reflecting.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6059)

FIGURE 1 Have you ever seen an ad for a product from a long time ago where the price was a fraction of what it is now?



6.2 Concepts in Economics and Business

LEARNING INTENTION

By the end of this subtopic, you will be able to explain the six Economics and Business key concepts: scarcity, making choices, allocation and markets, specialisation and trade, interdependence, and economic performance and living standards.

The world of Economics

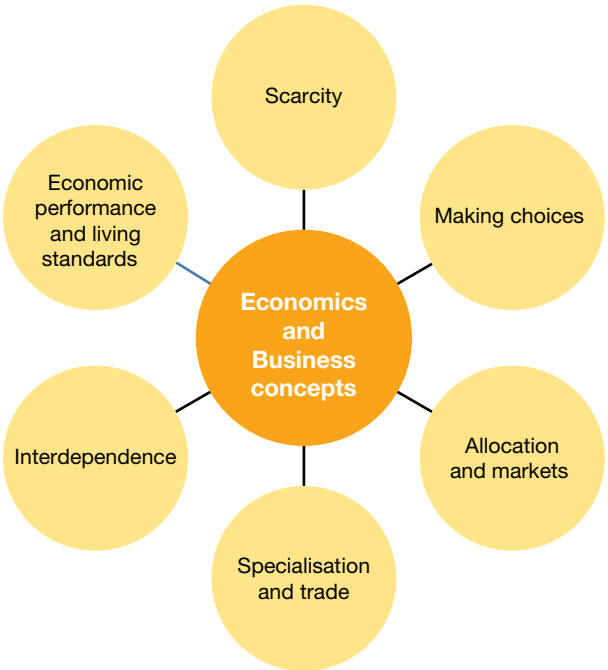
As you have learned in previous years, **economics** is a social science (a study of human behaviour) that explores how individuals, businesses and governments make decisions. Economics also examines how limited resources are used to produce and distribute goods and services that will satisfy society's unlimited needs and wants. Basically, economists investigate choices and how to make people better off in terms of their living standards. The world of economics is everywhere; it is occurring right now all around you, happening day and night, going on today and will continue tomorrow. The economic environment is also always changing. This means that it is a dynamic and exciting world, full of surprises and opportunities.

The world of Business

The world of **business** is all around us. You may have a job working for a business, or know someone else who does. You have most likely purchased something from a business at some stage. Perhaps you have even operated your own 'business' — mowing neighbours' lawns, babysitting, washing cars or setting up a stall at a local market. A business is any activity that is conducted by an individual or individuals to produce and sell goods and services that will satisfy the needs of society, with the main objective of making a profit. As well as making profit for owners, businesses make important contributions to the economy.

The Economics and Business concepts can help us to make sense of the world. By using these concepts you can identify questions, guide your investigations or assist decision making about the world you live in, and you can use them to try to imagine a different world. The six key concepts are:*scarcity, making choices, specialisation and trade, interdependence, allocation and markets, economic performance and living standards.*

FIGURE 1 There are six key concepts in Economics and Business.



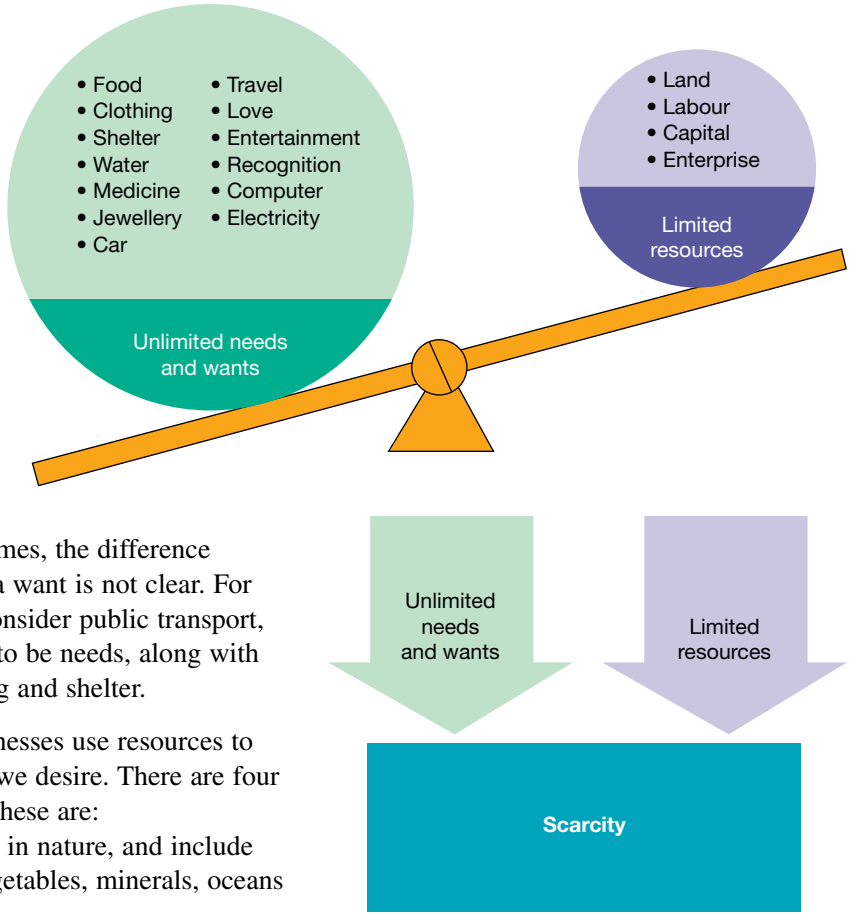
economics a social science (study of human behaviour) that analyses the decisions made by individuals, businesses and governments about how limited resources are used to satisfy society's unlimited needs and wants

business any activity conducted by an individual or individuals to produce and sell goods and services to make a profit

6.2.1 Scarcity

Scarcity is one of the fundamental concepts in Economics and Business. This situation involves people having limited **resources** available to satisfy their unlimited **needs** and **wants**. Scarcity is often referred to as the 'basic economic problem'. Therefore, scarcity of resources creates the need to study economics to ensure we share or allocate resources fairly.

FIGURE 2 The basic economic problem is scarcity, where we have unlimited needs and wants, but limited resources to satisfy them — an unbalance between wants and resources exists.



Economists define needs as goods or services that people must have in order to survive. They typically distinguish *needs* from *wants*, which are goods and services that are not necessary for survival. Wants are a wish or desire for something that will make life more enjoyable for a person. Sometimes, the difference between what is a need and what is a want is not clear. For example, most people in Australia consider public transport, health care and telecommunications to be needs, along with the traditional needs of food, clothing and shelter.

To satisfy our needs and wants, businesses use resources to produce the goods and services that we desire. There are four main types of economic resources. These are:

- *land*. These resources are found in nature, and include fertile soil, forests, fruit and vegetables, minerals, oceans and rivers.
- *labour*. These resources relate to both the mental and physical effort of people who are working. Labour includes all of the people who are employed by businesses and government to transform resources into goods or services that can be purchased. Examples of labour include farmers, teachers, pilots and baristas.
- *capital*. These resources have been created by combining land and labour to produce manufactured items used by businesses and governments to assist in making other goods and services. For this reason, capital is considered a human-made resource. Examples of capital include computers, dams, factories, machinery, railways, roads and tractors.
- *enterprise*. This resource refers to the ability of individuals who organise and combine the other three resources in order to create value. Managers organise the other economic resources efficiently in order to run their business successfully.

To produce goods and services, a combination of economic resources will be utilised. For example, on a sheep farm, the farm manager organises all of the land, labour and capital resources to ensure shearing goes smoothly and efficiently. Land resources such as fertile soil, rain and grass are used to raise the sheep. Labour resources such as shearers, roustabouts and wool classers are used to cut and organise the wool from the sheep. Capital resources such as the wool shed, shearing machines and wool press are used to make the process of shearing more efficient. However, as we have seen, the resources available to us are limited. For instance, the farm may have had less rainfall

scarcity the economic problem of having unlimited needs and wants, but limited resources to satisfy them

resources items of value that we use to produce goods and services to satisfy needs and wants, which include land, labour, capital and enterprise

needs goods or services that consumers consider necessary to maintain their standard of living

wants goods or services that are desired in order to provide satisfaction to the user, but which are not necessary for survival or to meet the basic standard of living in a community

this year, so the farm manager may not be able to run as many sheep. There may be fewer shearers in the labour market, so the farm manager may not be able to shear the sheep at the best time of year. Or they may not be able to afford enough shearing machines so shearing may take longer to complete. Because of scarcity, people must choose some things but give up others.

FIGURE 3 There are four main types of economic resources: land, labour, capital and enterprise.

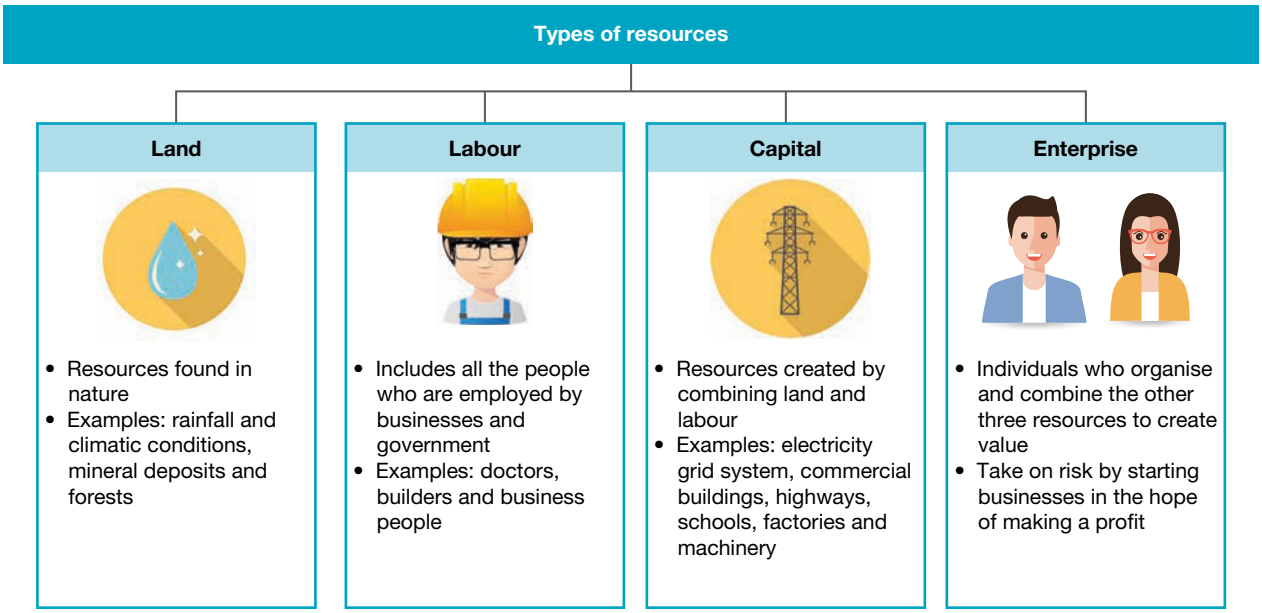
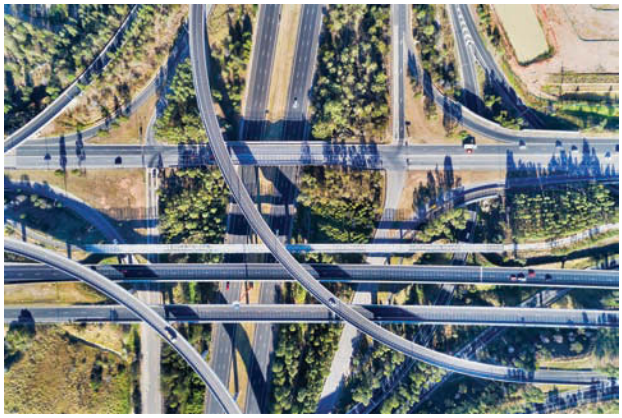


FIGURE 4 Businesses use economic resources (land, labour, capital and enterprise) to produce the goods and services that society wants and needs.







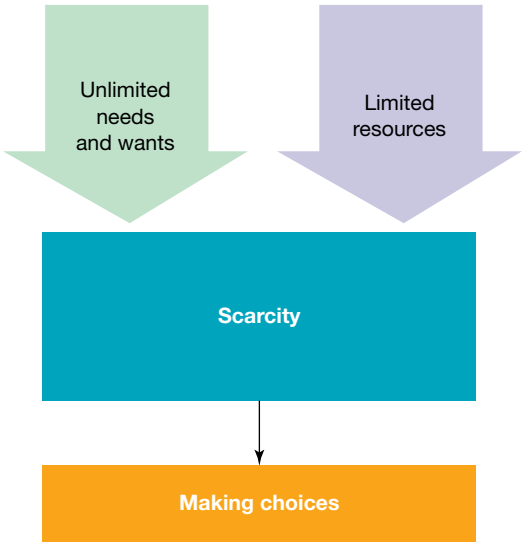


6.2.2 Making choices

Due to the problem of scarcity, we must make choices or decisions about how our limited resources are used. Making choices about alternatives is the essence of economics.

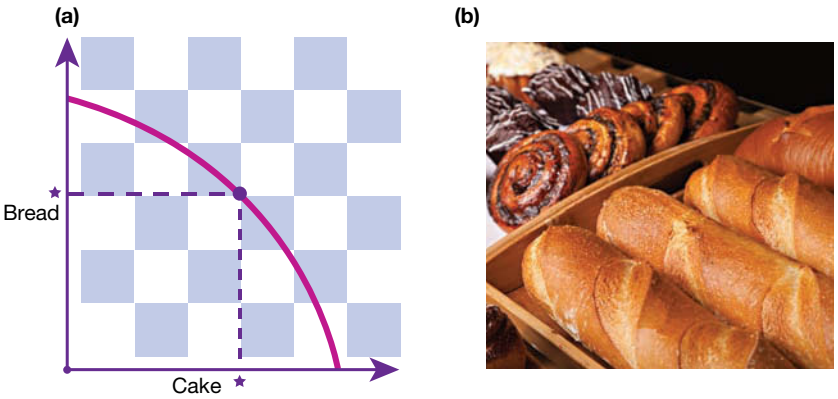
Every choice we make involves an **opportunity cost**. Opportunity cost is the value of the next best alternative that is given up when making a decision. In other words, it is the loss of a potential benefit from one alternative when another alternative is chosen. Opportunity cost can be shown by using a production possibility frontier (PPF) or curve. A PPF shows the trade off in allocating resources between the production of two goods or services. For instance, a bakery may want to make bread, cakes or a combination of both. Rather than just making a choice between two options, the PPF can show the best combination of bread and cakes that can be produced with the bakery's available resources (see **FIGURE 6a**).

FIGURE 5 Scarcity means making choices about how resources are used.



There can only be one opportunity cost; this is the value of the next best alternative that is foregone, not the total of all the available alternatives. Consumers, business and the government all need to consider opportunity cost when they make choices. Consumers constantly have to make choices when they purchase goods and services, and about how they will use their time and earn an income. Businesses need to make choices about what goods to produce and how. Governments must make choices about how to intervene in the economy.

FIGURE 6 Economists understand that the cost of producing bread is not simply the price paid for the ingredients, labour and equipment used, it is also the value of the next best alternative given up. This is the opportunity cost.



6.2.3 Allocation and markets

Making decisions about how scarce resources will be used to satisfy needs and wants is known as **resource allocation**. To make choices to overcome the economic problem, all societies have developed systems of production and distribution of goods and services, which we call the **economic system**. All economic systems must answer three basic economic questions:

- *What to produce?* Decisions must be made about what goods and services should be produced and in what quantities. Should we produce cars or bicycles, computers or smartphones, wheat or barley, and how much of each? All of these production possibilities involve different allocations of resources.
- *How to produce?* Decisions must be made about how we produce those goods and services. Do we use labour intensive production methods (predominantly making use of labour) or capital intensive methods of production (predominantly making use of technology or machinery)?

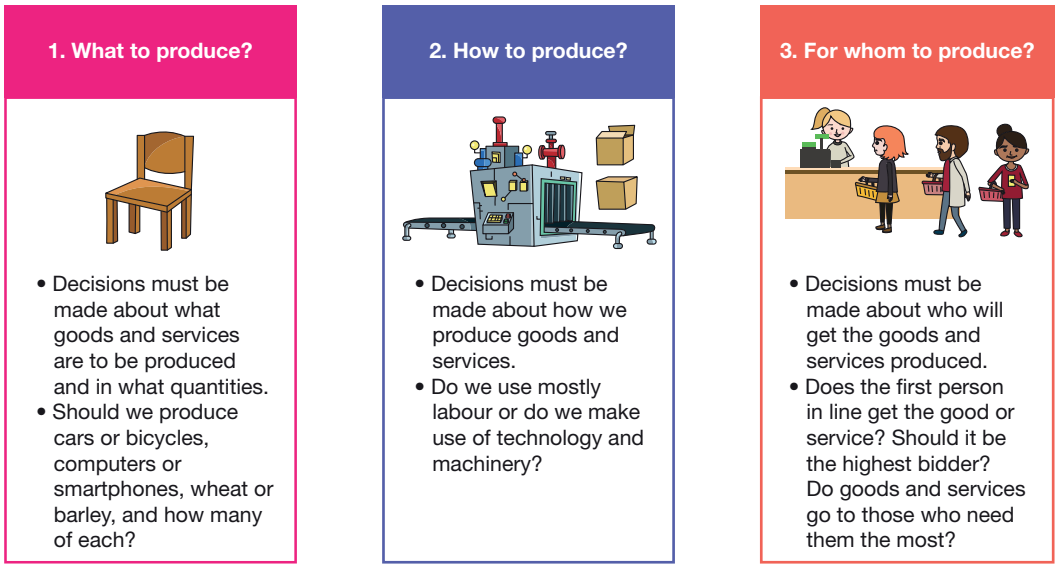
opportunity cost the next best alternative given up whenever a choice is made

resource allocation relates to decisions about how scarce resources are distributed among producers, and which types of goods and services will be produced to satisfy wants and needs

economic system a way of organising the production and distribution of the nation's goods, services and incomes

- *For whom to produce?* Decisions must be made about how those goods and services are distributed; that is, we need to determine who will receive the goods and services produced. Does the first person in a line acquire the good or service? Should it be the highest bidder? Or do the goods and services go to those who need them the most?

FIGURE 7 Three basic economic questions



Many different economic systems have been used throughout history, but the type of economic system we have in Australia is called a **market capitalist economy**, meaning that we rely on the **market** to allocate resources. This is done this through the actions of consumers and producers. For instance, producers decide what they will are willing to supply based on their available resources and what they are willing to charge for their products. However, consumers will choose whether they wish to purchase the products offered and can pressure producers to lower their prices or alter their product to better suit their needs. In a market capitalist economy resources are generally owned by private individuals and businesses, and there is little government intervention.

FIGURE 8 In Australia's market capitalist economy, consumers and producers answer the three economic questions.



In Australia, the three economic questions are largely answered by the market. For example:

- *What to produce?* The market is used to make most decisions about the types and quantities of goods or services to be produced. The goods and services produced will be determined by the wants and needs of consumers and availability of resources. For instance, Australia's climate means consumers have a need for high-quality sunscreen and will demand this product from the market.
- *How to produce*? The market helps to make decisions about the production methods to be used by businesses in order to make each good or service. The aim of every business is to make a profit. Therefore, businesses producing sunscreen will aim to make the highest quality product using the most efficient methods possible.
- *For whom to produce?* The market determines how the nation's goods and services will be accessed by members of society. When individuals supply land resources, labour or capital to a sunscreen manufacturer they are paid for their contribution to production.

market capitalist economy a n economic system that relies on the market to allocate resources based on the actions of consumers and producers, and where resources are generally owned by private individuals and businesses

market the place where goods, services or resources are exchanged between buyers and sellers

Left to its own devices, the market can allocate resources inefficiently. For example, well-educated or well-trained income earners usually earn more than unskilled workers and therefore have the greatest access to goods and services and lower income earners may miss out on the goods or services that they need. At times the profit seeking nature of businesses can lead to negative outcomes for society and the environment. For example, the increased use of capital resources and machinery can create more efficiency for a business, it may lead to more carbon emissions in the atmosphere and less work for human labour. This can create higher unemployment and increase wealth inequality in the economy. Governments may need to intervene in the economic life of our country to reduce these problems.

6.2.4 Specialisation and trade

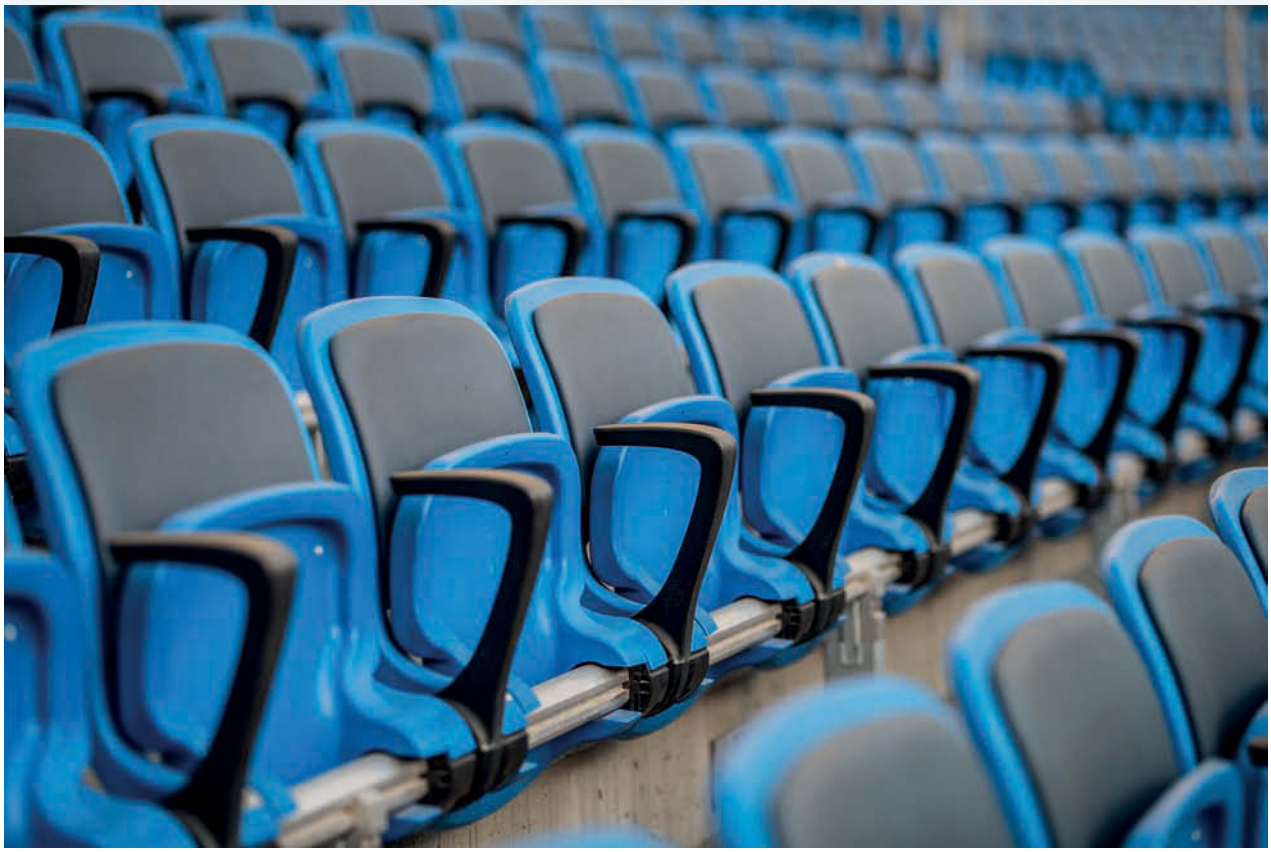
Modern economies utilise **specialisation** to increase production and provide a surplus that can be used to **trade**. Awareness of this concept means that an individual, business or nation will be making the most efficient use of resources.

Businesses will often choose to specialise in the creation of one or a very limited range of products or services in order to maximise efficiency and gain expertise in the market. This can also allow them to achieve a competitive advantage over other businesses in their field both in Australia and internationally. For example, a manufacturing business may choose to focus on building seating only for stadiums and arenas. Therefore, they can sell these to their local market and export any surplus product overseas.

specialisation a method of production where a worker, business or nation focuses on the production of a limited range of goods or services in order to increase production and make the most efficient use of resources

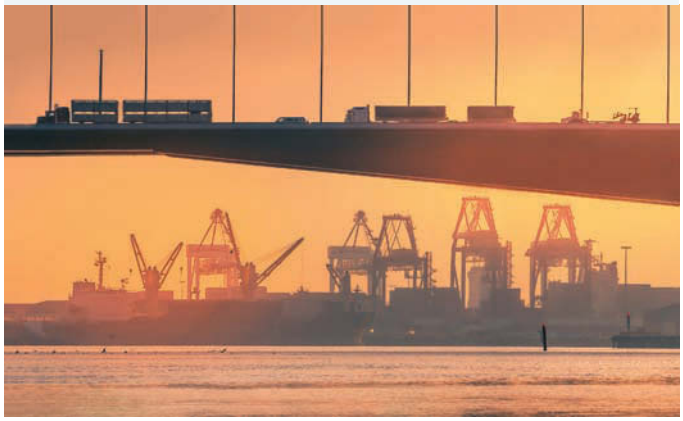
trade the activity of buying, selling or exchanging goods and services between producers and consumers and/or countries

FIGURE 9 Specialisation can be seen in business. Businesses will often choose to focus on the creation of a limited range of products to gain expertise and greater efficiency in production.



Countries also make use of specialisation. If one country is more efficient at producing a certain product and another country is efficient at producing a different product, then it makes sense for the two countries to trade. Australia is a major producer and exporter of iron ore, coal, gold, beef and education-related services. However, we import many products such as medical equipment, cars and machinery from other countries that are more efficient at producing such products.

FIGURE 10 Individuals, businesses and nations trade with other individuals, businesses or nations to get something that they cannot provide or produce for themselves.



6.2.5 Interdependence

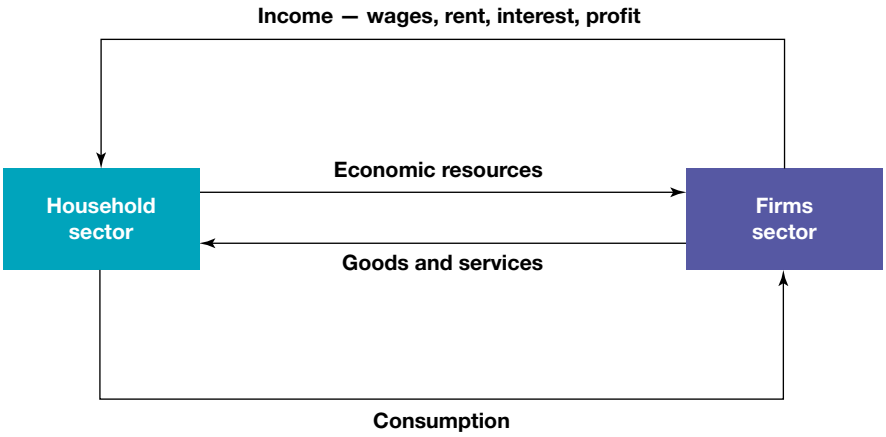
In Economics, we use the term **interdependence** to to describe the way that participants in the economy rely on each other. That is, individuals, businesses and governments are all dependent on each other. For example, businesses will struggle to survive without consumers buying their goods and services. Consumers rely on businesses to provide them with the goods and services they demand to satisfy their needs and wants, as well as to provide them with income in exchange for labour. Governments provide employment and services such as housing, health care and education for many of their citizens, while also relying on taxation income from business and individuals.

FIGURE 11 Businesses need customers to survive, and customers rely on businesses to provide the goods and services they need.



The exchange of goods and services between producers and consumers and countries results in increased interdependence between the groups (or sectors) in economies, as well as between economies. Economists understand that the actions of one participant will have an impact on other participants in the economy.

FIGURE 12 A simple two-sector circular flow model of income demonstrating the interdependence between consumers and businesses



interdependence the mutual dependence between participants in an economy; that is, the reliance of consumers, workers, businesses and governments on each other

6.2.6 Economic performance and living standards

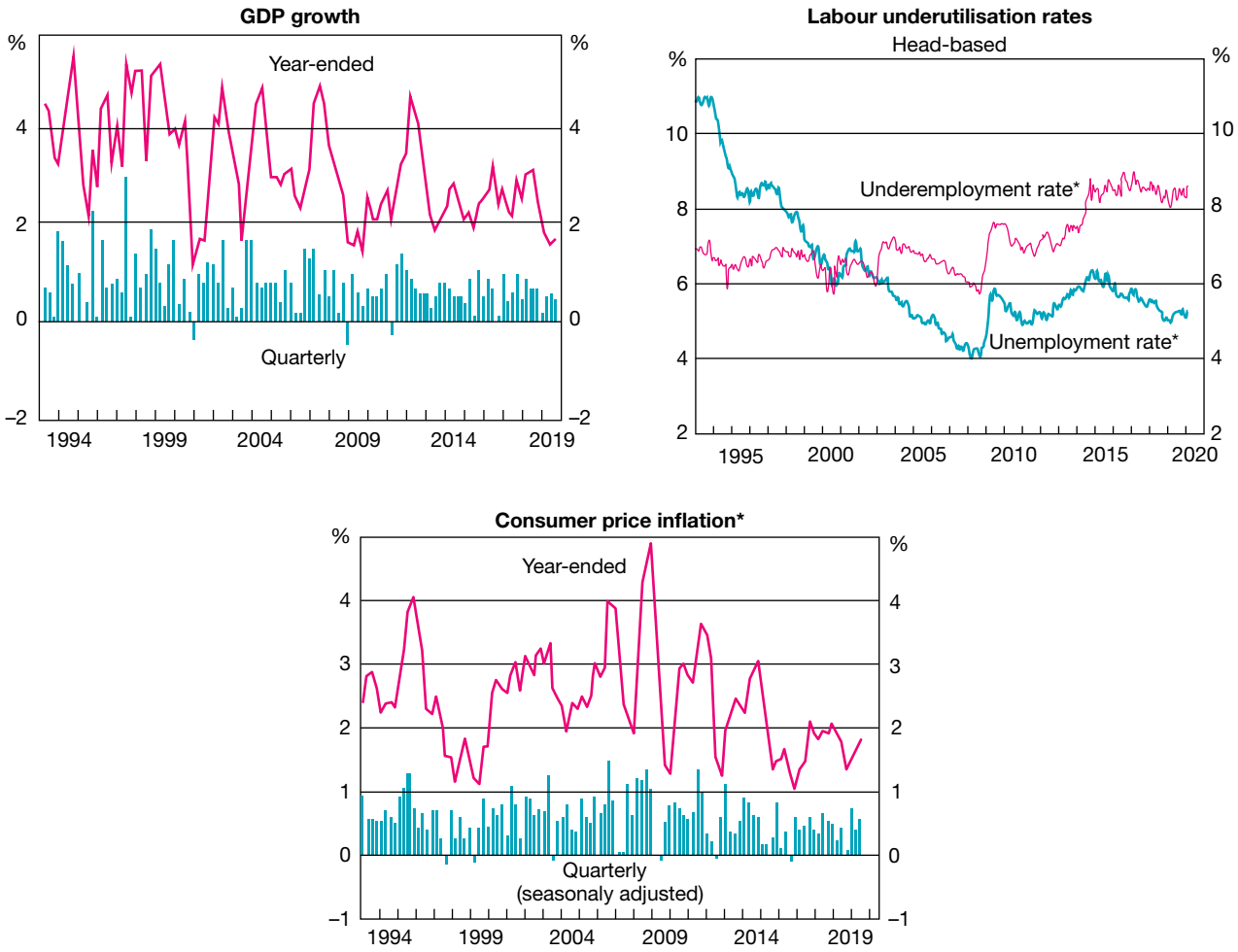
The main objective of an economy is to satisfy the needs and wants of its citizens. It does this by prioritising the efficient production of as many goods and services as possible using its available resources. This is accomplished by addressing the three key economic questions. In Australia, the government is responsible for managing the performance of the economy. Our government pursues low inflation, economic growth and full employment.

Economies measure their **economic performance** to determine how well the economy is providing for its citizens. The performance of our economy can be measured by considering a range of economic indicators. Each indicator provides a snapshot of the economy at a particular point in time. Some key economic indicators include:

- *gross domestic product (GDP)*. This measures economic growth (the real growth in the volume (value) of goods and services produced by an economy over a period of time). The Australian government aims for an increase in GDP of 3–4 per cent per year to achieve strong and sustainable economic growth.
- *unemployment rate*. This tells us about the percentage of the total labour force that is without a job but actively looking for work. The Australian government aims for a low unemployment rate, approximately 5 per cent.
- *inflation rate*. This measures the change in the price of goods and services in the economy. To ensure stable prices, Australia's monetary policy aims for an inflation rate of 2–3 per cent.

economic performance the measure of how well an economy is performing based on whether it is achieving its economic objectives

FIGURE 13 Graphs summarising trends in GDP, unemployment and inflation in Australia over twenty years.



Source: Reserve Bank of Australia.

The Australian government also aims to achieve equality in the distribution of income for its citizens and achieve external stability through international trade. The information obtained by measuring the performance of an economy directs government policy. Generally, the Australian government pursues policies that focus on economic growth.

Many economists believe that economic growth promotes improvements in the **standard of living** (how well off individuals or countries are overall). It is important that the government takes changes to living standards into consideration when implementing policies to improve economic performance.

6.3 Skills in Economics and Business

LEARNING INTENTION

By the end of this subtopic, you will be able to explain each of the four categories of skills in the Humanities and Social Sciences, and how to apply these skills.

6.3.1 What skills will you build this year?

This year, you will continue to build your ability to use the four broad categories of skills in Humanities and Social Sciences. The following summaries are to remind you of these four key skills.

1. Questioning and researching involves locating relevant and detailed information and/or data from a range of appropriate sources. In Year 10 Economics and Business, this includes conducting research into indicators of economic performance.
2. Analysing involves interpreting information to identify the main features or ideas, then examining the information closely to determine how the parts relate to the whole. In Year 10 Economics and Business, this includes analysing a business case study.
3. Evaluating means examining you interpretations of information to draw evidence-based conclusions. It requires taking into account ambiguities and multiple perspectives in a source and proposing potential responses to contemporary challenges or issues. In Year 10 Economics and Business, this includes predicting the outcomes of economic and business decisions.
4. Communicating your ideas means presenting information in a range of formats to suit the intended audience and purpose. This includes essays, oral presentations, debates, tables and cartoons. Reflecting on your skills is also an important part of the process. In Year 10 Economics and Business, this includes preparing a budget.

6.3.2 SkillBuilders in the topic

In addition to these broad HASS skills, there is a range of essential practical skills that you will learn as you study Economics and Business. The SkillBuilder subtopics will teach tell you about the skill, show you how to apply the skill and let you practise the skill with tasks related to the topics covered in this subject.

The SkillBuilders you will use in Year 10 are:

- SkillBuilder — Conducting research into indicators of economic performance
- SkillBuilder — Analysing a business case study
- SkillBuilder — Predicting the outcomes of economic and business decisions
- SkillBuilder — Preparing a budget.

standard of living a level of material comfort in terms of goods and services available. This is often measured on a continuum; for example, a 'high' or 'excellent' standard of living compared to a 'low' or 'poor' standard of living.

6.4 SkillBuilder — Conducting research into indicators of economic performance

LEARNING INTENTION

This SkillBuilder shows you how to research indicators of economic performance. Conducting research is an integral part of the Questioning and researching HASS skill.

6.4.1 Tell me



While studying Economics and Business you will develop the skill of asking questions in order to complete research (a systematic inquiry for discovering or verifying knowledge about something). Questioning is the action of posing statements that require answers, particularly in relation to what is known and what is not known in order to improve your knowledge. Research is important because it allows us to find out what is unknown and contributes to filling in gaps in our knowledge.

The following steps provide a useful guide to the process of writing questions and carrying out research.

- Identify and understand the general task you are attempting to complete.
- Develop a series of specific questions that will help guide your research in the appropriate direction, and help you determine the information you need.
- Locate appropriate sources of that information.
- Record relevant information from a range of sources.
- Present the information in an appropriate form.

6.4.2 Show me

Imagine you have been asked to investigate how economic indicators are used to analyse the performance of the Australian economy.

Your first step is to clearly identify the key task. This could be expressed as follows:

Prepare a report on economic growth rates and how this indicator is useful in providing information about the performance of Australia's economy.

It is now necessary to break this down into a series of more specific questions. These could include:

1. What is economic growth?
2. What is an economic growth rate?
3. What is GDP and how is it measured?
4. What is the difference between real and nominal GDP.
5. How has Australia been performing in terms of economic growth over the last five years? Over the last ten years? Over the last 20 years?
6. How accurate is GDP in measuring Australia's economic performance?

The next step is to locate appropriate sources. By entering the search term 'Australian economic growth rates' in your favourite search engine, you will be presented with a number of sources. Look for reliable sources relevant to your area of research. For investigating economic growth, the Reserve Bank of Australia (RBA) website would be a highly reputable source.

A Wikipedia entry is often found at or near the top of the list of sources, and many students will be familiar with this resource. There is no problem with using Wikipedia as one of your sources — so long as you remember that it is not always reliable and any information gathered from Wikipedia should always be checked against another source to make sure it is accurate. To help ensure that your information is correct, it is a good idea to use at least two sources to answer each question.

Keep your questions beside you as you read each source, and note the location of material that provides answers. You can select and print some text, and then highlight those sentences or paragraphs that provide answers to your questions. Sometimes a complete answer to a question may be found in several places in a piece of text. Be sure to highlight all relevant text, and indicate with a number which question the information answers.

When you are satisfied you have found the answers to all the questions, you need to write the answers in order, making sure you use your own words as much as possible. You can then use the answers to present your information in the required form. For example, this may be an oral report to the rest of the class, an essay to be marked by your teacher, a PowerPoint presentation, or any other format that is appropriate.

6.4.3 Let me do it

Complete the following activity to practise this skill.

6.4 ACTIVITY

Using the above process as a model, devise a series of questions and carry out the research to produce a report on the following key question:

Prepare a report on one selected indicator of economic performance and how this indicator is useful in providing information about the performance of our economy.

There are a number of indicators you could choose for this task, including economic growth rates, unemployment trends, the inflation rate, Human Development Index, quality-of-life index and sustainability indexes.



6.5 SkillBuilder — Analysing a business case study

LEARNING INTENTION

This SkillBuilder shows you how to analyse a business case study. Analysing data, reports and case studies is part of the Analysing HASS skill.

6.5.1 Tell me

Analysing is another skill that you will develop while studying Economics and Business. This skill involves interpreting information to identify the main features or ideas, then examining the information closely to determine how the parts relate to the whole. One way in which you might use this skill in Economics and Business is by analysing a business case study.

A business case study helps you understand business concepts. It is a real-life example that shows how businesses work and how business concepts apply to individual situations. Business people use case studies to understand the strategies that other businesses have introduced and to identify which ones have succeeded or failed. When you have identified the elements of a case study, you will be able to better understand business concepts.

CASE STUDY: BlueScope

Using innovation to create a long-term competitive advantage

BlueScope is a manufacturer of steel and supplier of steel products to global building and construction markets. It operates in Australia, New Zealand, Asia and North America. BlueScope has used open innovation and research and development to create a competitive advantage.

Working with several universities and industry partners, including BlueScope, the Australian Research Council (ARC) recently launched a steel research hub located at the University of Wollongong. The new facility brings scientists and researchers together from various steel manufacturers and research institutions to develop new technologies for the Australian market. A key focus of the steel research will be energy and sustainability, as well as more efficient building construction and solutions for harsh environments.

BlueScope has modified its products and changed the ways it interacts with customers, suppliers and competitors so that it is not just competing on price. The company strongly believes that by using innovation to create a competitive advantage, it will develop products that will allow it to keep manufacturing in Australia.

One of BlueScope's innovative new products is called Next Generation Zincalume®. By combining magnesium with an aluminium, zinc and silicon coating, a unique protective barrier has been formed that makes steel more resistant to corrosion. Zincalume steel also has a smaller impact on the environment through a reduced use of zinc and aluminium.

Furthermore, BlueScope plans to transform its popular Colorbond® product. A photovoltaic laminate will be added, resulting in a roof panel that can produce solar power. Panels will also transfer thermal energy in and out of buildings as required.

FIGURE 1 BlueScope's managing director and CEO, Mark Vassella, announced in 2019 that the company had reported a half-year EBIT (earnings before interest and tax) of almost $840 million, an increase of 65 per cent on the previous year.



6.5.2 Show me

How to analyse a business case study

Step 1

Read the case study twice — once to get a general idea of the content and the second time to focus on the key issues. As you read through the second time, identify the key issues. You could choose a different colour highlighter for each key issue. You may also choose to make notes on the case study.

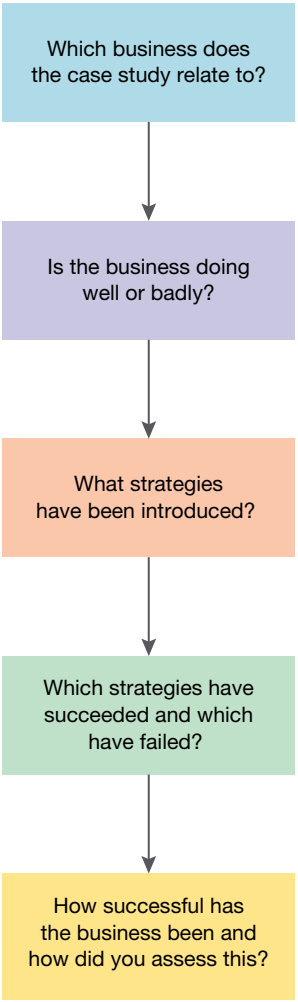
Step 2

Identify and define important terms. Use a dictionary or the internet to find out what they mean.

Step 3

Complete your analysis by writing dot point answers to the questions shown in the **FIGURE 2** diagram. (Use the questions as headings under which to write your points.)

FIGURE 2 How to analyse a business case study



6.5.3 Let me do it

Complete the following activity to practise this skill.

6.5 ACTIVITY

Read the following BHP case study, then analyse it using the questions from **FIGURE 2**.

CASE STUDY: BHP

In 2016 BHP, the world's biggest mining company, announced a plan to grow the base value of its business by more than 70 per cent, even without a significant recovery in commodity prices to help turn around falling revenue and profitability.

BHP's CEO outlined a roadmap based solely on existing opportunities, identifying six areas of attack to lift profits:

1. **Costs**
   Productivity improvements have delivered annual gains since 2012 of more than US$10 billion. BHP can reduce costs faster and more profoundly than the rest of the industry.
2. **Volume**
   Another 10 per cent can be added to current annual production. This will increase revenue.
3. **Oil**
   The oil shale assets, which are currently closed, give the company a large resource base to quickly increase production when prices increase.
4. **New projects**
   BHP's portfolio of growth projects has an aggregate net present value of US$25 billion.

FIGURE 3 BHP's Mount Newman iron ore mine in Western Australia



5. **Exploration**
   The company plans to increase exploration, a counter-cyclical move, mainly in oil, to take advantage of falling costs as others pull back.
6. **Technology**
   BHP plans to invest in technology to further reduce costs, improve safety and increase production volumes.

6.6 SkillBuilder — Predicting the outcomes of economic and business decisions

LEARNING INTENTION

This SkillBuilder shows you how to predict the outcomes of economic and business decisions. Evaluating predictions and outcomes is part of the Evaluating HASS skill.

6.6.1 Tell me

Evaluating means to propose explanations for events or issues and to make overall judgements or decisions based on the evidence. This is a skill that you might develop in economics and business by looking at the benefits or advantages of something and then examining the costs or disadvantages of something.

Economic and business decisions are made every day in workplaces throughout Australia. A range of people such as employees, supervisors, managers and business owners make these decisions. Examples of economic and business decisions may include:

- which good or service to make
- how to produce a particular good or service
- which suppliers a business will use
- how many people will be employed
- whether to outsource a task or complete it within the business
- how much to charge for a product.

When making economic and business decisions, it is important to consider all possible outcomes of the decision. In particular, a business must plan for:

- intended outcomes — the projected goals or objectives of a decision
- unintended outcomes — the consequences of a decision that are unplanned and unexpected.

After making an economic or business decision, a business must identify the unintended outcomes of the decision. If these unintended outcomes have the potential to have a negative impact on the business, strategies must be developed to address them.

One tool that a business can use to identify the possible outcomes of a decision is a graphic organiser like the following one. This tool allows a business to identify the different outcomes/impacts of a decision, be they intended or unintended.

Business or economic decision to be identified here	
Intended outcomes	**Unintended outcomes**

6.6.2 Show me

The following hypothetical scenario relates to a business decision made by Dayna Clothing Designs.



Dayna Clothing Designs is an Australian manufacturer of clothing and accessories. In response to increased competition, rising costs and declining profits, the business has considered making a number of changes. In particular, Dayna Clothing Designs has made the decision to outsource the production of its goods to another business in Vietnam.

The main objectives (intended consequences) of this decision are to:

- reduce labour costs
- access cheaper raw materials
- establish a new customer base.

In relation to the business's decision to outsource its production, a number of outcomes can be identified using the following graphic organiser.

Business or economic decision: Dayna Clothing Designs decision to outsource the production of its goods to another business in Vietnam	
Intended outcomes	**Unintended outcomes**
To reduce labour costs by relocating to Vietnam, which is a low-wage country	Products made by the Vietnamese company may not be of the same quality
To access cheaper raw materials, which will further reduce production costs	Possible exploitation of workers in Vietnam may lead to negative publicity
To establish a new customer base in Vietnam in order to increase sales	Loss of jobs in Australia may lead to a negative reaction from consumers

While many of the intended outcomes of this decision will benefit Dayna Clothing Designs, a number of unintended outcomes must be considered. The business must develop strategies to address each of these unintended outcomes. Failure to do so may mean that any benefits gained from the decision are quickly lost. The following table identifies each unintended outcome and recommends a strategy to deal with each.

Unintended outcome	Strategy to address this outcome
• Products made by the Vietnamese company may not be of the same quality.	• Dayna Clothing Designs could conduct quality control tests before the products are sold to ensure that each item meets their quality standards.
• Possible exploitation of workers in Vietnam may lead to negative publicity.	• Dayna Clothing Designs must ensure that the Vietnamese company that produces its products complies with laws relating to wages and working conditions. If they do not, a new manufacturer should be found.
• Loss of jobs in Australia may lead to a negative reaction from consumers.	• Dayna Clothing Designs can invest money in programs to help retrain workers who have lost their jobs.

6.6.3 Let me do it

Complete the following activity to practise this skill.

6.6 ACTIVITY

Complete the following activities to practise this skill.



Read the following hypothetical scenario that relates to a business decision made by Luke's Lolly Land.

Luke's Lolly Land is an Australian manufacturer of lollies and other confectionery. The business has operated in Australia for 26 years. Luke's Lolly Land has developed a reputation for high-quality handmade products. In order to deal with growing competition, the business has decided to purchase new machinery to automate its production process. The main objectives (intended consequences) of this decision are to:

- reduce the number of errors in production
- increase the speed of production
- reduce labourc osts.

Using the Dayna Clothing Designs example in the Show me section as a model, analyse the outcomes of the business decision for Luke's Lolly Land by completing the activities.

In the following table identify three intended and three unintended outcomes of the business decision by Luke's LollyLa nd.

Business or economic decision: Luke's Lolly Land decision to purchase new machinery to automate its production process	
Intended outcomes	**Unintended outcomes**

In the following table recommend a strategy to help address each of the unintended outcomes of the business decision by Luke's Lolly Land.

Unintended outcome	Strategy to address this outcome

After considering all of the intended and unintended outcomes for Luke's Lolly Land, do you think the business should proceed with its decision? Write a one-paragraph response justifying your decision.

6.7 SkillBuilder — Preparing a budget

LEARNING INTENTION

This SkillBuilder shows you how to prepare a budget. Preparing a budget is part of the Communicating and reflecting HASS skill.

6.7.1 Tell me

When you use the skill of Communicating and reflecting in Economics and Business, you will be presenting your findings or representing information using an appropriate format to suit a particular audience. You will also need to use terminology that is used by economists and people in the world of business. One way in which governments and businesses, and even individuals, communicate is through a budget.

FIGURE 1 A budget can be used to assist with finances and planning.



A budget is defined as a plan for the future. The government plans for the future of the economy on an annual basis by preparing and releasing its budget each May. The budget establishes the sources of the government's expected revenues or receipts — that is, the amount of money it is expecting to receive and from where that money will be sourced. It also establishes where (location) and in which areas of the economy the money will be spent.

The government is not the only group that prepares a budget. Many businesses prepare budgets to provide information about their future and to assist them in deciding on a course of action. Many families also prepare budgets to enable them to manage their household finances and save for particular things such as a holiday, a new car or new furniture. It is not uncommon for teenagers to prepare a budget when they start working part time and want to save to buy a car.

6.7.2 Show me

How to prepare a budget

There are many different ways to present a budget and a range of online tools that can help you establish, monitor and stick to a budget. You can see two examples of budgets in this subtopic. Regardless of how the budget is presented, there are some basic steps to follow in preparing one. It helps to have a basic understanding of budgeting principles and to be able to create a simple budget plan on paper.

Step 1

If you have a regular job, or other regular income such as pocket money, start by listing the amount/s you generally expect to receive and when.

Step 2

Now think of all the regular expenses you incur. These might include mobile phone plan charges, daily food and drink expenses, public transport costs and regular entertainment expenses (e.g. basketball game fees, monthly movie catch-up with friends, etc.). List these under the heading 'Payments' (or 'Expenses').

Step 3

By deducting the expected payments from the anticipated income (receipts) you can gain an indication of whether you will have a surplus (extra) or deficit (shortfall) of funds for the month. You will need to adjust your expenses or earn more income if you have a deficit. If you have a surplus, you have excess funds that you can put towards saving.

The following table contains the budget of a first year university student who is hoping to go on an overseas holiday at the end of the year. She wants to save $7000. Consider how this student uses the components we have just discussed.

Lee's budget

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Expenses												
Rent	$500	$500	$500	$500	$500	$500	$500	$500	$500	$500	$500	$500
Food	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200
Telephone			$100			$100			$100			$100
Electricity			$150			$150			$150			$150
Car — petrol	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200
Entertainment	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200
Car registration						$400						
Other	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200
Total expenses	$1300	$1300	$1550	$1300	$1300	$1950	$1300	$1300	$1550	$1300	$1300	$1550
Total income	$2000	$2000	$2000	$2000	$2000	$2000	$2000	$2000	$2000	$2000	$2000	$2000
Amount saved	$700	$700	$450	$700	$700	$50	$700	$700	$450	$700	$700	$450
Amount saved at month end	$700	$1400	$1850	$2550	$3250	$3300	$4000	$4700	$5150	$5850	$6550	$7000

6.7.3 Let me do it

Complete the following activity to practise this skill.

6.7 ACTIVITY

Prepare a budget for the coming month. Use the following template (or design your own) and record your expected receipts and expenditure on a weekly basis for the next month. Adjust the terms in the rows to suit your personal circumstances.

Item	Month: _____	Month: _____	Month: _____	Month: _____	Month: _____
Receipts					
Work					
Parents					
Presents					

Item	Month: _____	Month: _____	Month: _____	Month: _____	Month: _____
Payments					
Mobile phone					
Travel					
Food					
Clothes					
Cash at start of month					
Cash at end of month					

Use your skills to analyse your budget.

Did you receive more than you expected?

Did you spend more than you expected?

Calculate the percentage contribution to your total receipts for each area of receipts.

Calculate the percentage contribution to your total spending for each area of expenditure.

If you were to adjust your spending, in which area would you be most able to reduce your spending?

If you were to adjust your spending, in which area would you be least able to reduce your spending? Why?

What could you do to increase your receipts?

Compare your results with those of your classmates. There is no need to share dollar amounts. Use the percentages and the analysis to explain your financial situation.



6.8 Review

6.8.1 Key knowledge summary

6.2 Concepts in Economics and Business

- Scarcity is the 'basic economic problem' — this involves society having limited resources available to satisfy unlimited needs and wants.
- There are four main types of economic resources: land, labour, capital and enterprise.
- Every choice made involves an opportunity cost; this is the next best alternative given up whenever a choice is made.
- All economies must make decisions about how resources will be allocated among producers and what types of goods and services will be produced. Economies must answer the three economic questions: What to produce? How to produce? For whom to produce?
- Australia is a market capitalist economy; this means that most answers to the three economic questions are made by the market (where buyers and sellers negotiate prices for goods and services).
- Governments may need to intervene in the economy to reduce inefficiencies.
- Modern economies have developed a method of production called specialisation (where a worker, business or nation focuses on the production of a limited range of goods or services) to increase production and provide a surplus that can be used to trade.
- Participants in an economy are mutually dependent (or interdependent); that is, consumers, workers, businesses and governments are reliant on each other.
- Our economy and our government have a number of economic objectives, including satisfying the needs and wants of citizens by efficiently producing as many goods and services as possible, achieving low inflation, economic growth and full employment.
- Economic performance can be measured using key economic indicators including gross domestic product, the unemployment rate and inflation rate.
- Standard of living refers to the quality of life of individuals or countries; this is influenced by the level of economic activity.

6.3 Skills in Economics and Business

- Questioning involves posing statements that require answers, particularly in regard to what is known and what is not known in order to improve your knowledge.
- Researching is important because it allows us to find out what is unknown and contributes to filling in gaps in our knowledge.
- Analysing involves interpreting information to identify the main features or ideas, then examining the information closely to determine how the parts relate to the whole.
- Evaluating involves proposing explanations for events or issues and making overall judgements based on the evidence.
- Communicating and reflecting involves presenting findings or representing information using an appropriate format to suit a particular audience. The appropriate use of Economics terminology and Business terminology is very important.

6.8.2 Key terms

business any activity conducted by an individual or individuals to produce and sell goods and services to make a profit

economic performance the measure of how well an economy is performing based on whether it is achieving its economic objectives

economic system a way of organising the production and distribution of the nation's goods, services and incomes

economics a social science (study of human behaviour) that analyses the decisions made by individuals, businesses and governments about how limited resources are used to satisfy society's unlimited needs and wants

interdependence the mutual dependence between participants in an economy; that is, the reliance of consumers, workers, businesses and governments on each other

market the place where goods, services or resources are exchanged between buyers and sellers

market capitalist economy an economic system that relies on the market to allocate resources based on the actions of consumers and producers, and where resources are generally owned by private individuals and businesses

needs goods or services that consumers consider necessary to maintain their standard of living

opportunity cost the next best alternative given up whenever a choice is made

resource allocation relates to decisions about how scarce resources are distributed among producers, and which types of goods and services will be produced to satisfy wants and needs

resources items of value that we use to produce goods and services to satisfy needs and wants, which include land, labour, capital and enterprise

scarcity the economic problem of having unlimited needs and wants, but limited resources to satisfy them

specialisation a method of production where a worker, business or nation focuses on the production of a limited range of goods or services in order to increase production and make the most efficient use of resources

standard of living a level of material comfort in terms of goods and services available. This is often measured on a continuum; for example, a 'high' or 'excellent' standard of living compared to a 'low' or 'poor' standard of living.

trade the activity of buying, selling or exchanging goods and services between producers and consumers and/or countries

wants goods or services that are desired in order to provide satisfaction to the user, but which are not necessary for survival or to meet the basic standard of living in a community

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6059)
Reflection (ewbk-6058)
Student Learning Matrix (ewbk-6052)



RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 6 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

6.4 SkillBuilder — Conducting research into indicators of economic performance

eWorkbook

- SkillBuilder — Conducting research into indicators of economic performance (ewbk-6053)

6.5 SkillBuilder — Analysing a business case study

eWorkbook

- SkillBuilder — Analysing a business case study (ewbk-6054)

6.6 SkillBuilder — Predicting the outcomes of economic and business decisions

eWorkbook

- SkillBuilder — Predicting the outcomes of economic and business decisions (ewbk-6055)

6.7 SkillBuilder — Preparing a budget

eWorkbook

- SkillBuilder — Preparing a budget (ewbk-6056)

6.8 Review

eWorkbook

- Reflection (ewbk-6058)
- Student Learning Matrix (ewbk-6052)

To access these online resources, log on to **www.jacplus.com.au**.

7 Economic performance and living standards

7.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

What can our purchases and level of happiness tell us about the health of the economy?

7.1.1 Introduction

It is important that an economy satisfies as many of the needs and wants of its citizens as possible. It does this by providing a structure — such as a market — that enables buyers and sellers to meet and exchange goods and services. One way to measure how well an economy is performing is through a calculation of a person's living standards. Living standards refers to how well-off a nation or country is overall.

FIGURE 1 The performance of the Australian economy affects people's living standards, including access to owning your own home.



In this topic we will discuss some of the key areas of economic performance assessment and more closely examine how the Australian economy has performed in terms of improving people's living standards. Throughout this topic we will be exploring what we mean by living standards in more detail. But by way of introduction, economists usually break living standards into two facets: material and non-material. Material living standards refers to our ability to access goods and services. The more things we can afford to buy, and that are available to buy, the higher our material living standards. Non-material living standards refer to our quality of life, and can be more subjective and harder to define. They tend to cover aspects such as leisure time, pollution, education rates, life expectancy, crime rates, and so on. If we are getting more leisure time, then we would say our non-material living standards are rising; but higher levels of pollution would lower our non-material living standards. As we will see, sometimes there is a trade-off between the two. For instance, working longer hours may entail a rise in your income, which means you can afford more goods and services and raise your material living standards, but it means you have less time to spend with family and friends, which may reduce your non-material living standards.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6069)

Video eLesson Living standards around the world (eles-2382)

7.2 Economic growth and Australia's economy

LEARNING INTENTION

By the end of this subtopic you will be able to identify how economic growth rates are an indicator of Australia's economic performance.

7.2.1 Economic growth = increased volume of goods and services

Every day you use goods and services. Think of the things you use on a daily basis: bread for breakfast, a bus or train service to get to school, pens and paper to complete homework and electricity for charging your laptop or smart device. And you will need all of these goods and services again tomorrow.

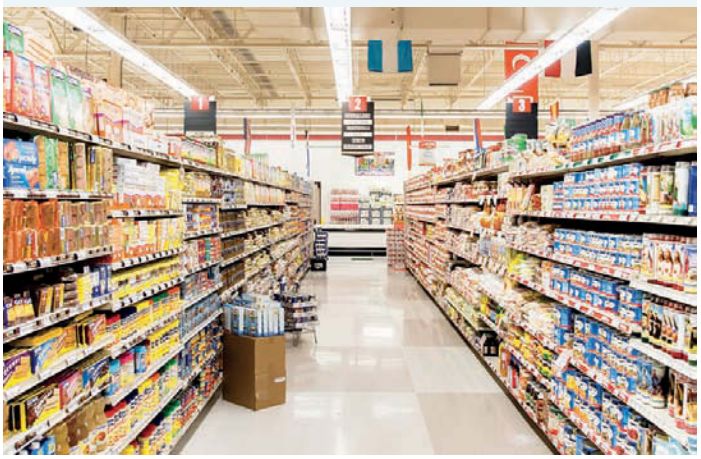
The need for an economy to produce goods and services to replace the ones that have been used or **consumed** is one of the main reasons why economies must grow each year. Other reasons why economies must grow include population growth — which requires additional goods and services — and the desire to continually improve the quality of products. Imagine if producers never improved telecommunication: mobile phones and the internet would not have been invented. **Economic growth** is defined as real growth in the volume (value) of goods and services produced by an economy over a period of time.

Measuring economic growth is important as it is linked to many other aspects of the economy and to its ability to satisfy the needs and wants of consumers.

FIGURE 1 Economic growth leads to employment and infrastructure growth.



FIGURE 2 Consumer goods must be continually produced to replace the ones that have been consumed.



7.2.2 Measuring economic growth

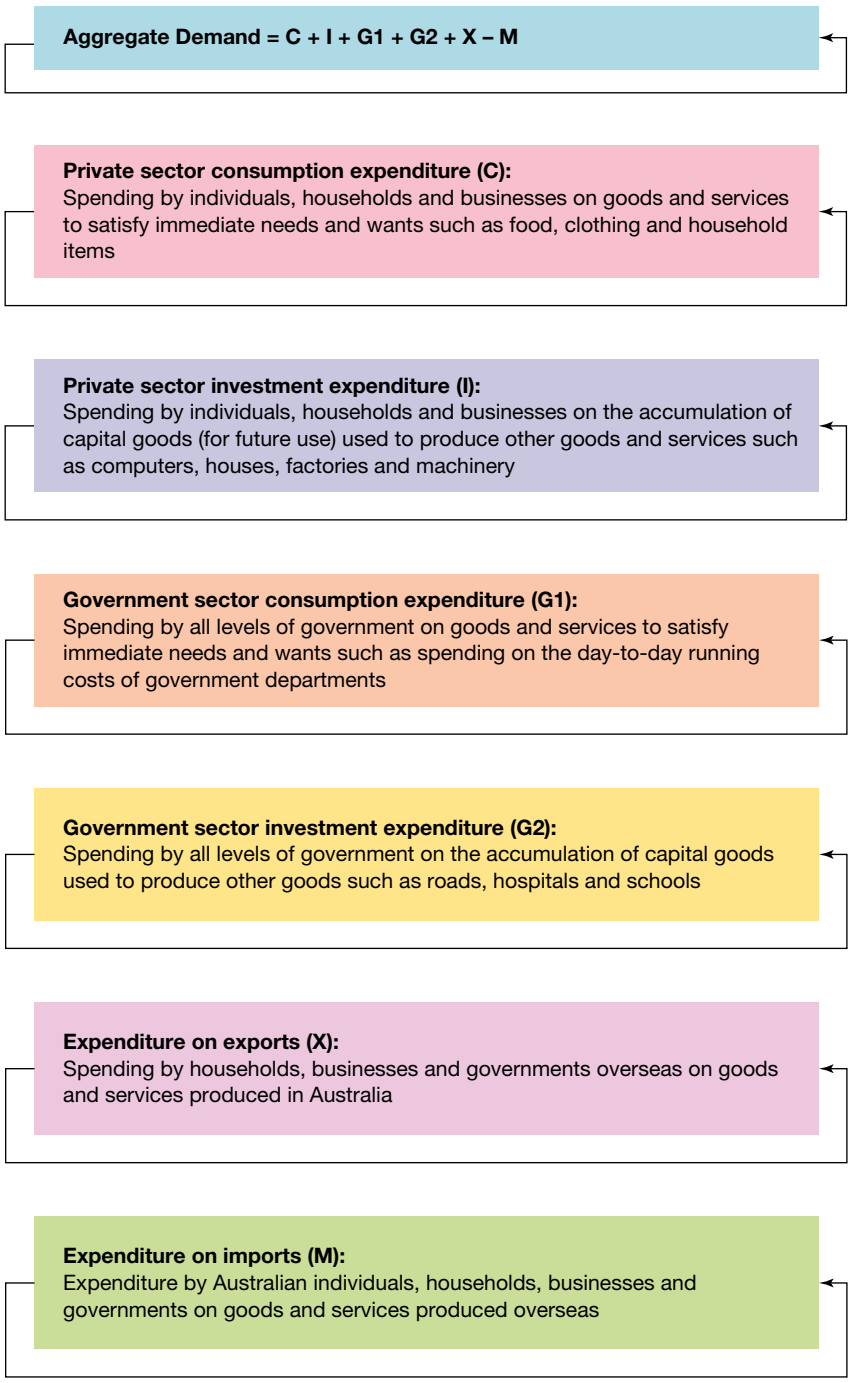
Economic growth occurs when an economy increases the volume of goods and services produced over a period of time. The most commonly used general measure of this is the annual rate of growth in real gross domestic product (GDP). GDP represents the total market value of final goods and services produced by a country over a period of time. This figure is adjusted to remove the effects of any inflation existing within the economy over the same period.

The most common means of measuring GDP is by using the Aggregate Demand (or Aggregate Expenditure) method shown in **FIGURE 3**.

consume to purchase goods and services for direct use or ownership

economic growth a measurement of the increase in a country's gross domestic product (GDP)

FIGURE 3 Aggregate Demand method of measuring GDP



It is generally considered acceptable for the rate of increase in GDP to be between 3 per cent and 4 per cent per year. This rate allows for an increase in population, the replacement of goods and services that have been consumed, improvements and new products.

Anything less than 3 per cent is considered slow growth and suggests the economy is not keeping up with the demand for goods and services. A figure above 4 per cent is often considered to be too high; in other words, the economy is growing too quickly and the rate of growth will not be **sustainable**.

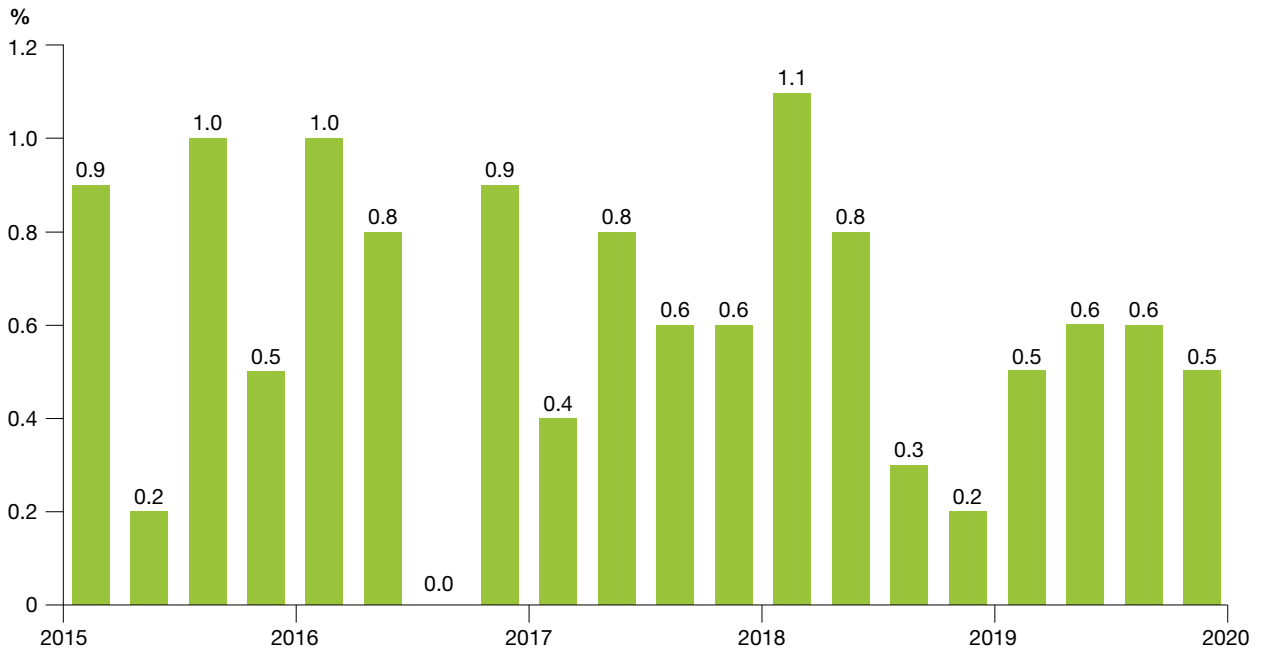
A sustained rate of growth means the economy is able to maintain that level over a significant period. Sustainable growth also means our environment can cope with the level of growth and we are preserving resources for the future.

sustainable able to last or continue for a long time

7.2.3 Australia's recent performance

FIGURE 4 charts Australia's rate of economic growth, as measured by changes in real GDP (GDP adjusted for the effect of inflation), from January 2015 to the end of the December quarter in 2019.

FIGURE 4 Australia's GDP quarterly growth rate, January 2015–December 2019

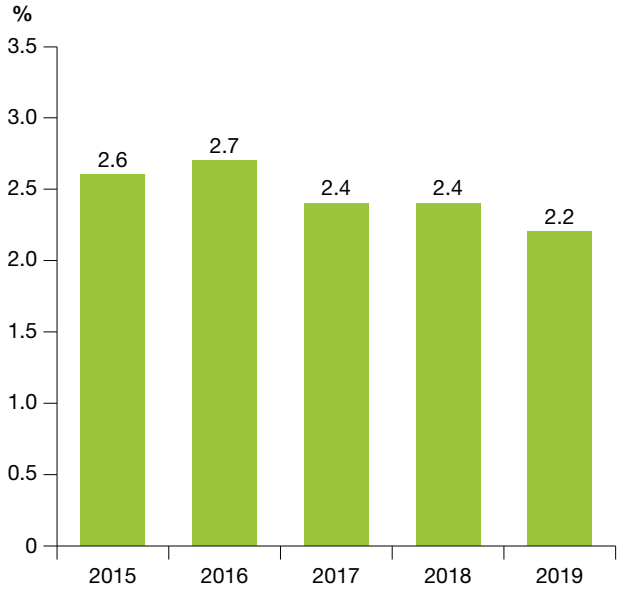


Changes to Australia's GDP growth rate are published **quarterly** so the annual rate of GDP growth must be drawn from the quarterly figures provided. For example, the annual growth rate of 2.2 per cent for 2019 shown in **FIGURE 5** is calculated by summing the rate for each quarter of 2019 shown in **FIGURE 4** (0.5 + 0.6 + 0.6 + 0.5).

FIGURE 5 shows that each year from 2015 to 2019 Australia's growth rate fluctuated but remained below the rate of 4 per cent (the figure identified as too high). The goal of achieving a rate of growth of between 3 per cent and 4 per cent, however, was not reached.

The Australian economy advanced 0.5 per cent (seasonally adjusted) in the October–December 2019 quarter, slowing slightly from the 0.6 per cent expansion (growth) in the previous quarter. This was the smallest quarterly increase since the July–September quarter in 2016, when a zero increase was recorded. Growth in the last half of 2019 was slow due to lower housing prices and consumer spending slowing.

FIGURE 5 Australia's annual GDP growth rate, 2015–19



quarterly every three months

7.2.4 International comparison

It is useful to compare Australia's economic performance with that of other countries. The United States is often considered to be the world's biggest economy and Australia's performance is regularly compared to its performance.

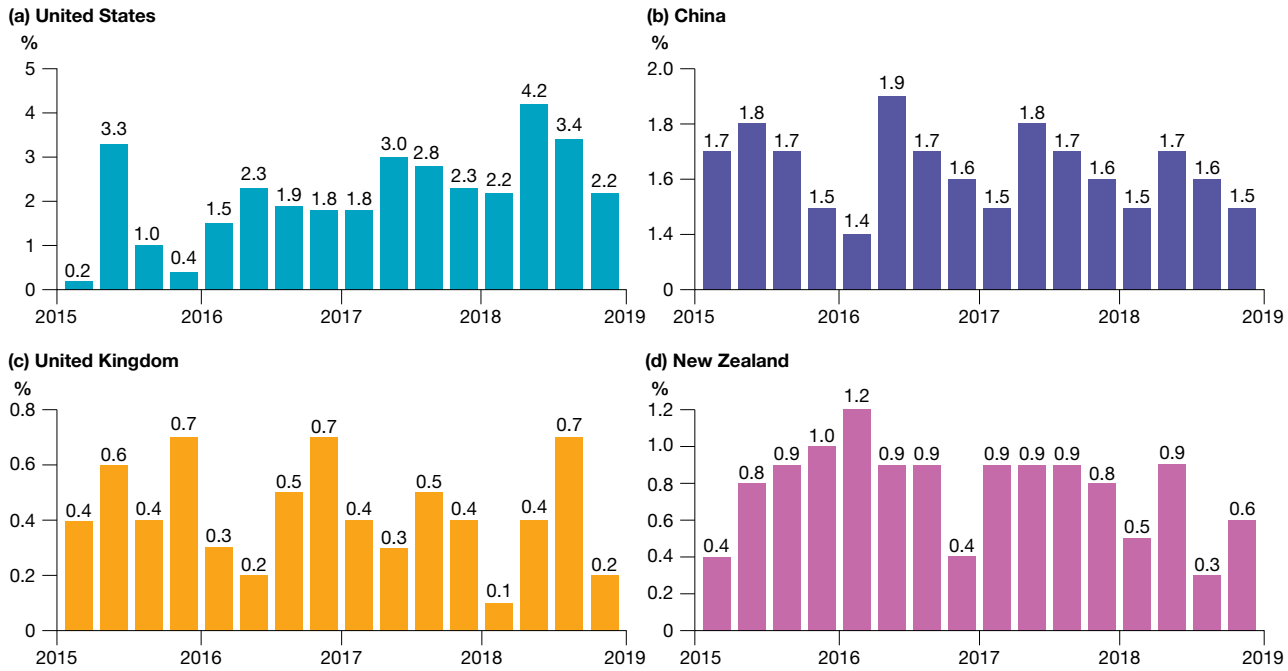
China is an important trading partner for Australia and changes in its growth can lead to a change in our growth. China buys large quantities of our mineral exports, so a decline in China's growth will have a negative impact on our mining sector and hence our growth.

Australia has historic ties to the United Kingdom. It is still one of our major trading partners and its economy is one of the main ones in Europe.

New Zealand is our closest neighbour and trading partner. The ties between the two countries are strong and New Zealand's economy often mirrors changes in our economy.

The graphs in **FIGURE 6** show the growth rates of those four economies. For the most current growth rates for each of these four countries see the **International growth rates** weblink in the Resources tab.

FIGURE 6 Growth rates of other economies, January 2015–December 2018: (a) the United States, (b) China, (c) the United Kingdom and (d) New Zealand



Note: The figures for the United States are not quarterly but rather are annual growth rates to the end of that quarter. The annual rate can be approximated by averaging the growth rates of the four quarters of the year; that is, for 2018 the United States economy grew by approximately 3 per cent. The vertical scale is different for each graph.

7.2.5 Limitations of measuring economic growth

While tracking changes in our GDP is the main means of measuring our economic growth, there are limitations to this form of measurement. Some of these limitations include:

- GDP doesn't include non-market production.
- GDP doesn't provide information about the distribution of production.
- GDP doesn't consider the impact of production on the environment.
- GDP involves some 'guesstimates' of production.

Let's look at each of these limitations.

GDP doesn't include non-market production

If someone carries out jobs around their own home that could be done by a paid worker they are contributing to economic growth, but this contribution is not included because it can't be measured. For example, when someone paints their own home, the Australian Bureau of Statistics (ABS) can't put a value on the work done, so this is not included in the official GDP figures.

GDP doesn't provide information about the distribution of production

GDP only measures changes in the quantity of goods and services produced, but there is no information about who receives this increased number of goods and services. If the increased production is not shared equally among the citizens of the economy, it can be argued that the economy hasn't really 'grown'.

GDP doesn't consider the impact of production on the environment

Increased production can mean increased pollution, quicker deterioration of the environment, depletion of non-renewable resources and increased climate change. These effects are referred to as **negative externalities** as they are considered negative outcomes of production. These externalities will all negatively affect our national wealth in the future.

GDP involves some 'guesstimates' of production

The value of some non-marketed (not sold) production making up GDP has to be 'guesstimated', leading to inaccuracies. For example, estimations are made for the part of a farmer's production that is consumed on the farm, as is the annual value of accommodation provided by houses occupied by their owners. This leads to inaccuracies in Australia's GDP figures.

negative externality a production outcome that was not intended and that negatively affects our economy and/or society

Resources

Weblinks Australia GDP growth rate
International growth rates

7.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 5, 6	Questions 7, 8, 9, 10	Questions 4, 11, 12, 13

Check your understanding

1. Define 'economic growth'.
2. Identify the formula used to calculate economic growth.
3. Explain what is meant by 'GDP'.
4. Explain why it is important for an economy to grow each year.
5. Identify the ideal range for Australia's annual growth rate.

Apply your understanding

6. Explain why it is important for an economy to measure its performance in terms of economic growth.
7. Analyse why it is important for Australia to compare its performance in terms of economic growth with other countries.

8. Identify Australia's current economic growth rate and describe what this means for the economy.
9. Analyse two limitations of using GDP as a measure of a country's economic growth.
10. Analyse one benefit and one disadvantage of achieving economic growth.
11. Explain why it is important for economic growth to be sustainable.
12. Analyse what may occur if the economic growth is too high or too low.
13. Explain how a rising economic growth rate may affect living standards in Australia.

For sample responses for every question, go to www.jacplus.com.au.

7.3 Employment trends and Australia's economy

LEARNING INTENTION

By the end of this subtopic you will be able to identify how unemployment trends are an indicator of Australia's economic performance.

7.3.1 The importance of reducing unemployment

As a student you are constantly asked to think about your future and what you want to do when you finish school. While this may not necessarily be your immediate goal, eventually you will hope to gain employment. Employment enables us to earn an **income** so we can purchase the goods and services we need and want. In the workplace we can form relationships, and often our friendship groups later in life include our work colleagues. Employment also enables us to feel good about ourselves as we are contributing to society, being productive and interacting with others.

FIGURE 1 Unemployed people have to rely on the government and welfare for their income.



However, not everyone is always able to find employment, and sometimes circumstances arise that lead to a person losing their job. Unemployment is a situation where people who are willing and able to work are unable to find employment. The government recognises that there will always be some level of unemployment, but tries to reduce it. Its goal is to maintain the rate of unemployment at about 5 per cent of the workforce, or at a level where cyclical unemployment is avoided. We will talk about cyclical unemployment later in this topic; it refers to unemployment caused by cyclical or regular decreases in the level of economic activity.

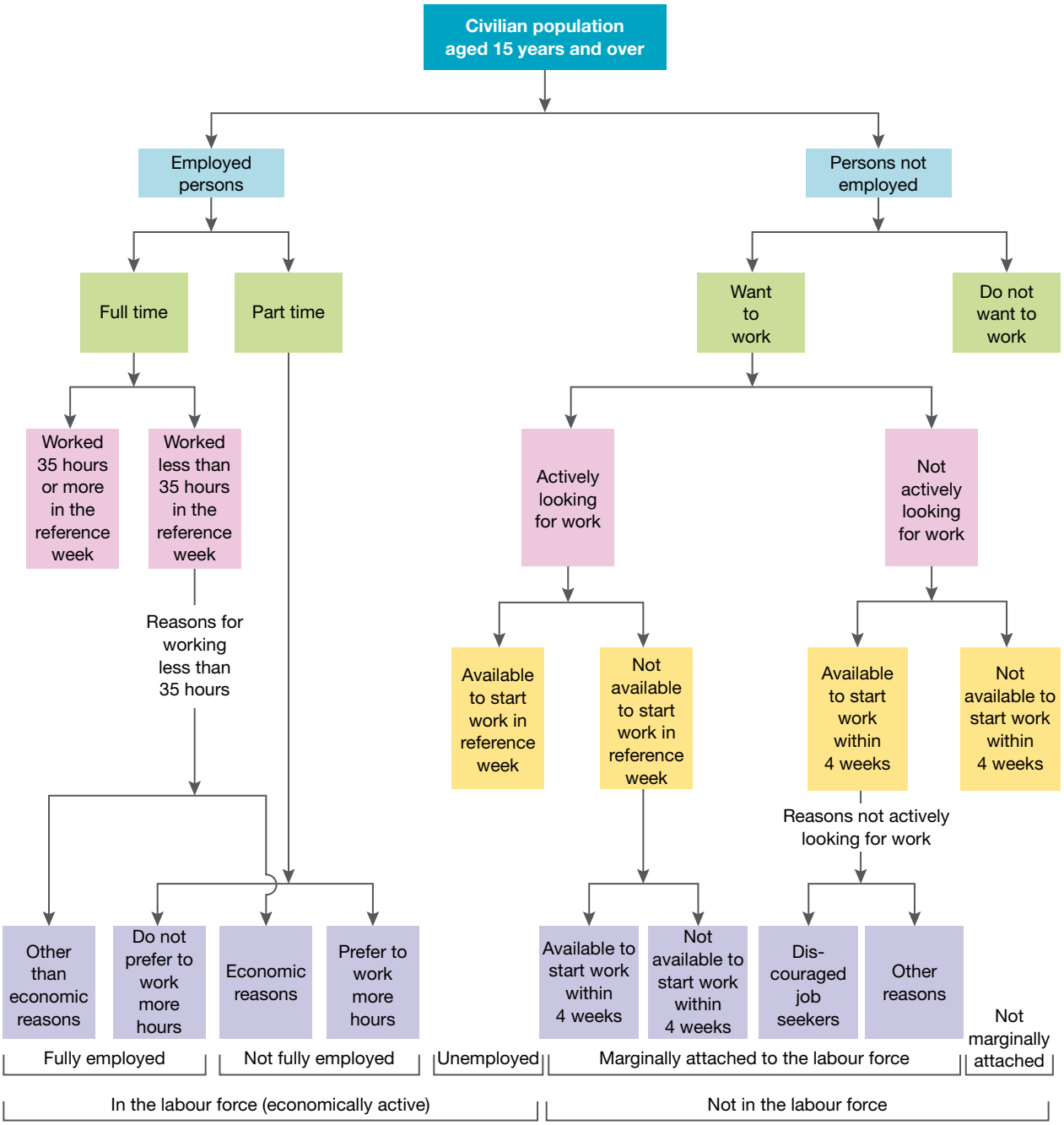
Let's first look at how unemployment is measured and what the causes of unemployment are.

income the reward earned from supplying productive resources. Providing labour earns income in the form of wages or salaries.

7.3.2 Measuring unemployment

In Australia, the unemployment rate is measured using the Labour Force Survey. The Labour Force Survey is conducted monthly and involves about 32 per cent of the civilian population aged 15 years and over. This survey sample is selected from around the country. As shown in **FIGURE 2**, people in the labour force are classified and measured according to their labour force status.

FIGURE 2 The structure of Australia's Labour Force Survey

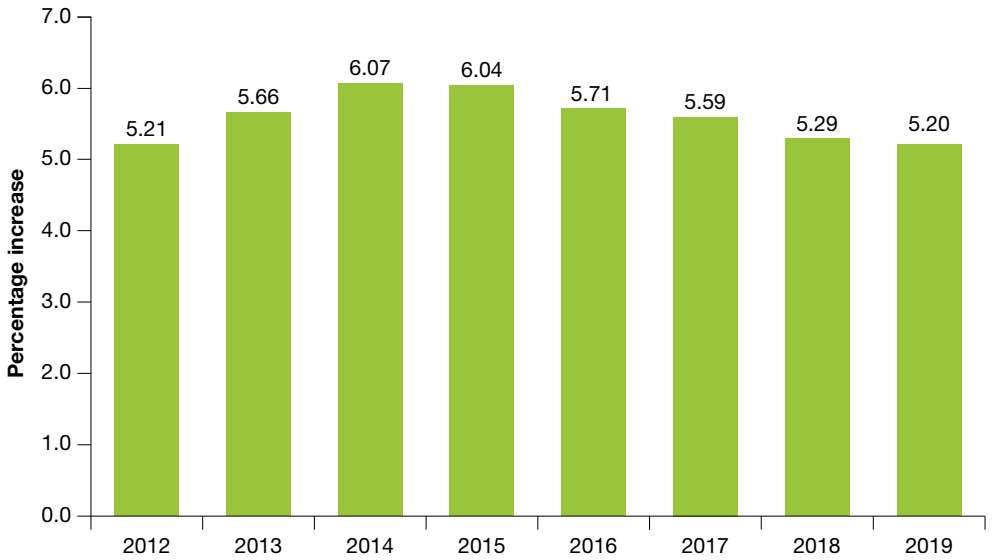


The ABS defines the labour force as people who are older than 15 years and who are able and willing to work. This definition includes people who are classified as employed, that is, they work full time (usually more than 35 hours per week) or part time (more than one hour per week), work for payment or profit, are self-employed, work in a family business, or have a job but are prevented from working due to illness, strikes, holidays or other similar situations in the survey week.

The definition also includes people who are unemployed — that is, those who do not have a paid job but who are actively looking for work by completing job applications and/or registering with Centrelink as a job seeker, either on a full-time or part-time basis, in the week prior to the survey. It also includes those who were able and willing to start employment in the week prior to the survey week or are waiting to resume a job after being laid off or stood down without pay. This group of people is expressed as a percentage of the total labour force, and this percentage is called the unemployment rate.

We can see in **FIGURE 3** that from 2012 to 2019, unemployment has remained above 5 per cent, peaking at just over 6 per cent in 2014 and 2015, with an overall downward trend since that point.

FIGURE 3 Australia's unemployment rates, 2012–19



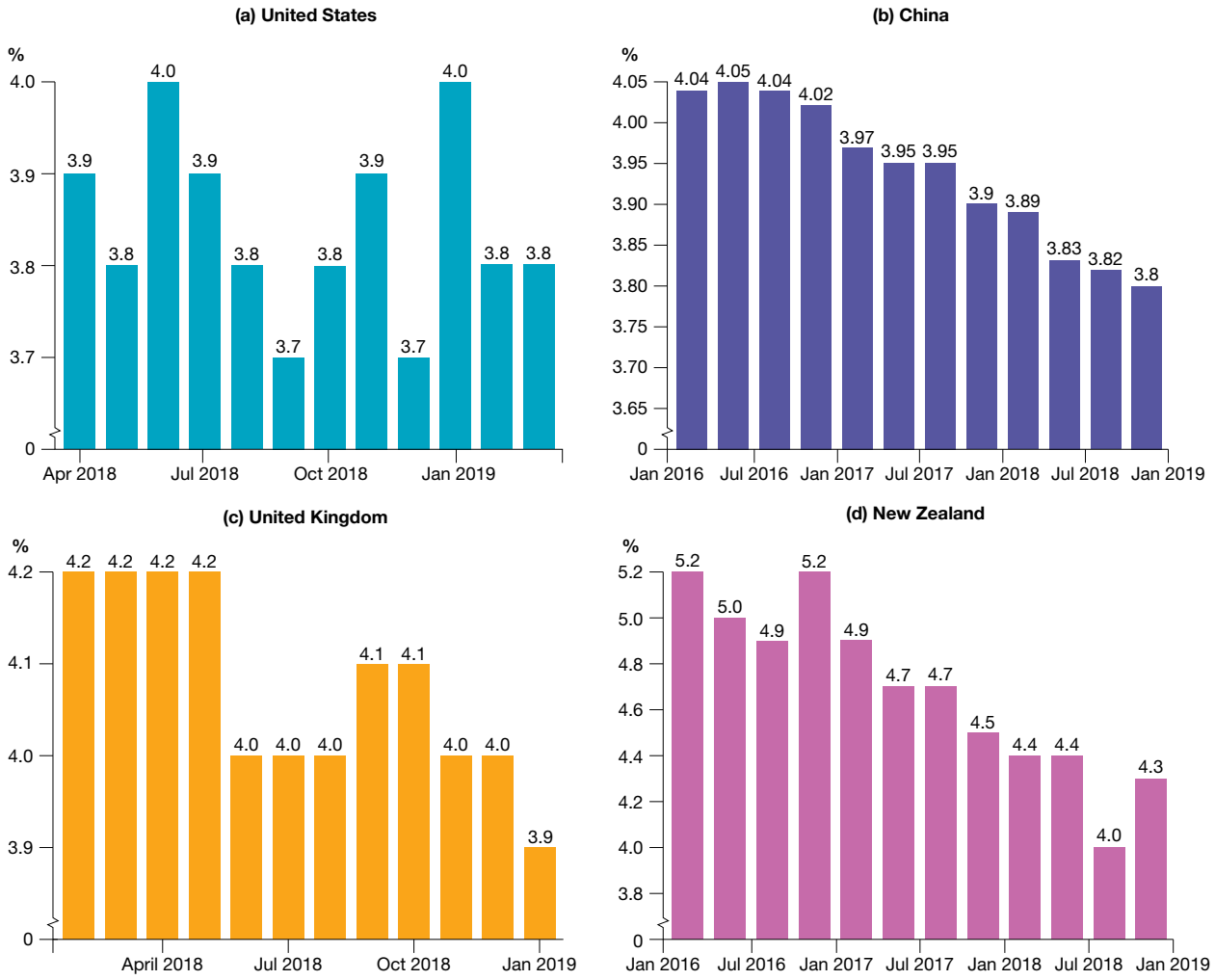
on Resources

Video eLesson Job numbers (eles-2435)

7.3.3 International comparison

As with economic growth, it is worthwhile comparing Australia's employment performance with that of some of Australia's trading partners. The graphs in **FIGURE 4** show the recent unemployment rates of the United States, China, the United Kingdom and New Zealand.

FIGURE 4 Unemployment rate of other economies 2018–19: (a) United States, (b) China, (c) United Kingdom and (d) New Zealand



7.3.4 Causes of unemployment

When examining our unemployment rate it is important to understand the causes of unemployment and the various types of unemployment that exist. It is possible to identify four key types of unemployment:

- cyclical unemployment
- structural unemployment
- seasonal unemployment
- frictional unemployment.

Cyclical unemployment

Cyclical unemployment occurs when the level of spending in the economy falls. When consumers or businesses feel pessimistic about the economy they tend to save rather than spend. This leads to reduced spending, reduced production and hence a reduced need for labour. If the pessimism persists, the economy can move into a period of negative growth. Two consecutive quarters of negative growth is referred to as a **recession** and this can cause further negativity about the state of the economy.

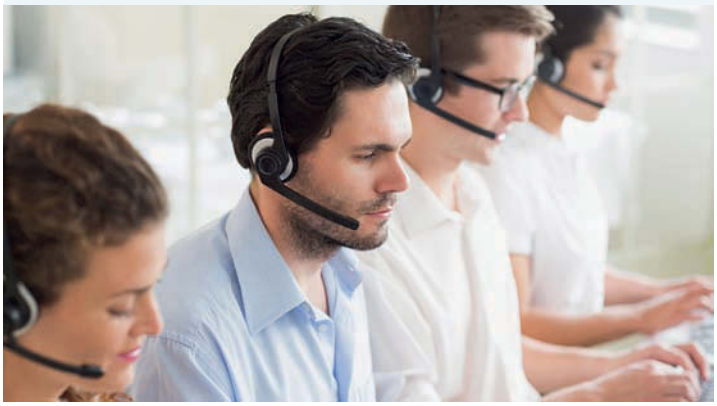
Cyclical unemployment can also occur because of a reduction in consumer incomes, higher interest rates leading to less money available for spending, poor economic conditions overseas among our trading partners, and a decrease in government spending to reduce budget deficits and debt.

recession a technical term referring to two consecutive quarters of negative growth in an economy

Structural unemployment

Structural unemployment occurs as a result of changes in the way goods and services are produced. Generally, this takes place when production methods change, leading to a mismatch of skills; that is, the skills currently in use are outdated and are not transferrable to the new production methods. This causes job losses, often due to changes in technology. Another cause of structural unemployment is outsourcing. This is when one section or department of a business is closed and its work is done overseas.

FIGURE 5 Structural unemployment can be caused by the outsourcing of jobs such as call-centre operators.



Seasonal unemployment

Seasonal unemployment results from the termination of jobs at the same time each year due to the regular change in seasons. Common examples of these types of jobs include fruit-picking, tourism, working for holiday operators, sheep shearing and working in the ski fields.

Frictional unemployment

Frictional unemployment occurs when people are unemployed between finishing one job and starting another. This is common in the building trades and in some areas of rural industry.

FIGURE 6 Fruit picking is one example of a seasonal job.



7.3.5 Effects of unemployment

Unemployment has a number of negative effects on the economy, society and individuals. Let's look at three of these effects:

- deteriorating living standards
- decreased national production
- changed government budget position.

Deteriorating living standards

Unemployment affects both **material** and **non-material living standards**. When an individual becomes unemployed, their standard of living is likely to deteriorate considerably because the average wage of $1659 per week (as at November 2019) is replaced by an average unemployment benefit of $277 per week (as at April 2020). This results in less spending on goods and services, and reduced savings as individuals re-adjust their spending patterns.

A reduced income can place stress on families and relationships as it often means cutting back spending on such things as children's activities or family social outings. Unemployed people often develop a feeling of personal failure associated with the loss of status and friends. Knockbacks from unsuccessful job applications reinforce this feeling and individuals may lose their skills and possibly their work ethic if they are out of work for long periods.

Decreased national production

When some of a nation's resources are not used or are lying idle, the economy does not produce at its optimum or productive capacity. Fewer goods and services are available and national output, or GDP, is lower than its potential level, causing lower material living standards.

Changed government budget position

Unemployment negatively affects government revenue and government payments. On the one hand, unemployment lowers the number of income earners, thereby reducing government tax revenues. At the same time, unemployment also raises government spending on welfare benefits, leaving fewer resources for other areas of need, such as health, education and infrastructure.

material living standards refers to the number of goods and services we can afford to buy

non-material living standards value-based elements of human wellbeing that are not connected to material possessions

on Resources

Weblinks Australia's unemployment rate
Australia's youth unemployment rate

DISCUSS

Unemployment benefits are paid to job seekers to provide a minimum adequate standard of living to people who are temporarily out of the workforce. As of March 2020, the Newstart Allowance for a single person aged 22 or over with no children was a maximum of $555.70 per fortnight. During the COVID-19 crisis, this was changed temporarily to a Job Seeker allowance of $1115.70, which included a $550 coronavirus supplement. Do you think it was right to increase the payment? Do you think there should be a permanent increase to the Newstart Allowance, to match the COVID-19 Job Seeker amount, or should it be a higher or lower figure?

General capability: Ethical understanding

7.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 5	Questions 4, 6, 7	Questions 8, 9, 10

Check your understanding

1. Define the term 'labour force'.
2. Outline the groups that make up the labour force.
3. Define the term 'unemployment'.
4. Describe seasonal unemployment. Use an example to illustrate your answer.
5. Explain what is meant by 'structural unemployment'.

Apply your understanding

6. Explain how the trend in Australia's unemployment rate may have affected the Australian economy over the last four years.
7. Explain how unemployment may affect an individual.
8. Analyse the effect of rising unemployment on material living standards.
9. Analyse the effect of rising unemployment on non-material living standards.
10. To what extent do you believe new technologies, such as self-scanning in shops, that cause structural unemployment are beneficial to our living standards?

For sample responses for every question, go to www.jacplus.com.au.

7.4 Inflation rates and Australia's economy

LEARNING INTENTION

By the end of this subtopic you will be able to identify how inflation rates are an indicator of Australia's economic performance.

7.4.1 Getting value for our money

As consumers, we are constantly looking for value for money — that is, for good-quality goods and services at reasonable prices. When the price of a good or service increases, we are naturally concerned because this represents a decrease in the value we are getting for our money for that particular good or service.

When the price of a good or service increases, we think of this as inflation. However, inflation is more than just the price of a good or service increasing. **Inflation** occurs when there is an increase in the general level of prices across the economy.

7.4.2 Measuring inflation

Inflation in Australia is traditionally measured by calculating the Consumer Price Index (CPI). This index is calculated every quarter by the ABS. The CPI measures the average change in retail price of a basket of local and imported

inflation a general rise in the prices of goods and services within an economy

goods and services that represent a high proportion of expenditure by metropolitan households.

This basket of goods and services is referred to as the **regimen** and it includes only those items considered important to Australian households. The regimen comprises more than 80 000 items, which can be grouped into the following 11 categories:

- food
- clothing and footwear
- housing
- household contents and services
- transportation
- recreation
- financial and insurance services
- communication
- alcohol and tobacco
- health
- education.

FIGURE 1 Inflation causes the value of money to fall.



FIGURE 2 The ABS regularly conducts a survey of prices to calculate inflation.



Once the items are selected, they are weighted. Next, the relative importance of each item to the overall household budget is determined and a weighting is applied. Weighting is based on the frequency of purchase and the relative cost of the item.

With the regimen and categories determined, prices for the goods and services included are surveyed at a range of representative retail outlets such as supermarkets, fast-food shops, chemists, department stores and service providers. Prices are only surveyed at these outlets in the eight capital cities of Australia. These prices are then compared to the prices of the same items in what is termed a 'base year' to determine the change in price. For more information see the **RBA inflation** weblink in the Resources tab.

7.4.3 Causes of inflation

There are generally considered to be two main types of inflation:

- *demand-side factors.* These factors cause an increase in demand that exceeds the current level of goods and services.
- *supply-side factors.* These factors lead to an increase in the cost of producing goods and services.

Demand-side factors

Demand-side factors are those factors that influence the level of spending or demand in the economy. If there is too much demand chasing too few Australian-made goods and services, the economy is operating ahead of productive capacity. This can lead to shortages of goods and services because businesses cannot produce more goods and

regimen a basket of goods and services whose prices are surveyed to calculate inflation

services or access the resources needed to produce additional goods and services. As a result, the general price level will rise. This is called **demand inflation** and it generally occurs when the economy is going through a period of strong growth and employment. A good way to think of this is as buyers at an auction who compete for only one property: the highest bidder will win the auction.

This excessive demand can result from a variety of factors, including:

- *an increase in consumer optimism about the future.* Consumers are encouraged to spend more money because they don't see a need to save for 'a rainy day'.
- *an increase in business confidence.* This can lead businesses to spend and invest in new assets, hire more employees or replace old equipment.
- *an increase in income.* If consumers have a higher income — either through wage increases determined by the government or through a reduction in income tax imposed by the government — they are likely to increase their spending on goods and services.
- *an increase in our exports.* If the economies of our major trading partners are performing well and they are experiencing good economic growth, they may increase their demand for our goods and services.

Demand inflation occurs periodically in our economy, as every economy goes through cycles. It is the Australian government's role to manage these cycles and the effect of demand inflation on the economy.

Supply-side factors

The supply of goods and services is the task of suppliers or producers. In producing goods and services for sale, producers and suppliers may experience an increase in their costs. When costs increase, some producers and suppliers may choose to absorb the cost increase themselves and operate with a smaller **mark-up**. However, not all businesses do this, choosing instead to pass on this increased cost to consumers in the form of higher prices. This is known as **cost inflation**.

The most common supply-side causes of cost inflation include:

- *an increase in wages paid to employees.* Wages are often the main cost for a producer and rising wages represent a large cost increase, which is passed on to consumers.
- *an increase in interest rates.* This raises the producer's cost of finance and borrowing. These costs are usually passed on to consumers.
- *an increase in government taxes, oil prices and prices for utilities (such as electricity, gas and water services).* These costs are outside the control of the producer and are also usually passed on to consumers.
- *an increase in the cost of raw materials.* One-off supply-side shocks due to a one-off event can cause this.
- *Australia's trading partners experiencing a period of inflation*. Many component parts are imported so, if our trading partners are experiencing inflation, that inflation may be passed on to Australian producers and suppliers, who then pass the cost on to consumers.

The Australian government has worked hard to minimise the incidence of cost inflation by making significant changes to the way some industries are organised and structured.

Reducing **tariffs** means that imported goods and services have become cheaper and Australian producers have had to cut costs to remain competitive. This has led to lower prices in some industries, such as the motor vehicle industry.

The government has also opened up some industries to increased competition. Industries such as gas and electricity were previously dominated by one provider. By allowing more competition there has been a lowering of prices as these new providers seek to attract customers.

demand inflation price increases that result from an excess of demand over supply for the economy as a whole

mark-up a fixed percentage or dollar figure added to the cost price of goods and services to determine the selling price

cost inflation a sustained increase in the price of goods and services caused by producers passing on increased production costs to consumers

tariffs taxes imposed on imported goods to make them more expensive

7.4.4 Effects of inflation

Inflation is considered to be an unfavourable occurrence for an economy. Inflation makes it difficult for the government to achieve any of its other economic objectives and it can negatively affect the living standards of consumers. This happens because, among other things, inflation:

- *causes local producers to lose out to overseas competitors.* Inflation raises the price of goods and services produced locally. This hurts Australian producers who wish to compete internationally as the prices they sell their products for cannot compete with the lower overseas prices. This inability to compete can cause business closures, resulting in higher rates of structural unemployment.
- *undermines economic growth.* Inflation erodes consumer and business confidence as consumers stop spending and producers stop investing in productive assets when prices are rising. This can reduce the level of spending, negatively affecting the rate of economic growth.
- *changes the allocation of resources.* When inflation occurs, people with excess income often invest in what is referred to as unproductive resources — that is, resources such as shares and property, which generally increase in value at a faster rate than inflation. So, instead of being used to purchase productive resources that generate goods and services, this money goes into resources that only produce an income for those wealthy enough to invest.
- *affects income distribution.* Inflation can reduce the purchasing power of the dollar and have a negative impact on income distribution. People on a fixed wage are not able to increase their income to cope with price increases, so their purchasing power declines.

FIGURE 3 Drought in Australia causes higher production costs and lower level of supplies.



FIGURE 4 In 2009, inflation in Zimbabwe saw its government produce a 100 trillion dollar banknote.

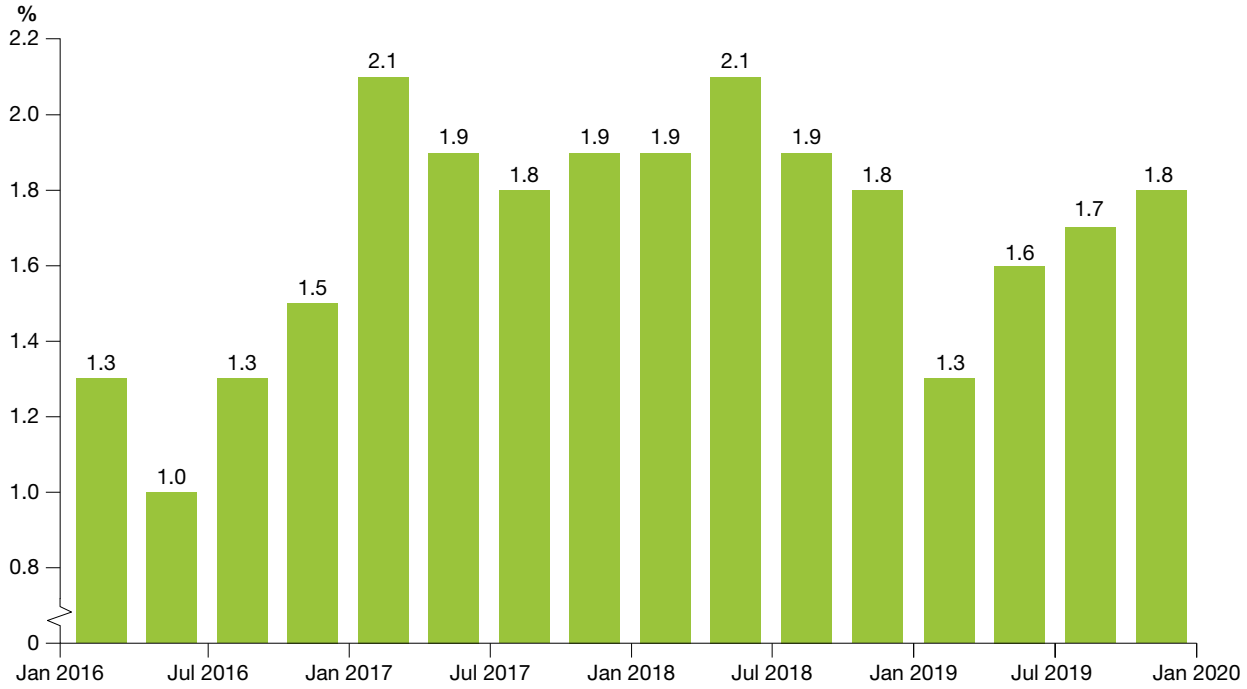


7.4.5 Australia's inflation rate

The Australian government has set a target for inflation of 2 to 3 per cent over the course of a business cycle. One business cycle is a period of five to seven years, during which time it is expected that the economy will go through certain stages such as a peak or boom, an economic downturn, a trough and an expansionary phase.

FIGURE 5 charts Australia's inflation performance from January 2016 to the end of December 2019. It shows that Australia's inflation rate stayed under 3 per cent per annum, which is the upper limit of the target rate for inflation.

FIGURE 5 Australia's inflation performance, January 2016–December 2019



on Resources

Weblink RBA inflation

7.4 ACTIVITY

Research and briefly describe two situations when countries experienced extremely high rates of inflation.

HASS skills: Questioning and researching
Economics and Business concept: Economic performance and living standards

7.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 4, 6	Questions 2, 7, 8	Questions 5, 9, 10

Check your understanding

1. What is meant by 'inflation'?
2. Explain the difference between the two types of inflation.
3. Explain why inflation is bad for the economy.

4. Identify two groups in society that would be negatively affected by high inflation and explain why.
5. Identify one group who may benefit from inflation and explain why this may occur.

Apply your understanding

6. How might rising prices affect material living standards?
7. How might rising prices affect non-material living standards?
8. How is inflation measured?
9. Can you identify any problems with the way inflation is calculated?
10. Prepare a list of all the items you have spent money on over the past week. Classify the items into the categories used by the ABS to calculate the CPI.
    a. Which category is most important to you?
    b. What percentage of your spending belongs to each category?
    c. Explain the item of expenditure that is most important to you. Is your spending reflected in your response?
    d. Assuming your income remained constant, explain how a rise in prices of 5 per cent may affect your spending.

For sample responses for every question, go to www.jacplus.com.au.

7.5 Sustainability indices and Australia's economy

LEARNING INTENTION

By the end of this subtopic you will be able to identify how sustainability indices are an indicator of Australia's economic performance.

7.5.1 Qualitative measures

Many measures of economic performance are quantitative; that is, they measure the dollar value or the percentage value change in an item. For example, unemployment measures the number of people unemployed as a percentage of the labour force. Inflation measures the percentage change in the price of goods and services.

While these measures provide useful information, this is not the only information available or relevant to an economy. There is a range of qualitative measures that can be calculated and examined to measure the performance of our economy. Qualitative measures determine or measure the quality of our life and the economy. We will examine two of these qualitative measures (or indices):

- the Genuine Progress Indicator (GPI)
- the Human Development Index (HDI).

FIGURE 1 Deforestation is an issue for economies that wish to develop in a sustainable manner.



7.5.2 Genuine Progress Indicator (GPI)

The GPI was developed in the late 1980s to measure the overall progress of an economy in achieving improved living standards. In simple terms, it calculates GDP but then makes both negative and positive adjustments to the values to reflect the good or bad effects on society's welfare of some types of activity and spending. Deductions from the figures are made to reflect costs such as:

- environmental damage due to pollution
- depletion of non-renewable energy resources such as coal and petrol
- reduced leisure time due to increased hours of work or travel times
- inequality in the distribution of income
- increased crime rates.

Some items that add to the GDP include:

- ongoing services provided by public infrastructure
- contributions made by the socially productive use of time, such as volunteer work and housework.

7.5.3 Human Development Index (HDI)

The United Nations' HDI is a measure that compares the wellbeing of people in different countries. It reflects and takes into account both positive indicators (such as long life expectancy at birth, educational attainment and average level of income per head per year) and negative ones (such as infant mortality and prevalence of child labour), combining these into a single statistical index number. When a country's index rises, it is a sign that there has been progress and living standards have increased. The main weaknesses of the HDI include the subjective nature of the indicators used to compile the index and the unreliability of the statistical data for some countries.

7.5 ACTIVITIES

1. The most recent data for the HDI is available at the HDR UNDP weblink in the Resources tab. Based on this data:
   a. List the three highest ranking countries.
   b. Does having a high gross national income (GNI) mean a country will be at the top of the HDI, above all other countries? Use data from the table to support your answer.
   c. Find the countries with the lowest HDI ranking. In what geographic region are these countries found? Brainstorm some reasons that might explain why this is the case.

   HASS skills: Questioning and researching
   Economics and Business concept: Economic performance and living standards
2. What things are important to you? Conduct a survey of the class to ascertain the three most important things for each member of the class. Using this information provide an explanation of what we should measure to determine our progress in terms of economic performance.

   HASS skills: Questioning and researching, Analysing, Evaluating

on Resources

Weblink HDR UNDP

7.5 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 4, 5	Questions 2, 6, 7	Questions 3, 8

Check your understanding

1. What is meant by the term 'sustainability'?
2. Explain why sustainability is more than just reducing pollution.
3. Explain how non-material living standards may factor into a measure of sustainability.
4. Describe the Human Development Index .
5. Describe the Genuine Progress Indicator.

Apply your understanding

6. Why is it important to consider sustainability when measuring economic performance?
7. Analyse why alternative measures of performance are needed.
8. Why do you think statistics for material living standards (GDP) are published but data measuring non-material living standards are not? Explain your view.

For sample responses for every question, go to www.jacplus.com.au.

7.6 Other indicators of economic performance and Australia's economy

LEARNING INTENTION

By the end of this subtopic you will be able to identify other indicators of Australia's economic performance, and discuss how economic performance and living standards can mean different things to different people and countries.

As we have already discovered, both **quantitative indicators** (such as unemployment) and **qualitative indicators** (such as the HDI) are useful in providing information about the performance of the economy. By using a combination of quantitative and qualitative indicators, we are able to get a clearer understanding of the state of the economy.

In addition to those already mentioned, there are a range of other indicators that give us information about how the performance of the economy is affecting the quality of people's lives. Three examples that will be examined in this section are:

- Business Confidence Index
- Liveability Ranking
- World Happiness Report.

qualitative indicators subjective measures that cannot easily be calculated or measured; e.g. indices that measure a particular aspect of quality of life or that describe living conditions, such as freedom or security

quantitative indicators objective indices that are easily measured and can be stated numerically, such as annual income or the number of doctors in a country

7.6.1 Business Confidence Index

Imagine you had a casual job and the hours that you worked changed significantly each week. One week you may work 18 hours and the next week you may only work four hours. This uncertainty about your working hours may affect your confidence as

a consumer. You may decide to save your money rather than spend it, just in case you don't work many hours in the next week.

FIGURE 1 When business confidence in the economy is high, more employees are hired.

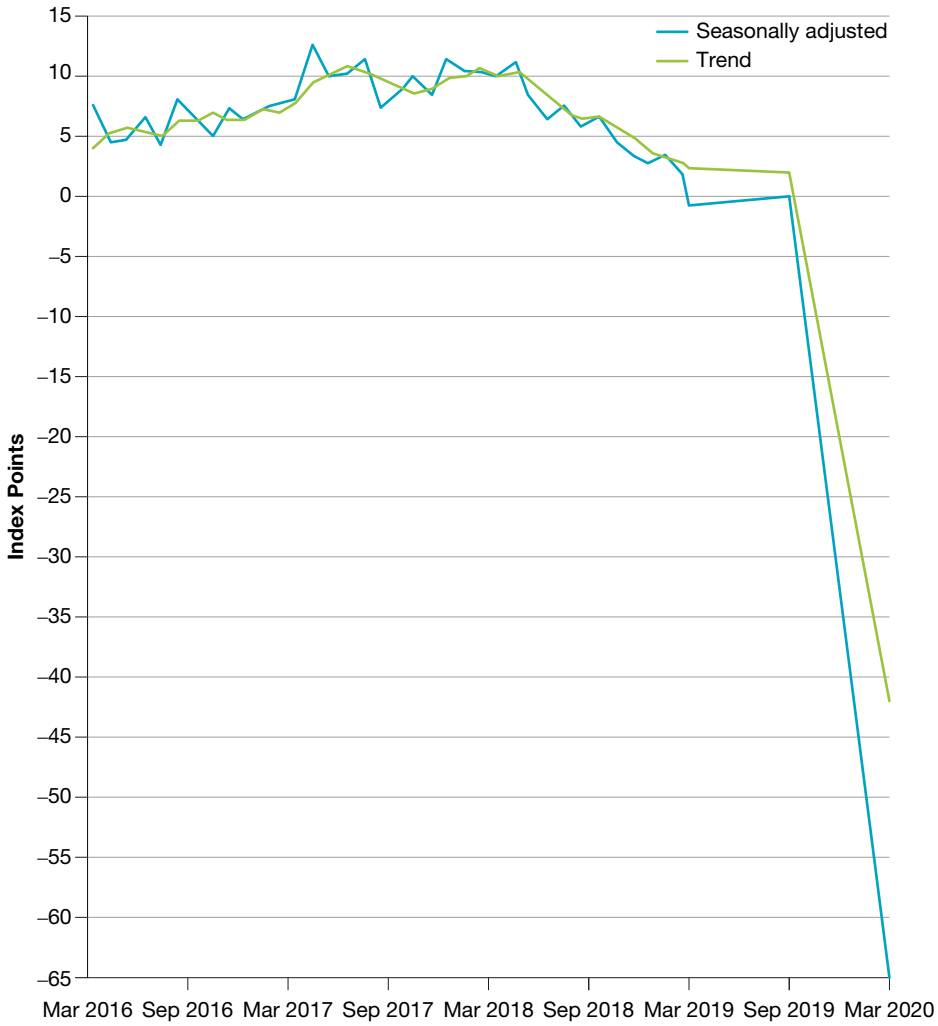


Businesses are no different. Their decisions are based on their confidence in the performance of the economy. When businesses are confident that the economy is performing well, they are more likely to borrow money to invest and expand, increase their levels of production and hire more staff. Of course, when business confidence is down, the reverse occurs.

The National Australia Bank (NAB) has developed a well-respected and commonly used indicator to measure business confidence. The NAB conducts a monthly business survey of more than 500 businesses to gauge how confident they are about the economy. In particular, data is gathered on the expectations of businesses in relation to matters such as their projected trading levels, profitability and employment. This data is then used to create an index that represents the level of business confidence in the economy.

As **FIGURE 2** shows, the level of business confidence can change significantly over time. Business confidence is influenced by both domestic and global events. Examples of domestic factors that may affect business confidence include a change of government, new laws or changes to the level of interest rates.

FIGURE 2 The NAB Business Confidence Index for March 2016–March 2020



Source: NAB Monthly Business Survey, March 2020.

Business confidence in one industry sector (such as mining) may be very different to that of other industry sectors. As such, the Business Confidence Index provides data about different industries. For example, the April 2020 NAB Business Survey indicated that business confidence was negative in all industry sectors due to the negative economic affect of the COVID-19 pandemic.

7.6.2 Liveability Ranking

While economic indicators are very important, it is also necessary to consider if the benefits of a strong economy are improving our quality of life. A number of indicators such as the Liveability Ranking have been developed to try to measure this. The Liveability Ranking considers a wide range of factors (outlined in **FIGURE 3**) to determine which cities are the most desirable to live in.

The 2019 *Liveability Ranking Report* surveyed 140 cities using the criteria set out in **FIGURE 3**. Overall, the report identified a range of factors that had contributed to changing 'liveability' in cities throughout the world. In particular, economic crisis, civil unrest, acts of terror and violence have reduced stability throughout the world and caused many cities to become less 'liveable'. Cities such as Damascus (Syria), Lagos (Nigeria) and Tripoli (Libya) are all considered less liveable, owing to such factors.

FIGURE 3 The major categories used to determine the Liveability Ranking (and the weighting of each)

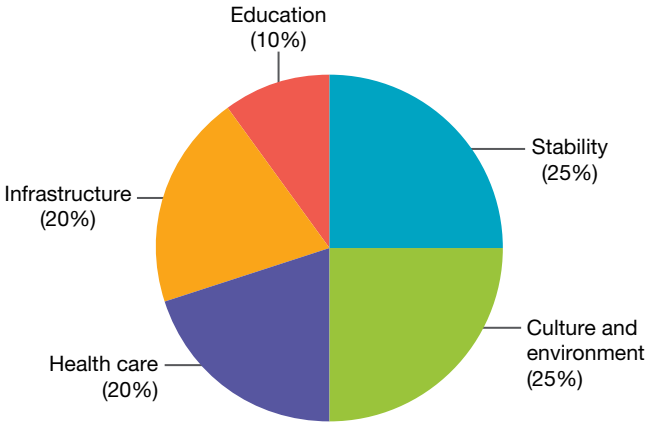


FIGURE 4 In recent times, Australia's major cities have always ranked well in liveability rankings. Perth is currently ranked 14th. Melbourne topped the list of the world's most liveable cities for seven years in a row from 2011 to 2017. In 2018 and again in 2019, Vienna, Austria took the top spot, with Melbourne in second place.





7.6.3 The World Happiness Report

What use is a strong and productive economy if people are not happy? If an economy is strong because people spend the majority of their lives working, with little time to enjoy themselves or see their family and friends, is it really of any benefit? The main aim of having a strong national economy is to ensure that people can benefit from it and enjoy a higher standard of living.

The World Happiness Report is a survey that was first conducted in 2012. It collects data on more than 150 countries and ranks them based on the level of happiness of their citizens. Increasingly, governments are interested in 'happiness' data because it not only tells them about the performance of the economy, but also the benefits that people derive from the performance of the economy.

Some of the major areas used to calculate the ranking in the World Happiness Report are:

- gross domestic product (GDP) per capita
- social support
- healthy life expectancy
- freedom of life choices
- generosity
- perceptions of corruption.

FIGURE 5 The main aim of having a strong economy is to ensure that people can benefit from it and enjoy a higher standard of living.



TABLE 1 The top ten and bottom ten countries according to the World Happiness Report, 2020

Top ten countries		Bottom ten countries	
Rank	**Country**	**Rank**	**Country**
1	Finland	153	Afghanistan
2	Denmark	152	South Sudan
3	Switzerland	151	Zimbabwe
4	Iceland	150	Rwanda
5	Norway	149	Central African Republic
6	Netherlands	148	Tanzania
7	Sweden	147	Botswana
8	New Zealand	146	Yemen
9	Austria	145	Malawi
10	Luxembourg	144	India

DISCUSS

Happiness is usually reported as the primary goal in individuals' lives; however, many people believe there is much more to a rewarding life than just seeking happiness. What else do you think people should pursue in life? Discuss in groups or as a class.

General capability: Personal and social capability

7.6 ACTIVITY

Choose *one* country that is not listed in the top ten or bottom ten of the 2020 World Happiness Report.

a. For your chosen country, undertake research in relation to its possible happiness levels.

b. Use your research to predict where your chosen country would be ranked on the latest World Happiness Report. Check to see how close your estimated ranking was with the actual ranking for your country on the report.

HASS skills: Questioning and researching, Evaluating

Economic and Business concept: Economic performance and living standards

on Resources

Weblink World Happiness Report

7.6 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 4, 5, 6	Questions 4, 7, 8	Questions 2, 9, 10

Check your understanding

1. Define 'business confidence'.
2. Identify one international and one domestic factor that may influence business confidence.
3. Define 'liveability'.
4. What are the five major categories used to determine the liveability ranking?
5. According to the 2019 World Happiness Report, what are the:
   a. three happiest countries
   b. three least happy countries?

Apply your understanding

6. Explain why business confidence may vary between industry sectors.
7. Explain how the level of business confidence can have an impact on economic growth and employment.
8. Explain why the World Happiness Report is a useful indicator for governments.
9. Imagine the Australian government has asked you to design a new index or indicator that provides information about the economy and standard of living in Australia. What would you call your index/indicator and how would it be calculated?
10. Media reports throughout 2019 referred to the 'housing affordability crisis' in Australia. Explain what you think is meant by this term and explain why this is a key indicator for non-material living standards, liveability and happiness.

For sample responses for every question, go to www.jacplus.com.au.

7.7 SkillBuilder — Calculating inflation

LEARNING INTENTION

This SkillBuilder shows you how to calculate inflation. Calculating inflation is part of the Questioning and researching HASS skill.

7.7.1 Tell me

Calculating the inflation rate for Australia involves collecting data about changes in the prices of goods and services. This information is not readily available and requires time to collect and the ability to conduct surveys at regular intervals. However, on a smaller scale, we can gain an idea of inflation rates through monitoring the changes in price of particular everyday items.

FIGURE 1 Monitoring the prices of everyday items can give us an indication of inflation rates.



7.7.2 Show me

Monitoring and recording the changes in price of a single product can give us an indication of what is occurring in the economy. For example, you could monitor the changes in the price of petrol or some other frequently used commodity.

Calculating changes in the price of petrol over a period of time can give an insight into how inflation is calculated and the effect the change in price may have on other areas of the economy.

7.7.3 Let me do it

Complete the following activity to practise this skill.

on Resources

Weblink RBA inflation calculator

7.7 ACTIVITIES

1. To gain an idea of inflation rates, carry out the following task.
   Identify a two-week period and a location you pass regularly where the price of petrol can be observed on a daily basis. (If there is more than one location available, select one and use that same location each day.)
   Each day for the two-week period record the price at your chosen service station of:
   - unleaded petrol
   - premium petrol
   - diesel
   - LP gas.

   Record the date and time you visit the location and then record the price advertised for each of the four products listed above.

   (***Note:*** When recording the price per litre ensure the price is the 'actual' price and not the price available to customers using discount offers or supermarket dockets.)

   Once you have collected this information, calculate the percentage change in price for each product each day. Use this calculation formula:

$$\%\ \text{increase on day 2} = \frac{\text{price day 2} - \text{price day 1}}{\text{price day 1}} \times \frac{100}{1}$$

   It should be noted that the changing price of one item does not constitute inflation — inflation is where the overall price level increases. At the end of the survey period, calculate the overall inflation rate for the four products using this formula:

$$\%\ \text{increase over the period} = \frac{\text{price on last day price on day 1}}{\text{price day 1}} \times \frac{100}{1}$$

2. Write a report outlining the inflation rates for the four types of fuel and then explain how the change in price of these may affect individuals, families and other businesses. Comment on the reliability of the data collected. What could be done to make the data more reliable?

7.8 Living standards related to economic performance

LEARNING INTENTION

By the end of this subtopic you will be able to define 'living standards' and explain their relationship to economic performance.

7.8.1 Getting the balance right

Economies measure their economic performance to determine how well the economy is providing for its citizens. Measures such as unemployment rates, inflation rates and the rate of economic growth, however, do not provide information about living standards.

Changes in the performance of an economy as measured by indicators such as inflation and unemployment rates and the rate of economic growth can have an impact on both material and non-material living standards. As such it is important that the government — which is responsible for managing economic performance — takes changes to living standards into consideration when implementing policies and strategies to improve economic performance.

As we will see, this can require a delicate balance in policy implementation as some policies may improve material living standards but may negatively affect non-material living standards, and vice versa.

Let's examine the link between the indicators of economic performance and material and non-material living standards. As mentioned in section 7.3.5, living standards refer to how well off a nation or country is overall. Material living standards relate to the level of economic wellbeing, influenced by annual levels of gross domestic product (GDP) per capita, incomes, and consumption of goods and services. The second type of living standard is referred to as non-material living standards. Non-material living standards are value-based elements of human wellbeing that are not connected to material possessions. They affect the quality of our daily lives. Elements of non-material living standards include our level of personal happiness and self-fulfilment, crime and death rates, the absence of pollution and political freedom. Many of these are difficult to measure.

FIGURE 1 Living standards can be improved by economic growth.



7.8.2 Living standards and economic growth

Improvements in material living standards are most often measured by changes in GDP, the same measure used to calculate the economic growth rate of an economy. The difference in the calculation is that the value of GDP is then divided by the number of people in the economy (GDP per capita). This measure aims to calculate the value of goods and services each member of the economy has access to. If there is an increase in the value of GDP per capita, it is assumed that the material living standards of each individual in the economy have improved. However, this is not always the case.

FIGURE 2 Material and non-material living standards can be improved by owning your own home.



Strong and sustainable economic growth

It is expected that economic growth will be both strong and sustainable. Strong economic growth is defined as a growth rate of between 3 per cent and 4 per cent on average per year. At this rate of economic growth, goals such as low inflation, full employment and external stability should be achievable. However, a higher rate of growth — such as 5 per cent — would lead to economic problems, and living standards would ultimately suffer. At a rate of 5 per cent per year, the pace of the economy would be pressed beyond its productive capacity. The producers of goods and services would not be able to keep up with the demand. This would cause cost and demand inflation due to general shortages of resources and of finished goods and services. It would also cause spending on imports to grow quickly.

However, an economic growth rate of less than 2 per cent per year would also endanger the government's economic goals. The unemployment rate would rise since there would not be enough jobs and incomes created for a growing labour force. Higher unemployment would lead to poverty and falling material living standards, because living standards suffer unless economic growth takes place at the right speed.

Growth should also be sustainable. Sustainable growth refers to the rate at which Australia's economy can grow its production of goods and services without jeopardising the living standards of future generations. The obvious problem in this context is that our demand for non-renewable natural resources is creating serious environmental problems such as pollution, global warming, resource depletion and loss of biodiversity. For example, clearing old growth forests and land, discharging waste into our waterways and the atmosphere, building in sensitive areas, building more freeways and encouraging excessive consumerism may maximise our short-term living standards and lifestyles, but what future will our children have? Will they be able to enjoy the same material and non-material living standards as we do? So, in this sense, the rate of economic growth is only sustainable in the long term if it does not deplete non-renewable resources, degrade the environment and reduce the ability of future generations to meet their needs and wants. In some ways, a trade-off exists between economic growth and some aspects of current and future living standards.

DISCUSS

Many non-renewable natural resources are being used up to maintain our current living standards. As a class, discuss whether tighter restrictions should be placed on using these resources even if it means that economic growth will be damaged as a result. **General capability: Ethical understanding**

Resources

Video eLesson Clearing forest for an oil well in the Amazon (eles-2437)

7.8.3 The weaknesses of GDP per capita as a measure of living standards

An increase in the value of goods and services produced per year divided by the number of people in the economy does not necessarily mean that people are better off or that their standard of living has improved. There are a number of things to consider when using GDP per capita as a measure of living standards.

GDP per capita is an average

GDP per capita gives only a rough idea about average material living standards, provided there is also a fairly even distribution of the goods and services produced, and provided the extra production makes people happier. There is no evidence to suggest that an increase in GDP is shared equally among the people in the economy. These are assumptions that can make rises in GDP per capita quite meaningless.

FIGURE 3 An increase in GDP doesn't necessarily mean a reduction in poverty rates.



GDP per capita assumes improvements in living standards

It is assumed that an increase in GDP per capita results in better employment opportunities, an increased life expectancy, increased consumer choice, improved provision of government services, and better health and education services. These improvements should help to raise both material and non-material living standards. However, there is no information that tells us whether these improved GDP figures and employment figures have resulted from people working longer hours or from machinery and computers being introduced to replace labour in performing some jobs.

These factors can reduce our leisure time and perhaps the quality of family life, as well as resulting in increased unemployment and an increased need for welfare.

GDP per capita doesn't measure the environmental impact

Pollution and environmental damage, resource depletion, stress, urban problems, overcrowding and possible increases in crime and divorce rates are not measured by GDP per capita, yet they have a significant impact on our living standards. Money spent on combatting crime, legal fees involved in family divorce and the costs of dealing with pollution are actually recorded as additions to GDP's value. GDP does not distinguish between good economic activity and bad activity or negative external events.

Resources

Weblink Australia GDP annual growth rate

7.8 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 6	Questions 5, 7, 8	Questions 4, 9

Check your understanding

1. Define 'economic growth'.
2. Explain what is meant by 'GDP'.
3. Define 'GDP per capita'.
4. Distinguish between economic growth being *strong* and being *sustainable*.
5. Distinguish between *material* and *non-material* living standards.

Apply your understanding

6. Explain why economic growth may be considered a good measure of living standards.
7. Explain why GDP per capita may not be considered an appropriate measure of living standards.
8. Explain why GDP per capita may be a better measure of material living standards than economic growth rates.
9. Explain why GDP per capita is not a useful measure of changes in non-material living standards.

For sample responses for every question, go to www.jacplus.com.au.

7.9 Measuring living standards

LEARNING INTENTION

By the end of this subtopic you will be able to identify ways living standards can be measured.

7.9.1 Alternative ways to measure living standards

GDP is the total value of goods and services produced by the economy in a given period (usually a year). By calculating GDP per capita (per head of population) we can use this figure as a measure of changes to living standards. If this figure rises, it can be argued that living standards have risen because we all have more goods and services.

However, GDP has limitations as a measure of living standards because some production is not included, no measure is taken of the quality of changes considered, and GDP provides no information on how the goods and services are distributed. In addition, non-material living standards are not accounted for.

There are alternative measures that can be used to better measure living standards.

7.9.2 Genuine Progress Indicator (GPI)

As discussed in section 7.5.2, the GPI index of overall living standards identifies some of the same consumption data involved in calculating GDP, but it then makes both negative and positive adjustments to some of the values calculated. The changes are designed to reflect the positive or negative effects on society and our living standards of certain types of activity and spending. Supporters of the measure argue that these adjustments make the statistics a far better indicator of the sustainable level of economic welfare or living standards than simply using GDP.

7.9.3 Human Development Index (HDI)

Earlier in the topic you were introduced to the United Nations' Human Development Index. The HDI is a measure that compares the wellbeing of people in different countries. It is a composite statistic of positive and negative indicators. These indicators are combined into a single statistical index number. When a country's index rises, it means there has been progress and living standards have increased.

FIGURE 1 Factors to consider when determining living standards



In 2019 Australia was ranked sixth in the HDI with an index of 0.938, a similar value it has had since 2013. The two main weaknesses of the HDI are the subjective nature of indicators used to compile the index and the unreliability of the statistical data for some countries.

7.9.4 Quality-of-life index

The quality-of-life index is a measure calculated by a private organisation that attempts to measure which country will provide the best opportunity for a healthy, safe and prosperous life in the future. It is based on a method that links subjective life-satisfaction surveys and objective determinants of the quality of life across countries.

The index was calculated in 2019 for 71 countries and territories using ten quality-of-life factors along with forecasts of future GDP per capita to determine a nation's score.

The ten quality-of-life factors are:

- material wellbeing as measured by GDP per capita
- life expectancy at birth
- the quality of family life based primarily on divorce rates
- the state of political freedoms
- job security as measured by the unemployment rate
- climate, measured by two variables: the average deviation of minimum and maximum monthly temperatures from 14 °C and the number of months in the year with less than 30 millimetres of rainfall
- personal physical security ratings based primarily on recorded homicide rates and ratings for risk of crime and terrorism
- the quality of community life, based on membership in social organisations
- governance, measured by ratings for corruption in public office
- gender equality, measured by the share of seats in parliament held by women.

In 2019 Australia was ranked fourth with a score of 191.13 out of 200. Denmark, Switzerland and Finland filled the top three places.

7.9.5 Other indicators

A range of other indicators are used by some countries to measure the changes in living standards of society. These include:

- Green Gross Domestic Product (GGDP)
- Happy Planet Index (HPI).

Green Gross Domestic Product (GGDP)

The GGDP is an index of economic growth with the environmental consequences of that growth factored into a country's conventional GDP. The GGDP places a price/cost on the loss of biodiversity, environmental damage and climate change. When calculating the GGDP the net natural capital consumption — including resource depletion, environmental degradation, and protective and restorative environmental initiatives — is subtracted from the traditional GDP.

Happy Planet Index (HPI)

As mentioned in subtopic 7.6, the HPI is an index designed to measure human wellbeing and environmental impact. It was introduced by the New Economics Foundation (NEF) in July 2006, with the aim to give progressively higher scores to nations with lower ecological footprints. It was developed in response to the belief that measures such as GDP and HDI were seen as not taking sustainability into account.

The index is made up of three components:

- experienced wellbeing
- life expectancy
- ecological footprint.

In 2016, 140 countries were surveyed, with some 'poor' countries scoring high due to their low ecological footprint and high life expectancy. Australia ranked one hundred and fifth, with a score of 21.2. Costa Rica ranked first with a score of 44.7. Switzerland ranked 24th with a score of 34.3. Use the **Happy Planet Index** weblink in the Resources tab to explore the data and the methodology used.

on Resources

Weblink Happy Planet Index

7.9 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 7	Questions 5, 6, 8	Questions 3, 9, 10

Check your understanding

1. Describe why measuring living standards is important.
2. Identify a traditional measure of living standards.
3. Outline three limitations of one of the traditional measures of living standards.
4. Identify one alternative measure of living standards.
5. What does it mean if a country's HDI score has gone down?

Apply your understanding

6. Explain why alternative methods of measurement are necessary.
7. Prepare a list of five factors that are important to you and should be included in a calculation of your living standards.
8. List and rank five factors that are important to you and should be included in a calculation of your living standards. Explain which one you consider most important and why.
9. Analyse why the factors that you consider important to living standards might not be the same as what others consider important. Give examples to support your reasoning.
10. 'When measuring living standards, material living standards are more important than non-material living standards.' Write a response, either agreeing or disagreeing with this statement.

For sample responses for every question, go to www.jacplus.com.au.

7.10 Macroeconomic policy options

LEARNING INTENTION

By the end of this subtopic you will be able to identify macroeconomic policy areas: budgetary/fiscal policy and monetary policy.

7.10.1 The bigger picture

Macroeconomics refers to the branch of economics that involves the level of expenditure (the amount) or aggregate demand (total demand for goods and services in an economy). It involves looking at the general influences on national spending, national output, national income, employment and overall material living standards. It emphasises the need for some degree of government involvement and manipulation of aggregate demand and economic activity demand-side policies.

Macroeconomic policies involve two key areas of influence by the government: budgetary/fiscal policy and monetary policy. Each of these policy areas attempts to manipulate the level of demand and spending in the economy to achieve the economic goals of the government. Let's examine each of these policies.

macroeconomic the branch of economics that emphasises the central role played by the level of expenditure or aggregate demand

7.10.2 Budgetary/fiscal policy

Budgetary policy (also called **fiscal policy**) is a government economic policy that involves altering the level of government spending and government receipts. Each year the government prepares its **budget**, which outlines its priorities for the coming year and, in some cases, for the years ahead. The budget is a document outlining where the government plans on receiving money from (receipts) and where it intends to spend that money (expenditure).

The difference between the receipts of the government and the expenditure by the government is known as the budget outcome. There are three possible budget outcomes:

- budget deficit, where the level of government receipts is less than the level of government expenditure
- budget surplus, where the level of government receipts is greater than the level of government expenditure
- balanced budget, where the level of government receipts equals the level of government expenditure. This is a rare event, and the government usually aims for a fiscal balance, where the value of budget deficits equals the value of budget surpluses over the business-cycle period (seven years).

To better understand how the government uses the budget to achieve its economic goals, it is important to understand the two components of the budget: budget receipts and budget spending.

FIGURE 1 The budget is delivered to parliament annually by the Treasurer.



FIGURE 2 Budgets can have a negative impact on some members of society.



Government budget receipts

Budget receipts are the government's incoming receipts of money that pay for budget spending. The most common form of government receipt is **taxation**. There are generally considered to be two types of taxes:

- direct taxes — those that refer to levies imposed directly onto the incomes of individuals and companies.
- Indirect taxes — those placed on the sale of goods and services and added onto the price of items.

A third type of government receipt is non-tax revenue — that is, receipts from a source other than taxation, such as asset sales, interest, the repayment of HECS debts by university students and profits from government business enterprises such as Australia Post.

Direct taxes

Examples of direct taxes include:

- *personal income tax*. This is a direct tax paid by individuals who earn incomes in the form of wages, salaries, rent, interest and dividends. For most people, income tax is deducted by their employer from their pay packet before they

budgetary policy a macroeconomic or aggregate demand management strategy involving the government's estimates of the expected value of its receipts and the expected value of its outlays

fiscal policy a macroeconomic or aggregate demand management strategy involving the government's estimates of the expected value of its receipts and the expected value of its outlays

budget a plan for the future; in economics it is a plan about the government's financial performance and framework for the coming financial year, and is estimated by calculating its expected revenues and expenditures

taxation a government levy or revenue measure that can be used as part of the budget to affect the level of prices, the growth rate and the distribution of income

are paid (pay-as-you-go or PAYG). However, for self-employed individuals, a different system exists for estimating income and tax that must be paid.

- *capital gains tax (CGT).* This tax is levied on the real profits made from the sale of capital assets such as land and shares purchased after 1985.
- *the Medicare levy.* This direct tax is designed to provide medical insurance to help cover the basic costs of family health care. It is normally levied at a rate of 2 per cent of personal taxable incomes.
- *withholding tax*. This is applied to individuals who fail to register their tax file number when receiving income such as dividends and interest. It is currently levied at the top tax rate of 47 per cent (including the Medicare levy).
- *company tax*. This is a flat or proportional tax levied directly on business profits. In 2018 the government passed a law to reduce this tax to 25 per cent by 2021–22.
- *fringe benefits tax (FBT).* This represents a direct tax paid by firms on the value of 'perks' provided to employees, such as a company-provided car or house. It is currently levied at 47 per cent of the taxable benefit.
- *superannuation fund tax*. This tax is levied at 15 per cent of most contributions as well as on the interest from fund investments. People aged over 60 can currently withdraw their super tax-free.
- *petroleum resource rent tax (PRRT).* This is levied at 40 per cent of the profits made from petroleum operations.

Indirect taxes

Examples of indirect taxes include:

- *excise duty*. This is an indirect tax imposed on selected, locally produced goods such as petrol, LPG, beer, spirits, wine and tobacco. It is a flat percentage added to the cost of the product. For example, the excise on unleaded petrol is about 30 per cent of the price of each litre sold. The precise rates applied are adjusted twice a year and are generally linked to changes in the Consumer Price Index.

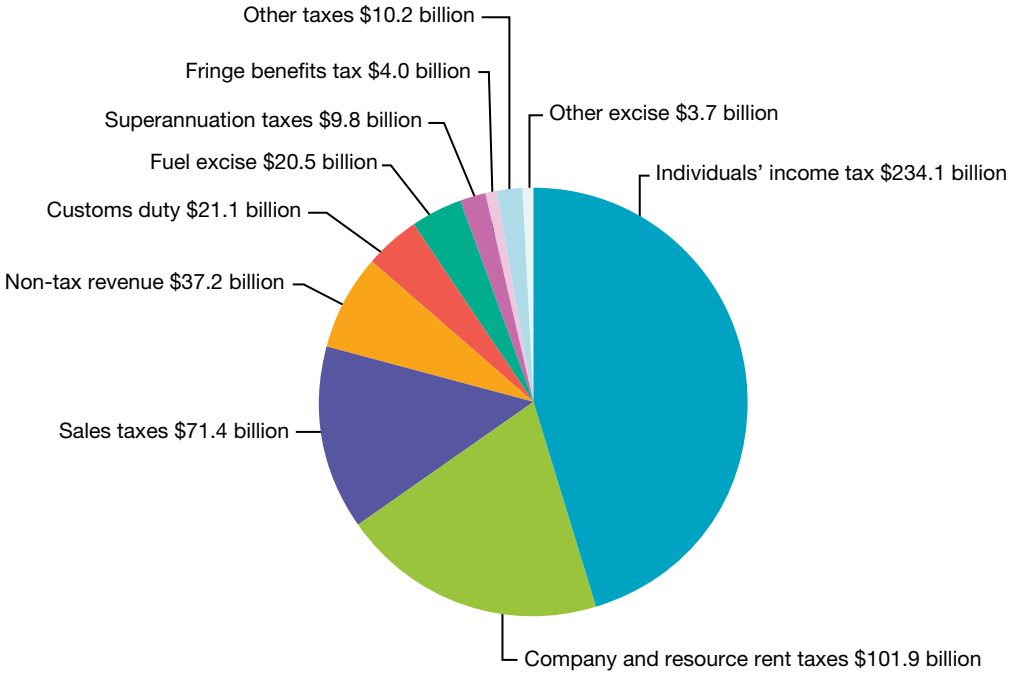
FIGURE 3 The tax on petrol provides the government with a significant source of revenue.



- *customs duties.* These are taxes levied on certain imported goods to raise revenue and protect local producers from foreign competition. Since the 1970s governments have had a policy of reducing tariffs to increase competition in Australia and to reduce prices for consumers.
- *goods and services tax (GST).* This tax was introduced in July 2000. It is a broad-based, indirect tax levied at the rate of 10 per cent on many goods and services in the economy.

FIGURE 4 summarises the sources of government revenue in 2019–20. Income tax on individuals is easily the main source of receipts, followed by revenues from company and resource rent taxes.

FIGURE 4 Sources of government budget revenue for 2019–20



Government budget spending

Budget spending is how the government uses the receipts it collects to provide certain goods and services for the community. Government spending is designed to affect the incomes of consumers, the level of demand and economic activity in the economy, inflation, trade and living standards. Government budget spending is allocated mainly to:

FIGURE 5 A part of government spending goes to the provision of welfare.

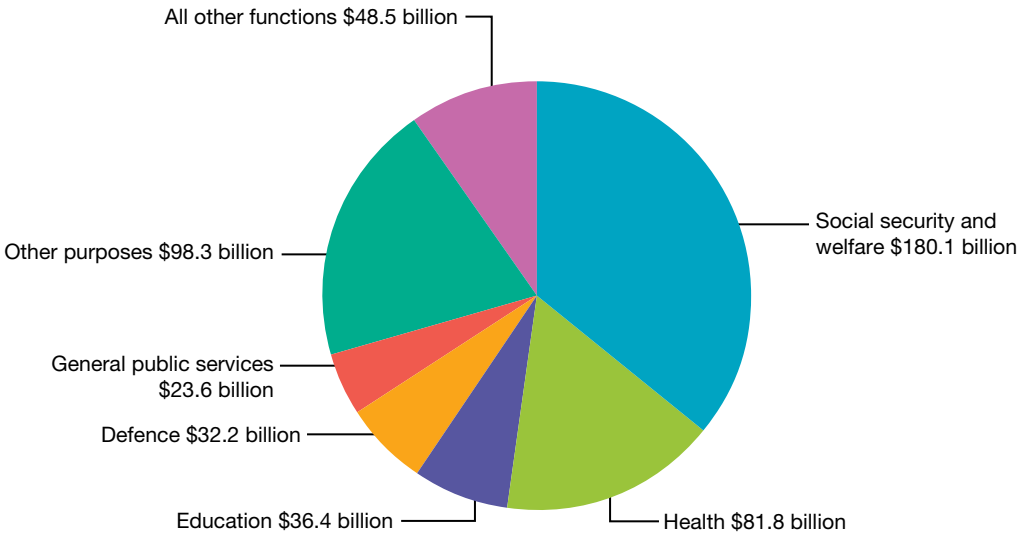


- *social security and welfare*. These payments go to the neediest groups in society including the unemployed, aged pensioners and people with disabilities. The main aim is to redistribute income, thereby helping to reduce poverty and improve general living standards.
- *health.* This involves providing medical attention to consumers, paying the wages and salaries of hospital staff, and outlays on building and furnishing hospitals.
- *defence.* This money is used for the payment of staff and day-to-day running expenses for the armed services, which includes payments for peacekeeping activities.
- *education.* Public education is provided by paying staff at universities, supporting state and non-government schools; vocational education and training; and building programs.
- *transport and communications*. This involves spending on government infrastructure such as roads, shipping, aviation and rail services.
- *housing and community amenities*. This includes spending on public housing and the First Home Owner Grant.
- *public-debt interest*. This is the cost to the government of paying interest on its debts or borrowings. Much of the debt incurred by the government comes from having to finance a budget deficit.
- *net payments to other governments*. These are federal payments to state and local governments to enable them to provide community services including public education, health, housing and transport.

Other areas to which government budget spending is allocated include mining, manufacturing and construction, other economic affairs, agriculture, forestry and fishing, recreation and culture, public order and safety, and fuel and energy.

FIGURE 6 shows the relative importance of the government's main areas of spending in 2019–20.

FIGURE 6 Allocation of government spending for 2019–20



Impact of the budget outcome

When the government delivers its budget it has an outcome in mind.

Budget deficits are designed to be expansionary; they encourage spending through tax reductions and increased government spending. It is expected that the increase in spending by the government and by consumers (due to lower taxation payments) will lead to increased economic growth and consequently increased living standards.

Budget surpluses are designed to be contractionary; they discourage spending through tax increases and decreased government spending. It is expected that the decrease in spending by the government and by consumers (due to higher taxation payments) will lead to a slowing of the economy.

7.10.3 Monetary policy

In addition to altering the level of spending in the economy through taxation and direct government spending, the government can also manage the economy through monetary policy. The government may announce major changes during times of dramatic economic events. For example, both during the GFC in 2008 and the COVID-19 pandemic of 2020, the government announced special 'stimulus packages', which led to large amounts of government spending in order to prevent the economy from crashing and causing high levels of unemployment.

Monetary policy is a policy operated by the Reserve Bank of Australia (RBA) that seeks to manage the level of spending in the economy. It involves controlling the money in the economy and the rate at which money flows around the economy. The primary instrument of monetary policy is the manipulation of interest rates to alter the cost, availability and demand for borrowing money. Because interest rates have the capacity to alter the level of spending in the economy, they can help to achieve the government's goals of low inflation,

monetary policy a major category of government aggregate demand management or macroeconomic policy. It is implemented by the RBA and is designed to influence the cost, availability and demand for credit and money.

strong and sustainable economic growth and full employment, ultimately improving Australia's living standards. Monetary policy operates without the approval of parliament and can be altered quickly through changes to the cash rate by the RBA at its monthly meetings.

The RBA has three means of influencing the flow of money, which affects how money is spent in the economy. These are:

- *changing interest rates.* It does this through market operations.
- *influencing the exchange rate.* It achieves this by buying and selling Australian dollars.
- *persuasion.* It uses its influence to achieve the desired direction of lending activities.

FIGURE 7 The Reserve Bank of Australia controls the amount of money in the economy.



Changing interest rates

Interest rates represent the cost of borrowing money. Whenever you borrow money you are required to repay that money, generally with interest. There is a price for borrowing money and that price can change. An increase in the price of borrowing money will generally see a decrease in the demand for money. The opposite is also true.

FIGURE 8 Interest rates are the cost of borrowing money.



The official price of borrowing money is called the **cash rate**. The cash rate is the interest rate that applies to a specialised market called the short-term money market. This cash rate depends on the overall deposits of cash in the short-term money market, which, in turn, is controlled by the RBA through its market operations. Market operations involve the RBA either buying back or selling second-hand government bonds through the short-term money market. Whether the cash rate rises or falls depends on the RBA's decision to either buy back or sell these bonds.

Increasing interest rates — a contractionary stance

If the RBA wanted to increase economic growth and inflation, it would encourage interest rates to decrease. This would encourage borrowing and spending. How would this happen? First, the RBA would announce a fall in the cash rate target at its monthly meeting (held on the first Tuesday of each month) and provide the reasons for its decision. This sends a signal to the market of the direction in which the RBA believes the economy is heading. It would then set out to achieve this target by buying government bonds in the short-term money market. Financial institutions such as banks — which are keen to make a profit — would enter the short-term money market and sell these bonds because they are selling at a higher price. This creates a situation where financial institutions receive payments from the RBA for the bonds, meaning banks are holding a lot of money, much more than they need to. To make more profit, they lend out this money, but because they have large amounts of cash on hand they do so at a lower interest rate to attract lenders. They also lower the interest for depositors as they do not need to attract deposits to fund their lending.

cash rate the official price of borrowing money; the interest rate that applies to the short-term money market

The opposite is true if the RBA wishes to raise interest rates to reduce demand. Selling bonds to the banks and other financial institutions provides less funds for the banks to lend, which would raise interest rates and discourage borrowing from consumers.

FIGURE 9 Higher interest rates can lead to mortgage defaults, causing families to lose their homes.



Lower interest rates make borrowing less expensive because the amount of interest to be repaid decreases. This means a lower percentage of a person's income is required to repay debt — and that's more money that can now be used to buy goods and services. This is particularly true for home loans. Because of the high amounts borrowed, interest-rate reductions can mean less income is needed to maintain repayments on home loans, decreasing the financial stress on families. Plus, those with excess cash have less incentive to save due to the lower return, so this helps to encourage spending, create jobs and boost economic growth.

Higher rates will do the opposite. With larger repayments, households will devote more of their income to loan repayments and less to spending on goods and services. At the extreme end, it can lead to mortgage defaults and families losing their homes. Those with excess cash may choose to save rather than spend in order to take advantage of the higher returns on offer.

Overall, spending falls, aggregate demand falls and economic growth slows down. The negative impact can be a decline in material living standards as consumers have less access to goods and services. Unemployment can also result from decreased spending, leading to negative effects on non-material living standards through financial stress, marriage breakdowns and increased bankruptcies.

Influencing the exchange rate

The exchange rate is the price at which the Australian dollar is traded against other currencies. When the Australian dollar appreciates in value, our currency is able to buy more of another currency. In effect, this means imported goods and services become cheaper as fewer Australian dollars are needed to buy the same quantity of imports.

The RBA can influence the value of the exchange rate by entering the foreign exchange market and buying or selling Australian dollars. If the RBA wanted to increase the level of economic activity and employment it would sell Australian dollars, increasing the supply and lowering the price. Imports would become more expensive and consumers would switch to locally produced goods and services. The opposite is also true.

While influencing the exchange rate is an instrument of monetary policy, it is seldom used now and is generally reserved for times when the value of the Australian dollar is changing erratically.

Persuasion

Persuasion is a strategy used by the RBA to talk up or down the level of borrowing, spending and economic activity. As a result of this, consumers and investors react and change their level of spending and borrowing. Statements by the RBA that suggest the economy is performing well will see an increase in consumer and business confidence and therefore an increase in the level of economic activity.

mortgage a loan used to finance the purchase of a house or property

7.10 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 5, 6	Questions 7, 8, 9	Questions 3, 10, 11

Check your understanding

1. Explain what is meant by the term 'budget'.
2. What are the two main possible budget outcomes?
3. Explain what is meant by a 'balanced budget'. Why do you think it is very unlikely we would ever have a balanced budget?
4. What is a 'cash rate'?
5. What is meant by 'interest rates'?

Apply your understanding

6. Explain what is meant by 'budgetary policy'.
7. Explain how a smaller budget deficit may affect economic growth and spending in the economy.
8. Explain the difference between a direct tax and an indirect tax.
9. Explain how monetary policy works.
10. In 2018 and 2019 banks raised interest rates without waiting for the RBA to change the cash rate. Explain how this may affect the government's published monetary policy position.
11. In early 2020 the cash rate had fallen to 0.5%. What impact would you expect this to have on both borrowing and saving?

For sample responses for every question, go to www.jacplus.com.au.

7.11 Microeconomic policy options

LEARNING INTENTION

By the end of this subtopic you will be able to identify microeconomic policy areas.

7.11.1 The smaller picture

Microeconomics involves examining the operation of the smaller fragments or units making up the whole economy, such as a particular business, an industry or a specific market or small sector of the economy.

Microeconomic policies involve government actions to assist industries or markets improve their productivity to make them more competitive and to improve outcomes for consumers through

FIGURE 1 Microeconomics involves attempting to improve productivity.



microeconomic the branch of economics that studies the smaller fragments or units making up the whole economy

lower prices, greater choice and increased employment opportunities. All of these outcomes should lead to an improvement in the living standards of Australians. This is generally known as microeconomic reform. In recent years the microeconomic reform policy has centred on four main areas:

- trade liberalisation
- labour market reforms
- market deregulation
- the national reform agenda.

In addition to these areas, microeconomic policies have also been specifically directed at small areas of the economy such as:

- immigration
- the environment.

Let's look at these areas in more detail.

7.11.2 Trade liberalisation

Trade between nations has often been subject to protection from governments. The imposition of tariffs and **quotas** and the provision of **subsidies** have all worked to protect local industries from overseas competitors.

Tariffs are a tax on imports that raise the price of those imported goods, making the locally produced goods more price competitive. Quotas are a limit on the number of goods allowed into Australia. This meant at some point locally produced goods had to be purchased as there were no imports available to purchase. Subsidies were an amount given to local producers to help them lower their price and compete with imports.

FIGURE 2 Trade liberalisation has had some negative effects on Australian manufacturers, particularly in the motor-vehicle industry.



Trade liberalisation works to reduce these protection mechanisms, making it necessary for local businesses to improve their productivity so they can lower their costs and improve their ability to compete with overseas products on a level playing field. The result should be reduced prices for locally made goods and services so consumers benefit from choice options and lower prices. This enables more goods and services to be purchased and so material living standards are raised.

Trade liberalisation operates through:

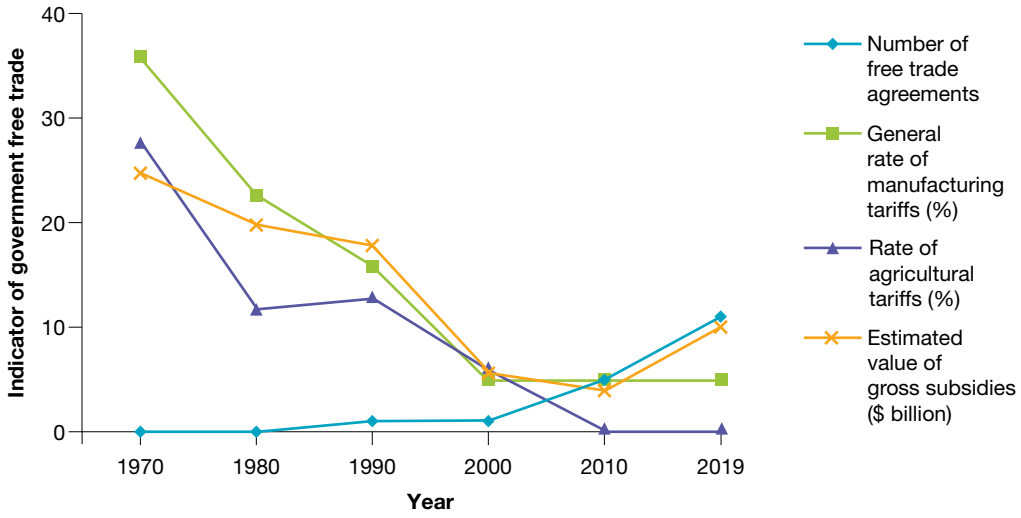
- cutting tariffs
- reducing subsidies
- abolishing import quotas
- increasing the number of bilateral free-trade agreements.

FIGURE 3 summarises changes made to Australia's level of protection since 1970.

quotas quantity limits or targets for production or imports

subsidy a cash payment by the government designed to help producers compete by enabling them to sell their product at a lower price than would otherwise occur

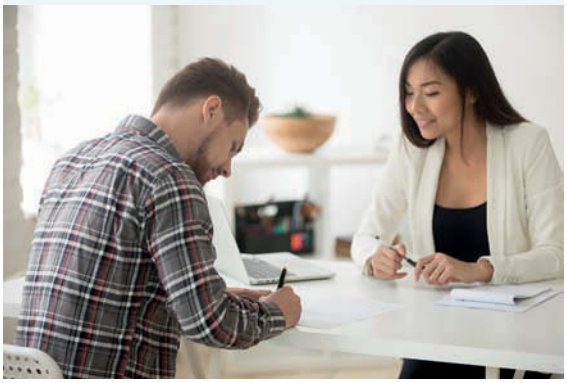
FIGURE 3 Indicators of the Australian government's adoption of trade liberalisation measures between 1970 and 2019



Year	1970	1980	1990	2000	2010	2019
Number of free-trade agreements	0	0	1	1	5	11
General rate of manufacturing tariffs (percentage)	36	23	16	5	5	5
Rate of agricultural tariffs (percentage)	28	12	13	6	0	0
Estimated value or gross subsidies ($ billion)	25	20	18	6	4	9

Reducing the level of protection has had some negative impacts. Industries where local manufacturers were unable to significantly change have ceased to operate, causing unemployment (the motor vehicle industry is an example). The rise in unemployment has negative impacts on non-material living standards because stress, financial pressures, mortgage defaults and marriage breakdowns often result.

FIGURE 4 Labour market reforms have resulted in many employees signing individual contracts with their employers.



7.11.3 Labour market reforms

The **labour market** is the market in which wage levels and working conditions, such as hours of work, leave and terms of dismissal, are determined. Since the 1980s, various governments have introduced major microeconomic reforms by reducing their control over wages and wage determination. In tandem with trade liberalisation, these policies were aimed at lifting labour efficiency (a higher level of GDP per hour worked), keeping labour costs down and increasing Australia's productive capacity.

This was done by shifting from the centralised wage system to one involving greater deregulation of wages based on collective bargaining or individual workplace agreements. In most cases this created a situation where wages were linked to efficiency and determined at the workplace level, rather than by the government. Since 2010 more than 85 per cent of workers have been covered by enterprise bargaining or other arrangements.

labour market the place, region or institution where buyers and sellers of labour negotiate wages

The deregulation of the labour market enabled some workers to access wage increases as a result of their increased productivity. This benefited both employer and employee as increased productivity meant lower costs and improved competitiveness. Wage increases could then be sourced from improved profits.

Improved competitiveness can also lead to increased employment levels and improved material living standards. On the other hand, non-material living standards may fall because increasing productivity usually means working more hours.

7.11.4 Market deregulation

Deregulation is the removal of unnecessary government controls, restrictions and supervision in various areas of the economy. In Australia this has seen progressive changes to key markets such as telecommunications, airlines, ports, shipping, primary produce and retail. Because economists believe that markets allocate resources most efficiently, a deregulated market should lead to lower prices due to stronger competition.

FIGURE 5 Market deregulation has led to increased competition in markets previously dominated by one company.



Market deregulation is seen as an important area of government microeconomic reform because it is a way of promoting many government economic goals including:

- *lower cost inflation* through lower prices due to competition between firms
- *strong and sustainable economic growth* through increased spending on goods and services due to lower prices (meaning higher demand)
- *higher employment in the long term* because new businesses will open in markets previously blocked, creating new jobs
- *external stability* through increased exports and less reliance on imports as locally produced goods become price competitive.

The result is that both material and non-material living standards will improve over time as the new competitors establish a share of the market.

deregulation the removal of unnecessary direct government controls, restrictions and supervision in various areas of the economy

7.11.5 National reform agenda

Microeconomic reform in Australia is currently undertaken as part of a national reform agenda designed to improve the lives of all Australians. From 1995 to 2005, reform occurred under the National Competition Policy (NCP), a broad collection of microeconomic reform measures designed to strengthen the level of competition and efficiency in markets. Strong competition results in greater efficiency, lower costs of production, cheaper prices and better quality of service and product.

FIGURE 6 Firms should be able to compete on a level playing field without one firm getting an unfair advantage because of its size or power.



In 1995, as part of the NCP reforms, the Australian Competition and Consumer Commission (ACCC) was established to help prevent powerful companies from artificially raising prices to exploit consumers. The ACCC now enforces the *Competition and Consumer Act 2010*, under which a number of anti-competitive practices are illegal, including:

- *price fixing*. This is when firms collaborate to set common or similar prices that are higher than normal.
- *exclusive dealing*. This occurs when companies refuse to supply their products or services to one or more firms.
- *collusive bidding*. This is when supposedly competing firms that are submitting a tender or quote for the completion of works or to supply goods or services meet secretly beforehand to agree whose tender should be most attractive, cheapest and likely to win the contract.
- *predatory pricing*. This is when dominant firms conduct a price war involving big cuts in selling prices with the intention of driving rival firms bankrupt, then later enjoying the market without competition.
- *market zoning*. This happens when competing firms in a region divide the market into zones, areas or regions within which they agree not to compete with each other over prices.

In 2006, the Council of Australian Governments, which represents all of the state and territory governments and the federal government, adopted a national reform agenda to continue competition and regulatory reform.

on Resources

Weblink Anti-competitive behaviour

7.11.6 Immigration policy

Australia's immigration policy has been used as an approach to managing the number and composition of migrants coming to Australia from overseas. In other words, apart from important humanitarian and family considerations, the federal government's current immigration program tries to attract young and suitably skilled people who are likely to make a valuable and ongoing contribution to the labour force and the Australian economy.

FIGURE 7 Skilled migrants can improve the productivity of local businesses.



By prioritising skilled persons as the majority of our yearly immigration intake, Australia is able to fill vacancies in industries where local skills are lacking. This can result in improved productivity, leading to expansion in those industries as they increase their profits.

These migrants also assist in improving non-material living standards as they further develop our multicultural society, bringing elements of their culture to Australia.

It can be argued, however, that if money was spent on training within Australia, we could fill these skill vacancies with people who are currently unemployed, raising their incomes and living standards.

7.11.7 Environmental policy

Environmental policy refers to specific policies created by the government to improve the quality of our environment and move away from traditional power generation methods by promoting industries that offer an alternative. Some measures introduced include:

- a government scheme that provides rebates for households that install domestic water tanks to collect rainwater and cut down on water usage from dams
- a government scheme that provides rebates for households that install insulation in their homes to reduce power bills
- a government scheme that provides rebates to households that install solar panels to provide their household with solar power and possibly return unused energy into the power grid, reducing reliance on fossil-fuel generated power
- the creation of the Renewable Energy Target (RET) scheme, whereby 23.5 per cent of Australia's electricity now comes from renewable energy sources
- the signing of the Kyoto agreement in 2008 to commit Australia to reduce emissions
- the imposition of a carbon tax (repealed in 2014).

FIGURE 8 Our environmental policy has led to the creation of a number of new industries.



These policies, among others, aimed to create new industries and provide a cleaner environment for future generations — a means of improving our non-material living standards. They also create jobs in new industries and make it important for traditional energy providers to become more efficient to remain competitive.

7.11 ACTIVITIES

1. Complete the following table to compare the sole providers of services during the 1980s with the range of providers available today. Conduct research or consult an adult you know to help you with this task. The first item has been completed for you.

HASS skills: Analysing, Evaluating
Economics and Business concept: Allocation and markets

Service	Previous provider	Providers today
Telecommunication	Telecom	Telstra, Optus, Vodafone
Electricity		
Water		
Gas		

2. Describe two anti-competitive behaviours that businesses may not engage in. Use the **Anti-competitive behaviour** weblink in the Resources tab to help you answer the question.

HASS skills: Questioning and researching

7.11 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 7	Questions 5, 6, 8	Questions 3, 9, 10

Check your understanding

1. Define the term 'microeconomic reform'.
2. Outline two key areas of government microeconomic policy.
3. Explain what is meant by a 'subsidy' and how it may assist businesses.
4. Explain how one microeconomic reform can assist the government in achieving one economic objective.
5. How may reducing tariffs negatively affect one government economic objective?

Apply your understanding

6. In 2018 and 2019 the US government and the Chinese government both introduced tariffs on imported goods from each other. Analyse how these tariffs may affect the Australian economy.
7. In your opinion, should Australia follow the lead of the US government and impose tariffs on Chinese imports? Justify your answer.
8. Define what is meant by environmental policies, listing two important examples of such measures.
9. How can our immigration policy work to improve both material and non-material living standards?
10. Government policies can overlap — the government has offered subsidies (or rebates) to consumers who install water tanks, home insulation and solar power panels. Describe how these subsidies form part of a government's environment policy.

For sample responses for every question, go to www.jacplus.com.au.

7.12 Direct government intervention in the market

LEARNING INTENTION

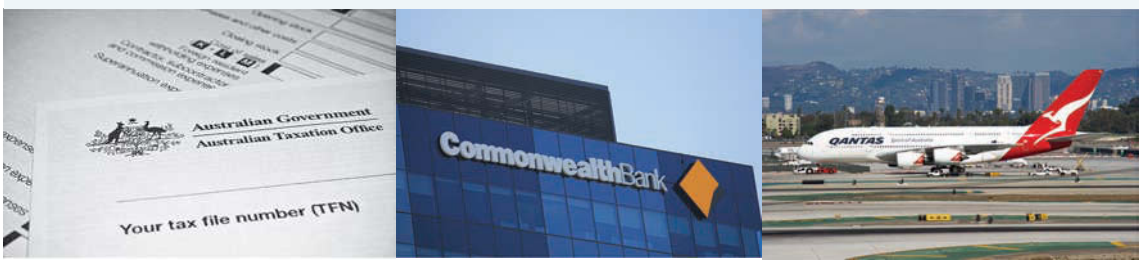
By the end of this subtopic you will be able to describe direct government intervention in the market, and identify the reasons for this.

7.12.1 Reasons for government intervention

So far we have identified the economic goals of the government, how it measures its performance in relation to those goals and the impact that achieving or not achieving those goals has on the living standards of Australians.

Setting economic goals and implementing policies to achieve them is one key way the government is actively involved in the economy. However, the government also intervenes in other areas.

FIGURE 1 The government plays an important role in the market.



The reasons governments directly intervene in the market are:

- to stabilise the economy
- to reallocate resources
- to distribute income.

7.12.2 Stabilisation of the economy

The level of economic activity involves the overall pace or speed at which the economy is performing and production is growing. The speed at which this occurs can affect:

- *inflation.* If the economy is moving too quickly, inflation will result as demand will pull prices upwards.
- *unemployment.* If the economy is moving too slowly, demand will fall and businesses may be forced to lay off workers or close down, leading to rising unemployment.

If the economy is unregulated, it can be very unstable and it can sometimes experience large and sudden changes to production and activity. It is the government's job to directly intervene in the market to stabilise the level of economic activity. As we have seen, the government does this through the implementation of budgetary, monetary and microeconomic reform policies.

FIGURE 2 The government is responsible for stabilising the economy to ensure economic goals are met and living standards are maintained.



7.12.3 Reallocation of resources

If left to itself, a market can be an efficient allocator of resources. This is because the owners of those resources are always seeking to maximise their profits and incomes. They do this by producing only those goods and services that are likely to deliver the most profit because they are the most in demand.

However, this is not always the case and there are a number of circumstances where the market does not use resources efficiently, for example:

- *The market may not produce enough socially desirable goods and services*. The government intervenes to ensure an adequate supply of these products. The private sector may under-produce these goods because they are expensive to produce and it is difficult to make a profit from them. Such items include products related to health care, education, public housing and public transport.
- *The government may intervene to provide goods that the private sector won't supply*. These are services such as defence, public toilets and street lighting, which are not profitable because it is not possible to make users pay for such services.

- *The market may produce socially undesirable items*. Some products are deemed to be undesirable but can still be profitable. For example, the existence and availability of certain guns and other weapons can have negative effects on communities, so the government tries to shift resources away from the production and provision of these things. The government has passed laws banning specific types of guns and weapons so there is less production of these items, meaning resources will be used in the production of other goods.

FIGURE 3 The government will intervene to provide services such as public toilets, which offer no profit appeal to the private sector.



- *The government may, in some instances, intervene to allocate resources*. These resources may be used for producing goods and services that compete with the private sector to ensure the product is available to everyone, not just to those who can afford it. One example is the ABC (Australian Broadcasting Corporation). This company initially provided television and radio services to all Australians because commercial television channels (7, 9 and 10) did not provide a service to remote areas. The same applied to telephone services through Telecom (now Telstra) and banking services (the Commonwealth Bank was originally established to compete with private banks before it was privatised).

7.12.4 Distribution of income

In a market economy, people earn an income according to the demand and supply of the labour they offer. Some people earn high incomes and some earn low incomes. We also know that because of changes in the level of economic activity some people lose their jobs and spend some time earning no income.

The private sector does not provide for people who don't, can't or are limited in their ability to earn an income. In these circumstances the government intervenes to provide these people with a minimum level of income through welfare payments.

FIGURE 4 The government uses taxation and its budget to ensure a minimum level of income for all Australians.



Modern Australia (and society in general) recognises that it has an obligation to look after the more vulnerable in our society and that those who can most afford to should carry the majority of the burden for providing for these vulnerable people. As a result, the following government measures are used to redistribute income and provide support to some groups in society.

- *Welfare benefits*. The government provides direct payments through its welfare system to vulnerable Australians. Unemployment benefits are the most visible payment made, but the government also makes

welfare payments to aged pensioners, disabled people, veterans and First Nations Australians. The government also makes payments to certain groups for various reasons from time to time. Examples include:
  - *the First Home Owner Grant*. This helps young people move into their first home and out of renting or public housing.
  - *an extra Family Tax Benefit payment*. This is an extra amount for eligible families when a child is born. It helps with the cost of raising children.
- *Progressive taxes*. Income tax is applied progressively. Higher income earners pay a larger percentage of their income in tax than low-income earners. The money collected from this taxation can be used to pay for welfare benefits to those in need and to provide necessary government services such as health care, education and housing. Taxation rates change periodically according to government policy and aims for the economy.
- *Provision of essential services*. The government does not only pay money directly to underprivileged people. It also redistributes income by providing services to low-income earners, giving them benefits such as health care, public education, concession travel cards for school children and rental assistance.
- *Compulsory superannuation*. To protect the future of Australians and reduce future reliance on government pensions, the government introduced a compulsory national superannuation scheme for all employees through a levy (currently 9.5 per cent of wages earned) on employers. The objective is for workers to be able to live off this superannuation and have less need for welfare when they retire.

DISCUSS

Income inequality has risen substantially in Australia over the past two decades, even with the current distribution-of-income methods in place. Do you think the Australian government should do more to try to reduce income inequality? **General capability: Personal and social capability**

7.12 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 5, 6	Questions 2, 7, 8	Questions 4, 9, 10

Check your understanding

1. What are the three main reasons the government intervenes in the market?
2. How can the pace at which the economy is performing affect:
   a. inflation
   b. unemployment?
3. How does the government act to stabilise the level of economic activity?
4. For what reasons might the government need to reallocate resources?
5. Why might the market not provide all the goods and services Australians need?

Apply your understanding

6. Explain why the government needs to allocate resources.
7. Why does the government need to redistribute income?
8. Explain what is meant by a ‘progressive tax system’.
9. Explain what is meant by ‘compulsory superannuation’ and why it is needed.
10. Explain why government welfare benefits are needed in the economy.

For sample responses for every question, go to www.jacplus.com.au.

7.13 Thinking Big research project — How does Australia measure up?

7.13.1 Scenario

You have considered data showing Australia's performance in terms of economic measures such as inflation, unemployment and economic growth, and have made comparisons with four other countries of importance to Australia's economy: China, New Zealand, the United Kingdom and the United States. But these are not the only countries of importance to Australia, and the economic measures identified above are not the only measures that are important to the citizens of a country.

But how does Australia measure up when compared with many other countries, and on measures beyond pure economic performance?



7.13.2 Task

Your task is to research and create a report or PowerPoint presentation on the recent economic performance of a country with which Australia has a relationship — a country other than the four already considered in this topic (China, New Zealand, the United Kingdom and the United States). In addition to economic performance, your research should include information about material and non-material living standards experienced in this country, and make comparisons with Australia across all measures.

7.13.3 Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group if you wish to. You can work independently or with a partner, which will allow you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.

- Select a country that has a relationship with Australia. Such relationships are usually trade related. Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. In the **Media centre** you will find an assessment rubric and some weblinks that will provide a starting point for your research.
- Your research should cover the following aspects and include recent statistics on:
  - inflation
  - unemployment
  - GDP, real GDP, real GDP per capita
  - education and literacy
  - health measures — life expectancy, maternal mortality, infant mortality, etc.
  - any other measures that you think are relevant and appropriate.
- Research the relationship between Australia and your selected country. In this section:
  - provide information on the trade relationship (what is traded, by whom and in what quantities?)
  - include trade statistics
  - outline any other relevant information about the relationship.
- Make notes of your research and remember to record details of your sources so you can create a bibliography to include in your report. Add your research notes and source details to the relevant topic pages in the Research forum. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Include relevant table data, images and graphs to illustrate your report and present data in a clear, understandable format.
- Check your report or PowerPoint presentation thoroughly, ensuring you have used correct spelling and grammar, and when satisfied, submit it to your teacher (along with your bibliography) for assessment.





on Resources

ProjectsPLUS Thinking Big research project — How does Australia measure up? (pro-0223)

7.14 Review

7.14.1 Key knowledge summary

7.2 Economic growth and Australia's economy

- Assessing the performance of an economy is important because it enables a country to evaluate how it is performing its role as 'manager'.
- Measuring an economy's performance also enables us to assess the wellbeing of a country's citizens.
- Economic growth is one important area that can be used to measure economic performance.

7.3 Employment trends and Australia's economy

- Unemployment is one important area that can be used to measure economic performance.
- In Australia, the unemployment rate is measured using the monthly Labour Force Survey.

7.4 Inflation rates and Australia's economy

- Inflation is one important area that can be used to measure economic performance.
- Inflation occurs when there is an increase in the general level of prices across the economy.
- Inflation in Australia is measured quarterly by calculating the Consumer Price Index (CPI).
- Inflation can have a negative impact on the living standards of consumers.

7.5 Sustainability indices and Australia's economy

- Sustainability indices and other indicators of economic performance provide a lot of information about the economy.
- The Human Development Index (HDI), the Genuine Progress Indicator (GPI) and the World Happiness Report are alternative measures of an economy's performance.
- Quantitative measures are those that measure the dollar value or the percentage value change in an item.
- Qualitative measures determine or measure the quality of our life and the economy.

7.6 Other indicators of economic performance and Australia's economy

- By using a combination of quantitative and qualitative indicators, we are able to get a clearer understanding of the state of the economy.
- It is important to understand how these indicators are measured and the effects these problems have on our living standards.
- The Liveability Ranking and the World Happiness Report are used to determine whether a strong economy improves our quality of life.

7.8 Living standards related to economic performance

- How an economy performs in terms of achieving its economic goals will affect the living standards of citizens of that country.
- There are two types of living standards: material and non-material.
  - Material living standards relate to the acquisition of material goods and services.
  - Non-material living standards relate to the qualitative elements of human wellbeing, which influence the aspects of living standards unconnected with material possessions.

7.9 Measuring living standards

- Living standards are very important to individuals and families.
- By calculating GDP per capita, we can use this figure as a measure of change in living standards.
- Achieving full employment, low inflation, strong economic growth and external stability through balanced trade will work to improve our living standards.
- The government is involved in assisting the economy in order to improve living standards.

7.10 Macroeconomic policy options

- Macroeconomic policies aim to keep inflation under control, minimise unemployment, create a sustainable level of economic growth and keep our trade situation balanced by looking at the general influences on national spending, national output, national income, employment and overall material living standards.
- Macroeconomic policies involve two key areas of influence by the government: budgetary/fiscal policy and monetary policy.
- Budget spending is how the government uses the receipts it collects to provide certain goods and services for the community.

7.11 Microeconomic policy options

- Microeconomic policies aim to keep inflation under control, minimise unemployment, create a sustainable level of economic growth and keep our trade situation balanced by examining the operation of the smaller fragments or units making up the whole economy.

7.12 Direct government intervention in the market

- Governments directly intervene in the market to:
  - stabilise the economy
  - reallocate resources
  - distribute income.
- In a market economy, people earn an income according to the demand and supply of the labour they offer.

7.14.2 Key terms

budget a plan for the future; in economics it is a plan about the government's financial performance and framework for the coming financial year, and is estimated by calculating its expected revenues and expenditures

budgetary policy a macroeconomic or aggregate demand management strategy involving the government's estimates of the expected value of its receipts and the expected value of its outlays

cash rate the official price of borrowing money; the interest rate that applies to the short-term money market

consume to purchase goods and services for direct use or ownership

cost inflation a sustained increase in the price of goods and services caused by producers passing on increased production costs to consumers

demand inflation price increases that result from an excess of demand over supply for the economy as a whole

deregulation the removal of unnecessary direct government controls, restrictions and supervision in various areas of the economy

economic growth a measurement of the increase in a country's gross domestic product (GDP)

fiscal policy a macroeconomic or aggregate demand management strategy involving the government's estimates of the expected value of its receipts and the expected value of its outlays

income the reward earned from supplying productive resources. Providing labour earns income in the form of wages or salaries.

inflation a general rise in the prices of goods and services within an economy

labour market the place, region or institution where buyers and sellers of labour negotiate wages

macroeconomic the branch of economics that emphasises the central role played by the level of expenditure or aggregate demand

mark-up a fixed percentage or dollar figure added to the cost price of goods and services to determine the selling price

material living standards refers to the number of goods and services we can afford to buy

microeconomic the branch of economics that studies the smaller fragments or units making up the whole economy

monetary policy a major category of government aggregate demand management or macroeconomic policy. It is implemented by the RBA and is designed to influence the cost, availability and demand for credit and money.

mortgage a loan used to finance the purchase of a house or property

negative externality a production outcome that was not intended and that negatively affects our economy and/or society

non-material living standards value-based elements of human wellbeing that are not connected to material possessions

qualitative indicators subjective measures that cannot easily be calculated or measured; e.g. indices that measure a particular aspect of quality of life or that describe living conditions, such as freedom or security

quantitative indicators objective indices that are easily measured and can be stated numerically, such as annual income or the number of doctors in a country

quarterly every three months

quotas quantity limits or targets for production or imports

recession a technical term referring to two consecutive quarters of negative growth in an economy

regimen a basket of goods and services whose prices are surveyed to calculate inflation

subsidy a cash payment by the government designed to help producers compete by enabling them to sell their product at a lower price than would otherwise occur

sustainable able to last or continue for a long time

tariffs taxes imposed on imported goods to make them more expensive

taxation a government levy or revenue measure that can be used as part of the budget to affect the level of prices, the growth rate and the distribution of income

7.14.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

What can our purchases and level of happiness tell us about the health of the economy?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6069)
Reflection (ewbk-6068)
Crossword (ewbk-6067)
Student Learning Matrix (ewbk-6064)

Interactivity Economic performance and living standards crossword (int-7681)

7.14 Review exercise

Multiple choice

1. Which of the following is used to measure economic growth?
   - **A.** Gross domestic product
   - **B.** Genuine progress indicator
   - **C.** Unemployment rate
   - **D.** Consumer Price Index
2. What growth rate does the Australian government hope to achieve?
   - **A.** Between 1 and 2 per cent
   - **B.** Between 2 and 3 per cent
   - **C.** Between 3 and 4 per cent
   - **D.** Between 4 and 5 per cent

3. The government considers the economy to be at full employment when the unemployment rate is approximately what percentage?
   - **A.** 2 per cent
   - **B.** 3 per cent
   - **C.** 4 per cent
   - **D.** 5 per cent

4. What type of unemployment results from a downturn in the level of economic activity?
   - **A.** Cyclical unemployment
   - **B.** Hidden unemployment
   - **C.** Seasonal unemployment
   - **D.** Structural unemployment

5. To be considered unemployed, during a survey period a person must do paid work for less than how long?
   - **A.** One month
   - **B.** One week
   - **C.** One day
   - **D.** One hour

6. Which of the following are *not* considered a sustainability indices? Select all options that apply.
   - **A.** Genuine Progress Indicator
   - **B.** Current Account Deficit
   - **C.** Business Confidence Index
   - **D.** Human Development Index

7. Which of the following is *not* an indicator of a non-material living standard?
   - **A.** GDP per capita
   - **B.** The crime rate
   - **C.** The divorce rate
   - **D.** Working hours per week

8. Which of the following is *not* an assumed result from an increase in GDP?
   - **A.** Better employment opportunities
   - **B.** Better health and education services
   - **C.** Increased life expectancy
   - **D.** Decrease in crime rates

9. Which of the following is *not* an alternative measure of living standards?
   - **A.** Genuine Progress Indicator
   - **B.** Quality-of-life index
   - **C.** The social wage
   - **D.** Human Development Index

10. What type of system is Australia's personal income tax system?
    - **A.** Proportional system
    - **B.** Progressive system
    - **C.** Regressive system
    - **D.** Indirect system

11. Which of the following is *not* a quality-of-life factor according to the quality-of-life index?
    - **A.** Life expectancy at birth
    - **B.** Job security
    - **C.** Access to health care
    - **D.** Gender equality

12. Which of the following is *not* a budget outcome?
    - **A.** Budget deficit
    - **B.** Budget receipts
    - **C.** Balanced budget
    - **D.** Budget surplus

Short answer

13. What is the most common measure of economic growth and what is Australia's target growth rate per year?
14. Explain how being unemployed can negatively affect a person's material and non-material living standards.
15. What is the Genuine Progress Indicator (GPI)?
16. There are two broad factors affecting prices in Australia: demand factors and supply factors. Describe two demand factors and two supply factors that could negatively affect the rate of inflation in Australia.
17. Identify one measure of living standards and describe how it works.



RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 7 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

7.1 Overview

Video eLesson
- Living standards around the world (eles-2382)

7.2 Economic growth and Australia'seconomy

Weblinks
- Australia GDP growth rate
- International growth rates

7.3 Employment trends and Australia's economy

eWorkbook
- Unemployment (ewbk-6065)

Video eLesson
- Job numbers (eles-2435)

Weblinks
- Australia's unemployment rate
- Australia's youth unemployment rate

7.4 Inflation rates and Australia's economy

Weblink
- RBA inflation

7.5 Sustainability indices and Australia's economy

eWorkbook
- Measures of economic performance (ewbk-6066)

Weblink
- HDR UNDP

7.6 Other indicators of economic performance and Australia's economy

Weblink
- World Happiness Report

7.7 SkillBuilder — Calculating inflation

Weblink
- RBA inflation calculator

7.8 Living standards related to economic performance

Video eLesson
- Clearing forest for an oil well in the Amazon (eles-2437)

Weblink
- Australia GDP annual growth rate

7.9 Measuring living standards

Weblink
- Happy Planet Index

7.11 Microeconomic policy options

Weblink
- Anti-competitive behaviour

7.13 Thinking Big research project — How does Australia measure up?

ProjectsPLUS
- Thinking Big research project — How does Australia measure up? (pro-0223)

7.14 Review

eWorkbook
- Reflection (ewbk-6068)
- Crossword (ewbk-6067)
- Student Learning Matrix (ewbk-6064)

Interactivity
- Economic performance and living standards crossword (int-7681)

To access these online resources, log on to **www.jacplus.com.au**.

8 Influencing consumers

8.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

People may think they make consumer choices on their own, but how do businesses influence and attract customers?

8.1.1 Introduction

It's a competitive world out there. Every business must find strategies that will enable it to survive. A business competes with other businesses to sell products in a market. If a business cannot sell its product to customers, it will not last for very long.

Many traps and dangers exist for businesses and consumers. These dangers are even more significant for the unaware and inexperienced. Businesses often 'hunt' consumers, using tactics that can be ethical and, at times, unethical. Consumers have to be conscious of these tactics before short-term and long-term financial decisions and choices are made.

Businesses also need to be wary of dangers. In the evolving global economy, there is an increasing number of competing businesses. Only the strongest and most savvy businesses will survive in this competitive environment. For these reasons, it is crucial that both businesses and consumers understand the markets in which they exist. This includes being aware of the movement of money, budgets, marketing tactics and product pricing, and being familiar with investing money and purchasing goods.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6079)

Video eLesson The relationship between businesses and consumers (eles-2384)

FIGURE 1 Businesses need to try to differentiate themselves from their compertitors and convince consumers to purchase their products.



8.2 Business influences on consumer decisions

LEARNING INTENTION

By the end of this subtopic you will be able to identify and explain factors that influence major consumer decisions.

8.2.1 The power of advertising

FIGURE 1 Which soft drink do you think of when you see this silhouette?

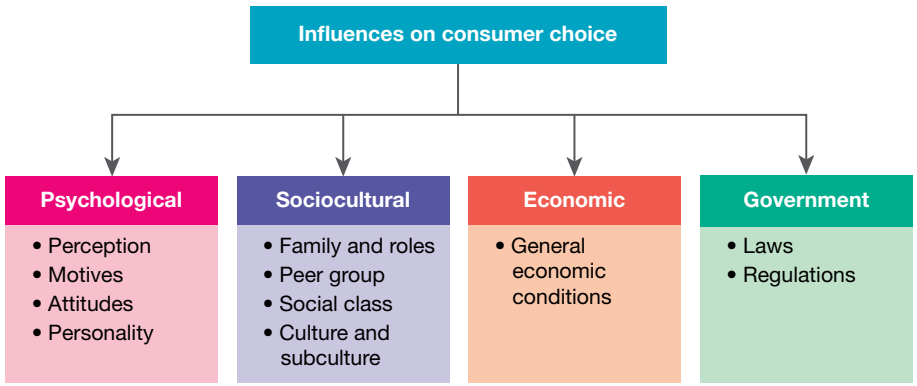


Be honest: when you look at **FIGURE 1**, which soft drink do you think of? Ask your classmates. If you said Coca-Cola, this advertising campaign was successful. The image was indeed part of a campaign run by global soft-drink giant Coca-Cola. Besides the shape of the silhouette, there is nothing to suggest this is an advertisement for Coca-Cola. There are no colours and there are no logos. Yet you instantly think of Coca-Cola's product. This advertisement is only successful because of previous marketing campaigns run by the company. For more than 100 years, Coca-Cola has dominated the soft-drink market. The company's creative and distinctive marketing strategies have been a key reason for its market position. Advertising and marketing have incredible power and influence over our lives and the decisions we make as consumers. Let's examine why businesses need to consider consumer behaviour before they develop their advertising and marketing strategies.

8.2.2 Factors influencing consumer decisions

As shown in **FIGURE 2**, four main factors influence consumer purchasing decisions.

FIGURE 2 The four main factors influencing consumer choice



Psychological influences

Four main **psychological factors** influence consumer choice.

1. *Perception.* As individuals, we often act on our perceptions of reality rather than reality itself. Consequently, marketers are extremely aware that they must create a positive or favourable perception of their product in the mind of the consumer. Consumers will not normally purchase a product they perceive as being of poor **quality** or inferior to similar brands.

psychological factors influences within an individual that affect their buying behaviour

quality the degree of excellence of goods or services and their fitness for a stated purpose

2. *Motives.* The main **motives** that influence consumer choice include comfort, health, safety, ambition, taste, pleasure, fear, amusement, cleanliness and the approval of others. As it does with a consumer's perception of the product, so advertising also attempts to influence an individual's motives to choose a product.
3. *Attitude.* **Consumer attitude** towards a business and its products generally influences the success or failure of the business's marketing strategy.
4. *Personality.* To some extent, **personality** influences the types and brands of product that a person buys.

Sociocultural influences

There are four main **sociocultural influences** that affect consumer choice:

1. *Family and roles.* All of us occupy different roles within the family and groups in the wider community. These roles influence buying behaviour. Although women's roles are changing, market research shows that most women still make buying decisions related to, for example, healthcare products, food and laundry supplies.
2. *Peer groups.* A consumer's buying behaviour may change to be more in line with that person's **peer group**, beliefs and attitudes.
3. *Social class.* In our society, the factors generally used to classify people are education, occupation and income. Social class, therefore, influences the type, quality and quantity of products that a consumer buys.
4. *Culture and subculture.* **Culture** influences buying behaviour because it infiltrates all that we do in our everyday life. It determines what people wear, what and how they eat, and where and how they live. Subcultures differentiate themselves from a larger culture to which they belong (for example, goths are a subculture).

FIGURE 3 Buying behaviour may change to be more in line with peer group beliefs and attitudes.



Economic influences

Economic forces have an enormous impact on consumers' willingness and ability to spend. During an economic boom, for example, consumers are willing to spend because they feel secure about their jobs and source of income. During a recession, consumer spending falls to a very low level.

Government influences

Governments use a number of economic policy measures to influence the level of economic activity. These policies directly or indirectly influence consumers' spending habits.

Of more direct and immediate impact is the influence of government regulations. Laws dealing with misleading and deceptive advertising, for example, protect consumers and influence business practices.

8.2.3 What is marketing?

Marketing is more than selling a product. It is the whole process of providing goods and services to satisfy the needs and wants of consumers at the right place and time, using the right promotions. A catchy definition of marketing is 'the right product,

motives the reasons why individuals do something

consumer attitude a person's overall feeling about an object or activity

personality a collection of all the behaviours and characteristics that make up a person

sociocultural influences forces exerted by other people that affect customer behaviour

peer group a group of people with whom a person closely identifies, adopting their attitudes, values and beliefs

culture all the learnt values, beliefs, behaviours and traditions shared by a society

marketing the process of planning and executing the development, pricing, promotion and distribution of products to create exchanges that satisfy individual and organisational objectives

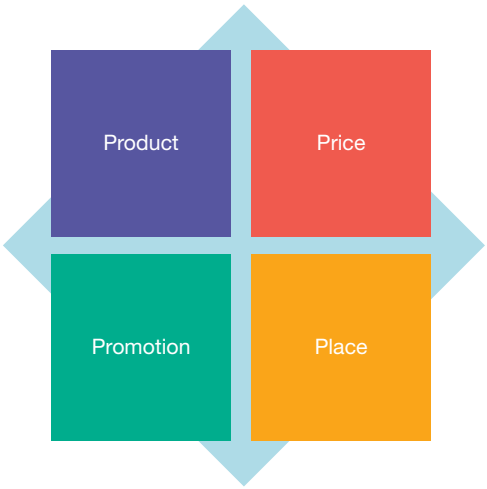
in the right place, at the right time, at the right price'. This is sometimes called the 4Ps: product, price, place and promotion.

Successful marketing needs to involve the following elements:

- *research* — gathering information from potential consumers about their wants and needs
- *publicity* — providing information about a new product or service
- *promotions* — assisting the launch of products and services (for example, events)
- *advertising* — promoting new behaviours (for example, anti-litter, Quit campaign, road safety programs)
- *evaluation* — finding out the success of the product or campaign.

The following extract is a set of guidelines for marketing a new product written by successful entrepreneur Janine Allis, who founded Boost Juice.

FIGURE 4 The 4Ps of marketing



ADVICE FROM JANINE FOR ALL BUSINESS PEOPLE

- Surround yourself with people who have done it before because you will save on mistakes and every mistake costs money.
- Put a promise to the brand.
- Question whether your company name tells people what you do.
- Your company name should be something you are passionate about.
- Your brand should crystallise your message.
- Clearly identify and promote to your target market.
- Changing a brand name is costly and can bring angst and heartache.
- Take what you've got but update it to reflect growth and expansion.

FIGURE 5 Boost Juice founder Janine Allis



Everyone in a business needs to know the business's plan, so that all departments work towards achieving the business's objectives. Such a plan is referred to as an *integrated* marketing plan.

There is no one set format for developing a marketing plan. Each plan will reflect the individual characteristics of the business. However, all marketing plans should have two features in common:

- They should be realistic, given the business's present situation.
- They should be achievable within the business's resources and budgets.

FIGURE 6 Marketing is not necessarily about selling something for a profit. For example, you can run a marketing campaign for a free concert or a cake stall.



Target markets

Entrepreneurs aim their products at target markets. These market segments may be determined by age, gender, income, occupation, education or geographical location. Marketing analysts break down target markets further to show how the types of products and brands purchased reflect the personality and lifestyle of the user (psychographic segmentation). Through market research, such as surveys and telephone marketing, information about products and users is gathered. Feedback may reveal information about brand loyalty, or how memorable a brand or advertisement is.

FIGURE 7 Selecting a market segment to be the target market is important. In this example, the fashion retailer makes clother for woman over 40 years of age. The clothes are of a reasonable quality but would not be classed as 'designer' clothes. In this business, female middle-income earners are the main target market.

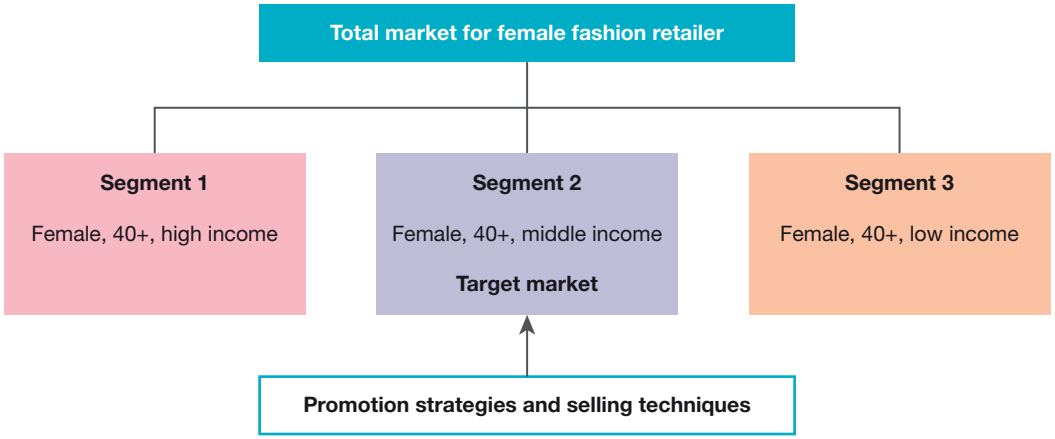


FIGURE 8 The fashion retailer Sportsgirl has a primary target market of 18- to 25-year-old females, and a secondary target marget of 26- to 40-year-old females.



DISCUSS

Brand loyalty is when customers favour one company's brand of goods (or services) over a competing brand; for example, you may know someone who will purchase only an Apple iPhone as their smartphone. Are there both advantages and disadvantages to being loyal to brands? **General capability: Critical and creative thinking**

8.2 ACTIVITY

Collect a number of print advertisements from a magazine. Suggest the psychological and/or sociocultural influence to which each advertisement is appealing. **HASS skills: Evaluating, Analysing**
Economics and Business concept: Making choices

8.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 6	Questions 4, 7, 9, 11	Questions 5, 8, 10

Check your understanding

1. Explain what a target market is.
2. List four factors influencing consumer behaviour and give an example of each.
3. Define each of the following terms:
   a. market research
   b. marketing campaign
   c. market segments.
4. Identify two market segments.
5. Identify the 4Ps of marketing.

Apply your understanding

6. Explain two of the 4Ps of marketing.
7. Think of an advertising campaign you have seen recently and identify how they used the two of the 4Ps of marketing you explained in question 6.
8. Explain how perception and motive influence consumer buying behaviour. Distinguish between the sociocultural and psychological factors that influence consumer choice.
9. How do peer groups influence buying behaviour?
10. Name some of your own peer groups and suggest how they influence your buying decisions.
11. What two features should all marketing plans have?

For sample responses for every question, go to www.jacplus.com.au.

8.3 Consumer choice, attitude and preference

LEARNING INTENTION

By the end of this subtopic you will be able to evaluate the outcomes of buying.

8.3.1 The influence of consumers on businesses

Consumers wield incredible power. As the purchase of products drives the marketplace, businesses find themselves at the mercy of consumer behaviour. If consumers stop buying particular products, the consequences can be serious and widespread. Businesses and retail distributors, as well as the manufacturers of components, can lose money when consumers change their purchasing behaviours. For this reason, businesses and retailers must also keep their consumers in mind. Let's investigate how consumers can hold companies responsible for their activities.

FIGURE 1 Eager customers queuing before the release of the latest iPhone



8.3.2 Consumer choices

As we have just learned, the marketplace is a highly competitive environment. Businesses and vendors go to extraordinary lengths to win and keep customers. For this reason, it is crucial that consumers and the choices they make are protected. There are several organisations in Australia that contribute to ensuring this happens.

The independent organisation CHOICE is one example. Founded in 1959, CHOICE began as a magazine published by the Australian Consumers' Association (ACA). The magazine, as well as the organisation behind it, aims to help consumers make wise purchasing decisions. CHOICE was also founded to protect consumers against substandard products and services. Today, CHOICE includes an extensive web-based service (choice.com.au) and provides comprehensive product tests and reviews. Consumers can use these services to research products and compare brands. By using organisations such as CHOICE, consumers are able to make educated and informed purchasing decisions.

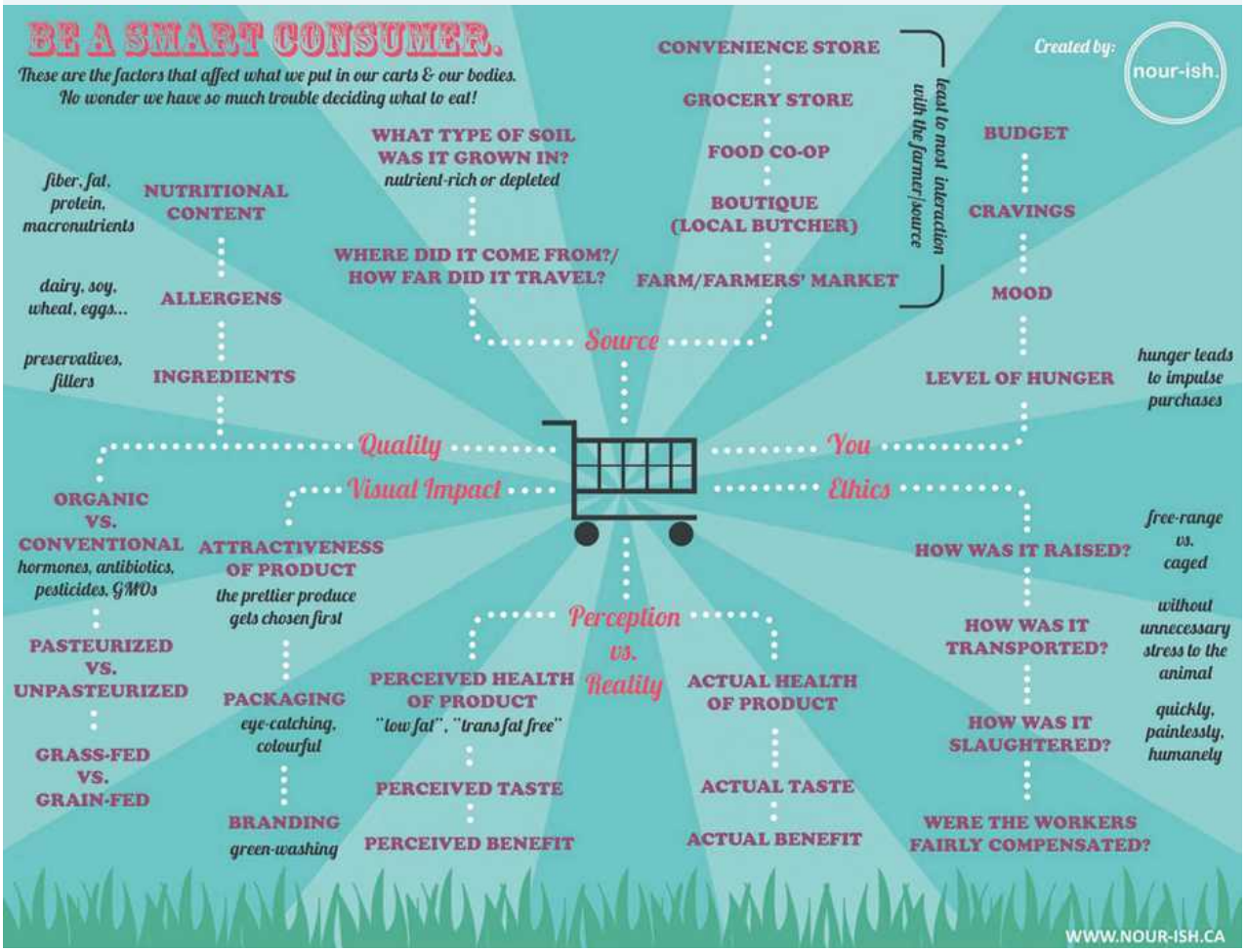
The Australian Competition and Consumer Commission (ACCC) is another organisation that helps protect the rights of consumers. Although the ACCC is a federal government body, it operates independently of any political **bias**. Its role is to regulate and oversee business **operations** while protecting the rights of the consumer. The ACCC monitors and regulates competitive marketplaces, ensuring that businesses operate with fair and reasonable economic conduct (including the setting of prices). The ACCC also provides consumers with independently researched product information. The ACCC often holds its own investigations into work and product standards, publishing its findings for the public to read.

Each state and territory of Australia also has a consumer affairs department. These state government bodies fulfil several roles for the ACCC and are avenues through which consumers can exercise their rights.

bias prejudice, leaning towards one view of things; showing favouritism towards one entity over another

operations the area of a business that consists of all the activities engaged in producing goods and services

FIGURE 2 The many factors considered by consumers seeking to make ethical purchasing choices



8.3.3 Ethical and environmental consumerism

Consumers have the ability to hold businesses accountable for their ethical and environmental practices. By demanding proper business behaviour, consumers have the power to influence the standards that businesses must meet.

Businesses that violate these ethical or environmental standards can find themselves the target of awareness campaigns or even **boycotts**. It is in the best interest of a business to learn and understand the concerns of its customers in order to avoid any such action. In fact, businesses can often gain customers by promoting ethical behaviour and positive environmental activities.

The booming bottled water industry provides many examples of the effects of **ethical consumerism**. The following case studies demonstrate the potential negative and positive impacts of consumer behaviour on businesses.

8.3.4 CASE STUDY: FIJI Water

One of the world's most popular brands of bottled water, FIJI Water is also the small island nation's major foreign export. An incredible 10 per cent of Fiji's total export income is generated from the bottled water industry. What makes this statistic hard to swallow is the fact that 53 per cent of Fijians lack access to clean drinking water. The location of the company's main processing plant also diverts water away from local

boycott choosing to avoid the purchase of particular products or brands for ethical, moral or political reasons

ethical consumerism making a purchasing decision based on a company's values and behaviours

communities, dramatically lowering agricultural production as well as causing environmental damage. These and other criticisms are published on the website Shop ethical!, an Australian-based website for ethical consumers. In an effort to present consumers with balanced information, this website also promotes any positive activities undertaken by the companies in question. Companies such as FIJI Water suffer from negative attention when consumers make ethical decisions. In the billion-dollar bottled water industry, this can result in a serious loss of revenue.

8.3.5 CASE STUDY: Thank You Water

At the other end of the bottled water spectrum is Australian company Thank You Water. The founders of this company saw both a problem and an opportunity with the world's growing preference for bottled water. With the money earned from its water sales, the Thank You group funds safe water projects across Australia and the world. By actively promoting its ethical business activities, Thank You Water has quickly become one of Australia's most popular brands of bottled water. In just four years, Thank You Water increased its bottle production from 40 000 (per year) in 2008 to 320 000 (per year) in 2013. It has since gone on to launch numerous other products in their personal care and baby care ranges. In this way, the company has used consumers' preferences for ethical and positive environmental action to its favour. Through its product sales, Thank You Water has given more than $6.2 million to fund water access, sanitation and hygiene programs globally. In August 2020, Thank You stopped producing bottled water because of the environmental impacts of bottled water market - something the company had initially hoped to solve.

FIGURE 3 Australian company Thank You Water uses profits from bottled-water sales to fund safe water projects.



on Resources

Video eLesson Consumer outrage over appalling treatment of chickens (eles-2439)

Weblink Shop ethical!

8.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample** responses for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions	Questions	Questions
1, 2, 4, 6	5, 7, 8	3, 9, 10

Check your understanding

1. How and when did CHOICE Australia begin?
2. List the services that CHOICE provides for consumers.
3. Explain the differences in the ethical and environmental approaches of FIJI Water and Thank You Water and how these may affect their consumer base.
4. What does ACCC stand for?
5. Which branch of government controls the ACCC?

Apply your understanding

6. What is the role of the ACCC?
7. How does the ACCC differ from CHOICE Australia?
8. Consumers are charged a small fee for some of the services provided by CHOICE (including research reports into products). Do you believe it is fair and reasonable for CHOICE to charge consumers? Explain your position.
9. Do you believe it is practical to be an ethical consumer? What are some of the difficulties ethical consumers may encounter?
10. Being an ethical consumer would be easier if businesses acted ethically in all circumstances. Do you agree? Justify your answer.

For sample responses for every question, go to www.jacplus.com.au.

8.4 Making major purchases

LEARNING INTENTION

By the end of this subtopic you will be able to identify the difference between minor and major consumer and financial decisions, and list examples of each.

8.4.1 Consumer choices

People often vividly remember their first car. Perhaps it was a rusty but reliable bomb handed down from your grandmother to your older brother and then to you. Or maybe it was your dream car: the one you had worked towards owning since your first shift at the fish-and-chip shop. Whatever the case, owning your first car is a significant milestone in your life. Now that you are only a few years away from that milestone, you need to start making some decisions. Do you spend a small amount of money on that rusty bomb and hope it doesn't need repairs? Do you pour all your savings into one large purchase? Or do you take out a loan in order to afford that car you've always wanted?

Buying a car is not the only challenging, long-term financial decision you will be faced with. Let's identify and evaluate the consumer choices that surround major purchases.

FIGURE 1 A car is probably the first major purchase you will make in your life.



8.4.2 Choosing a car

Before making a major purchase such as a car, you need to decide exactly what you want. You would be foolish to go out and buy the first car that attracts your eye. Instead, you need to determine what kind of car you want. The size of the car you buy will depend on your needs, your lifestyle and your purpose for buying the car. You may want a small car (to help you save on petrol costs and to best suit your limited garage space) or a station wagon (in which you can easily transport your surfboard each weekend). As well as the size and look of the car, you also need to consider its age, condition and fuel efficiency. One last consideration is whether the car you *want* is the car you *need*. Is it worth spending money on a new car or are you better off buying your grandmother's old bomb? You need to weigh up all these options before making your choice.

How safe is your car?

Once you have a car in mind, the next step is to conduct proper research. Websites such as **RedBook** and **Carsales** (use the weblinks in the Resources tab) contain detailed statistics on new and used cars. You can search these sites for your preferred car and find lists of previous sales, safety records and other useful information. Another valuable website is **How safe is your car?** (go to the weblink in the Resources tab). This site provides independent safety information on new and used cars. If you purchase a used car, the seller is required by law to obtain a **roadworthy certificate**. This document is proof that the car meets the necessary mechanical and safety standards. You can possibly save hundreds of dollars by avoiding a bad car purchase (commonly known as 'buying a lemon'). To this end, motoring organisations such as the RAC WA, and some insurance companies, provide pre-purchase, pre-selling and end-of-warranty inspections on new and used cars, as well as independent valuations and owners' reports. These services can inform you of the history and condition of the car and whether it has been in an accident. This helps you make an informed purchase — you know what you are buying. Your last choice in these initial stages of purchasing a car is perhaps your most important one — deciding how you will pay for it.

roadworthy certificate official proof that a used car has been properly tested and is safe to operate and drive

FIGURE 2 Safety should be a major consideration when buying a car.



DISCUSS

All new cars sold in Australia have to meet specified minimum safety standards. As a result, newer cars perform significantly better than older cars in accidents. Should there be increased safety standards for second-hand cars to bring them in line with the new-car safety standards? **General capability: Ethical understanding**

on Resources

Weblinks RedBook
Carsales
How safe is your car?

8.4.3 The costs of car ownership

There are a number of costs that you need to consider when buying a car. First, there is the purchase price of the car. Before taking delivery of the car, you will also be required to pay **stamp duty** and dealer charges (if it is a new car). If you buy the car second-hand, you will need to re-register the car in your name and pay the relevant charges. Next there are ancillary costs, which are essential for all car owners. Purchasing car insurance can be expensive, but it provides a safeguard in the event of an accident. Comprehensive car insurance protects you no matter who is at fault. 'Third-party' insurance is compulsory and protects others if you are at fault, and protects you if others are at fault. If you cause an accident while driving an uninsured car, the damage to your car and other cars could cost tens of thousands of dollars.

FIGURE 3 Only comprehensive car insurance protects you regardless of who is at fault.



Joining an emergency road-side assistance provider is another cost for car owners. While joining these services is not essential, they can help you out of a lot of troublesome situations. There is also the cost of any permanent additions you may want (for example, a sound system, tinted windows, alloy wheels). The extent of these additions is a strictly personal choice but can add significant costs to car ownership. Finally, you need to consider that your car will never be worth as much as it was the day you bought it. As your car gets older, it depreciates in value. The rate of depreciation increases as newer models with better **technology** are produced.

stamp duty a compulsory fee (a percentage of the total purchase price) charged by state governments

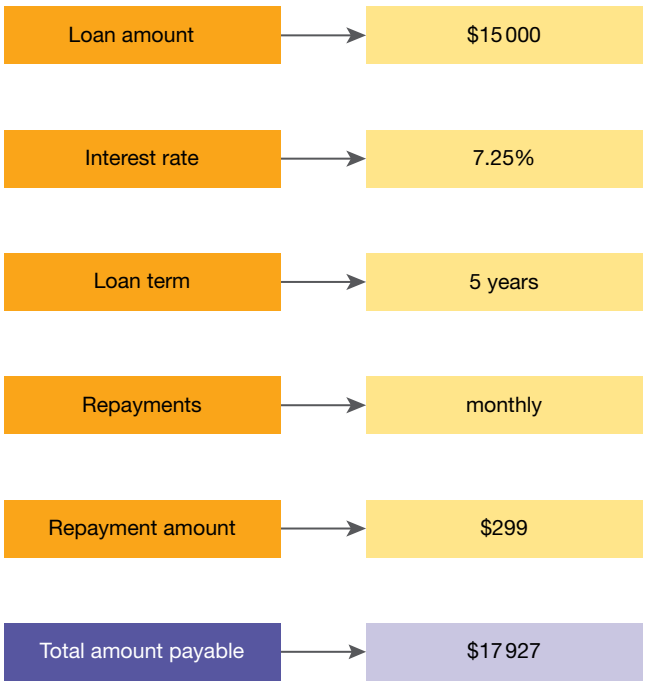
technology the use of scientific knowledge to develop machinery and devices to solve business problems

Loans

If you do not have enough money to purchase a car outright you can take out a **loan**. This involves borrowing a sum of money from a bank or other financial institution. Let's say the car you want costs $20 000 and you only have $5000. A bank can lend you the remaining amount so that you can afford your car. Over the course of an agreed period of time (usually between one and five years), you are required to pay the money back to the bank or lender. This is done by making periodic repayments, which include a percentage of interest. It is through these interest payments that lenders make their money. Interest is the amount paid by a borrower to a lender for the privilege of borrowing money. A fixed or variable interest rate is usually agreed upon at the beginning of the loan. For example, a lender could offer a rate of 7.25 per cent.

FIGURE 4 applies this rate to the example discussed above. As you see in **FIGURE 4**, there is nearly $3000 difference between the original loan amount and the total amount payable. This means that the lending organisation makes a considerable profit from each loan agreement it signs. On a $15 000 car loan, a bank would only make a relatively small amount of money. Yet on a $500 000 home loan (at 5.5 per cent interest over 30 years), a bank would make more than $500 000 in interest. **Profit** from interest payments is one of the main sources of revenue for banks and lending organisations.

FIGURE 4 An example showing repayments for a car loan



8.4.4 Making the right decision

Purchasing your first car is a milestone that you'll remember for the rest of your life. When you make any major purchase, it is important that you consider both short-term and long-term consequences. Spending only $2000 on your grandmother's old car may seem like the most cost-effective option at the time. However, older cars can often be more expensive to run. They lack modern fuel efficiency technology and can be expensive to repair. Although you may spend more initially on a newer car, the long-term costs can often turn out to be more manageable. Whatever your decision, it is crucial that you conduct proper research on the car itself and the method of payment you choose to purchase that memorable first car.

loan the temporary lending of money, usually by a financial institution

profit what remains after all business expenses have been deducted from the money that has been collected from selling goods and services

8.4 ACTIVITY

Use the information in this subtopic to choose your ideal first car. Conduct internet research to complete the following table.

Make	
Model and year	
Body type	
Transmission	
Condition	
Fuel efficiency	
Safety rating	

HASS skills: Evaluating, Analysing
Economics and Business concept: Making choices

8.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 7	Questions 5, 6, 8	Questions 3, 9, 10

Check your understanding

1. Identify the largest purchase you have made in your life so far.
2. Explain how you obtained the funds to purchase the item identified in question 1.
3. Buying a car is likely to be the next major purchase of your life. List the options you should consider when deciding what kind of car to buy.
4. Before a used car is sold, what tests does it need to have?
5. List the costs involved with car ownership. Choose three of these costs and describe them in more detail.

Apply your understanding

6. Explain why insurance is beneficial for all car owners.
7. Explain what is meant by ‘stamp-duty’.
8. How do banks make money from car loans?
9. What is the difference between comprehensive and third-party car insurance?
10. Insurance, stamp duty and loan repayment costs all need to be considered when buying a car. Identify and explain other costs of car ownership.

For sample responses for every question, go to www.jacplus.com.au.

8.5 SkillBuilder — Choosing a mobile phone plan

8.5.1 Tell me

What questions do we need to ask when choosing a mobile phone plan?

Do you have a pre-paid mobile or do you pay a bill every month? Do you have unlimited standard calls and can you send as many text messages as you want? How many gigabytes of data do you get, and is social media included? You need to consider all these questions and more when you choose a mobile phone plan.

In this SkillBuilder, you will find out what mobile phone plans are and how you can select the one that best suits your needs. You will also find out how to compare the many offers from the various providers that operate in Australia.

FIGURE 1 Choosing the right mobile phone plan can save you a lot of money over time.



8.5.2 Show me

Mobile phones are usually purchased through telecommunications providers. Companies such as Telstra, Optus and Vodafone sell phone handsets as well as contract agreements known as 'plans'. Although some people choose to purchase their mobile phones outright, the majority of Australian consumers sign up to either a pre-paid or post-paid mobile phone plan. Usually included in the plan are essential mobile phone functions such as calls, text messages, multimedia messaging, data charges and voicemail. Tailored plans are often available that enable consumers to choose a plan that suits their specific needs. For example, as business owners tend to make the majority of their phone calls during the day, business plans offer a lower charge for calls made during business hours. Mobile phones can also provide portable internet access when used as personal 'hotspots'. Before purchasing a phone and signing up to a plan, it is important to compare mobile phone providers and the options they offer to consumers.

8.5.3 Let me do it

Complete the following activities to practise this skill.

8.5 ACTIVITIES

1. Construct a comparison table like the one shown here. You can either use the headings provided, or you can alter this table to suit your own search parameters. Use online information or call the company directly to obtain the information you need. As mobile phone providers offer a huge range of products, it is best to narrow your search before you begin this phase. A good way to do this is to choose one specific brand and model of phone to research. There are also many different mobile phone providers in Australia, so it will be easier if you limit your search by investigating only some of the following companies:
   - Telstra
   - Optus
   - Vodafone

- Belong
- Dodo
- iiNet
- Amaysim.

There are several websites that present information and compare plans for a number of different mobile phone providers.

Use the **Mobile phone providers** weblinks in the Resources tab to find information on pricing of mobile phone plans offered by three different telecommunications companies.

Phone provider	Length of contract (months)	Calls included ($)	Min. monthly charge ($)	Data included (GB)	Additional data costs ($ per GB)	Flagfall ($)	SMS costs ($)	MMS costs ($)
Telstra								
Optus								
Vodafone								
Belong								

HASS skills: Questioning and researching

2. Once you have completed the summary table, you need to evaluate the costs and benefits of the different alternatives. To do this, complete the following tasks.
   a. Complete a cost–benefit analysis for each of the mobile phone plans you researched. Use a table like the following to help you.

Phone provider	Costs	Benefits
Telstra		
Optus		
Vodafone		
Belong		

   b. Considering your own needs as a mobile phone user, rank the providers from most suitable to least suitable.
   c. Write a one-paragraph response that justifies your rankings.

HASS skills: Evaluating

on Resources

Weblinks Mobile phone providers 1
Mobile phone providers 2
Mobile phone providers 3

8.6 Thinking Big research project: Hitting the target — multimedia advertising campaign

8.6 1 Scenario

Advertising is designed to influence consumer decisions and, as with many things, it has undergone changes as society and technology have changed — from posters, billboards and newspapers to radio, television and now social media. You will create and adapt a product advertisement for use across different media types, aiming to hit the target market of each medium.



8.6 2 Task

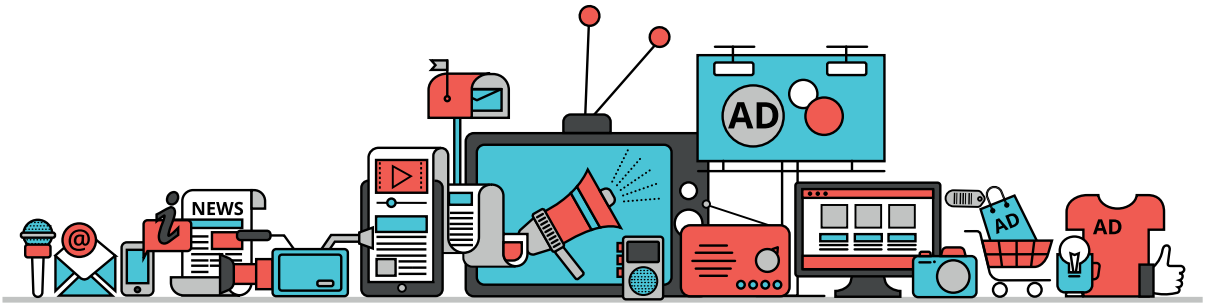
Your task contains various parts, all relating to advertising one product across different media. You should complete the following:

1. Collect a newspaper advertisement for a product you are familiar with.
2. Analyse the advertisement — identify the target market and market segments at which the advertisement is directed.
3. Write a script for a radio advertisement for the same product. (Radio advertisements are generally between 15 and 30 seconds long.) Write an outline of the target market and market segments it may be directed towards.
4. Record the script in an audio format.
5. Write a script for a TV commercial for the product and an outline of the target market and market segments it may be directed towards. (TV advertisements are traditionally 30 seconds long.) ***Note:*** The TV ad must be different from the radio ad.
6. Write a script for a social media advertisement for the product (to appear on Facebook, Instagram or an online game site) and an outline of the target market and market segments it may be directed towards. Social media advertisements can be as short as 5 seconds or as long as 30 seconds. ***Note:*** The social media ad must be different from the other ads created.



8.6.3 Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group. Working in groups of three or four will allow you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.
- Select an advertisement for a product — check with your teacher for approval to work with this product.
- Navigate to the **Research forum**, where you will find starter topics loaded to help structure your work. You can add further topics to the Research forum if you wish. In the **Media centre** you will find an assessment rubric and some weblinks that will provide some inspiration for your task.
- Develop your scripts and target market outlines for each advertising form, as detailed in the **Task** section.
- If you have the equipment and appropriate permissions, you can film the television and social media advertisements to present to the class.
- Prepare a summary of how your advertisements differ depending on the type of media you are using.
- Submit your completed scripts, target market outlines and summary of advertising differences to your teacher for assessment.



on Resources

ProjectsPLUS Thinking Big research project — Hitting the target — multimedia advertising campaign (pro-0224)

8.7 Review

8.7.1 Key knowledge summary

8.2 Business influences on consumer decisions

- Four main factors influence consumer purchasing decisions: psychological, sociocultural, economic and government factors.
- Psychological factors that influence consumer choice include perception, motive, attitude and personality.
- Sociocultural factors that influence consumer choice include family, peer groups, social class and culture.
- Marketing campaigns are designed specifically with consumer attitudes in mind.

8.3 Consumer choice, attitude and preference

- The decisions consumers make can affect not only their own lives but also the viability of businesses and markets.
- Businesses and companies go to considerable lengths to understand consumer attitudes and desires.
- Consumers need to be aware of the various strategies employed by businesses.
- Some businesses and companies may indulge in unethical behaviour.

8.4 Making major purchases

- Consumers should conduct thorough research on companies and the products they offer.
- Before making a major purchase such as a car, you need to decide exactly what you want. It is crucial that you conduct proper research on the car itself and the method of payment you choose to purchase that car.

8.7.2 Key terms

bias prejudice, leaning towards one view of things; showing favouritism towards one entity over another
boycott choosing to avoid the purchase of particular products or brands for ethical, moral or political reasons
consumer attitude a person's overall feeling about an object or activity
culture all the learnt values, beliefs, behaviours and traditions shared by a society
ethical consumerism making a purchasing decision based on a company's values and behaviours
loan the temporary lending of money, usually by a financial institution
marketing the process of planning and executing the development, pricing, promotion and distribution of products to create exchanges that satisfy individual and organisational objectives
motives the reasons why individuals do something
operations the area of a business that consists of all the activities engaged in producing goods and services
peer group a group of people with whom a person closely identifies, adopting their attitudes, values and beliefs
personality a collection of all the behaviours and characteristics that make up a person
profit what remains after all business expenses have been deducted from the money that has been collected from selling goods and services
psychological factors influences within an individual that affect their buying behaviour
quality the degree of excellence of goods or services and their fitness for a stated purpose
roadworthy certificate official proof that a used car has been properly tested and is safe to operate and drive
sociocultural influences forces exerted by other people that affect customer behaviour
stamp duty a compulsory fee (a percentage of the total purchase price) charged by state governments
technology the use of scientific knowledge to develop machinery and devices to solve business problems

8.7.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

People may think they make consumer choices on their own, but how do businesses influence and attract customers?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

on Resources

eWorkbook Customisable worksheet for this topic (ewbk-6079)
Reflection (ewbk-6078)
Crossword (ewbk-6077)
Student Learning Matrix (ewbk-6074)

Interactivity Innovation and competition in the marketplace crossword (int-7682)

8.7 Review exercise

Multiple choice

1. What has helped Coca-Cola maintain its market dominance?
   - A. Clever and creative advertising
   - B. Cheaper prices
   - C. High levels of the addictive drug caffeine
   - D. High levels of sugar

2. What are the four main influences on consumer behaviour?
   - A. Psychological, socioeconomic, cultural and governmental
   - B. Psychological, socioeconomic, emotional and governmental
   - C. Psychological, sociocultural, economic and governmental
   - D. Psychological, sociocultural, emotional and governmental

3. Which of the following is *not* a psychological factor that influences consumer behaviour?
   - A. Perception
   - B. Motive
   - C. Attitude
   - D. Guilt

4. Who is CHOICE Australia run by?
   - A. Businesses
   - B. Consumers
   - C. Independent members
   - D. Government

5. Which of the following is *not* a role of the ACCC?
   - A. To set the price of products
   - B. To provide research into product safety
   - C. To regulate marketplaces
   - D. To protect the rights of consumers

6. How does ethical consumerism ask companies to act?
   - **A.** Frugally
   - **B.** Responsibly
   - **C.** Fairly
   - **D.** Rationally

7. What is the proof that a car is mechanically sound to drive known as?
   - **A.** Comprehensive insurance
   - **B.** Third-party insurance
   - **C.** Roadworthy certificate
   - **D.** Roadside assistance

8. How do banks make money on car loans?
   - **A.** They take a percentage of the car's initial value.
   - **B.** They charge interest for the life of the loan.
   - **C.** They get paid by car companies to sell particular cars.
   - **D.** They don't.

9. The consequences of buying a car are:
   - **A.** long-term.
   - **B.** short-term.
   - **C.** immediate.
   - **D.** both short-term and long-term.

Short answer

Use the **Shop ethical!** weblink in the Resources tab to answer the following questions.

Choose an issue that you wish to investigate further.

10. Summarise the key points of your chosen issue.
11. Choose one company connected to your chosen issue that has a bad track record and discuss its poor activity.
12. Choose one company connected to your chosen issue that has a good track record and discuss the positive role it plays.
13. Suggest what could be done to raise awareness of your chosen issue.

on Resources

Weblink Shop ethical!

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 8 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

8.1 Overview

Video eLesson
- The relationship between businesses and consumers (eles-2384)

8.2 Business influences on consumer decisions

eWorkbook
- Consumer demand (ewbk-6075)

8.3 Consumer choice, attitude and preference

eWorkbook
- Competition and innovation in the marketplace (ewbk-6076)

Video eLesson
- Consumer outrage over appalling treatment of chickens (eles-2439)

Weblink
- Shop ethical!

8.4 Making major purchases

Weblinks
- RedBook
- Carsales
- How safe is your car?

8.5 SkillBuilder — Choosing a mobile phone plan

Weblinks
- Mobile phone providers 1
- Mobile phone providers 2
- Mobile phone providers 3

8.6 Thinking Big research project — Hitting the target — multimedia advertising campaign

ProjectsPLUS
- Thinking Big research project — Hitting the target — multimedia advertising campaign (pro-0224)

8.7 Review

eWorkbook
- Reflection (ewbk-6078)
- Crossword (ewbk-6077)
- Student Learning Matrix (ewbk-6074)

Interactivity
- Innovation and competition in the marketplace crossword (int-7682)

Weblink
- Shop ethical!

To access these online resources, log on to **www.jacplus.com.au**.

9 Improving business productivity

9.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

Why is productivity important for a business? What might happen to a business that cannot improve productivity?

9.1.1 Introduction

One of the main objectives of a business is to improve the efficiency of its operations and **productivity**. Productivity measures the amount of **output** compared to the amount of **input** that goes into production. By improving productivity, businesses can be more competitive as they produce products at lower costs than competitors. Productivity can be improved by reducing the number of inputs required to obtain the same level of output or an increased output. Alternatively, productivity can be improved if inputs remain the same but output increases, therefore, obtaining more from the inputs. There are many strategies that businesses can use to improve productivity. We will explore these strategies in this topic.

productivity a measure of efficiency; the amount of output produced compared to the amount of input required in production

output the end result of a business's efforts; the good or service that is delivered or provided to a consumer

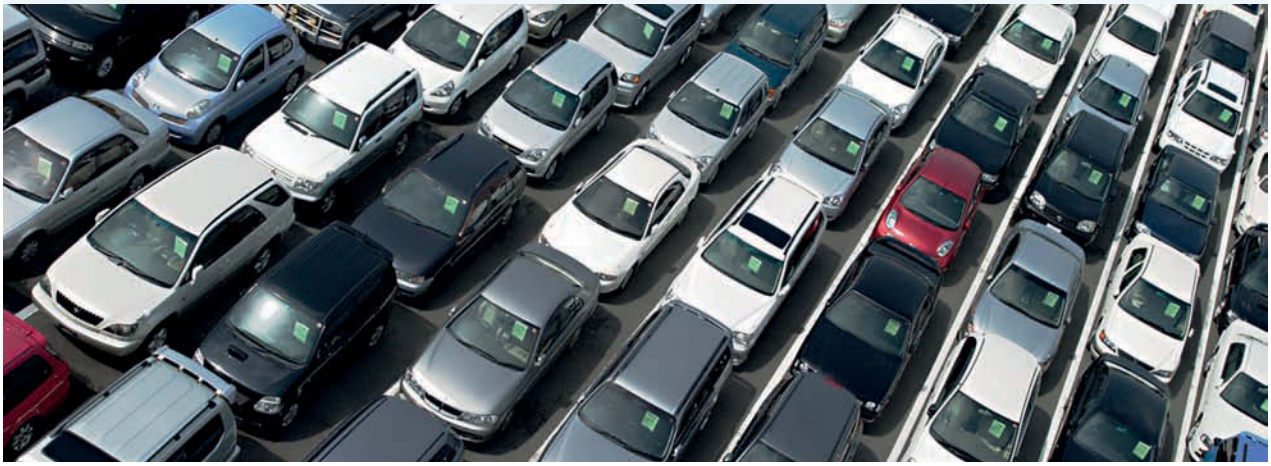
input the resources — including materials, equipment and labour — used in the process of production

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6091)

Video eLesson Improving business productivity (eles-2385)

FIGURE 1 Car manufacturers can improve productivity by reducing the number of inputs required to obtain the same number of cars, or more cars. Alternatively, they can improve productivity if inputs remain the same but the number of cars produced increases, resulting in more cars from the inputs.



9.2 Managing operations and improving productivity

LEARNING INTENTION

By the end of this subtopic you will be able to:

- describe ways in which businesses can improve productivity
- explain how the use of technology has allowed innovative responses by business.

9.2.1 Operations

Operations is the area of a business responsible for making the business's product, whether it is manufacturing goods or providing a service. Operations oversees the transformation of inputs — including the materials, equipment and labour used in the process of production — into output, that is, the finished product. Operations can influence improvements in productivity because it involves capital investment, investment in applications of technology and the use of materials management strategies such as just-in-time inventory systems.

FIGURE 1 Operations is responsible for turning inputs into goods (such as these bottles of soft drink) or services.



9.2.2 Capital investment

Capital investment involves putting financial resources into physical resources such as machinery, equipment and facilities. These investments are essential for a business to be able to provide goods and services to customers. Investing in **capital** can improve productivity. For example, building a modern assembly line in a factory will reduce costs and the use of labour while producing more products, which increases the productivity of the business's capital. An investment in capital also increases the productivity of labour and other resources employed by a business.

9.2.3 Investment in technology applications

Investment in **technology** is another way businesses can improve productivity. Regardless of whether they are manufacturing a good or producing a service, businesses can use technology to speed up or shorten processes and maximise the use of resources. Using technology means production can take place using less labour or fewer materials.

Technology also enables businesses to drive **innovation**. New technology can support a business in designing or developing new products or processes. It can also be used to actually produce new or improved products or as part of a new innovative process.

operations the area of a business that consists of all the activities engaged in producing goods and services

capital physical resources owned by a business and used in production, including factories, machinery and equipment

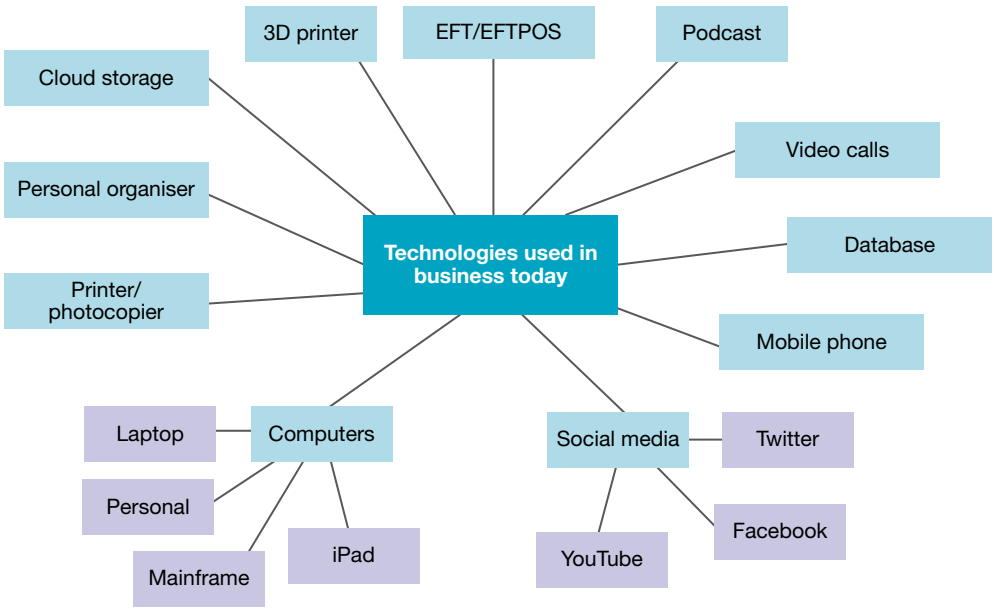
technology the use of scientific knowledge to develop machinery, equipment and devices designed to solve business problems

innovation adding a new product (which can be a good or a service) to an existing product line, or significantly improving an existing product or process

Office technology

Office and communication technologies such as the ones in **FIGURE 2** have enabled new markets to open up because businesses can now reach more customers around the world. Developments in business technologies have created the opportunity for workers to complete a greater range of tasks in less time. Many office technologies also enable employees to work from locations outside the business.

FIGURE 2 Technologies used by businesses today



Customer relationship management

Customer relationship management (CRM) refers to the systems that businesses have introduced to maintain customer contact. CRM applications can be used to improve productivity by storing information about existing and potential customers.

This information can be entered and retrieved by employees from different areas in the business, including the sales, marketing and operations departments. In this way, the business can improve customer service because services can be provided directly to customers. This reduces costs and improves productivity.

FIGURE 3 Customer relationship management is used to learn about and store information regarding customers' needs and behaviours.



Robotics

Robotics is a special form of technology capable of complex tasks. Robots are often used in manufacturing, on assembly lines, in engineering or in research where a programmable machine capable of doing several different tasks is required. They are capable of performing tasks with greater precision and accuracy than any human worker can. Robots work without complaint and do not demand higher wages. They work in conditions that are often far too dangerous for employees. By performing tasks faster and with greater accuracy in places where humans often cannot, robots improve productivity.

robotics highly specialised forms of technology that are capable of complex tasks

FIGURE 4 Robotics technology is used in many areas of business, including manufacturing and packing.



Computer-aided design

Computer-aided design (CAD) is software that generates two-dimensional or three-dimensional diagrams from a set of given input data (parameters). Once a design has been created it can be viewed from multiple angles, which assists both the designer and the end user to visualise the product. A lot of information can be obtained from the design. The costs of materials can be calculated and the time to complete the task of production can be determined, enabling the costs of the overall project to be quantified. In this way, CAD can improve productivity. If the cost is too high or if the design is too limited, the input parameters can be easily altered to reflect any new requirements. The normal drafting process can be very expensive, time consuming and less accurate. CAD can also be used to design the process that would be used to create the product in the shortest possible time using the least number of materials.

computer-aided design software that enables a business to create, modify or design product possibilities from a series of input parameters

CASE STUDY

Innovative technologies

The 2019 WA Innovator of the Year Award was won by Mining and Process Solutions for the development of GlyLeach — an environmentally friendly metal extraction method. This is a low-cost method of mineral extraction, which is also biodegradable. This will enable mineral deposits that were previously thought uneconomic to mine to be accessed, improving access to important minerals like copper, while reducing both the economic cost and environmental cost.

Technology is not used only by businesses that manufacture goods. Businesses that produce services also use technology to improve productivity. Snap Laundromat in Brisbane has introduced an innovative new technology to its washing machines and dryers that enables customers to pay for and operate the laundry services with their smartphones. The founder of Snap Laundromat, Ian McFarlane, created a small network controller about the size of a cake of soap to go inside each machine.

The customer can either swipe a QR code on the machine or visit a website to create an account. Once the account has a balance, they can select a dryer or washing machine of their choice. Mr McFarlane said that customers, particularly young people and travellers, have been very quick to take up the new technology. He has started a new business, Eziwash, to make the controllers available to other laundromats. The use of this technology application means that customers can quickly and easily pay for their laundry service, particularly if they do not have cash, and could encourage more people to use the laundromat. Eventually the technology will provide the ability to download customer data and to reward customers for their loyalty.

FIGURE 5 Use of technology applications can make the customer experience simpler, quicker and more worthwhile.



9.2.4 Materials management

Materials management is concerned with managing the way materials are received and stored and making sure they are available to the operations process when required. Many businesses have large quantities of materials on hand to complete production. This is called stock, or **inventory**. Businesses hold large inventories to make sure they do not run out of materials. However, this can become a huge cost for a business because the stock has to be stored. Stock that takes up storage space for a long time can also result in the business missing opportunities to invest money in other places. In addition, materials can become unusable after a certain period of time. It is very important to manage materials effectively so that costs can be kept down.

materials management an operations strategy that manages the use, storage and delivery of materials to ensure the correct number of inputs is available to the operations system when required

inventory the goods and materials held as stock by a business

just-in-time an inventory system that ensures the correct materials arrive just as they are needed in the operations process

The 'just-in-time' inventory system

Some businesses use an inventory system called **just-in-time** (JIT). This system ensures that the correct materials arrive just as they are needed for production, which can reduce storage costs and reduce the risk of waste occurring in storage, thereby improving the business's productivity.

CASE STUDY

Just-in-time real estate

REA Group is a global online real-estate advertising company that owns and operates property-advertising sites in Australia, including www.realestate.com.au. The business has applied the just-in-time system to software development. Decisions are made based on having access to the right information at the right time. This supports its efforts to be focused on customers and their rapidly changing needs. The business avoids carrying out excessive planning or documentation because this is considered to be a waste. In this way, innovation and creativity are encouraged.

FIGURE 6 REA Group uses the just-in-time system to access the right information about customer needs at the right time.



9.2 ACTIVITY

1. Use the **FM magazine** (Facility Management) weblink in the Resources tab to find out how operations management can improve productivity. Search the website for articles relating to productivity and write a list of at least five ways that operations management can improve productivity.

HASS skills: Questioning and researching
Economics and Business concept: Specialisation and trade

on Resources

Weblink FM magazine

9.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 5, 7	Questions 6, 8	Questions 3, 10

Check your understanding

1. What is operations management responsible for?
2. List four types of technology applications used by business to improve productivity.
3. Define the term 'innovation'.
4. What is the just-in-time inventory system?
5. What does CRM stand for?

Apply your understanding

6. Define the following productivity strategies.
   a. Capital investment
   b. Investment in technology applications
   c. Materials management
7. Describe how each of the strategies in question 6 can improve productivity.
8. Outline three benefits of a business using technology in an office.
9. Read the case study 'Innovative technologies' and answer the following questions.
   a. What innovative technology did Mining and Process Solutions introduce and how is it innovative?
   b. In what way is the technology that Snap Laundromat introduced innovative?
   c. How could Snap Laundromat's new technology be used to make the customer experience more worthwhile?
10. Read the case study 'Just-in-time real estate' and answer the following questions.
    a. Explain how REA Group has applied just-in-time to software development.
    b. In what way would this system improve productivity?
11. Outline what might happen to a business if it does not invest in capital or technology applications or make use of materials management strategies such as the just-in-time inventory system.

For sample responses for every question, go to www.jacplus.com.au.

9.3 Improving productivity through human resource management

LEARNING INTENTION

By the end of this subtopic you will be able to explain what human resource management is, and identify ways businesses structure their working environment to provide flexibility and efficiency.

9.3.1 Human resource management

Human resources is the area of a business that is responsible for coordinating all the activities related to the employees of a business. It manages the relationship between the employer and employees. The strategies used by the human resource department, such as training and flexible workplace conditions, focus on improving the motivation of employees and meeting their expectations. By improving motivation, human resources can influence improvements in productivity.

9.3.2 Training

The aim of **training** is to improve the skills, abilities and knowledge of employees so they can perform their job more efficiently and effectively. Both new employees and existing employees require training, depending on their level of experience. By giving them the opportunity to develop their skills and increase their knowledge, employees are more likely to feel valued within the business. Well-trained staff are likely to be more motivated and perform their jobs more efficiently. This will result in improved productivity. Staff who are well-trained are also less likely to leave the business, which results in reduced costs.

FIGURE 1 Training is important for a business because it can improve the performance of employees, improve staff morale and productivity, and ultimately increase profit.



Training can take many forms. Common methods of training include:

- *off-the-job training*. This takes place at a site away from the workplace. It may involve classroom activities, lectures and simulations.
- *on-the-job training*. This takes place at the workplace. It may involve coaching, hands-on training and job rotation (where workers move from one area of a business to another).
- *competency-based training*. This involves employees learning one competency and identifying areas where further training is required.

human resources the area of a business that manages the relationship between the employer and employees, from acquiring to terminating staff

training the process of teaching employees skills, abilities and knowledge

CASE STUDY

Top Employer: Tata Consultancy Services

Tata Consultancy Services (TCS) is a multinational information-technology services, consulting and business solutions company with its headquarters in India. Its services are offered across a number of sectors including banking and finance, retail, utilities, energy and telecommunications. TCS was recognised as a Top Employer Australia 2019 by the Top Employer Institute. Certification is awarded to the best employers around the world — that is, companies that demonstrate the highest standards of employee offerings. These employee offerings include primary and secondary benefits and working conditions, training and development, career development and culture management.

FIGURE 2 Tata Consultancy Services invest in developing the talent of their staff.



Rajeev Das the Head of Human Resources, TCS Asia–Pacific said, 'At a time of profound technology change, our investments in organic talent development at scale and our focus on attracting and retaining the best talent in every country that we operate in, have helped us gain leadership and become the preferred partner in our customers' Business 4.0™ transformation journeys'.

The key pillars of TCS's strong HR performance are:

- investing in talent development through one of the world's largest corporate training programs and STEM initiatives targeting girls
- ensuring values and behaviour are clear and aligned including an explicit code of conduct
- encouraging health and wellbeing through fitness and mental health initiatives
- driving retention and satisfaction by improving staff satisfaction.

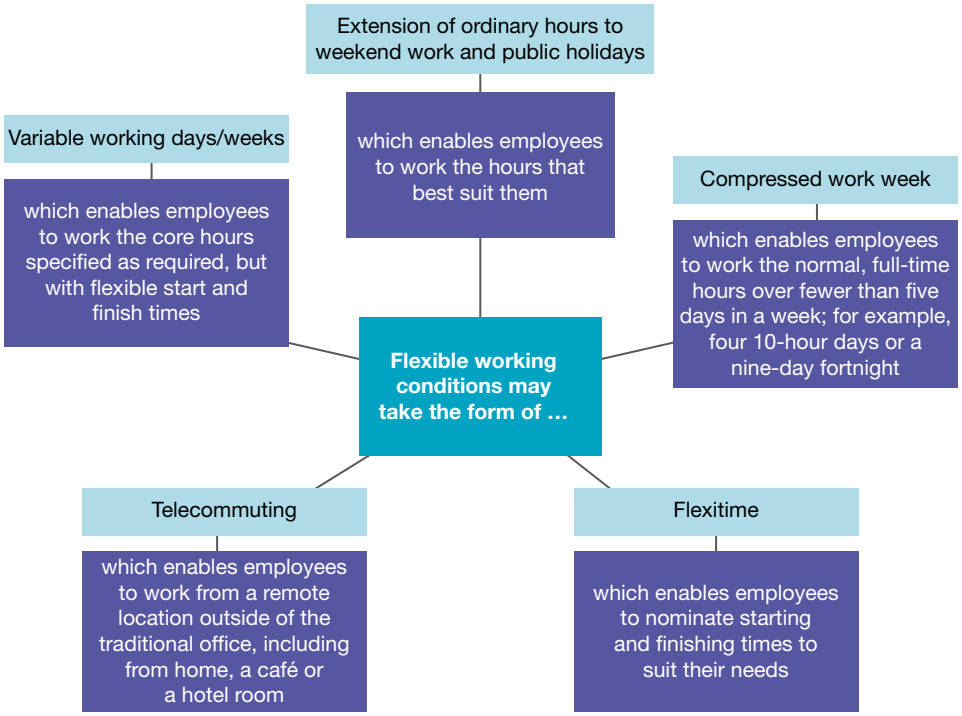
9.3.3 Flexible workplaces

Flexible working conditions help many employees achieve a better **work–life balance**. This means employees can achieve the right combination of time devoted to work, and time devoted to family and personal life. Many businesses actively seek to improve their employees' work–life balance to improve productivity. Flexible workplace conditions enable employers to attract and retain staff by facilitating flexible employment options to meet individual staff needs and to access a larger pool of employees. Businesses can provide flexible working conditions by varying the hours their employees work; varying where employees may work from; making leave entitlements available, including sick leave and long-service leave; or offering other arrangements such as childcare facilities. Some forms that flexible working conditions may take can be seen in **FIGURE 3.**

flexible working conditions conditions that enable employees to balance work and family responsibilities more effectively

work–life balance achieving the right amount of time between work and family/personal life

FIGURE 3 There are many ways businesses can offer flexible working conditions.



Research suggests that flexible working conditions do improve productivity. A small-to-medium enterprise (SME) study in 2017 by workplace consultant Regus surveyed more than 20 000 senior business managers around the world. It found that benefits of flexible working include improved concentration levels and productivity as well as less time spent commuting.

FIGURE 4 Flexible working conditions enable employees to balance time devoted to work with time devoted to family and personal life as well as improve their productivity.



CASE STUDY

Shell's flexible workplace

Shell Australia provides flexible working conditions for office roles wherever required and operationally possible. This means, for example, that employees may be able to 'telecommute' and work from home or start their working day earlier or later, depending on staffing needs. Shell attempts to provide a working environment where employees are able to balance their work and family commitments. For example, Shell offers an Employee Assistance Program, which is a professional, confidential counselling service for employees and their immediate family members.

Amber-Liza Guster, a senior commercial manager at Shell Australia and mother of two children, works three days a week with the possibility of working extra time when needed. 'In the team I work in we have three mums who work part-time and two dads who have flexible work arrangements', she says. 'Across the industry I see different views and it comes primarily down to a company's beliefs of what value flexible arrangements bring to a business. To make flexible work arrangements successful there needs to be a commitment from the individual and the company.'

The human resources manager at Shell Australia, Helen Reid, says that more than half of Shell's workforce has taken advantage of the flexible work arrangements.

FIGURE 5 Shell Australia provides flexible working conditions for its employees, including variable working days and the opportunity to telecommute



9.3 ACTIVITY

1. Use the **Inside HR** weblink in the Resources tab to find out how human resource management can improve productivity. Search the website for articles relating to productivity and write a list of at least five ways human resource management can improve productivity.

HASS skills: Questioning and researching
Economic and Business concept: Economic performance and living standards

on Resources

Weblink Inside HR

9.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3	Questions 5, 6, 7	Questions 4, 8

Check your understanding

1. What is human resource management responsible for?
2. List two types of training.
3. Identify four ways that businesses can provide flexible workplaces.
4. Describe how the following strategies can improve productivity:
   a. training
   b. flexible workplaces.

Apply your understanding

5. Read the case study 'Top Employer: Tata Consultancy Services' and answer the following questions.
   a. Identify the key pillars of HR at TCS that led to them being awarded a Top Employer award.
   b. Outline the benefits to TCS and its employees of having these pillars.
6. Read the case study 'Shell's flexible workplace' and answer the following questions.
   a. List some of the ways Shell offers flexible working conditions.
   b. How, do you think, Shell benefits from offering Ms Guster flexible work arrangements?
7. Outline what might happen to a business if it does not use human resource management strategies such as offering training or flexible working conditions to staff.
8. Do you think more workplaces will offer flexible working in the future? Justify your answer.

For sample responses for every question, go to www.jacplus.com.au.

9.4 Ethics, social responsibility and the triple bottom line

LEARNING INTENTION

By the end of this subtopic you will be able to:

- identify ethical and unethical workplace practices
- describe the impact of these practices on individuals
- explain reasons for triple bottom line business planning
- outline the possible implications of ethical practices for employees, competitors and the broader economy.

9.4.1 Ethical and social responsibility

Society expects businesses to act ethically and to be socially responsible. Businesses that incorporate ethical and socially responsible practices into their business activities experience positive reputations, leading to increased sales and profits. Employees will want to work for the business, reducing the costs of replacing staff and increasing productivity. By comparison, unethical behaviour, or a lack of social responsibility, can damage a business's reputation.

9.4.2 Ethical workplace practices

Ethics are standards that define what is acceptable and unacceptable behaviour. **Workplace ethics** are standards that apply to business, such as being honest in business dealings with others. Business people make decisions every day. In many decisions involving ethical questions, it can be difficult to give a definitive answer about what is acceptable and what is unacceptable. It often depends on the individual circumstances surrounding the situation. For example, what should a business do in the following situations?

- A loyal, long-serving employee cannot adapt to new technology.
- Confidential information about a competitor's pricing policy has been leaked by a disgruntled employee.
- The business is asked for a cash payment to help hasten a decision about a tender contract.

Honest and fair behaviour

Society expects businesses to be truthful in the way they communicate information and fair in the way they deal with people. Customers and suppliers expect to be dealt with honestly and fairly. If, for example, a business's advertising includes words such as 'special', 'sale', 'low fat' or 'light', customers would expect that the business was not being misleading or deceptive. Not only is false or misleading advertising unethical, it is also illegal. A business using these words in an attempt to knowingly mislead customers is engaging in unethical practices. Suppliers would expect that if a business has arranged for a delivery of certain items and promises to pay within a set period of time then, apart from exceptional circumstances, the business would honour its commitment to the supplier.

Employees also expect to be dealt with honestly and fairly. For instance, confidential information about employees should be kept secret, obligations to employees, such as fair pay, should be fulfilled and harassment or discrimination should not occur. Occasionally, a business may become aware of an unethical business practice of one of its employees. This can place the business in a difficult position, especially if the employee is important to the successful operation of the business. At other times, some employees may place an employee in a difficult ethical position, such as when older employees decide to play a practical joke on a young apprentice. Sometimes, these 'practical jokes' get out of hand and may develop into a serious harassment or negligence case.

Conflict of interest

Conflict of interest can occur when a person in a position of trust has competing personal or professional interests — for example, when gifts or payments are on offer. There is a fine line between what is regarded as a gift and what may become a bribe. Corruption undermines the integrity of the business and, if unchecked, infiltrates the workplace culture. Once a pattern of corruption takes hold and is perceived to be acceptable behaviour, it quickly becomes entrenched within the business. Changing the attitudes and practices of individuals within such a business is extremely difficult. What start off as small incidents to which most people turn a blind eye may develop into corruption on a grand scale. When such corrupt practices are eventually exposed, the business's image can be severely damaged.

workplace ethics the application of moral standards to practices in the workplace

conflict of interest a situation where a person takes advantage of circumstances or a piece of information for their own gain rather than for the business's interests

DISCUSS

Many stores sell clothes that are made in sweatshops. However, ensuring that all products are produced in ethical conditions will significantly raise the prices of these goods. With this in mind, should there be tighter restrictions to ensure that businesses are socially responsible? **General capability: Ethical understanding**

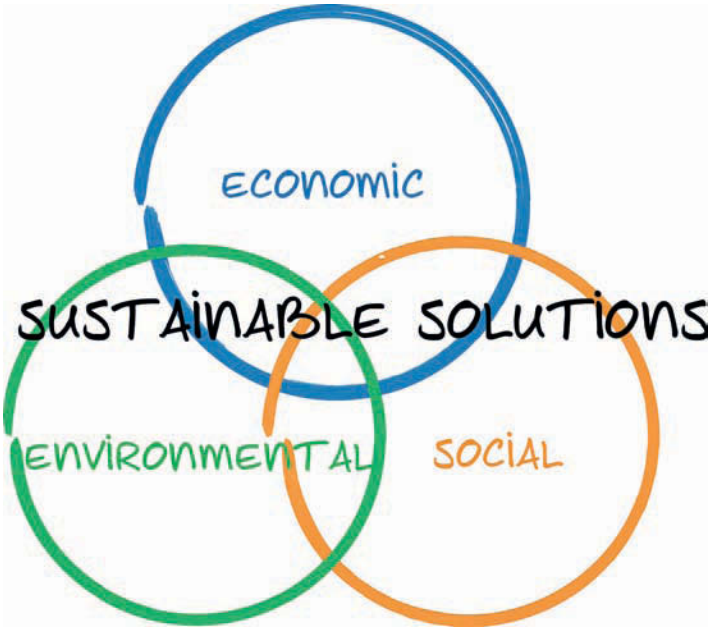
9.4.3 Social responsibility

Socially responsible management involves the managers or owners of a business taking steps to ensure that the broader social welfare — including that of customers, suppliers and the environment — is taken into consideration when conducting business dealings. Socially responsible management, therefore, involves ethics, because a business that is socially responsible will consider its impact on people and the environment rather than just making a profit. For example, Heinz Australia takes responsibility for its staff, customers, community and environment. It gives back to the community through community partnerships, fundraising and a volunteer program that provides employees with up to two paid days' leave each year to volunteer at registered charities or organisations. Heinz uses an environmental management system to track environmental targets and has plans for reducing greenhouse emissions and packaging materials.

9.4.4 Triple bottom line business planning

The traditional view of business is that it exists to produce products, earn a profit and provide employment. As society's expectations of acceptable business behaviour increase, socially aware business owners recognise the importance and necessity of planning sustainable business objectives; that is, focusing on financial outcomes while also being conscious of environmental and social performance. Many businesses today plan for the **triple bottom line**: financial (or economic), environmental and social performance. Businesses that take their social and ethical responsibilities seriously are often 'rewarded' with improved business performance.

FIGURE 1 Triple bottom line business planning incorporates economic, environmental and social aspects.



socially responsible management managing a business in such a way that the broader social welfare of the community, including its people and the environment, is taken into consideration when making business decisions

triple bottom line the economic, environmental and social performance of a business

DISCUSS

Individually or in groups, research a business you use that is socially responsible. Identify what steps they take to ensure their business is socially responsible. Some examples to get you started include Kmart's ethical sourcing, Cotton On Foundation and the annual Ethical Fashion Report.

9.4.5 The implications of ethical and socially responsible practices

The use of ethical practices and acting in a socially responsible manner can have negative implications for a business. For example, introducing policies and documentation related to ethics and social responsibility, such as codes of conduct and social reports, often involves a financial cost and can be time consuming. This can reduce a business's profit or inhibit employees from completing other tasks.

FIGURE 2 A positive business reputation can be the difference between success and failure. Ethical and socially responsible practices can improve the reputation of a business.



However, ethical and socially responsible practices can also bring significant benefits to a business. For example, adopting these practices can:

- *improve the reputation of the business*. This, in turn, can make the business more competitive as customers will be drawn to its products rather than those of competitors, bringing an increase in sales and profits.
- *encourage employees to want to stay with the business*. This reduces staff turnover (the number of employees leaving the business) and increases productivity.
- *improve the atmosphere of the workplace*. This increases motivation and productivity.
- *attract potential employees to the business*. This can reduce the cost of recruitment and enable the business to acquire the most talented employees.
- *increase investment in the business*. Many investors prefer to invest in businesses with integrity and responsible practices.

Ethical and socially responsible practices also have implications for the broader economy. These practices affect employment, wages and employment standards, environmental regulations and other legislation, products in the market, infrastructure, tax income and income distribution.

9.4 ACTIVITIES

1. Visit your local shopping centre to observe business practices that promote recycling and protection of the environment. Record any examples of socially responsible strategies being practised. Identity a business you believe is not environmentally aware and write a letter explaining why adopting strategies based on corporate social responsibility can increase the competitive advantage of their business. Suggest some ways that the business can promote recycling or other environmentally sound practices.

   HASS Skills: Questioning and researching
   Economic and Business concept: Making choices

2. Use the **St James Ethics Centre** weblink in the Resources tab to find out more about ethics. Search the website for articles relating to business ethics. Read one of the articles and write a list of at least five things you did not know about business ethics.

   HASS skills: Communicating and reflecting

on Resources

Weblink St James Ethics Centre

9.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 6	Questions 4, 7, 8	Questions 5, 9

Check your understanding

1. Define ethical management.
2. Suggest three ethical and three unethical workplace practices.
3. Define 'socially responsible management'.
4. Name the three aspects of the triple bottom line.
5. What are the broader implications for the economy in ethically and socially responsible practices?

Apply your understanding

6. Describe the possible implications of planning for the triple bottom line for the following:
   a. the business
   b. employees
   c. competitors
   d. the broader economy.
7. Describe one business you know and explain how that business demonstrates its commitment to social responsibility.
8. Copy and complete the following table to identify the advantages and disadvantages of adopting socially responsible strategies.

Advantages	Disadvantages
Customers are more likely to want to deal with a socially responsible business.	Socially responsible strategies can be expensive to introduce and implement.

9. What are some of the consequences of a business not acting in an ethical and socially responsible manner?

For sample responses for every question, go to www.jacplus.com.au.

9.5 Responding to variations in economic conditions

LEARNING INTENTION

By the end of this subtopic you will be able to identify ways that businesses have responded to improving economic conditions.

9.5.1 Economic conditions

Australia's economic conditions have improved over the past two decades, with the country experiencing economic growth for more than 20 consecutive years. More recently, a resources boom has driven this growth, with mining investment as a proportion of GDP (the monetary value of all goods and services produced in Australia over a single year) quadrupling over the past decade. Businesses typically respond to conditions such as this by increasing capital investment and recruiting more employees, but they have also responded to these improving conditions in other ways, such as increasing their research and development funding to create innovative products, adjusting marketing strategies to expand their market share and upskilling their workforce to improve productivity.

Resources investment is now expected to decline, resulting in a slowdown in the growth of Australia's living standards. Many economists expect that other areas of the economy, such as home building and mining exports, will drive future economic growth. Businesses in Australia will need to respond accordingly.

9.5.2 Increasing research and development expenditure

Businesses undertake **research and development (R&D)** in order to improve their knowledge, as well as to improve existing products or create new ones. **Invention** (developing something new) and innovation are at the heart of Australia's economy. Researchers and scientists undertaking R&D in businesses have produced many new products. Finding new ways to do things results in improved efficiency and increased productivity.

FIGURE 1 Businesses invest millions of dollars in R&D in Australia each year. The main purpose of R&D is to discover and develop innovative products.



According to the Australian Bureau of Statistics (ABS), Australian businesses spent $17.43 billion on R&D from 2017 to 2018, which is 4 per cent more — a significant increase of $600 million — than the amount spent on R&D from 2015 to 2016. Cochlear, the global company that designs, manufactures and supplies cochlear implants — which enable people to hear — spends around 12 per cent of its annual revenue on R&D every year, investing more than $180 million on research and development each year.

Federal and state governments support businesses in carrying out research and development via direct funding, grants and tax incentives. Funding is provided to

research and development (R&D) activities undertaken to improve existing products or create new products

invention the development of something new

universities, publicly funded research agencies, such as the CSIRO, and businesses. Government support for businesses comes through the research and development tax incentive, which provides a tax offset to encourage businesses to engage in research and development.

CASE STUDY

Global Health invests in research and development

Global Health is an Australian company that develops and sells software applications for the healthcare industry. To stay competitive, Global Health must invest in research and development. Its revenue is largely earned from the sale of software licences and annual subscriptions to overnight and day hospitals (referred to as the acute sector) and specialists, general practitioners, community health and allied health providers (referred to as the non-acute sector). One of its main products is an electronic medical record system called MasterCare.

Global Health invests approximately 20 per cent of its total revenue to research and development. Between 2013 and 2014, the company took advantage of an AusIndustry Research and Development Grant. AusIndustry is an area of the federal government that aims to help Australian businesses become more innovative and internationally competitive. The grant was for approximately $413 000 and it increased Global Health's research and development spending by more than 33 per cent. This meant that it spent approximately $1.1 million developing software that should benefit the business and its shareholders for years to come.

9.5.3 Adjusting marketing strategies

The **marketing** department is the area of a business that is responsible for the marketing mix, often referred to as the 4 Ps (product, price, promotion and place). Marketing strategies undertaken by businesses arise through the marketing mix: developing the product, pricing, promoting and distributing products to present to potential customers. When facing improving economic conditions, businesses adjust these strategies to expand their **market share**.

Businesses focus on the following elements when adjusting their marketing campaign:

- *research* — gathering information from potential customers about their new wants and needs
- *product* — making changes to existing products or introducing new ones
- *price* — adjusting the price accordingly, based on customer demand and the need to make a profit
- *promotions* — providing information about the new product or launching the new products (for example, at events or through advertising)
- *place* — reviewing the methods used to distribute the product
- *evaluation* — finding out how successful a modified or new product or campaign is.

marketing the process of planning and executing the development, pricing, promotion and distribution of products to create exchanges that satisfy individual and organisational objectives

market share the proportion of the total market that a business has, calculated by dividing a business's sales (from that market) by the total sales of all businesses in the market and expressing the result as a percentage

CASE STUDY

Bellamy's Australia changes its marketing strategy

Bellamy's Australia is a wholesale distributor of a range of organic food and formula products for infants. As a wholesale distributor, it sources its products from established dairy producers. The business started as a family-operated company in Tasmania in 2004. Bellamy's products are sold directly to retail customers through their website and sold in Coles, Woolworths, Chemist Warehouse, Costco and Big W stores. Select supermarkets in New Zealand, China, Singapore, Hong Kong, Malaysia and Vietnam also distribute the products.

The company has grown rapidly, with revenue growing on average 55 per cent every year since 2010, and it listed on the Australian sharemarket in 2014. In the early stages, print media was used to promote the product, but this strategy was not overly successful. Bellamy's then changed its marketing strategy to improving shelf displays in stores and using social media to connect with new mothers. In Australia, Bellamy's has a presence on two commonly used social media platforms, Facebook and Twitter. As it expanded into China, it also needed to use Sina Weibo and Weixin. Bellamy's employed a mix of Chinese-Australians and local Chinese people to manage its China marketing team and worked with the Australian consultancy business ChinaSEO to help target Chinese customers with its web campaigns. In 2019 the Federal government approved the takeover of Bellamy's by Chinese dairy giant China Mengniu, a result of the huge increase in demand in China for their products.

FIGURE 3 Social media blended with traditional marketing techniques allows a retail business to reach and connect with more customers.



9.5.4 Upskilling the workforce

It is vital that both managers and employees have skills that help them complete tasks effectively. **Upskilling** involves providing training and further education for a business's workforce so it can learn these additional skills. Employees who have appropriate skills are more likely to be productive and motivated.

The Organisation for Economic Co-operation and Development (OECD) collects and analyses data that assists governments around the world in understanding the level and distribution of skills among their adult populations as well as the use of skills in different contexts as part of its Programme for the International Assessment of Adult Competencies (PIAAC). The survey is conducted every ten years, with the last PIAAC results being released by the ABS in 2013. Developed with the support of the Australian Council for Educational Research (ACER), the study assessed people aged 15 and 74 years in 25 countries in terms of proficiency in literacy, numeracy and problem solving in a technology-rich environment.

According to experts from ACER, the fact that a large number of Australians have low literacy and numeracy skills has a negative impact on individuals, the economy and productivity. Mr David Tout, Senior Research Fellow at ACER and a member of the numeracy expert group for PIAAC, noted that Australia needs to lift its population's skill levels to ensure a healthy society and a robust economy. 'The twenty-first century requires its citizens and workers to have increasingly higher-level literacy and numeracy skills', Mr Tout said.

upskilling the provision of training and further education to teach employees additional skills

9.5 ACTIVITIES

1. Use the **Business** weblink in the Resources tab to find out more about research and development, marketing, and skills and training. Search the website for each strategy and create a table to record the information you find on the website under each appropriate heading.
2. In groups of three or four, plan and create a video presentation that is interesting and catchy and that will help people understand the ways businesses respond to improving economic conditions. Use video editing programs and internet resources in your planning.

HASS skills: Communicating and reflecting
Economic and Business concept: Making choices

Resources

Weblink Business

9.5 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 4	Questions 5, 6, 7	Questions 8

Check your understanding

1. Briefly outline how Australia's economic conditions have improved over the past two decades.
2. Define the term 'market share'.
3. What is upskilling?
4. Why does the OECD collect PIAAC data?
5. What did the last PIAAC survey reveal about Australia's skill level?

Apply your understanding

6. Describe how the following strategies can support a business in responding to improving economic conditions.
   a. Increasing research and development expenditure
   b. Adjusting marketing strategies
   c. Upskilling the workforce
7. Read the case study 'Bellamy's Australia changes its marketing strategy' and answer the following questions.
   a. How did Bellamy's originally promote its products?
   b. Why did Bellamy's change its marketing strategy initially?
   c. Why did Bellamy's need to change its marketing strategy in China?
   d. How did the changes to Bellamy's marketing strategy affect its market share?
8. What might happen to a business that does not respond to improving economic conditions?

For sample responses for every question, go to www.jacplus.com.au.

9.6 Thinking Big research project — Ethical business — real change or fast fashion?

Scenario

About 20 years ago the clothing industry was taken over by a trend known as fast fashion. Clothing became less expensive, new clothing ranges were released more often and it became commonplace for clothing to be worn only a few times and then discarded. While the fast fashion business model has delivered increased revenue to clothing manufacturers it has also significantly increased the impact of the clothing industry on garment workers, animal welfare and the health of our planet.

Some brands are taking steps to improve their practices and finding that increased ethical practices are not only good for the planet, but also good for business.



Task

For this task, you are required to use research skills and creativity to produce an engaging presentation on a fast fashion brand. In order to do this, you will need to develop a good understanding of what the terms fast fashion, ethics and productivity mean, analyse your chosen brand's current level of ethics and develop a plan for your chosen brand to increase both their ethical practices and productivity. You are to present your findings in a PowerPoint presentation.

There are a number of elements involved in completing this project task; these are outlined in the Process section.

Process





- Open the ProjectsPLUS application in the Resources for this topic. Open the Project set-up tab to enter the project due date. Save your settings and the project will be launched.
- In the **Media centre** you will find an assessment rubric to guide your work and some weblinks that will provide a starting point for your research.
- Click on the **Good on you** weblink. Complete the questions provided on the worksheet to complete your research into fast fashion and business ethics.
- Select a well-known clothing or footwear brand. Research this business' operations and assess how ethical their current practices are. Present your findings in the table on the worksheet. Ensure you use a wide range of sources to research your brand, including the **Good shopping guide** and **Good on you** weblinks, your brand's website and the media.
- Once you have assessed your brand's currents level of ethics and sustainability, brainstorm how they can continue to improve their ethical practices.
- Choose one area where you believe your chosen brand can improve their ethical practices, which will also increase their productivity/business competitiveness. Create a detailed plan explaining how they can implement your idea.
- Present your plan for your chosen brand in a PowerPoint presentation. Use appropriate images or diagrams to add interest to your information.
- Present your plan to the class and submit to your teacher for assessment.

on Resources

ProjectPLUS Thinking Big research project — Ethical business — real change or fast fashion? (pro-0251)

Weblinks Good on you
Good shopping guide

9.7 Review

9.7.1 Key knowledge summary

9.2 Managing operations and improving productivity

- Improving productivity — the amount of output compared to the number of inputs — is one of the main objectives of a business.
- Businesses can improve productivity through operations management, such as:
  - making use of capital investment
  - investment in applications of technology
  - just-in-time inventory systems.

9.3 Improving productivity through human resource management

- Businesses can improve productivity through human resource management, such as making use of training and flexible workplaces.

9.4 Ethics, social responsibility and the triple bottom line

- Society expects that businesses will act in an ethical and socially responsible manner.
- Businesses that do so and plan for the triple bottom line will experience positive reputations, leading to increased sales and profits.

9.5 Responding to variations in economic conditions

- Businesses have responded to improving economic conditions by, for example, increasing their R&D funding to create innovative products, adjusting their marketing strategies to expand market share and upskilling their workforce to improve productivity.
- Other ways productivity can be enhanced include:
  - investing in new technological applications and capital, including equipment and facilities, as well as through the use of materials management strategies such as just-in-time inventory systems
  - using technology to drive and allow innovative responses
  - introducing workforce management strategies such as training and flexible workplace conditions to improve the productivity of workers
  - acting in an ethical and socially responsible manner; will have an impact on employees, competitors and the broader economy
  - planning for the triple bottom line, thereby considering financial (or economic), environmental and social performance
  - increasing R&D funding to create innovative products, adjusting marketing strategies to expand market share and upskilling the workforce to improve productivity.

9.7.2 Key terms

capital physical resources owned by a business and used in production, including factories, machinery and equipment

computer-aided design software that enables a business to create, modify or design product possibilities from a series of input parameters

conflict of interest a situation where a person takes advantage of circumstances or a piece of information for their own gain rather than for the business's interests

flexible working conditions conditions that enable employees to balance work and family responsibilities more effectively

human resources the area of a business that manages the relationship between the employer and employees, from acquiring to terminating staff

innovation adding a new product (which can be a good or a service) to an existing product line, or significantly improving an existing product or process

input the resources — including materials, equipment and labour — used in the process of production

invention the development of something new

inventory the goods and materials held as stock by a business

just-in-time an inventory system that ensures the correct materials arrive just as they are needed in the operations process

marketing the process of planning and executing the development, pricing, promotion and distribution of products to create exchanges that satisfy individual and organisational objectives

market share the proportion of the total market that a business has, calculated by dividing a business's sales (from that market) by the total sales of all businesses in the market and expressing the result as a percentage

materials management an operations strategy that manages the use, storage and delivery of materials to ensure the correct number of inputs is available to the operations system when required

operations the area of a business that consists of all the activities engaged in producing goods and services

output the end result of a business's efforts; the good or service that is delivered or provided to a consumer

productivity a measure of efficiency; the amount of output produced compared to the amount of input required in production

research and development (R&D) activities undertaken to improve existing products or create new products

robotics highly specialised forms of technology that are capable of complex tasks

socially responsible management managing a business in such a way that the broader social welfare of the community, including its people and the environment, is taken into consideration when making business decisions

technology the use of scientific knowledge to develop machinery, equipment and devices designed to solve business problems

training the process of teaching employees skills, abilities and knowledge

triple bottom line the economic, environmental and social performance of a business

upskilling the provision of training and further education to teach employees additional skills

work–life balance achieving the right amount of time between work and family/personal life

workplace ethics the application of moral standards to practices in the workplace

9.7.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

Why is productivity important for a business? What might happen to a business that cannot improve productivity?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6091)
Reflection (ewbk-6090)
Crossword (ewbk-6089)
Student Learning Matrix (ewbk-6085)

Interactivity Individual and business success crossword (int-7710)

9.7 Review exercise

Multiple choice

1. What does productivity measure?
   - **A.** The amount of output produced
   - **B.** The amount of output compared to the amount of inputs that go into production
   - **C.** The cost of producing output
   - **D.** The amount of input compared to the amount of output that goes into production

2. How can productivity be improved?
   - **A.** Keeping inputs the same and increasing output
   - **B.** Increasing inputs to obtain the same output
   - **C.** Reducing input to obtain less output
   - **D.** All of the above

3. Operations is the area of a business responsible for which of the following?
   - **A.** Recording the earnings from the sales of products
   - **B.** Managing the relationship between the employer and employees
   - **C.** Researching and developing new products
   - **D.** Making the business's product

4. What is inventory system that can reduce storage costs and improve productivity?
   - **A.** Training
   - **B.** Robotics
   - **C.** Just-in-time
   - **D.** Marketing

5. Human resources is the area of a business responsible for which of the following?
   - **A.** Making the business's product
   - **B.** Managing the relationship between the employer and employees
   - **C.** Planning, pricing, promoting and distributing new products
   - **D.** Organising the financial and accounting affairs of the business

6. What is a flexible working condition whereby employees nominate starting and finishing times called?
   - **A.** Telecommuting
   - **B.** Maliflex
   - **C.** Flexi time
   - **D.** Job sharing

7. What does workplace ethics refer?
   - **A.** Interesting work for employees
   - **B.** Honest messages delivered to staff
   - **C.** The management of honest relationships between the employer and employees
   - **D.** The application of moral standards to practices in the workplace

8. What does the triple bottom line focus on?
   - **A.** Flexible training and capital performance of a business
   - **B.** Economic, social and environmental performance of a business
   - **C.** Social, competitive and environmental performance of a business
   - **D.** All of the above

Short answer

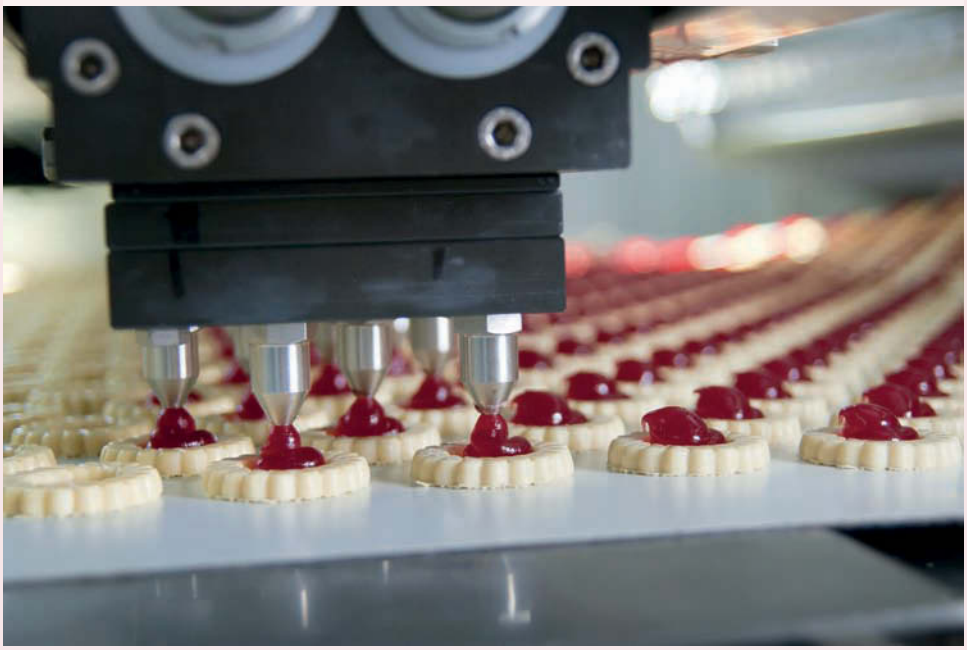
Read the following case study and then answer the questions.

Pops Dollarakis

Victor Dollarakis is the chief executive officer (CEO) of Pops Dollarakis, a global manufacturer of biscuits, crispbread and crackers. Its headquarters are in Sydney.

Mr Dollarakis has been reading a great deal about theories of management lately and is very interested in the ideas behind improving productivity in particular. Pops Dollarakis is considering the use of technology as a source of innovation. The business also realises that economic conditions are improving and is considering how it will respond accordingly. Mr Dollarakis comes to you, seeking your advice.

FIGURE 1 Pops Dollarakis produces biscuits, crispbread and crackers, and like many businesses it must organise itself to improve productivity and respond to changing economic conditions.



9. Describe the ways in which Pops Dollarakis might improve productivity.
10. Explain how the use of technology might support Pops Dollarakis in developing innovation.
11. Identify some ethical workplace practices and explain how these would affect Pops Dollarakis.
12. Outline to Mr Dollarakis why it would also be worth considering planning for the triple bottom line and how it may benefit the business, its employees and the broader economy.
13. Explain to Mr Dollarakis some ways that the business might respond to improving economic conditions.

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 9 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

9.1 Overview

Video eLesson
- Improving business productivity (eles-2385)

9.2 Managing operations and improving productivity

eWorkbook
- Managing operations and improving productivity (ewbk-6086)

Weblink
- FM magazine

9.3 Improving productivity through human resource management

Weblink
- Inside HR

9.4 Ethics, social responsibility and the triple bottom line

eWorkbook
- Ethical and socially responsible practices (ewbk-6087)

Weblink
- St James Ethics Centre

9.5 Responding to variations in economic conditions

eWorkbook
- Ethical and socially responsible practices (ewbk-6088)

Weblink
- Business

9.6 Thinking Big research project — Ethical business — real change or fast fashion?

ProjectPLUS
- Thinking Big research project — Ethical business — real change or fast fashion? (pro-0251)

Weblinks
- Good on you
- Good shopping guide

9.7 Review

eWorkbook
- Reflection (ewbk-6090)
- Crossword (ewbk-6089)
- Student Learning Matrix (ewbk-6085)

Interactivity
- Individual and business success crossword (int-7710)

To access these online resources, log on to **www.jacplus.com.au**.

GEOGRAPHY

GEOGRAPHY CONCEPTS AND SKILLS

10 Geography concepts and skills 298

ENVIRONMENTAL CHANGE AND MANAGEMENT

11 Introducing environmental change and management 346

12 Land environments change and management 375

13 Coast change and management 431

14 Urban change and management 466

15 Inland water change and management ..... online only

16 Marine environments change and management ..... online only

GEOGRAPHIES OF HUMAN WELLBEING

17 Measuring and improving wellbeing 504

18 Global responses to human wellbeing 549



10 Geography concepts and skills

10.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

10.1.1 Introduction

As a student of Geography, you are building knowledge and skills that will be needed by you and your community now and into the future. The concepts and skills that you use in Geography can also be applied to everyday situations, such as finding your way from one place to another. Studying Geography may even help you in a future career here in Australia or somewhere overseas.

Throughout your study of Geography, you will cover topics that will give you a better understanding of the social and physical aspects of the world around you, on both the local and global scale. You will investigate issues that need to be addressed now, and for the future.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6133)

FIGURE 1 Geography helps you understand and explore the amazing world we live in.



10.2 Concepts in Geography

By the end of this subtopic you will be able to:

- identify the seven Geography concepts using the acronym SPICESS
- explain each of the Geography concepts
- apply the Geography concepts.

10.2.1 SPICESS

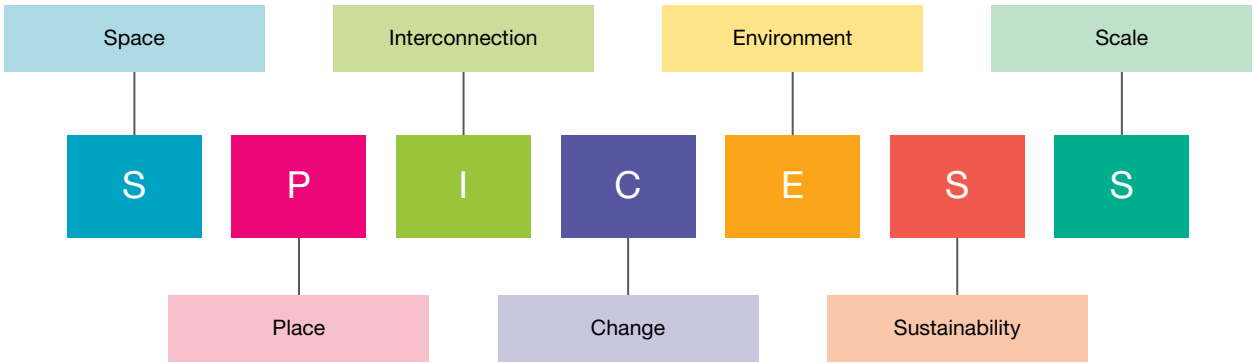
As you work through each of the topics in this title, you'll complete a range of exercises to check and apply your understanding of concepts covered. This year, you will build on your understanding of the key Geography concepts.

- Space
- Place
- Interconnection
- Change
- Environment
- Sustainability
- Scale

The easiest way to remember these concepts is the acronym SPICESS.

Geographical concepts help you make sense of your world. By using these concepts you can investigate and understand the world you live in, and you can use them to try to imagine a different world. The concepts help you to think geographically. We will explore each of the Geography concepts in detail in the following sections and through the activities and exercises for this subtopic.

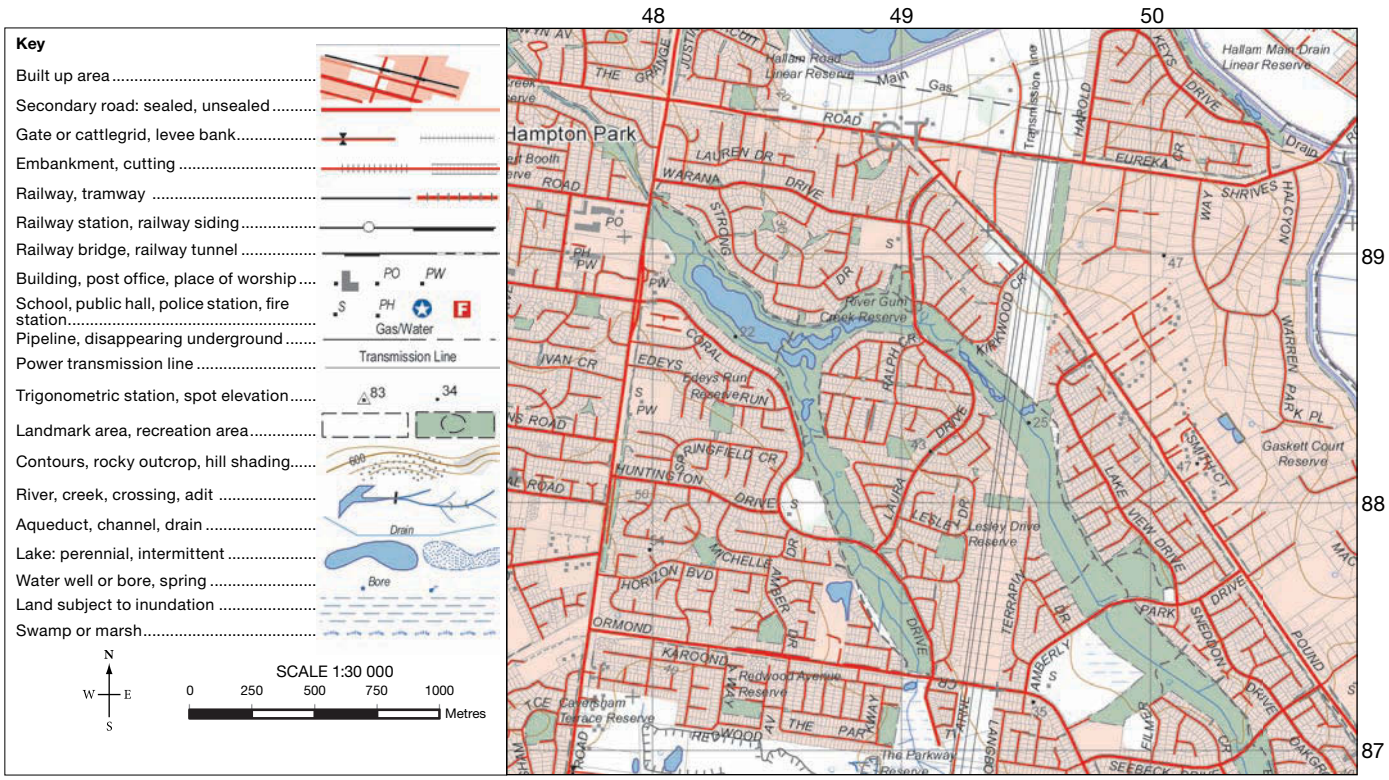
FIGURE 1 A way to remember the seven Geography concepts is to think of the term SPICESS.



10.2.2 What is space?

Everything has a location on the space that is the surface of the Earth, and studying the effects of location, the distribution of things across this space, and how it is organised and managed by people, helps us to understand why the world is like it is.

FIGURE 2 A topographic map extract of Narre Warren in 2013, a suburb on the rural–urban fringe of Melbourne



Source: © Vicmap Topographic Mapping Program/Department of Environment and Primary Industries.

A place can be described by its absolute location — for example, latitude and longitude, a grid reference, a street directory reference or an address. Alternatively, a place can be described using a relative location — where it is in relation to another place in terms of distance and direction.

Geographers also study how features are distributed across space, the patterns they form and how they interconnect with other characteristics. For example, tropical rainforests are distributed in a broad line across tropical regions of the world, in a similar pattern to the distribution of high rainfall and high temperatures.

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

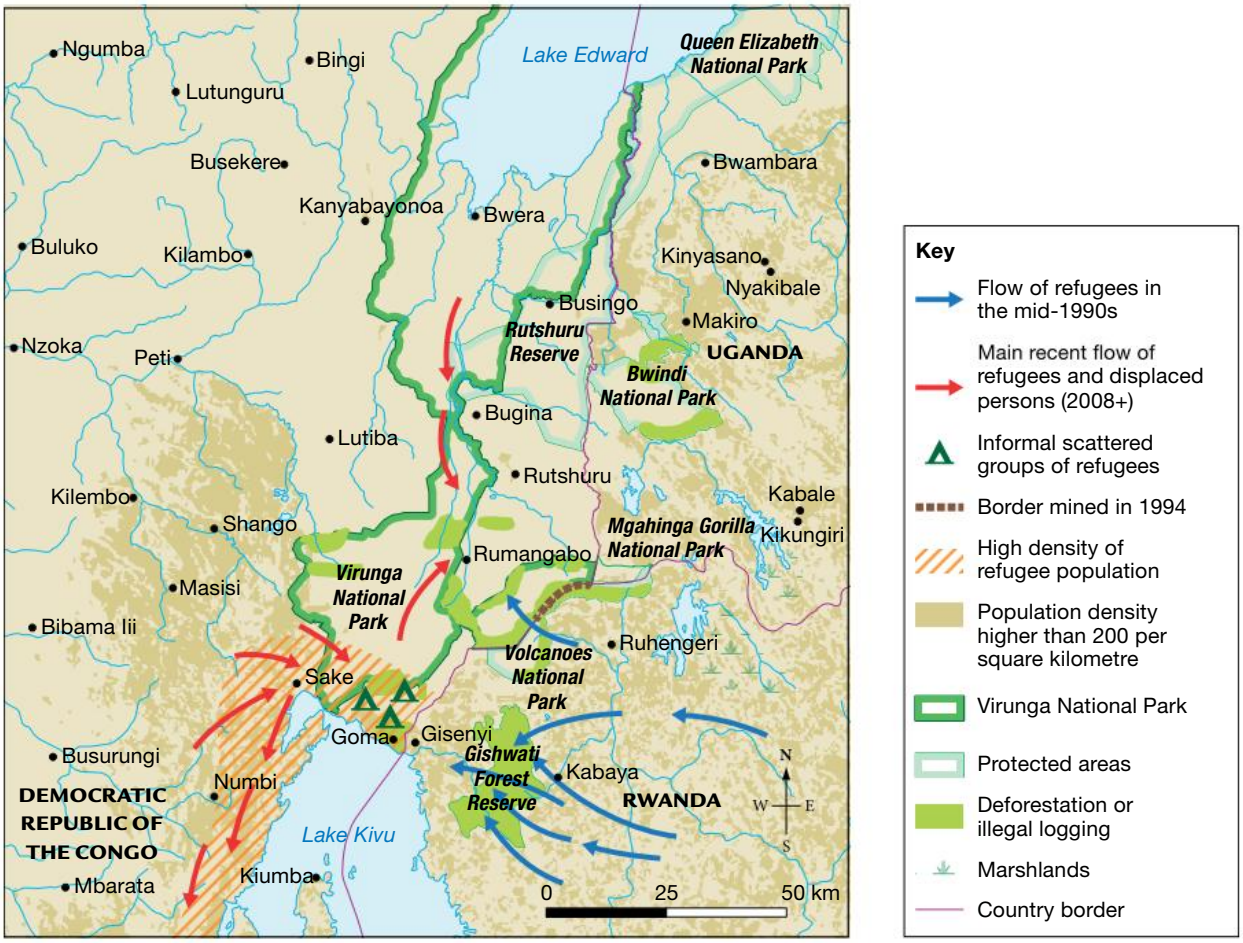
- Developing Australian Curriculum concepts > **Space**

10.2.3 What is place?

The world is made up of places, so to understand our world we need to understand its places by studying their variety, how they influence our lives and how we create and change them.

Places may be natural (such as an undisturbed wetland) or highly modified (like a large urban conurbation). Places provide us with the services and facilities we need in our everyday life. The physical and human characteristics of places, their location and their environmental quality can influence the quality of life and wellbeing of people living there.

FIGURE 3 The Democratic Republic of the Congo (DRC) has for years been subject to raids by militia groups and the influx of refugees from neighbouring countries. Forests in the country are important places for wildlife habitats and shelter for soldiers. Forests also provide the valuable resources of timber for fuel and building materials for refugees, and cleared land can be planted for food crops.



Source: AfriPop 2013. IUCN and UNEP-WCMC 2013, The World Database on Protected Areas (WDPA) [On-line]. Cambridge, UK: UNEP- WCMC. Available at: www.protectedplanet.net [Accessed 30/07/2013]. Made by Spatial Vision.

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

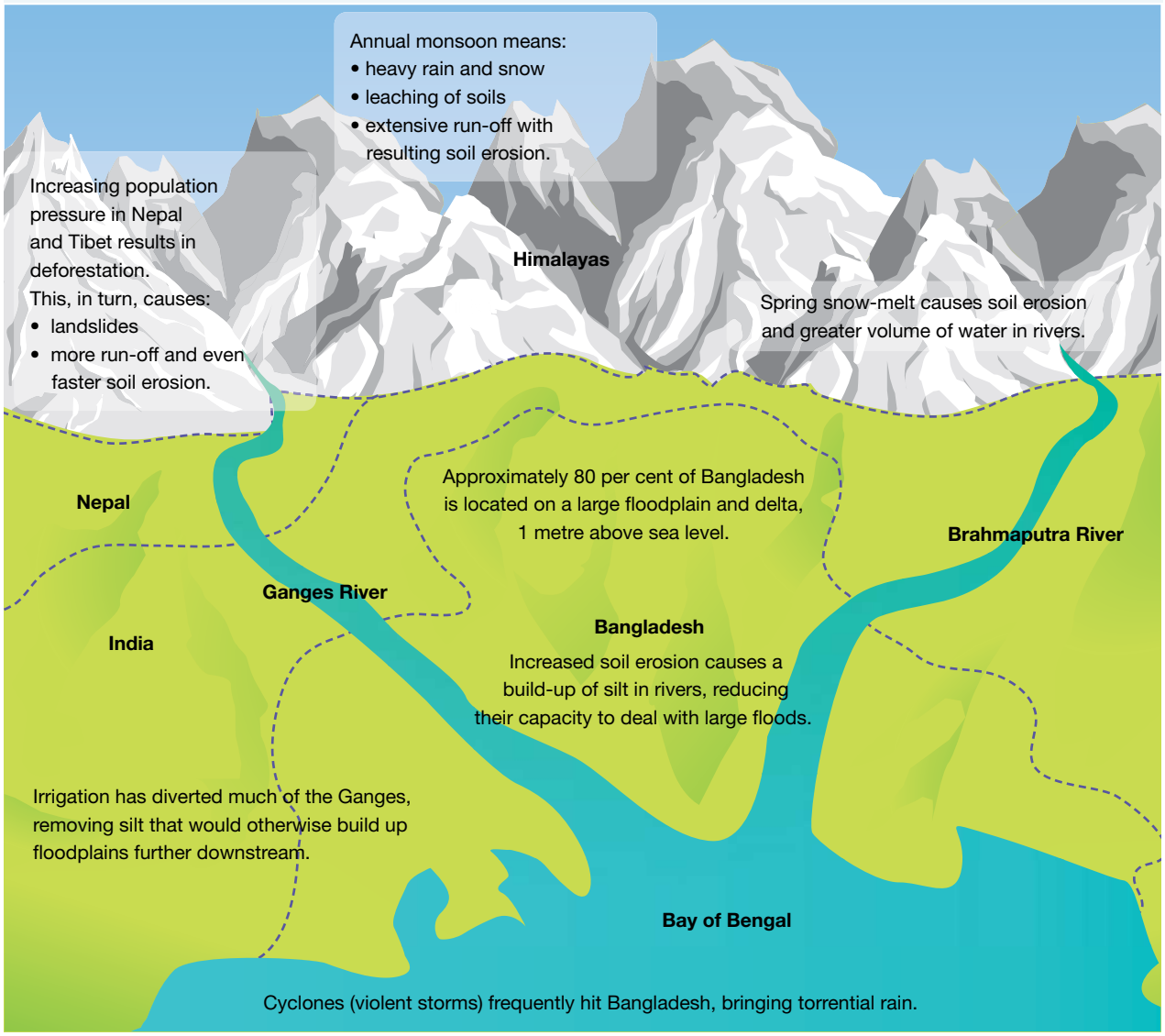
- Developing Australian Curriculum concepts > **Place**

10.2.4 What is interconnection?

People and things are connected to other people and things in their own and other places, and understanding these connections helps us to understand how and why places are changing.

The interconnection between people and environments in one place can lead to changes in another location. The damming of a river upstream can significantly alter the river environment downstream and affect the people who depend on it. Similarly, the economic development of a place can influence its population characteristics; for example, an isolated mining town will tend to attract a large percentage of young males, while a coastal town with a mild climate will attract retirees who will require different services. The economies and populations of places are interconnected.

FIGURE 4 Bangladesh is one of the most flood-prone countries in the world. This is due to a number of factors. Firstly, it is largely the floodplain for three major rivers (the Ganges, Brahmaputra and Meghna), which all carry large volumes of water and silt. Secondly, being a floodplain, the topography therefore is very flat, which allows for large-scale flooding. In addition, the country is located at the head of the Bay of Bengal, which is susceptible to typhoons and storm surges. It is expected that sea level rises associated with global warming will increase the flooding threat even further in the future.



Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

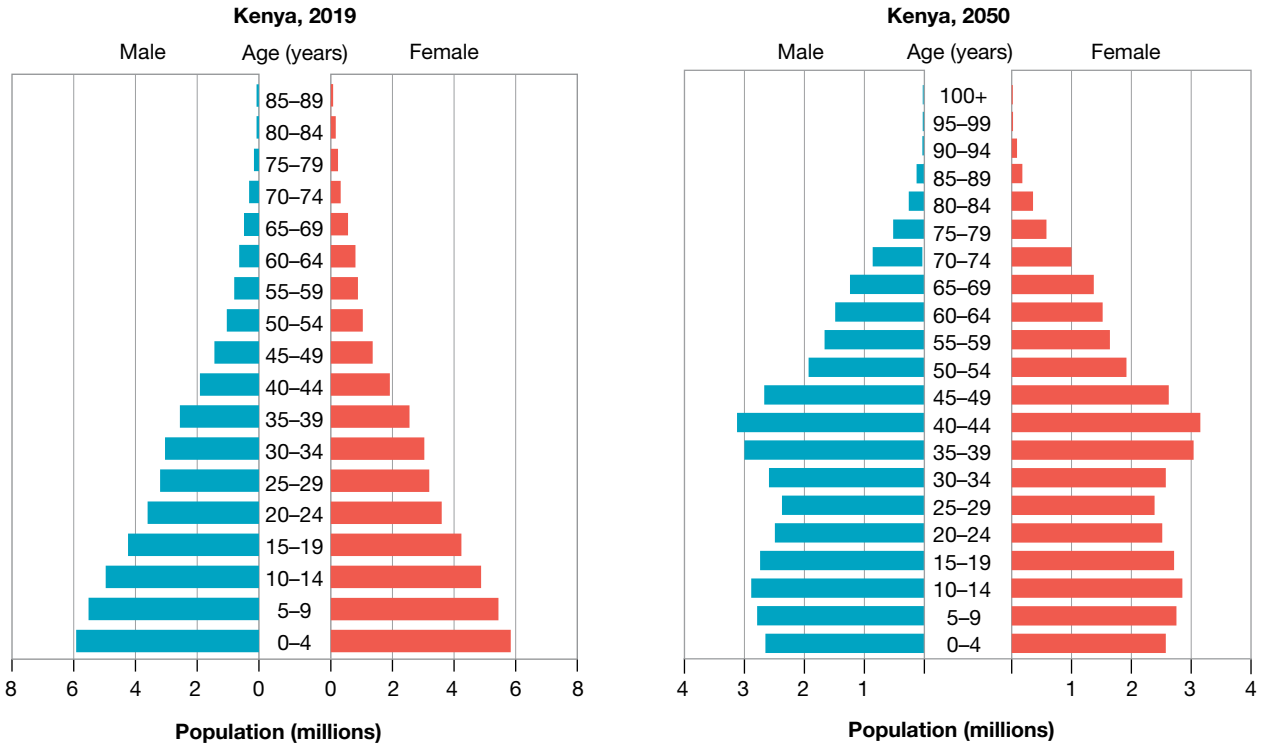
- Developing Australian Curriculum concepts > **Interconnection**

10.2.5 What is change?

The concept of change is about using time to better understand a place, an environment, a spatial pattern or a geographical problem.

Topics that are studied in Geography are in a constant process of change over time. The scale of time may be a short time period, such as the issue of traffic congestion in peak hour or the erosion of a beach during a storm. Other changes can take place over a longer period, such as changes in the population structure of a country or revegetation of degraded lands.

FIGURE 5 Population pyramids for Kenya, showing the predicted changes from 2012 to 2050. The graphs represent the number of males and females in five-year age groups.



Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Developing Australian Curriculum concepts > **Change**

10.2.6 What is environment?

People live and depend on the environment, so it has an important influence on our lives.

There is a strong interrelationship between humans and natural and urban environments. People depend on the environment for the source, sink, spiritual and service functions it provides.

Humans significantly alter environments, having both positive and negative impacts. The building of dams to reduce the risk of flooding, the regular supply of fresh water and the development of large-scale urban environments to improve human wellbeing are examples. On the other hand, mismanagement has created many environmental threats such as soil erosion and global warming, which can potentially to have a negative impact on the quality of life for many people.

FIGURE 6 Lake Urmia is the largest lake in the Middle East and one of the largest landlocked saltwater lakes in the world. Between 2005 and 2017, the lake lost over 65 per cent of its surface area due to over-extraction of water for domestic and agricultural needs. The lake and its surrounding wetlands are internationally important as a feeding and breeding ground for migratory birds.



Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Developing Australian Curriculum concepts > **Environment**

10.2.7 What is sustainability?

Sustainability is about maintaining the capacity of the environment to support our lives and the lives of other living creatures.

Sustainability ensures that the source, sink, service and spiritual functions of the environment are maintained and managed carefully to ensure they are available for future generations. There can be variations in how people perceive sustainable use of environments and resources. Some people think that technology will provide solutions, while others believe that sustainable management involves environmental benefits and social justice.

FIGURE 7 Dust storms are an extreme form of land degradation. Any land practices that lead to a loss of topsoil may be considered unsustainable.



This concept can also be applied to the social and economic sustainability of places and their communities, which may be threatened by changes such as the degradation of the environment. Land degradation in the Sahel region of Africa has often forced people, especially young men, off their land and into cities in search of work. Dust storms are an extreme form of land degradation. Dry, unprotected topsoil is easily picked up and carried large distances by wind before being deposited in other places. Drought, deforestation and poor farming techniques are usually the cause of soil being exposed to the erosional forces of wind and water. It may take thousands of years for a new topsoil layer to form. Therefore, any land practices that lead to a loss of topsoil may be considered unsustainable.

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Developing Australian Curriculum concepts > **Sustainability**

10.2.8 What is scale?

When we examine geographical questions at different spatial levels we are using the concept of scale to find more complete answers.

Scale is a useful tool for examining issues from different perspectives; from the personal to the local, regional, national and global. It is also used to look for explanations or compare outcomes. For example, explaining the changing structure of the population in your local area may require an understanding of migration patterns on a national or even global scale.

FIGURE 8 A map of India showing the distribution of literacy levels (percentage) for 2011



Source: Government of India, Ministry of Home Affairs, Office of Registrar General. (***Note:*** Most recent data available)

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Developing Australian Curriculum concepts > **Scale**

10.3 Skills in Geography?

By the end of this subtopic you will be able to explain what geographers do.

10.3.1 Careers that will help the Earth

As the world's population increases and the impacts of environmental changes affect living conditions, people and organisations will need to adapt and develop strategies to manage and sustain fragile environments and resources. Land degradation, marine pollution and feeding the future world population are just three environmental challenges that will be the focus for many occupations in the future. Which careers will be helpful in managing environmental change?

TABLE 1 Careers that will manage environmental change

Conservationists 	Conservationists will work to find solutions to land degradation. They will work for governments, in national parks and on policy development, and with local communities on environmental protection projects.
Oceanographers 	Work for oceanographers will mainly involve research and monitoring of the marine environment. They may work for governments, providing data and advice on pollution levels, or they may work for private or not-for-profit organisations, helping to suggest and implement plans for cleaning up the oceans.
Agricultural scientists 	Agricultural scientists will be employed by the government, and agricultural and horticultural producers. They will work with farmer groups and agribusiness to carry out research, and with mining companies, working on regeneration projects.

10.3.2 Profile of a geographer

Geographers have a love of learning. They are the explorers of the modern world. Geographers are lifelong learners; they expand their knowledge to adapt their skills to the tasks required.

Expansion of knowledge requires a willingness to learn. How many of these skills and attributes have you developed?

- Willingness to learn
- Curiosity and adaptability
- Active listening
- Good communication
- Critical thinking
- Time management
- Problem solving

You can develop your skills and work attributes by undertaking work experience or volunteering activities while you are still at school.

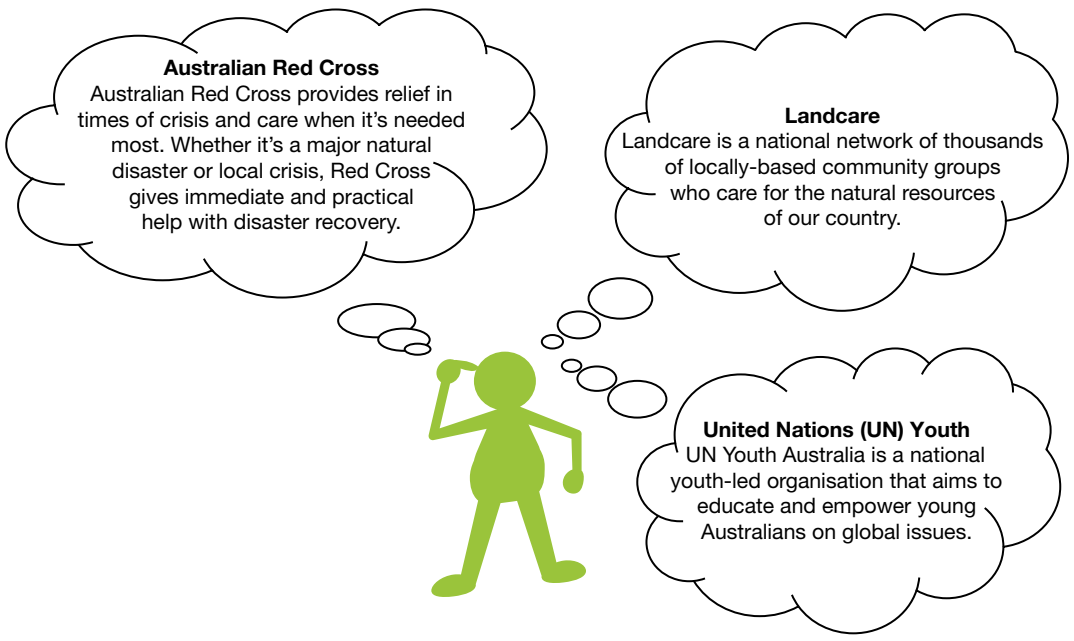
10.3.3 The importance of work experience

The activities you undertake and skills you develop in Geography will be useful to you in many aspects of your life and career. In building and managing your career options, it is also helpful to have an understanding of the interconnections between various careers. One way of building your knowledge of these interconnections, particularly in relation to Geography and the career paths that lead from it, is to undertake work experience in the field. Work experience can help you to understand the tasks involved in various roles and the training required to specialise in a particular area. You can gain first-hand experience through observation of and participation in the day-to-day tasks of workplaces.

Volunteering

Volunteering in your community is a great way to find out about different work environments and the things that affect the delivery of the services or programs. Volunteering your time to support local communities and businesses also demonstrates your willingness to learn and support others, and it can provide a great boost to your self-confidence, as well as important skill development. **FIGURE 1** provides some ideas to get you thinking.

FIGURE 1 Some options for volunteering



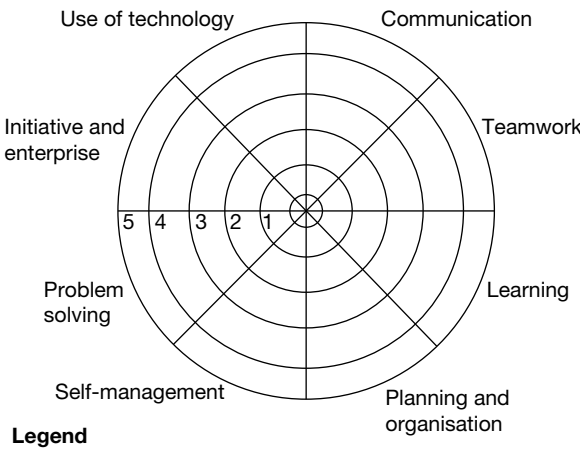
Learning directly from industry experts through volunteering can help you to consolidate your interests while also picking up valuable core skills for work (refer to **TABLE 2**). These core skills are considered the most important component of a career portfolio. The study of Geography also assists in the development of these skills.

TABLE 2 The core skills for work

Communication	Ability to use effective listening and speaking skills
Teamwork	Ability to connect and work with others
Learning	Ability to recognise and utilise diverse perspectives
Planning and organisation	Ability to develop plans and see things through to completion
Self-management	Ability to make decisions
Problem solving	Ability to identify and solve problems
Initiative and enterprise	Ability to create and innovate through new ideas
Use of technology	Ability to work in a digital world

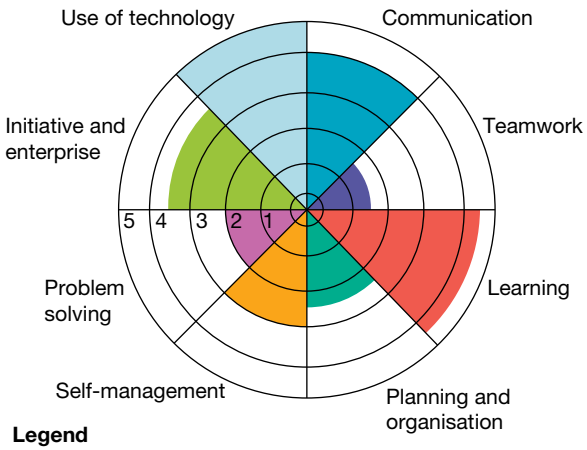
How many of the core skills for work have you developed? Use the **FIGURE 2** chart to help you think about your own skills. You may find you have particular strengths and other areas you need to improve upon. If you do this periodically, you can monitor your progress in this area. **FIGURE 3** is an example of a completed chart.

FIGURE 2 Evaluating my core skills for work



Legend
1 = Poor
2 = Fair
3 = Good
4 = Very good
5 = Excellent

FIGURE 3 Core skills analysis — March 2020



Legend
1 = Poor
2 = Fair
3 = Good
4 = Very good
5 = Excellent

10.3.4 Future careers and Geography

Studies in Geography, along with other HASS subjects and evidence of your work experience or volunteering, can demonstrate your adaptability, creativity and enterprise skills for future work.

In the future, the type of work that will be available will change in response to the impact of climate change, population growth and decline, and technological innovation. The rapid expansion of world economies will mean that industries will adapt their workforces. Migration and a borderless world will mean that individuals will become global citizens working in large teams around the world. Many of the occupations of this century are yet to be created, while others have been imagined and offer a glimpse into the future.

The hypothetical job advertisement in **FIGURE 4** outlines some of the skills that will be needed to tackle these future roles.

FIGURE 4 Agroecologist — a career of the future

Seeking an agroecologist…	Job requirements/skills
Agroecologists help restore ecological balance while feeding and fuelling the planet. Agroecologists work with farmers to design and manage agricultural ecosystems whose parts (plants, water, nutrients and insects) work together to create an effective and sustainable means of producing the food and environmentally-friendly biofuel crops of the future. Agroecologists also work with Ecosystem Managers to reintroduce native species and biodiversity to repair the damage done by the ecosystem-disruptive farming techniques of the past.	You will need an undergraduate degree in Agroecology, in which you'll have learned how plants, soil, insects, animals, nutrients, water and weather interact with one another to create the living systems in which crop-based foods are grown. You'll also have learned about the technologies and methods involved in growing food in a sustainable way. To be successful in this role, you will need to be responsive to change, demonstrate adaptability by working as part of a global team, and be creative and enterprising in all elements of the business to ensure that business growth is sustainable.

10.3.5 Skills used in studying Geography

In addition to these concepts, there is a range of essential practical skills that you will learn, practise and master as you study Geography. These skills can be categorised into the four core skills areas you already know from your study of HASS.

- Questioning and researching
- Analysing
- Evaluating
- Communicating and reflecting

The specific geographical skills you will use in Year 10 are:

- comparing an aerial photograph and a topographic map
- constructing and interpreting a scattergraph
- interpreting a cartogram
- using multiple data formats
- constructing and describing complex choropleth maps
- writing a geographical essay.

Additional SkillBuilders are available online at www.jacplus.com.au:

- Interpreting a complex block diagram
- Creating a fishbone diagram
- Reading topographic maps at an advanced level
- Comparing an aerial photograph and a topographic map
- Using geographic information systems (GIS)
- Evaluating alternative responses
- Drawing a futures wheel
- Comparing aerial photographs to investigate spatial change over time
- Describing change over time
- Building a map with geographic information systems (GIS)
- Using Excel to construct population profiles
- How to develop a structured and ethical approach to research
- Understanding policies and strategies
- Debating like a geographer
- Constructing and describing complex choropleth maps.

Resources

Weblinks ACTU Worksite
Careers 2030

10.3 ACTIVITIES

1. Part-time, casual or vacation work are all useful ways to build your core skills for work. Use the **ACTU Worksite** weblink in the Resources tab to locate information on work experience, volunteering and being ready for your first job. **HASS skills: Questioning and researching**
2. Over the coming decades, new careers in G eography will emerge. Ecosystem auditors, localisers and rewilders will become commonplace in the future. Exploring these careers today can provide an insight into the type of studies and further training you will need to undertake to ensure that you are ready for the workforce of tomorrow.
   a. Use the **Careers 2030** weblink in the Resources tab to learn about the work of an ecosystem auditor, a localiser or a rewilder.
   b. Develop a career profile for this emerging career. Include the following details in your profile:
      i. a definition for this occupation
      ii. the core skills needed in this field
      iii. the study or training required to successfully carry out the tasks of the role
      iv. the industries that will employ these occupations. **HASS skills: Communicating and reflecting**

10.4 SkillBuilder — Interpreting a complex block diagram

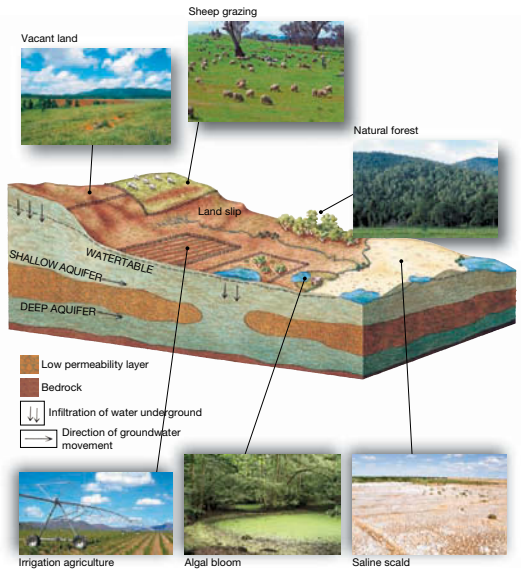
online only

What is a complex block diagram?

A complex block diagram is a diagram that is made to appear three-dimensional. It shows a great deal of information about a number of aspects on a topic or location. It shows what is happening at the surface of the land or water, what is happening above the land or water, and what is happening beneath the soil or water at a number of different locations across an area.

Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).



Resources

Video eLesson Interpreting a complex block diagram (eles-1746)

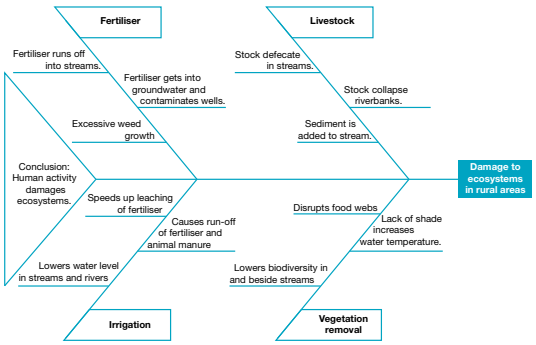
Interactivity Interpreting a complex block diagram (int-3364)

10.5 SkillBuilder — Creating a fishbone diagram

online only

What is a fishbone diagram?

Fishbone diagrams are useful to help visualise a problem or effect, and to show the causes of that problem. Bones above and below the central line are used to identify causes, while the 'head' of the diagram gives the problem or effect. Each major category of cause then flows to other causes and even sub-causes. These are all linked to convey the interconnection of ideas.



Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson Creating a fishbone diagram (eles-1748)

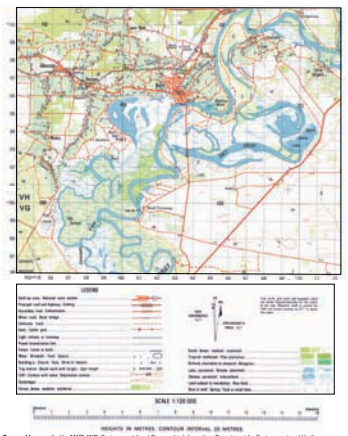
Interactivity Creating a fishbone diagram (int-3366)

10.6 SkillBuilder — Reading topographic maps at an advanced level

online only

What is reading a topographic map at an advanced level?

Topographic maps are more than just contour maps showing the height and shape of the land. They also include local relief and gradients and allow us to calculate the size of various areas. Reading this information requires more advanced skills.



Source: Map supplied by MAPLAND, Environmental and Geographic Information, Department for Environment and Heritage, South Australia.

Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson Reading topographic maps at an advanced level (eles-1749)

Interactivity Reading topographic maps at an advanced level (int-3367)

10.7 SkillBuilder — Comparing an aerial photograph and a topographic map

LEARNING INTENTION

This SkillBuilder shows you how to compare an aerial photograph and a topographic map. Comparing an aerial photograph and a topographic map is part of the Analysing HASS skill.

10.7.1 Tell me

What comparisons can be made between aerial photographs and topographic maps?

Comparing an aerial photograph with a topographic map enables us to see what is happening in one place. Photographs and maps may be from the same date but they may also be from different dates, and will thus show different information.

Why is comparing an aerial photograph with a topographic map useful?

Comparing an aerial photograph with a topographic map is useful because each format provides different information. The camera captures a place at one moment in time. The realistic colours in a photograph give a clear impression of the activities taking place on the land. Aerial photographs allow us to see beneath the water as well. Topographic maps allow the cartographer to add information that cannot be identified from the air, such as place names and building names.

Comparisons of aerial photographs and topographic maps are useful when:

- you want to create a new map combining elements from both
- you are trying to make comparisons about places over time
- you want to see the interconnection between phenomena on an aerial photograph and a topographic map
- oceanographers need to assess sand movement along a coast
- local councils are handling building permits
- transport authorities are undertaking long-term planning.

A good comparison of an aerial photograph with a topographic map:

- includes dates for the photograph and map
- contains a general statement on the region
- provides specific examples, such as place names
- provides directions when showing change over time
- gives distances when showing the scale of change.

10.7.2 Show me

Model

Use Google Earth or Google Maps to locate an aerial photograph view of the same area shown in the **FIGURE 1** topographic map. You can download a higher resolution copy of this map from the Resources tab (doc-11572).

Mossman has changed since 1982, when the map was created. Then, the town was smaller, and we can see that it has developed towards the north, south-east and south-west. By 2011, Cooya, on the coast, had expanded to the south by some 500 metres along the coast. The forested areas on the Cassowary Range and the mangrove coastal area at Port Mossman, however, remain intact. The intertidal flat south of Cooya is evident in the photograph, as are the ledges about a kilometre offshore. The aerial photograph indicates the productivity of the area: some fields contain crops and others have been recently tilled. The topographic map allows us to identify Mt Beaufort and the Cassowary Range as areas within the natural environment. Like many places in coastal areas of Australia, the towns are growing over time.

FIGURE 1 Topographic map of Mossman and the Daintree River National Park, Queensland, 1982



Source: © Commonwealth of Australia, Geoscience Australia (1982). Topographic map of Daintree National Park — Mossman, QLD. 1:100 000 Series R631, Sheet 7965, Edition 1 1- AAS. 1982.

You will need:

- a topographic map and an aerial photograph of the same place.

Procedure

Step 1

Check the titles of both the topographic map and the aerial photograph to ensure they are of the same place. If the titles or areas do not exactly match, work out which part of one relates to the other by identifying common features in both.

Step 2

Confirm the dates of both pieces of information, so that you are aware of any differences that exist between the photograph and the map as a result of being created at different times.

Step 3

Scan back and forth from the map to the photograph, looking for similarities and differences. Clarify any information that you are not sure about. Begin a paragraph by comparing the two sets of data, ensuring you mention place names, dates and any available statistics; for example, 'Mossman has changed in the 30 years since 1982'. In some circumstances you could say 'it has changed significantly' or 'it has changed minimally'.

Step 4

Identify the changes that you see. What aspects did you find interesting, and why? Continue your paragraph describing the differences that you see between the two sets of data; for example, 'In 1982, the town was smaller, and we can see that it has developed towards the north, south-east and south-west. By 2011, Cooya, on the coast, had expanded to the south by some 500 metres along the coast.'

Step 5

Conclude your paragraph with a summary sentence; for example, 'The past 30 years have seen major changes in the Mossman area, especially to the towns of Cooya and Newell, which have been infilled and extended north and south along the coast'.

on Resources

Digital documents	Topographic map of Mossman and the Daintree River National Park, Queensland (doc-11572)
	Topographic map extract of Merimbula, New South Wales (doc-11571)
Video eLesson	Comparing an aerial photograph and a topographic map (eles-1751)
Interactivity	Comparing an aerial photograph and a topographic map (int-3369)
Google Earth	Mossman

10.7.3 Let me do it

Complete the following activities to practise this skill.

10.7 ACTIVITIES

1. Using the topographic map and the aerial photograph of Merimbula in subtopic 13.4, write a paragraph comparing the information gained about Merimbula from both data sources. Use the checklist to ensure you cover all aspects of the task.
2. Apply your skills to answer the following questions.
   a. List three features within Merimbula that can be identified on the map but not on the aerial photograph.
   b. What information does the aerial photograph give you about boating in the area that is not available on the topographic map?
   c. Which features of Merimbula Lake, seen on the topographic map, cannot be identified on the aerial photograph? What features in Merimbula Lake are given greater clarity by the aerial photograph?
   d. What information does the map provide about the airport that cannot be gained from the aerial photograph?
   e. What details does the topographic map give about the land facing Bar Beach that cannot be seen in the aerial photograph due to the oblique angle of photography?

Checklist

I have:

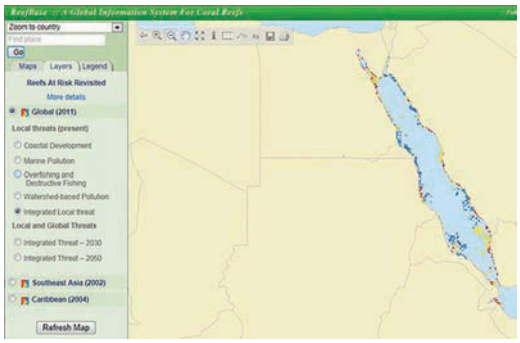
- included dates for the photograph and map
- provided a general statement on the region
- provided specific examples, such as place names
- provided directions when showing ***change*** over time
- given distances when showing the ***scale*** of ***change***.

10.8 SkillBuilder — Using geographic information systems (GIS)

online only

What is GIS?

GIS is a computer-based system of layers of geographic data. Just as an overlay map allows you to interchange layers of information, GIS allows you to turn layers on and off to make comparisons between pieces of data.



Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson Using geographic information systems (GIS) (eles-1752)

Interactivity Using geographic information systems (GIS) (int-3370)

10.9 SkillBuilder — Constructing and interpreting a scattergraph

LEARNING INTENTION

This SkillBuilder shows you how to construct and interpret a scattergraph. Constructing and interpreting a scattergraph is part of the Analysing HASS skill.

10.9.1 Tell me

What is a scattergraph?

A scattergraph is a graph that shows how two or more sets of data, plotted as dots, are interconnected. This interconnection can be expressed as a level of correlation.

How is a scattergraph useful?

Scattergraphs are used to show us a visual image of the interconnection of factors. Sometimes it is difficult to see the relationship until the sets of data are presented visually. You will find that the graphs clearly show the interconnection of factors where clusters of dots form, while other dots stand out alone.

Scattergraphs are also useful for:

- analysing the degree of connection — perfect correlation, positive correlation, negative correlation and no correlation
- testing our hypothesis on a topic
- testing whether there is a relationship between sets of data gathered during fieldwork.

A good scattergraph:

- is drawn in pencil
- has ruled axes
- has labelled axes
- uses small dots plotted accurately
- shows a line of best fit
- includes a clear title.

A good interpretation of a scattergraph:

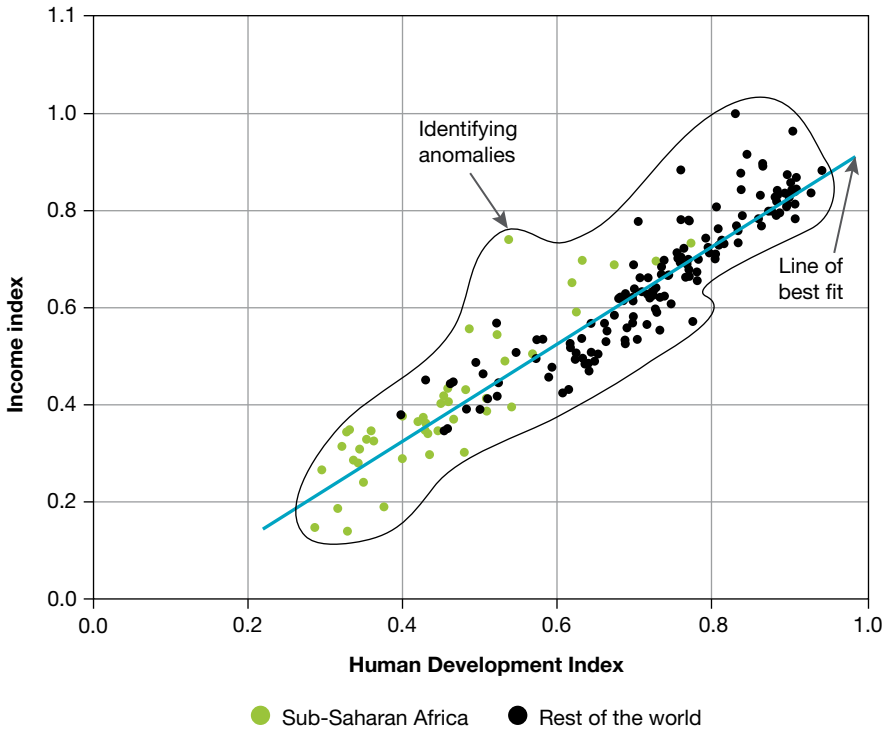
- identifies and communicates key features such as the levels of each feature on each axis and the relationship to the line of best fit.

10.9.2 Show me

Model

Interpretation of this scattergraph shows a positive correlation between income and the Human Development Index (HDI). As the level of income increases, the level of human development increases. Countries in sub-Saharan Africa (green dots) can be seen predominantly at the lower end of the line of best fit. This indicates that a low level of income puts these countries at the low end of the HDI. Most of these countries fall at less than 0.4 on both axes — the HDI and the income index. There are a few countries in the sub-Saharan region that do better, but these do not get beyond 0.8 on either index.

FIGURE 1 Scattergraph showing the interconnection between income and the HDI for sub-Saharan Africa and the rest of the world, 2011



Source: © United Nations Development Programme.

You will need:

- two sets of data
- a piece of graph paper
- a light-grey pencil
- a ruler.

Procedure

To complete a scattergraph, you must have two sets of information about which you want to test the interconnection. In the following example, we use the data on food supply and road network density from the 2012 Human Development Report.

Creating a scattergraph

Step 1

Choose two sets of data for a topic that might be interconnected. In other words, there might be a cause-and-effect relationship between the two factors; for example, road network density might affect food supply.

TABLE 1 Food supply and road density in Africa

Countries	Food supply, kilocalories per capita per day, 2005–2007	Road density network, metres per capital, 1999–2008
Angola	1949.3	3.7
Benin	2512.3	2.6
Botswana	2235.0	13.8
Burkina Faso	2669.0	6.7
Burundi	1679.7	1.8
Cameroon	2259.0	3.0
Cape Verde	2549.3	3.1
Central African Republic	1956.0	6.6
Chad	2040.0	4.0
Comoros	1857.3	1.6
Congo, Democratic Republic of the	1585.3	2.80
Congo, Republic of	2512.7	4.7
Côte d'Ivoire	2514.7	4.4
Equatorial Guinea	–	5.5
Eritrea	1586.7	1.1
Ethiopia	1951.7	0.6
Gabon	2730.0	6.8
Gambia	2345.3	2.6
Ghana	2849.0	2.7
Guinea	2529.3	5.1
Guinea-Bissau	2288.0	2.7
Kenya	2060.0	1.8
Lesotho	2468.3	3.0
Liberia	2163.3	3.7
Madagascar	2132.7	3.2
Malawi	2127.0	1.3
Mali	2579.3	1.4
Mauritania	2822.7	3.4
Mauritius	2935.7	1.6
Mozambique	2071.0	1.4
Namibia	411.0	35.1
Niger	449.4	1.3

TABLE 1 Food supply and road density in Africa *(continued)*

Countries	Food supply, kilocalories per capita per day, 2005–2007	Road density network, metres per capital, 1999–2008
Nigeria	1513.1	1.4
Rwanda	1679.1	1.6
Sao Tomé and Príncipe	3407.8	2.3
Senegal	1168.4	1.3
Seychelles	–	5.9
Sierra Leone	1429.5	2.5
South Africa	4212.0	8.1
South Sudan	–	–
Swaziland	1176.5	3.3
Tanzania, United Republic of	1240.0	2.1
Togo	1191.6	2.1
Uganda	1566.4	2.7
Zambia	2266.8	6.5
Zimbabwe	503.5	7.7

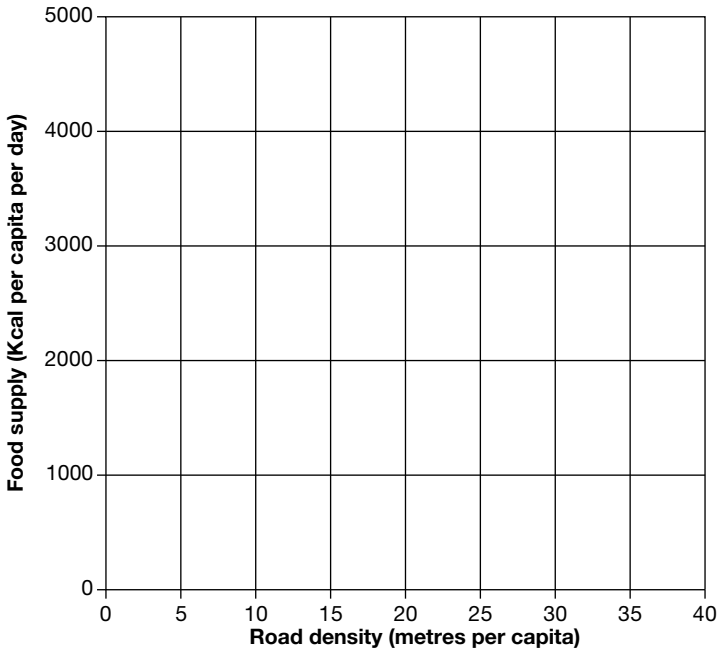
Step 2

Decide which factor you will place on the base line, or horizontal axis, and which factor you will place on the vertical axis. In this case, we will place road density on the horizontal axis and food supply on the vertical axis.

Step 3

Look at the range of numbers in the data to be plotted and decide on a scale for each axis. Ensure that the maximum and minimum numbers will fit on the scale. Draw a graph outline and label the axes, including the units of measurement (see **FIGURE 2**).

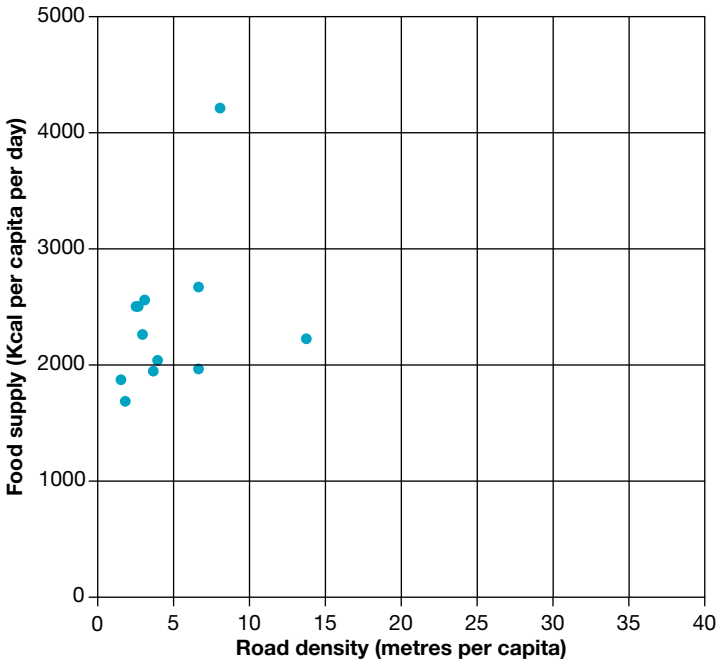
FIGURE 2 The graph base



Step 4

Plot all the data on the graph. Mark with a small dot the point where both data values intersect. Angola's data, for example, would intersect at about the 2000 line on the vertical axis and just before the 5 line on the horizontal axis.

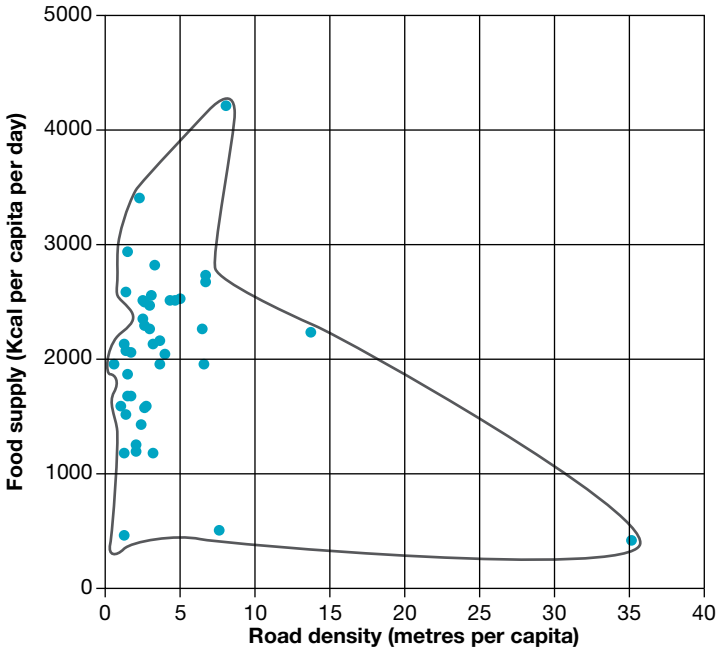
FIGURE 3 Starting to plot the data



Step 5

Now draw a pencil outline around all the dots. This will show you the trend of the data and identify the anomalies. These anomalies occur where the outline bulges.

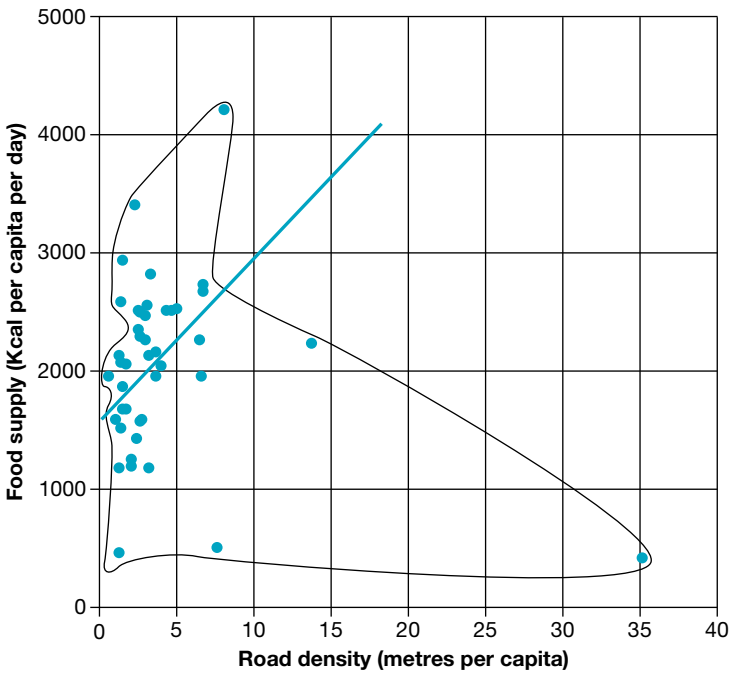
FIGURE 4 Identifying the trend



Step 6

Now draw a line of best fit — that is, a line that has equal points either side of it. To do this, sit your ruler on its narrow edge on the graph and move it around until there is a roughly equal number of dots on both sides of the ruler. Draw along the ruler's edge to create the line of best fit, or trend line.

FIGURE 5 Drawing the line of best fit



Step 7

Using the models in **FIGURE 6**, determine whether the shape shows:

- positive correlation — the line of best fit goes from bottom left to top right
- negative correlation — the line of best fit goes from top left to bottom right
- a perfect correlation — all dots sit on the line of best fit rather than on either side of it
- no correlation — the dots are randomly scattered rather than in a straight line.

The closer the points are to the line, the stronger the relationship. Note that the 'odd' points are considered anomalies.

Step 8

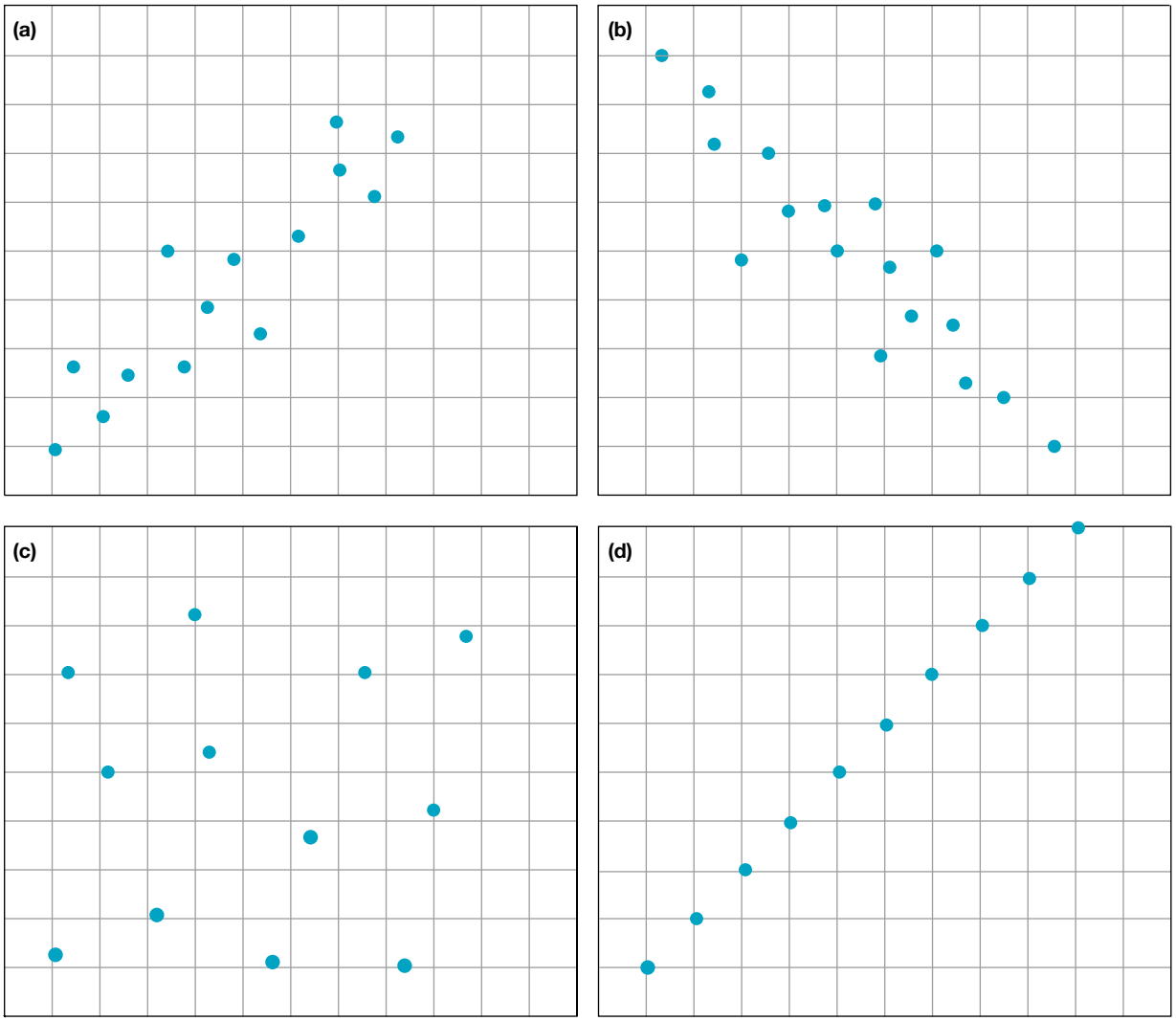
Give your graph a title.

Interpreting a scattergraph

To interpret a scattergraph is to write a few sentences explaining your findings. Use the following format:

- State the type of correlation.
- Describe what is happening on the graph regarding the two factors.
- Discuss any anomalies.
- Be specific about any particular places or countries you want to use as an example.
- Write a concluding statement.

FIGURE 6 Correlation patterns: (a) positive correlation, (b) negative correlation, (c) no correlation, (d) perfect correlation



on Resources

Video eLesson Constructing and interpreting a scattergraph (eles-1756)

Interactivity Constructing and interpreting a scattergraph (int-3374)

10.9.3 Let me do it

Complete the following activities to practise this skill.

10.9 ACTIVITIES

1. Using the data in **TABLE 2**, complete a scattergraph to show the relationship between life expectancy and years of schooling. Write a paragraph interpreting the finished graph, using the steps outlined above. Use the checklist to ensure you have covered all aspects of the task.

TABLE 2 Life expectancy and years of schooling, selected countries, 2019

Country	Life expectancy (years), HDI Report 2019	Years of schooling, HDI Report 2019
Australia	83.3	12.7
China	76.7	7.9
Democratic Republic of the Congo	60.4	6.8
Egypt	71.8	7.3
India	69.4	6.5
Japan	84.5	12.8
Kenya	66.3	6.6
Norway	82.3	12.6
Syria	71.8	5.1
United States	78.9	13.4

2. Apply your skills to answer the following questions.

- **a.** Is there a correlation between life expectancy and years of schooling?
- **b.** What type of correlation can you identify?
- **c.** In your scattergraph, are there any anomalies?
- **d.** What type of relationship between the two factors would result in an anomaly?
- **e.** From this correlation pattern, where would you expect the following countries to fit on the graph?
  - **i.** United Kingdom
  - **ii.** Indonesia
  - **iii.** New Zealand
  - **iv.** Brazil

Checklist

I have:

- drawn in pencil
- ruled the axes
- labelled the axes
- used small dots plotted accurately
- shown a line of best fit
- included a clear title
- identified and communicated key features such as the relationship to the line of best fit.

10.10 SkillBuilder — Interpreting a cartogram

LEARNING INTENTION

This SkillBuilder shows you how to use a geographic information systems. Using a geographic information systems is part of the Analysing HASS skill.

10.10.1 Tell me

What is a cartogram?

A cartogram is a diagrammatic map; that is, it looks like a map but is not a map as we usually know it. These maps use a single feature, such as population, to work out the shape and size of a country. Therefore, a country is shown in its relative location but its shape and size may be distorted.

Why is a cartogram useful?

Cartograms show value by area, allowing patterns to become obvious that are not identifiable on traditional maps. Computers have made the development of cartograms easy. Programs such as Worldmapper provide a range of cartograms.

Cartograms are useful for:

- comparing statistical country data quickly and easily
- representing the proportion of a feature in a country
- identifying regional or global differences.

A good interpretation of a cartogram:

- identifies patterns
- identifies the countries that appear largest and those that appear smallest
- clearly represents and communicates the data.

10.10.2 Show me

You will need:

- a cartogram
- an atlas.

Procedure

To interpret a cartogram, you need a computer-drawn cartogram such as **FIGURE 1**.

Step 1

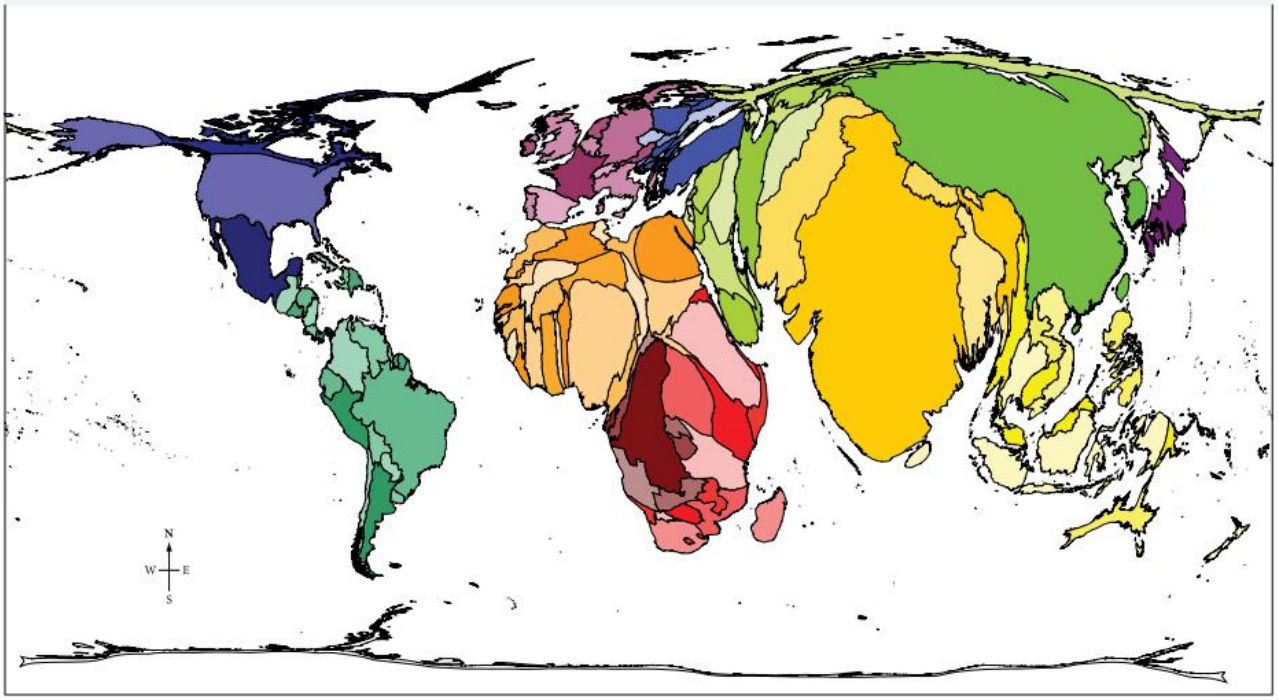
Read the title; check that the meaning is clear. In **FIGURE 1**, the world's population in 2050 is mapped.

Step 2

Study the cartogram, looking for the largest and the smallest shapes on it. With your knowledge of the world map, or by using an atlas, identify those countries and continents that are distorted in size and shape. For example, in **FIGURE 1**, Africa and Asia are expanded, indicating a large estimated growth in population, but Australia has almost disappeared, indicating a small expected growth in population.

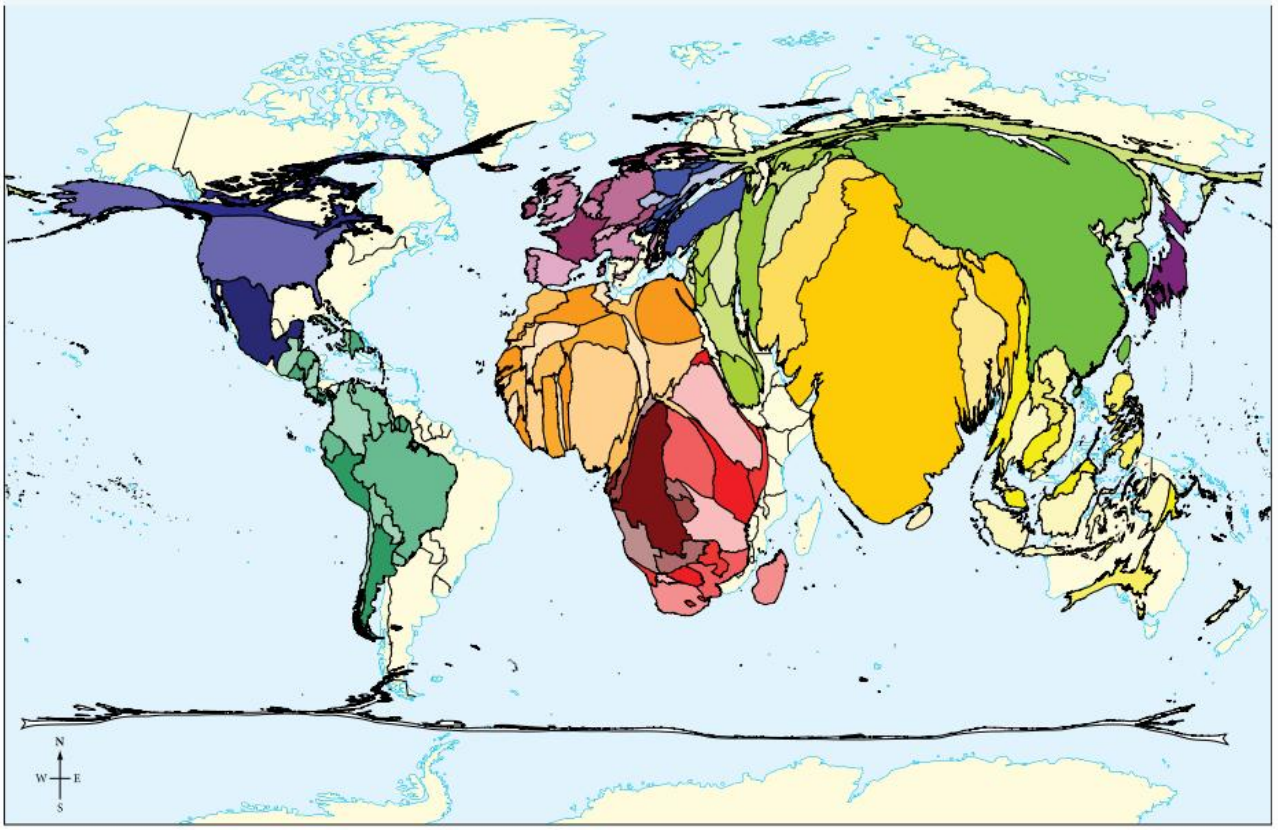
FIGURE 2 shows an ordinary map of the world with a cartogram superimposed on it.

FIGURE 1 Cartogram showing estimated world population, 2050



Source: Spatial Vision.

FIGURE 2 Cartogram of the world's population in 2050 superimposed on a world map



Source: Spatial Vision.

Step 3

Interpreting the cartogram requires a description of the interconnection between the feature that has been mapped and the proportional size of a country.

Look for these aspects:

- countries that appear larger
- countries that appear smaller
- countries and continents whose shapes have been distorted.

Write a few sentences describing the feature mapped, as has been done in the 'Model' paragraph.

Model

The **FIGURE 1** cartogram or proportional map shows the estimated distribution of the world's population in 2050. It is evident that the greatest proportion of the world's population is expected to live in Africa and Asia as these mapped countries are distorted larger than their size on a standard world map. It is also evident that regions in South America, North America and South-East Asia are not expected to see massive population growth. Australia is distorted to be smaller than it is on a standard world map, indicating that population is not expected to grow too much here.

on Resources

Video eLesson Interpreting a cartogram (eles-1757)

Interactivity Interpreting a cartogram (int-3375)

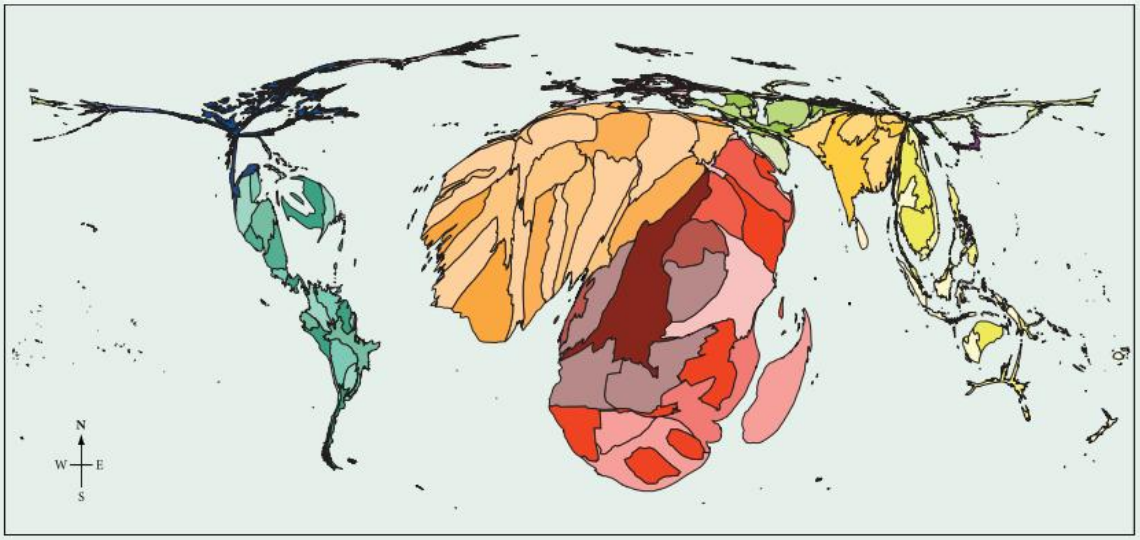
10.10.3 Let me do it

Complete the following activities to practise this skill.

10.10 ACTIVITIES

1. Study the **FIGURE 3** cartogram, which shows the proportion of the world's population living on less than US$1.25 per day. Write a description of the countries in which people live on less than a $1.25 a day. Use the checklist to ensure you have covered all aspects of the task.

FIGURE 3 The proportion of the world's population living on less than US$1.25 per day



Source: The World Bank: Poverty headcount ratio at $1.25 a day PPP % of population: World Development Indicators.

2. Referring to **FIGURE 3**, apply your skills to answer the following questions.
   a. Which continent is the enlarged shape at the centre of the map?
   b. How has the shape of Australia been distorted? What does this tell us about the number of people living on less than US$1.25 a day in Australia?
   c. Which other continents have been reduced in size by the cartogram?
   d. Which continents have the most countries that have been enlarged by the cartogram? What does this say about the poverty levels in those countries?
   e. How do you think this map might be ***changed*** by 2030?

Checklist

I have:
- identified patterns
- identified the countries that appear largest and those that appear smallest
- clearly represented and communicated the data.

10.11 SkillBuilder — Using multiple data formats

LEARNING INTENTION

This SkillBuilder shows you how to use multiple data formats. Using multiple data formats is part of the Analysing HASS skill.

10.11.1 Tell me

What are multiple data formats?

Multiple data formats are varied forms of data presentation, used when a range of data needs to be shown. All the information must be read before the data can be interpreted.

Why are multiple data formats useful?

Multiple data formats are useful in major reports when a range of ideas needs to be pulled together and presented as a united document. You will probably have used multiple data formats when presenting annotated visual displays, poster displays, slide presentations, brochures, and so on.

Multiple data formats are useful for:
- bringing together a range of data on a topic
- providing the best opportunity to showcase a range of data in the most suitable formats
- drawing attention to data by having interesting presentation techniques
- providing material at a level of readability suited to a particular audience.

A good interpretation of multiple data formats:
- makes concise and accurate analysis of each data format
- includes all the information provided.

10.11.2 Show me

You will need:

- a range of data.

Model

In Fiji, a group of Pacific islands, population growth and subsistence living go hand in hand. The population pyramid, **FIGURE 1a**, shows that Fiji has a young population, and that the largest age group is 0–4 years of age. The population in 2008 had become evenly distributed between the rural and the urban areas (**FIGURE 1b**),

whereas in the past rural living had dominated. Native Fijians are mostly involved in subsistence farming or fishing, while Indo-Fijians are employees (**FIGURE 1c**). The pie graph, **FIGURE 1e**, shows that these businesses in which they might be employed include the garment industry, which is a third of Fiji's exports. Other resources include mining, timber, raw sugar and fishing. **TABLE 1** indicates that 30 000 Fijians are involved in subsistence fishing, and **FIGURE 1f** shows that fishing for export provides US$45 million. Fiji's growth and development is ongoing, and is supported by overseas aid.

FIGURE 1 (a)–(f) A range of data about Fiji

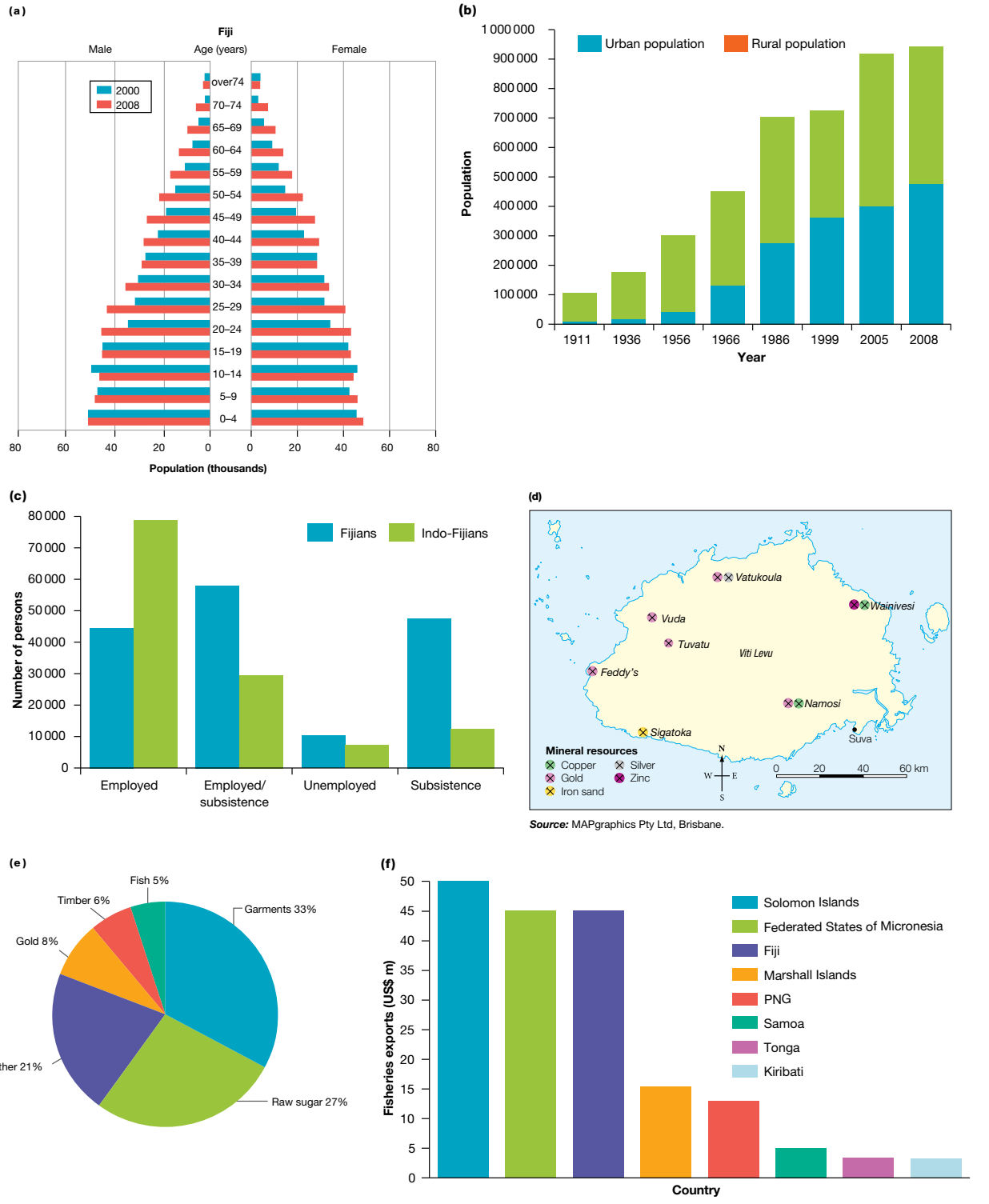


TABLE 1 Employment in subsistence fishing in selected Pacific countries

Pacific country	Number employed
Papua New Guinea	250 000–500 000
Solomon Islands	50 000
Fiji	30 000
Kiribati	20 000
Tonga	7500
Marshall Islands	4700

Procedure

Step 1

Study **FIGURE 1** and **TABLE 1** carefully. You should have encountered all these formats — population profiles, bar graphs, cumulative bar graphs, tables, pie graphs and maps — in your study of Geography. Be systematic in your approach to the data. Read titles, labels, units of measurement, dates and legends, and then make your interpretations.

Step 2

Consider an approach that allows you to link data in a logical flow of ideas about the topic. In this instance, the data in **FIGURE 1** and **TABLE 1** is about Fiji's people and their work. Introduce your topic with a short sentence stating the intention of your writing. For example, the 'Model' paragraph starts with an opening sentence about the location of Fiji.

Step 3

Begin by finding the figures that are about population structure (population profile, bar graphs on urban and rural population growth, for example). The model paragraph includes the following statements: 'Fiji has a young population, and the largest age group is 0–4 years of age'. The population in 2008 had become evenly distributed between the rural and the urban areas, whereas in the past rural living had dominated.

Step 4

To show the interconnection between people and work, the graph of economic activity works well. The model paragraph says 'Native Fijians are mostly involved in subsistence farming or fishing, while Indo-Fijians are employees'. Then you can consider the map and pie graph on mining and the graph and table on the role of fishing. See the remainder of **FIGURE 1** and the model paragraph.

Step 5

When writing, end with a concluding statement. The model paragraph has the concluding statement: 'Fiji's growth and development is ongoing, and is supported by overseas aid'.

on Resources

Video eLesson Using multiple data formats (eles-1761)

Interactivity Using multiple data formats (int-3379)

10.11.3 Let me do it

Complete the following activities to practise this skill.

10.11 ACTIVITIES

1. Discuss the wellbeing of women in India. Use the maps, images and graphs from subtopic 17.4 (**FIGURES 7** and **8**) and subtopic 17.5 (**FIGURES 8** and **9**). Use the checklist to ensure you cover all aspects of the task.
2. Apply your skills to answer the following questions.
   a. How does maternal mortality in India compare with other parts of the world?
   b. In which parts of India would a woman prefer not to be when giving birth?
   c. In which parts of India are there more females than males?
   d. Using **FIGURE 8** in subtopic 17.4, describe how reproductive health indicators have ***changed*** since 1990.

Checklist

I have:
- made concise and accurate interpretations of each data format
- included all the information provided.

10.12 SkillBuilder — Constructing and describing complex choropleth maps

LEARNING INTENTION

This SkillBuilder shows you how to construct and describe complex choropleth maps. Using choropleth maps is part of the Analysing HASS skill.

10.12.1 Tell me

What is a complex choropleth map?

A complex choropleth map is a map that is shaded or coloured to show the average density or concentration of a particular feature or variable, and it shows an area in detail. The collector areas of data are smaller, so they show the mapped information more precisely. The key or legend shows the value of each shading or colouring. The most dense or highest concentration is usually the darkest shade. The least dense or lowest concentration is usually the lightest shade. Average values are attached to the colour shadings in the key or legend. In constructing your own choropleth map, you need to determine the values that relate to each shade within a colour range.

How are complex choropleth maps useful?

A complex choropleth map is used to show values in a pictorial way. It allows the viewer to quickly identify where the values are highest (darkest) and lowest (lightest) and to note any patterns over space. However, the information is based on averages, and precise data is not given for a particular place or region within the map. Areas can contain within them wide variations from the average value mapped.

Complex choropleth maps are useful for showing:
- the distribution of a feature across a city or country
- the extent of a feature across a region
- patterns, which are indicated by the changing colours of the map
- conglomerations of data in specific locations.

A good complex choropleth map:
- uses a base map
- has clearly determined values for each colour

- uses shades within a colour spectrum
- is neatly coloured
- includes a clear title.

A good description of a complex choropleth map:

- looks for a pattern and subtleties within a broad pattern
- notes any anomalies
- uses quantities
- refers to the title and legend.

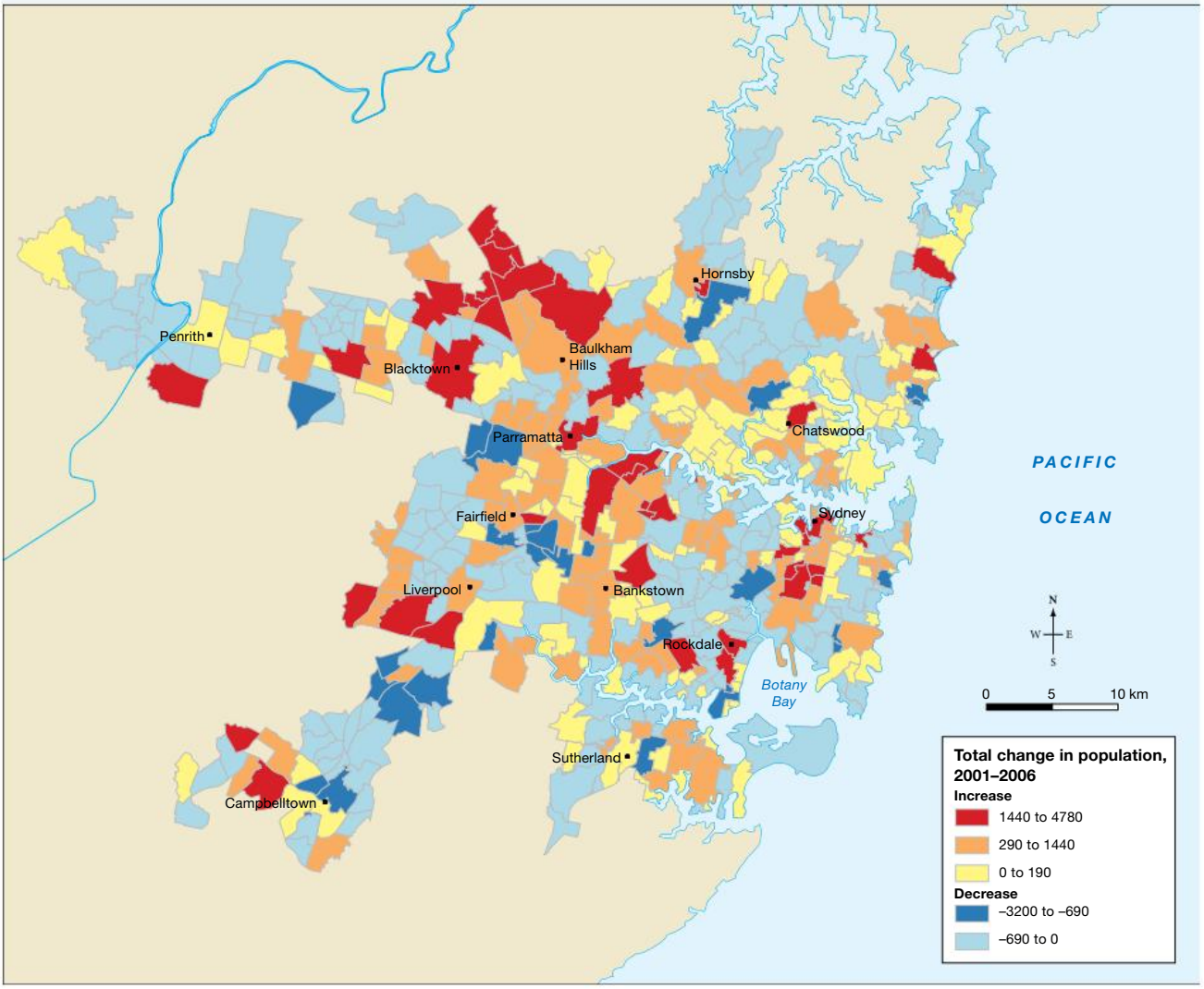
10.12.2 Show me

You will need:

- a set of data specific to a range of places
- a base map to match the places
- coloured pencils with a range of shades
- a ruler.

Model

FIGURE 1 Population change in Sydney, 2001–06



Source: Spatial Vision.

The change in Sydney's population between 2001 and 2006 was very uneven. The areas of greatest increase (1440 to 4780) are scattered across the city, with most found on the urban fringes.

Most areas that experienced the greatest increase are clustered together — for example, around Baulkham Hills, Blacktown and Parramatta in the west and north-west, and Liverpool and Campbelltown in the south-west. There are relatively few census areas that show minimal increase (0 to 290 people).

The areas of greatest decrease (–3200 to –690) are also scattered across the city. Most of these decreases are found on the urban fringes, especially in the west and south-west of Sydney, between Liverpool and Campbelltown.

The areas with the smallest change (0 to 290 increase) tend to be found in areas about 5 to 15 kilometres from the city. Clusters are found on the north shore around Chatswood, north-east and south-east of Parramatta, and around Penrith.

The most common kind of change is moderate decline (–690 to 0). Clusters of this change are found around Penrith and Botany Bay, north and south-east of Hornsby, and north of Campbelltown.

Procedure

Constructing a choropleth map

Step 1

Select a set of data to map, and ensure that you have a base map to match the area. In **FIGURE 1**, the ABS data is based on small regions across Sydney, and the base map shows the boundaries of those regions. The ABS website will provide you with the names of these areas.

Step 2

Look at the range of data you have to plot. In **FIGURE 1**, there are positive and negative numbers to consider, but this is not always the case. You should try to divide the data into approximately five categories — too many categories will spread the data too thinly, while too few categories will show few variations in the data. For each category, select a colour shade where the darkest colour represents the greatest value and the lightest colour represents the lowest value. Create a key on the base map.

Step 3

Now very carefully colour all areas on the base map with the highest value. It is a good idea to go through the list of data and colour-code each place before you begin.

Step 4

Check that the geographical conventions are complete: border, orientation, legend, title, scale and source.

Describing a choropleth map

Step 5

To interpret the colours, you need to comment on where the deepest or most intense colours occur. Can you discuss the map by areas? For example, in **FIGURE 1** the areas of greatest change (1440 to 4780 people), represented by a deeper colour, are scattered across the city but are most likely to be found on the urban fringes, indicating the growth of the city's boundaries.

Step 6

To further interpret the colours, you need to comment on where the lightest or least intense colours occur. Can you discuss the map by areas? For example, in **FIGURE 1** most of the areas that have shown only moderate increase (0 to 290) are found 5 to 15 kilometres from the city.

Step 7

To identify a subtle change, you need to look for a change of colour within an area that is predominantly one colour. In **FIGURE 1**, in the middle of the northern area of 1440 to 4780 increase, there are two census areas that show 290 to 1440 increase.

Step 8

Are there any coloured areas that stand out from the rest? That is, is there a colour among a mass of other colours that isn't expected? This is called an anomaly, and needs to be discussed. Identify the place that is different from the surrounding places. For example, there are no areas of 1440 to 4780 increase in the Sutherland Shire, south of the river that flows into Botany Bay.

on Resources

Digital document	Blackline master: Map of Africa (doc-12012)
Video eLesson	Constructing and describing complex choropleth maps (eles-1732)
Interactivity	Constructing and describing complex choropleth maps (int-3350)

10.12.3 Let me do it

Complete the following activities to practise this skill.

10.12 ACTIVITIES

1. Use the data from **TABLE 1** and a base map of Africa (use the **Blackline master: Map of Africa** digital document in the Resources tab) to construct a choropleth map, then describe what is shown on your map. Use the checklist to ensure you cover all aspects of the task.

TABLE 1 Official development assistance to agriculture in sub-Saharan Africa, 2010

Country	US$ million	Country	US$ million
Angola	27	Madagascar	19
Benin	21	Malawi	79
Botswana	1	Mali	223
Burkina Faso	71	Mauritania	11
Burundi	96	Mauritius	0
Cameroon	62	Mozambique	72
Cape Verde	3	Namibia	14
Central African Republic	3	Niger	43
Chad	9	Nigeria	69
Comoros	2	Rwanda	68
Congo	1	Sao Tome and Principe	3
Cote d'Ivoire	93	Senegal	256
Democratic Republic of Congo	100	Seychelles	1
Eritrea	13	Sierra Leone	75

Ethiopia	222	Somalia	1
Gabon	28	South Africa	20
Gambia	15	Sudan	145
Ghana	126	Swaziland	6
Guinea	8	Togo	36
Guinea-Bissau	10	Uganda	198
Kenya	323	United Republic of Tanzania	132
Lesotho	0	Zambia	36
Liberia	36	Zimbabwe	81

Source: Food and Agriculture Organization of the United Nations, 2012, FAO, *The State of Food and Agriculture 2012*, www.fao.org/docrep/017/i3028e/i3028e.pdf.

2. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.

a. Which regions of sub-Saharan Africa receive the most agricultural assistance?

b. Which regions of sub-Saharan Africa receive the least agricultural assistance?

c. Which countries within southern Africa (south of 10°S) received quite different agricultural aid from that of their neighbours?

d. Are there any parts of the region that you think should receive more aid? Can you think of a reason why aid might not be going to these countries?

e. Will aid make a difference to the food production figures produced in 10 years' time? Explain your answer.

Checklist

In drawing a complex choropleth map, I have:

- used a base map
- included clearly determined values for each colour
- used shades within a colour spectrum
- coloured neatly
- included a clear title.

In describing a complex choropleth map, I have:

- looked for patterns and subtleties within a broad pattern
- noted the anomalies
- used quantities
- referred to the title and legend.

10.13 SkillBuilder — Evaluating alternative responses

onlineonly

What are alternative responses?

Alternative responses are a range of different ideas/opinions on an issue. Evaluating ideas involves weighing up and interpreting your research to reach a judgement or a decision based on the information.

Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).



A special environment
The island's special features include:
- long surf beaches and rocky headlands
- about 40 crystal-clear freshwater lakes. Some of these are perched lakes (that is, they sit, or perch, on an impermeable layer of rock or hardened organic matter lying above the watertable). There are also 'window' and barrage lakes. Window lakes appear when depressions in the land surface dip below the watertable, thus exposing part of it. Barrage lakes form when shifting sand dunes block running water and cause it to pool.
- many streams and creeks
- coloured sand cliffs, some 35 kilometres in length
- salt pans, lagoons, mangrove forests and wetlands
- thick rainforests, some of which are so dense that sunlight does not penetrate the canopy
- offshore seagrass beds to support colonies of dugong
- over 25 species of mammals, including dingoes thought to be the purest strain of the species in Australia
- over 350 species of birds. One of Australia's rarest birds, the endangered ground parrot, is found on the island.
- vast sandblows (that is, tracts of sand moved by the wind) and lofty sand dunes.

Past land uses
Fraser Island once had a sand-mining industry (mining its tracts of mineral-rich black sand). This was stopped in 1976 following a federal government inquiry. There was also a timber industry, disbanded in December 1991 by the Queensland Government after a separate inquiry.

Tourists
Hundreds of thousands of tourists now visit the Fraser coast region every year, injecting some $366 million into the region in 1999. It is estimated that 32 per cent of this visitor expenditure was contributed by tourists to Fraser Island itself. The most obvious risks that tourism brings to the national park have to do with land-clearing, waste, increased traffic and disturbance of the islan's flora and fauna.

Ecotourism facilities
The island's Kingfisher Bay Resort and Village has the highest level of accreditation as an ecotourism facility. An environmental impact statement was prepared before the proposed facility was approved for construction.

Dingo management
In the past, many tourists fed the dingoes that roam the island. In April 2001, however, a young boy was tragically killed by dingoes. Tourists are now provided with a 'Dingo Smart' brochure, and are heavily fined if caught feeding a dingo or trying to encourage its attention. Any dingoes known to be a problem are culled.

Managing camping facilities
There are six government-owned camps — at Central Station, Lake Boomanjin (the largest perched lake in the world), Lake McKenzie, Dundubara, Waddy Point and Wathumba — and two that are privately owned. People can also camp on a restricted number of beach areas, but not within 50 metres of a creek, stream or lake. Beach camping areas are temporarily closed sometimes to allow vegetation to regrow or to halt erosion.

Managing four-wheel drive vehicles
Four-wheel drive vehicles are needed to travel around the island. Left unmanaged, these large vehicles could have a significant impact on the island's flora and fauna and on levels of erosion, especially because touring parties tend to drive in the same areas. It is the most attractive parts of the island that are often the most vulnerable.

All vehicles travelling on the island have to display a purchased permit and, more recently, driving and parking on sand dunes have been made illegal. The Environmental Protection Agency has started a campaign to educate four-wheel drivers about the impacts their vehicles have on the island's environment.

Government funding
In 2004, the Australian government's Natural Heritage Trust granted $300 000 to reduce road-related erosion, provide environmentally friendly amenities and better direct pedestrian movement around Fraser Island. Barriers along the sides of the island's roads and better planning have reduced the degree of erosion from run-off. The idea was partly to make pedestrian travel a more attractive option, as well as draw pedestrians away from the island's vulnerable dunes. To do this, boardwalks were built along the banks of Eli Creek (see the photograph on page 26). Stretches of dunes are also regularly closed for rehabilitation. Although the potential threat from tourism-related erosion remains, the stability of the island's sand dun es is improving.

Visitor numbers to Fraser Island

Please tourists, don't pee in the lake
So, we're sure your momma told you not to pee in the swinning pool — but did she also tell you it's bad to pee in a lake? Down in Australia, the beautiful Basin Lake on Fraser Island off Queensland isn't doing well these days, and one of the causes is high levels of urine in the water. The official word is that too many tourists are using the lake as a toilet and that's led the Queensland Parks and Wildlife Service to consider closing one of the access tracks to reduce visitor numbers. Right now 35 000 people visit the lake every year and since there's no in-or outflow from the lake; whatever goes in, stays in. Our alternative suggestion is to simply stick up a big notice advertising the current urine levels in the lake. We're fairly sure most people would skip the swim.
Source: Fraser Island Travel Guide, 17 October 2008.

Resources

- **Video eLesson** Evaluating alternative responses (eles-1744)
- **Interactivity** Evaluating alternative responses (int-3362)

10.14 SkillBuilder — Drawing a futures wheel

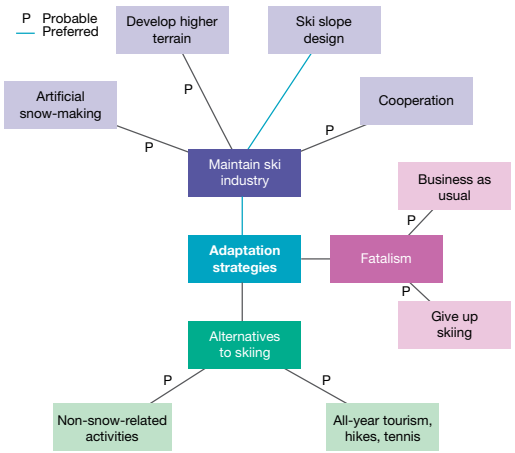
onlineonly

What is a futures wheel?

A futures wheel is a series of bubbles or concentric rings with words written inside each to show the increasing impact of change. It helps show the consequences of change.

Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).



Resources

- **Video eLesson** Drawing a futures wheel (eles-1745)
- **Interactivity** Drawing a futures wheel (int-3363)

10.15 SkillBuilder — Comparing aerial photographs to investigate spatial change over time

online only

What is an aerial photo?

Aerial photos are images taken above the Earth from an aircraft or satellite. Two images taken at different times, from the same angle, and placed side by side, show change that has occurred over time. Comparing aerial photographs is useful because each photograph captures details about a specific place at a particular time.



Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson Comparing aerial photographs to investigate spatial change over time (eles-1750)

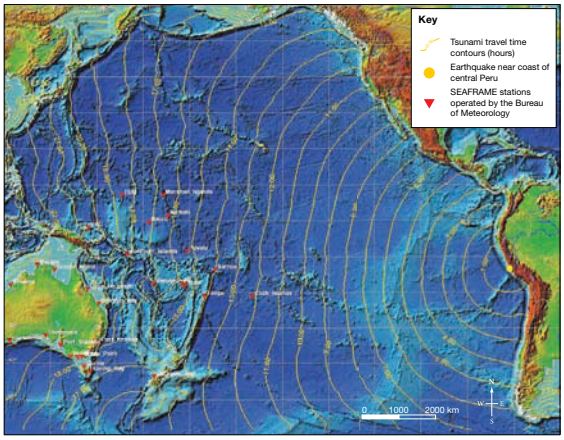
Interactivity Comparing aerial photographs to investigate spatial change over time (int-3368)

10.16 SkillBuilder — Describing change over time

online only

What is a description of change over time?

A description of change over time is a verbal or written description of how far a feature moves, or how much it alters, over an extended period.



Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson Describing change over time (eles-1753)

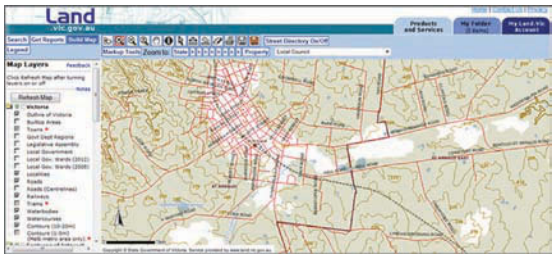
Interactivity Describing change over time (int-3371)

10.17 SkillBuilder — Building a map with geographic information systems (GIS)

online only

What is GIS?

A geographic information system (GIS) is a computer-based system that consists of layers of geographic data. Just as an overlay map allows you to interchange layers of information, GIS allows you to turn layers on and off to make comparisons between data.



Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson Building a map with geographic information systems (eles-1754)

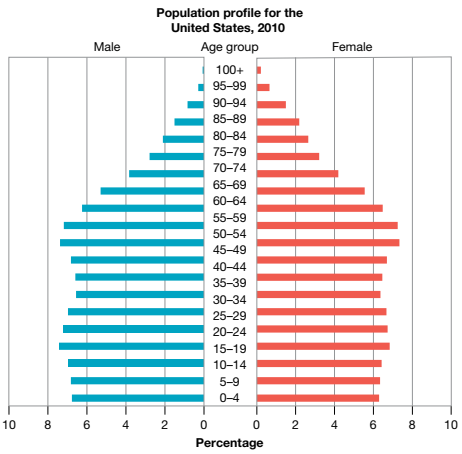
Interactivity Building a map with geographic information systems (int-3372)

10.18 SkillBuilder — Using Excel to construct population profiles

online only

Why do we use Excel to construct population profiles?

When constructing population profiles, there is a large amount of data and large numbers to handle. The use of an Excel spreadsheet simplifies the process.



Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson Using Excel to construct population profiles (eles-1758)

Interactivity Using Excel to construct population profiles (int-3376)

10.19 SkillBuilder — How to develop a structured and ethical approach to research

online only

What is a structured and ethical approach to research?

A structured and ethical approach to research involves organising your work clearly and meeting research standards without pressuring anyone into providing material and without destroying environments while gathering the data. Your work must also be your own, and anything that is someone else's work must be referenced in the text and included in the reference list.



Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson How to develop a structured and ethical approach to research (eles-1759)

Interactivity How to develop a structured and ethical approach to research (int-3377)

10.20 SkillBuilder — Understanding policies and strategies

online only

What are policies and strategies?

Policies are principles and guidelines that allow organisations to shape their behaviour and decisions, and to clarify future directions. Strategies ensure that the key components of a plan are implemented. Policies and strategies are particularly useful in large organisations, where information needs to be spread to all employees.



Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson Understanding policies and strategies (eles-1760)

Interactivity Understanding policies and strategies (int-3378)

10.21 SkillBuilder — Debating like a geographer

online only

What does debating like a geographer mean?

Debating like a geographer is being able to give the points for and against any issue that has a geographical basis, and supporting the ideas with arguments and evidence of a geographical nature.

Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

Affirmative speaker 1
(Introduces key ideas)
- Where is the Southern Ocean?
- Who is whaling?
- Which countries are involved in the issue?
- How far is it from Japan?
- Whale species
- Uses of whale meat
- The role of tradition
- Scientific research

Negative speaker 1
(Negates affirmative speaker 1 and introduces key ideas)
- Southern Ocean is a whale sanctuary
- Why don't the trawlers work closer to home?
- What is so important about the whale hunting that the benefits outweigh the costs?
- Global food chains affected
- Animal cruelty

Affirmative speaker 2
(Negates negative speaker 1 and expands on key ideas—provides the facts, statistics, emotional argument)
- Whale numbers
- Scientific research: what is research achieving?
- Importance of tradition

Negative speaker 2
(Negates affirmative speaker 2 and expands on key ideas—provides the facts, statistics, emotional argument)
- Global food chains: facts
- How are whales caught? Is it humane?
- The work of Greenpeace, its actions, the conflict
- International Whaling Commission, its work, the global ban

Affirmative speaker 3
(Negates negative speaker 2 and sums up key ideas)
- Emphasises that resource is well managed: whaling is not the only threat to species

Negative speaker 3
(Negates affirmative speaker 3 and expands on key ideas)
- Emphasises the resource is being degraded and conflict is rife

Resources

Video eLesson Debating like a geographer (eles-1762)

Interactivity Debating like a geographer (int-3380)

10.22 SkillBuilder — Writing a geographical essay

LEARNING INTENTION

This SkillBuilder shows you how to how to write a geographical essay. Writing a geographical essay is part of the communicating and reflecting HASS skill.

10.22.1 Tell me

What is a geographical essay?

A geographical essay is an extended response structured like any essay, but it focuses on geographical facts and data, particularly data that can be mapped.

How is writing a geographical essay useful?

A geographical essay is used to show the facts about a place, its environment, people and interconnections. A geographical essay may indicate change over time, refer to the scale of activities, or look to the future in discussing sustainability.

Geographical essays are useful for:

- environmental groups reporting on a hotly debated local topic
- planners presenting ideas for transport options
- researchers providing data on census analysis
- journalists writing about a community issue.

A good geographical essay has:

- an introduction
- a number of paragraphs, each with a key geographic idea
- facts and figures of a geographic nature supporting each paragraph
- a conclusion
- a bibliography.

10.22.2 Show me

You will need:

- a topic of interest
- paper and pen for brainstorming
- computer or paper and pen for drafting the structure of your essay
- access to research materials in a library or on the internet.

Model

FIGURE 1 An essay plan

Introduction: A freeway should not go through the urban parkland. Three reasons, or themes, are listed.

Theme 1: Noise levels from traffic. Currently peaceful environment. Sound barriers don't work.

Theme 2: House and land prices will decrease. People will not buy property because of the noise. Lifestyle is changed; roads and pathways are divided by the freeway; many people can't get to the parkland.

Theme 3: Animals will lose habitat and movement routes. Currently the area is home to kangaroos, and the habitat will be diminished. Vegetation may not support the kangaroos, animals will suffer.

Conclusion: If a road has to go through this area, it must be a tunnel under the parkland.

FIGURE 2 An essay introduction

A freeway should not go through the urban parkland of Sandy Bay. The increased traffic will cause noise levels from cars, small trucks and semi-trailers to soar. House and land prices will decrease, as potential buyers will be concerned about the noise and pollution. Animals such as the grey rock wallaby and echidna will lose habitat and their movement routes will be disrupted. If a road must go through this area, it should be a tunnel under the parkland.

Procedure

Step 1

On a piece of paper, brainstorm all the ideas you can think of that relate to the topic. When you have finished, try to group the ideas into three or four themes. Connect ideas with a line. You could try using a fishbone diagram or some other graphic organiser.

Step 2

Use the **FIGURE 1** model to set out a plan for your essay.

- Introduction
- Paragraph 1 is about key theme 1.
- Paragraph 2 is about key theme 2.
- Paragraph 3 is about key theme 3, etc.
- Conclusion

Step 3

Having organised your key ideas, you now need to find some geographic facts and figures to support your ideas. Using case studies and giving examples of particular places add value to your writing. Quoting organisations gives authority to your work. Keep your work organised according to the key ideas so you can find information when writing.

Step 4

Introduce your topic by stating a powerful fact that captures the reader's imagination. In the next sentence, outline the aspects that are going to be discussed in the following paragraphs. Make sure that you list these in the order in which you wish to present the paragraphs. Your last sentence should lead into your first paragraph.

Step 5

Each paragraph that you write needs to have a distinct and powerful opening sentence that summarises the facts you are going to present in the following sentences. The factual sentences need to be presented in an organised manner. The last sentence should link clearly to the next paragraph.

In this instance, paragraph 1 will be about increased noise levels and will require data from other road developments to show the increase in noise levels. Paragraph 2 could include the results of a survey of local residents, showing their concerns about the roadwork and what they perceive will be the impact on the value of their houses. Paragraph 3 will highlight a species of animal in the parkland and show maps indicating that the animal often crosses the area of the planned roadway.

Step 6

The conclusion should consist of only one or two sentences. It must contain no new data. It needs to leave the reader in no doubt about what your opinion on the topic is; for example, 'For the wellbeing of people and animals, the only viable roadway is one contained in a tunnel'.

Step 7

Provide a list of the references you have used. Your school will have a preferred system for bibliographies and reference lists. You may have heard, for example, of the Harvard, Oxford, Chicago or Vancouver referencing systems.

on Resources

Video eLesson Writing a geographical essay (eles-1763)

Interactivity Writing a geographical essay (int-3381)

10.22.3 Let me do it

Complete the following activities to practise this skill.

10.22 ACTIVITES

1. Plan a geographical essay on the following topic: 'The scenic/historic [select one] ***environment*** of _____ [put in a ***place*** near you] is being destroyed by degradation. Discuss'. Use the checklist to ensure you cover all aspects of the task.
2. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions.
   a. What are three key themes that you outlined in your plan?
   b. List two facts that you would search for to support each theme.
   c. What would be your opening sentence of the introduction?
   d. What would be the final sentence of your essay?
3. Practise your skills further by conducting whatever research is required and writing the full essay outlined in your plan.

Checklist

In writing a geographical essay, I have included:

- an introduction
- a number of paragraphs, each with a key geographic idea
- facts and figures of a geographic nature supporting each paragraph
- a conclusion
- a bibliography.

10.23 Review

10.23.1 Key knowledge summary

10.2 Concepts in Geography

- The acronym SPICESS helps you remember the seven Geography concepts:
  - space
  - place
  - interconnection
  - change
  - environment
  - sustainability
  - scale.

10.3 Skills in Geography

- Many occupations are linked to the study of geography.
- Careers that will be involved in the management of environmental change include conservationists, oceanographers and agricultural scientists.
- Work experience provides an important opportunity to explore career options, to learn what you enjoy and to gain valuable understanding of different careers and work roles.
- Volunteering in the community demonstrates your willingness to learn and to contribute, as well as providing opportunities for skills development.
- There are a number of core skills for work, which you can work on developing over time.
- Future careers will evolve in response to our ever-changing world.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6133)
Reflection (ewbk-6132)
Student Learning Matrix (ewbk-6112)

Interactivity Geographical skills and concepts crossword (int-7668)

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 10 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

10.2 Concepts in Geography

MyWorld Atlas
- Space
- Place
- Interconnection
- Change
- Environment
- Sustainability
- Scale

10.3 Skills in Geography?

Weblinks
- ACTU Worksite
- Careers 2030

10.4 SkillBuilder — Interpreting a complex block diagram

eWorkbook
- Interpreting a complex block diagram (ewbk-6113)

Video eLesson
- Interpreting a complex block diagram (eles-1746)

Interactivity
- Interpreting a complex block diagram (int-3364)

10.5 SkillBuilder — Creating a fishbone diagram

eWorkbook
- Creating a fishbone diagram (ewbk-6114)

Video eLesson
- Creating a fishbone diagram (eles-1748)

Interactivity
- Creating a fishbone diagram (int-3366)

10.6 SkillBuilder — Reading topographic maps at an advanced level

eWorkbook
- Reading topographic maps at an advanced level (ewbk-6115)

Video eLesson
- Reading topographic maps at an advanced level (eles-1749)

Interactivity
- Reading topographic maps at an advanced level (int-3367)

10.7 SkillBuilder — Comparing an aerial photograph and a topographic map

eWorkbook
- Comparing an aerial photograph and a topographic map (ewbk-6116)

Digital documents
- Topographic map of Mossman and the Daintree River National Park, Queensland (doc-11572)
- Topographic map extract of Merimbula, New South Wales (doc-11571)

Video eLesson
- Comparing an aerial photograph and a topographic map (eles-1751)

Interactivity
- Comparing an aerial photograph and a topographic map (int-3369)

Google Earth
- Mossman

10.8 SkillBuilder — Using geographic information systems (GIS)

eWorkbook
- Using geographic information system (GIS) (ewbk-6117)

Video eLesson
- Using geographic information systems (GIS) (eles-1752)

Interactivity
- Using geographic information systems (GIS) (int-3370)

10.9 SkillBuilder — Constructing and interpreting a scattergraph

eWorkbook
- Reading topographic maps at an advanced level (ewbk-6115)

Video eLesson
- Constructing and interpreting a scattergraph (eles-1756)

Interactivity
- Constructing and interpreting a scattergraph (ewbk-6118)

10.10 SkillBuilder — Interpreting a cartogram

eWorkbook
- Interpreting a cartogram (ewbk-6119)

Video eLesson
- Interpreting a cartogram (eles-1757)

Interactivity
- Interpreting a cartogram (int-3375)

10.11 SkillBuilder — Using multiple data formats

eWorkbook
- Using multiple data formats (ewbk-6120)

Video eLesson
- Using multiple data formats (eles-1761)

Interactivity
- Using multiple data formats (int-3379)

10.12 SkillBuilder — Constructing and describing complex choropleth maps

eWorkbook
- Constructing and describing complex choropleth maps (ewbk-6121)

Digital document
- Blackline master: Map of Africa (doc-12012)

Video eLesson
- Constructing and describing complex choropleth maps (eles-1732)

Interactivity
- Constructing and describing complex choropleth maps (int-3350)

10.13 SkillBuilder — Evaluating alternative responses

eWorkbook
- Evaluating alternative responses (ewbk-6122)

Video eLesson
- Evaluating alternative responses (eles-1744)

Interactivity
- Evaluating alternative responses (int-3362)

10.14 SkillBuilder — Drawing a futures wheel

eWorkbook
- Drawing a futures wheel (ewbk-6123)

Video eLesson
- Drawing a futures wheel (eles-1745)

Interactivity
- Drawing a futures wheel (int-3363)

10.15 SkillBuilder — Comparing aerial photographs to investigate spatial change over time

eWorkbook
- Comparing aerial photographs to investigate spatial change over time (ewbk-6124))

Video eLesson
- Comparing aerial photographs to investigate spatial change over time (eles-1750)

Interactivity
- Comparing aerial photographs to investigate spatial change over time (int-3368)

10.16 SkillBuilder — Describing change over time

eWorkbook
- Describing change over time (ewbk-6125)

Video eLesson
- Describing change over time (eles-1753)

Interactivity
- Describing change over time (int-3371)

10.17 SkillBuilder — Building a map with geographic information systems (GIS)

eWorkbook
- Building a map with geographic information systems (ewbk-6126)

Video eLesson
- Building a map with geographic information systems (eles-1754)

Interactivity
- Building a map with geographic information systems (int-3372)

10.18 SkillBuilder — Using Excel to construct population profiles

eWorkbook
- Using Excel to construct population profiles (ewbk-6127)

Video eLesson
- Using Excel to construct population profiles (eles-1758)

Interactivity
- Using Excel to construct population profiles (int-3376)

10.19 SkillBuilder — How to develop a structured and ethical approach to research

eWorkbook
- How to develop a structured and ethical approach to research (ewbk-6128)

Video eLesson
- How to develop a structured and ethical approach to research (eles-1759)

Interactivity
- How to develop a structured and ethical approach to research (int-3377)

10.20 SkillBuilder — Understanding policies and strategies

eWorkbook
- Understanding policies and strategies (ewbk-6129)

Video eLesson
- Understanding policies and strategies (eles-1760)

Interactivity
- Understanding policies and strategies (int-3378)

10.21 SkillBuilder — Debating like a geographer

eWorkbook
- Debating like a geographer (ewbk-6130)

Video eLesson
- Debating like a geographer (eles-1762)

Interactivity
- Debating like a geographer (int-3380)

10.22 SkillBuilder — Writing a geographical essay

eWorkbook
- Writing a geographical essay (ewbk-6131)

Video eLesson
- Writing a geographical essay (eles-1763)

Interactivity
- Writing a geographical essay (int-3381)

10.23 Review

eWorkbook
- Reflection (ewbk-6132)
- Student Learning Matrix (ewbk-6112)

Interactivity
- Geographical skills and concepts crossword (int-7668)

To access these online resources, log on to **www.jacplus.com.au**.

10.4 SkillBuilder—Interpreting a complex block diagram

LEARNING INTENTION

This SkillBuilder shows you how to interpret a complex block diagram. Interpreting a complex block diagram is part of the Analysing HASS skill.

10.4.1 Tell me

What is a complex block diagram?

A complex block diagram is a diagram made to appear three-dimensional. It shows a great deal of information about a number of aspects on a topic or location. It shows what is happening at the surface of the land or water, what is happening above the land or water, and what is happening beneath the soil or water at a number of different locations across an area.

Why are complex block diagrams useful?

Complex block diagrams are useful because they allow you to see the interconnection between a number of factors affecting an environment. A diagram is a visual representation of a process or processes occurring in the environment.

Complex block diagrams:

- help you understand relationships between things over space
- provide you with an understanding of possible reasons for features or situations by simplifying explanations
- explain a number of factors at the same time
- show the interconnection between factors.

A good interpretation of a complex block diagram:

- helps identify features and patterns and possible reasons for these
- identifies and communicates key features and processes
- seeks to explain interconnection between features and spaces.

10.4.2 Show me

How to interpret a complex block diagram

You will need:

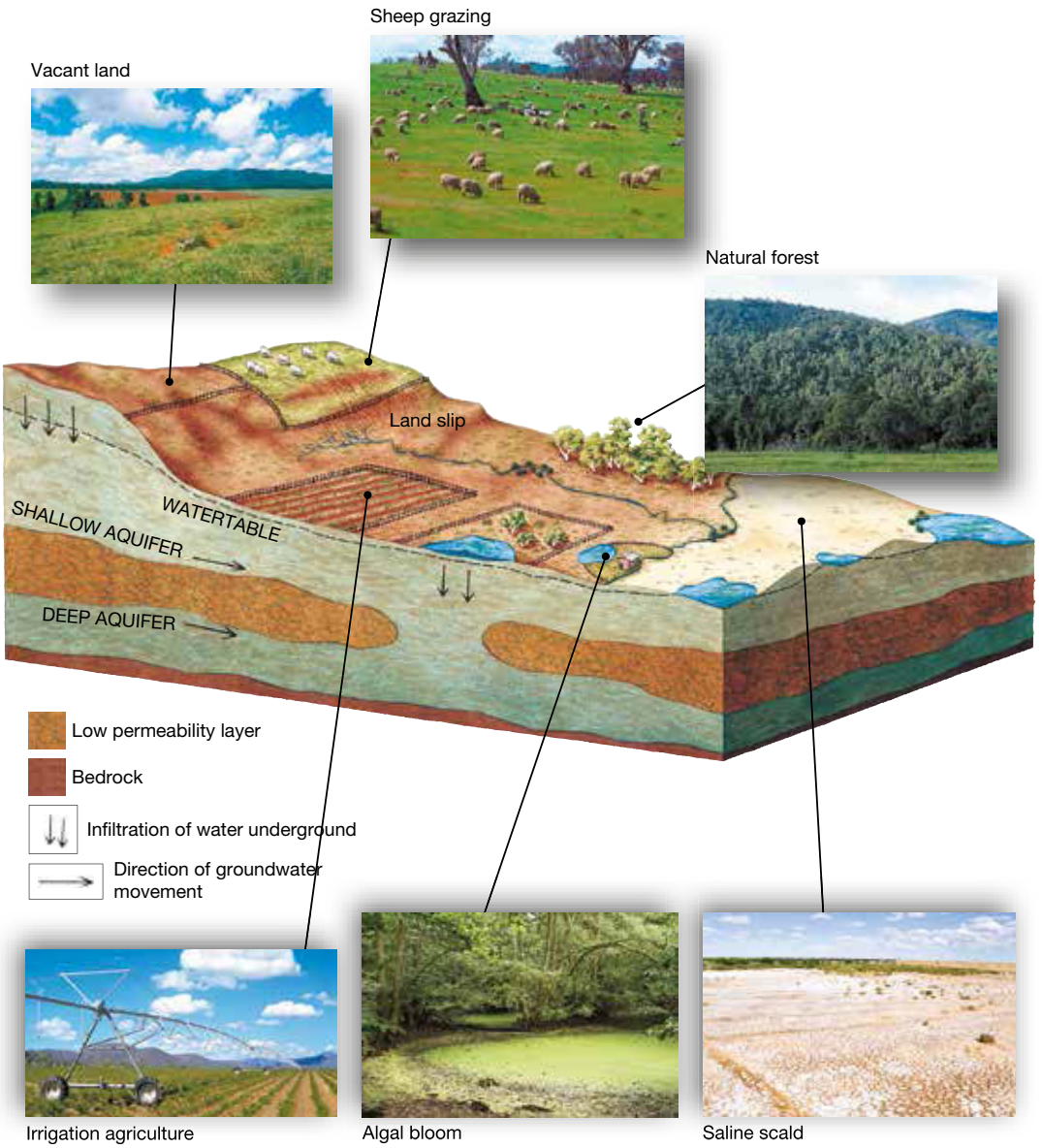
- a complex block diagram
- a geographic dictionary or internet access.

Model

The designer of the block diagram in **FIGURE 1** has translated the photographs into a drawing, shaping the land according to the contours of the area and knowledge of the region, and showing the movement of water taking place in the soil. Our knowledge allows us to interpret the arrows, which show underground water flow, and helps us to explain why the farmer has problems with saline scald on the farm.

The water movement down the slope and through the soil has brought salt to the surface. Water flowing underground, between the layers of impermeable rock, moves to a low-lying part of the farm. Here, water picks up salt and comes to the surface. When the water evaporates, it leaves the salt on the land surface, causing obvious saline scalding.

FIGURE 1 Saltbush Farm, land audit, 2012. Saltbush Farm is in the catchment of the Naangi River, a tributary of the Murray.



Procedure

Step 1

Read the title and identify the topic or location being studied. Saltbush Farm in **FIGURE 1** is in the catchment of the Naangi River, a tributary of the Murray River. This complex block diagram was produced as part of a land audit.

Step 2

This complex diagram of Saltbush Farm, with its accompanying photographs, shows you what you would see if you were to visit this farm. Examine the complex diagram, carefully reading any labelling that explains the topic being covered. **FIGURE 1** clearly indicates land uses such as sheep grazing on the higher slopes, irrigation agriculture on the flatter land and natural forest to one side of the farm. It shows land issues, such as erosion on vacant land, land slips on the higher slopes and saline scald on the lowest land. Water movement in the soil is evident, as well as the direction of ground water, which is moving from higher to lower land.

Step 3

If there are any terms on the complex block diagram that you do not understand, you must seek clarification. Do you know these terms: *permeability, bedrock, infiltration, groundwater, algal bloom* and *saline scald*? Use a geographic dictionary or undertake internet research to understand the terms.

Step 4

Saltbush Farm has a major land degradation issue caused by soil salting. A knowledge of soil salting and the movement of water shown in the complex block diagram will help you to write a short paragraph explaining the processes at work on the part of the farm that is prone to saline scald. The Model text explains this as: 'The water movement down the slope and through the soil has brought salt to the surface. Water flowing underground, between the layers of impermeable rock, moves to a low-lying part of the farm. Here, water picks up salt and comes to the surface. When the water evaporates, it leaves the salt on the land surface, causing obvious saline scalding'.

on Resources

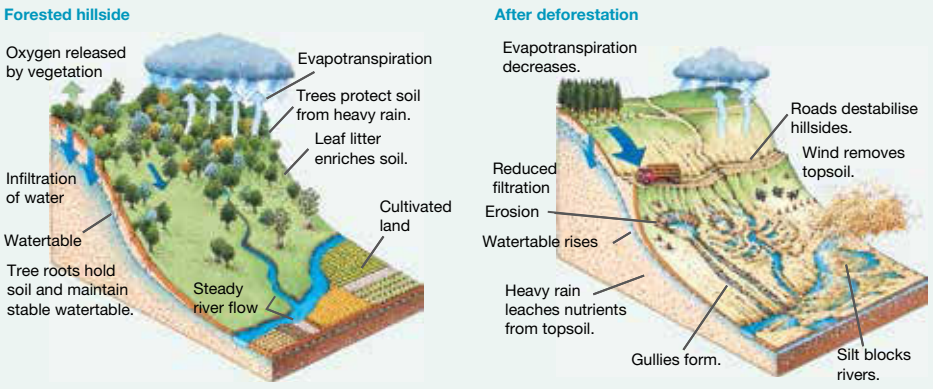
Video eLesson	Interpreting a complex block diagram (eles-1746)
Interactivity	Interpreting a complex block diagram (int-3364)

10.4.3 Let me do it

Complete the following activities to practise this skill.

10.4 ACTIVITIES

1. Using the following complex block diagrams (**FIGURE 5** from subtopic 12.2), write a short paragraph explaining how an area is ***changed*** by deforestation. Use the checklist to ensure you have covered all aspects of the task.
2. Apply your skills in interpreting a complex block diagram to answer the following questions.
   a. How is the water cycle affected by deforestation of an area?
   b. How can roads destabilise a hill slope?
   c. Why does erosion and land slippage occur?
   d. How can a dust storm pick up topsoil?
   e. Where does the silt that blocks rivers come from?



CHECKLIST

I have:

- identified features and patterns and possible reasons for these
- identified and communicated key features and processes
- explained the ***interconnection*** of features and ***spaces***.

10.5 SkillBuilder—Creating a fishbone diagram

LEARNING INTENTION

This SkillBuilder shows you how to create a fishbone diagram. Creating a fishbone diagram is part of the Communicating and reflecting HASS skill.

10.5.1 Tell me

What is a fishbone diagram?

A fishbone diagram is a graphic representation of the causes of a particular effect.

Why are fishbone diagrams useful?

Fishbone diagrams are useful to help visualise a problem or effect, and to show the causes of that problem. Bones above and below the central line are used to identify causes, while the 'head' of the diagram gives the problem or effect. Each major category of cause then flows to other causes and even sub-causes. These are all linked to convey the interconnection of ideas.

Fishbone diagrams can also be adapted and used to list the positive and negative impacts of an action or event. They are useful when you are:

- brainstorming
- clarifying interconnections
- expanding ideas
- structuring an extended response.

A good fishbone diagram:

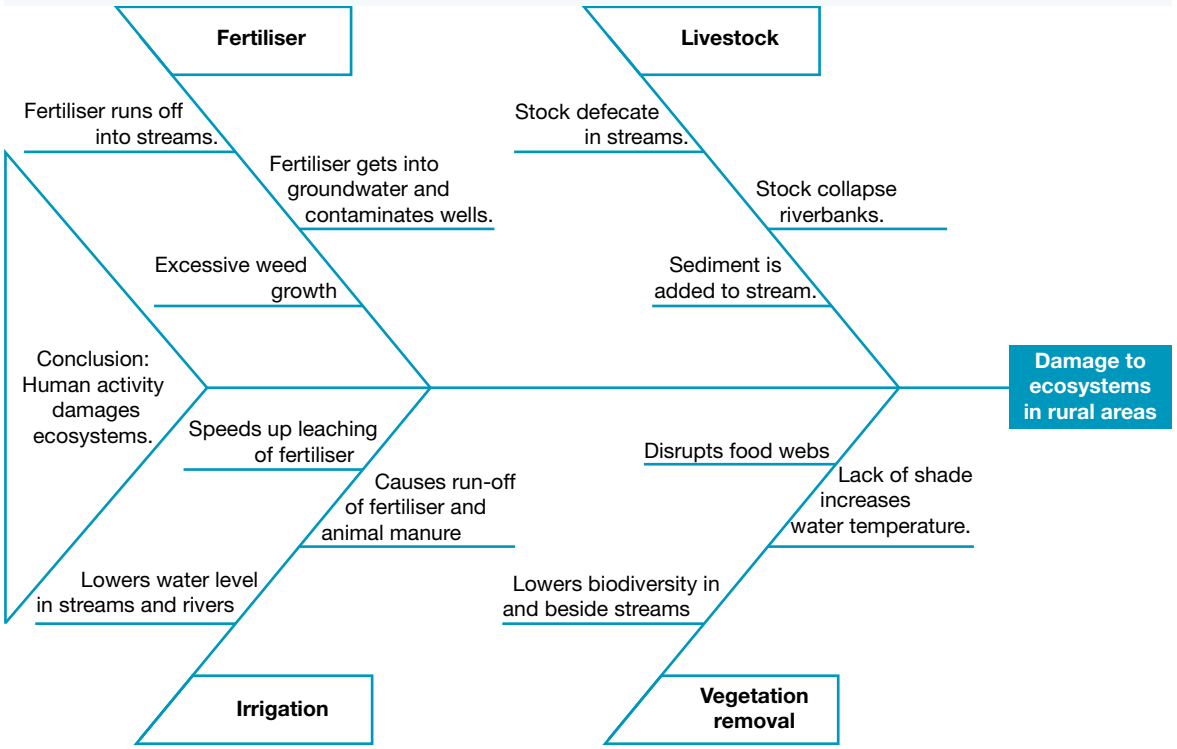
- is drawn in pencil
- has ruled lines
- identifies and labels causes and sub-causes
- identifies and labels the effect
- includes a clear title.

10.5.2 Show me

How to create a fishbone diagram

Model

FIGURE 1 Fishbone diagram that examines the causes of damage to ecosystems in rural areas



You will need:

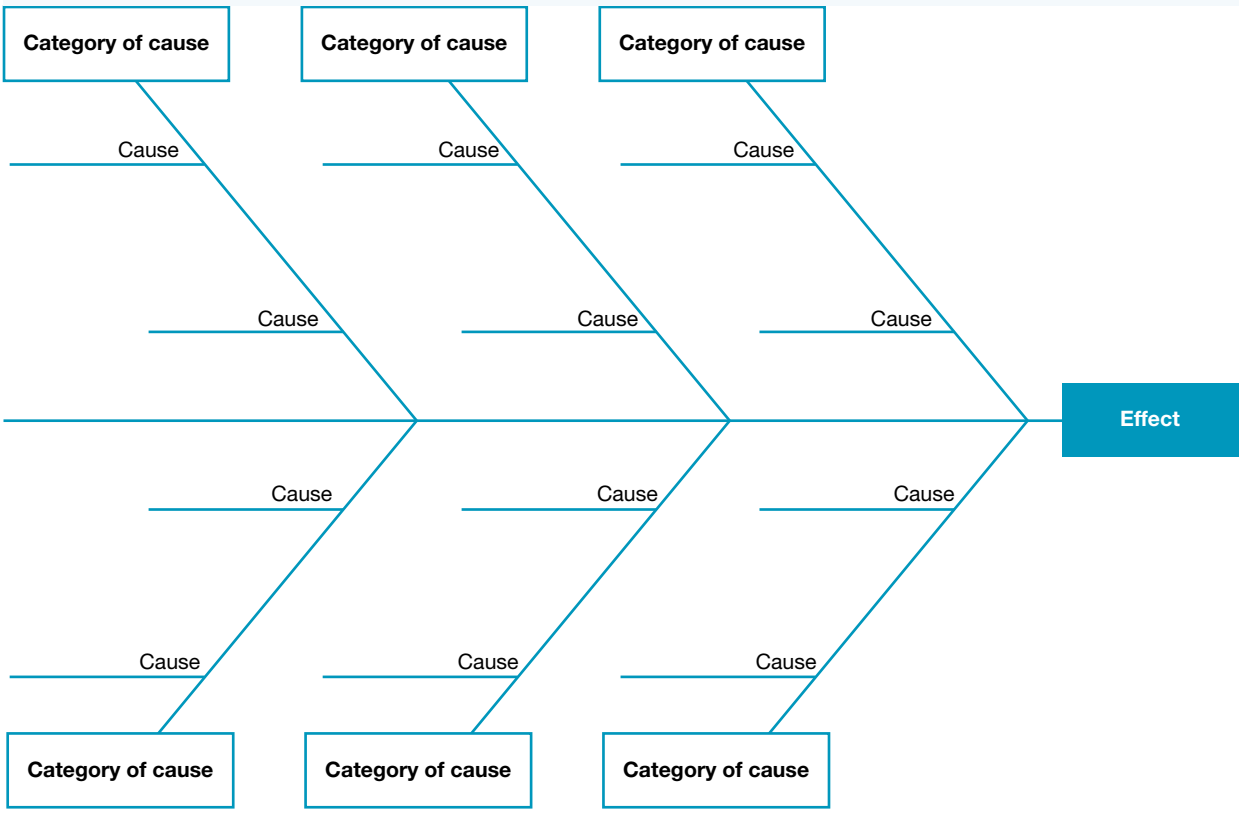
- a template of a fishbone diagram
- a piece of paper
- a ruler
- a light-grey pencil.

Procedure

Step 1

To complete a fishbone diagram, obtain a template to work on (see **FIGURE 2**). Determine the problem to be considered — this becomes your 'effect'. Place the effect in the head of the fishbone diagram — for example, 'Damage to ecosystems in rural areas'.

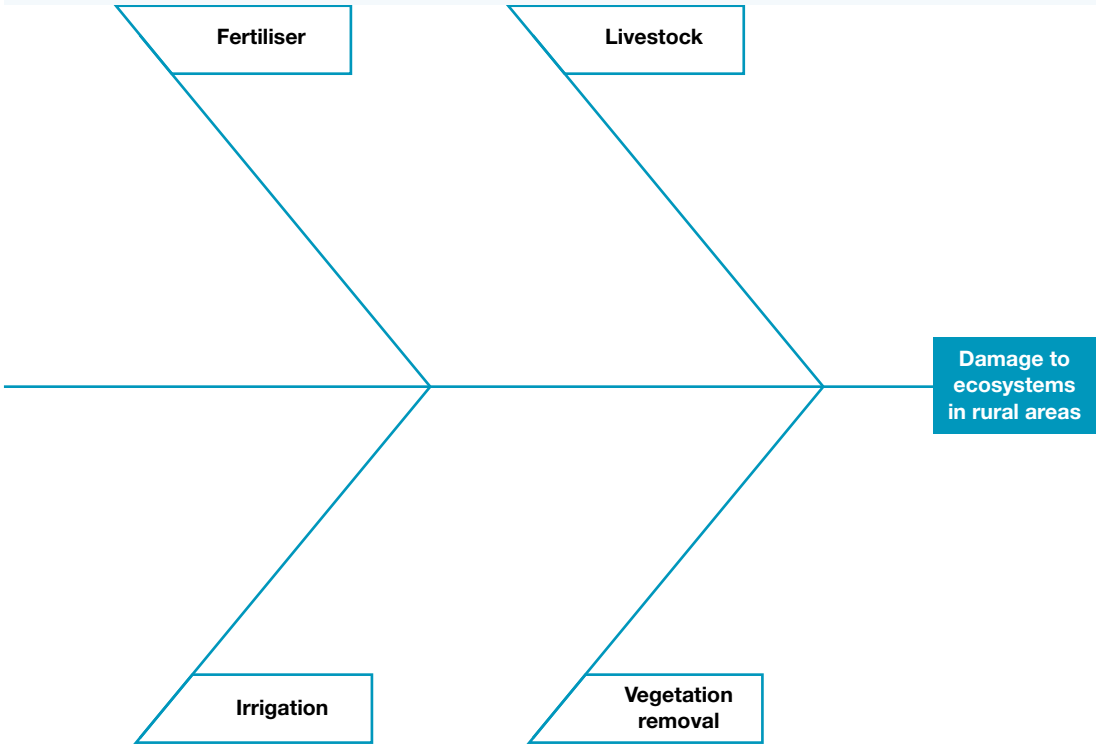
FIGURE 2 Fishbone diagram template



Step 2

Consider all the possible causes of the problem and decide what major categories these fall into. Then decide which of these categories is the most significant, and place them in the category of causes boxes closest to the fish head; place the least important categories of causes close to the fish tail. For example, 'Vegetation removal' and 'Livestock' go closest to the fish head.

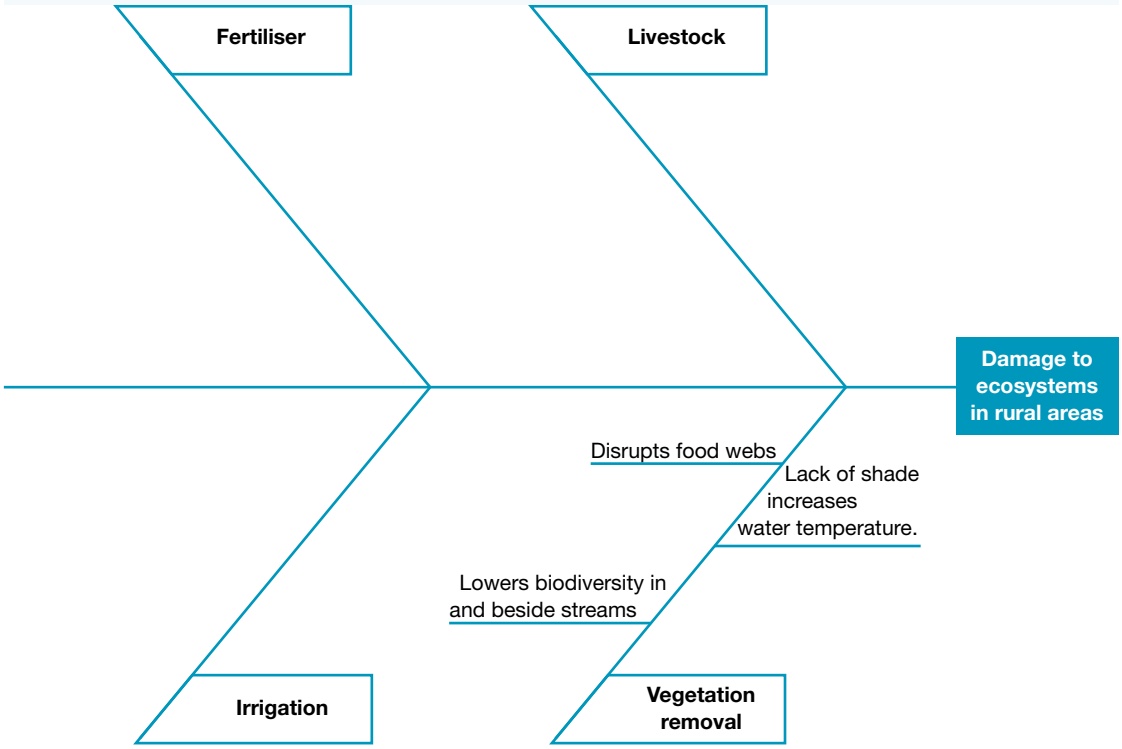
FIGURE 3 A fishbone diagram showing categories of causes



Step 3

For each category of causes, now brainstorm a number of effects within that category. Keep asking 'Why is this a problem?' or 'Why does this happen?' For example, if we ask why vegetation removal damages ecosystems in rural areas, we come up with 'Lowers biodiversity' and 'Increases water temperature'.

FIGURE 4 A fishbone diagram and some effects



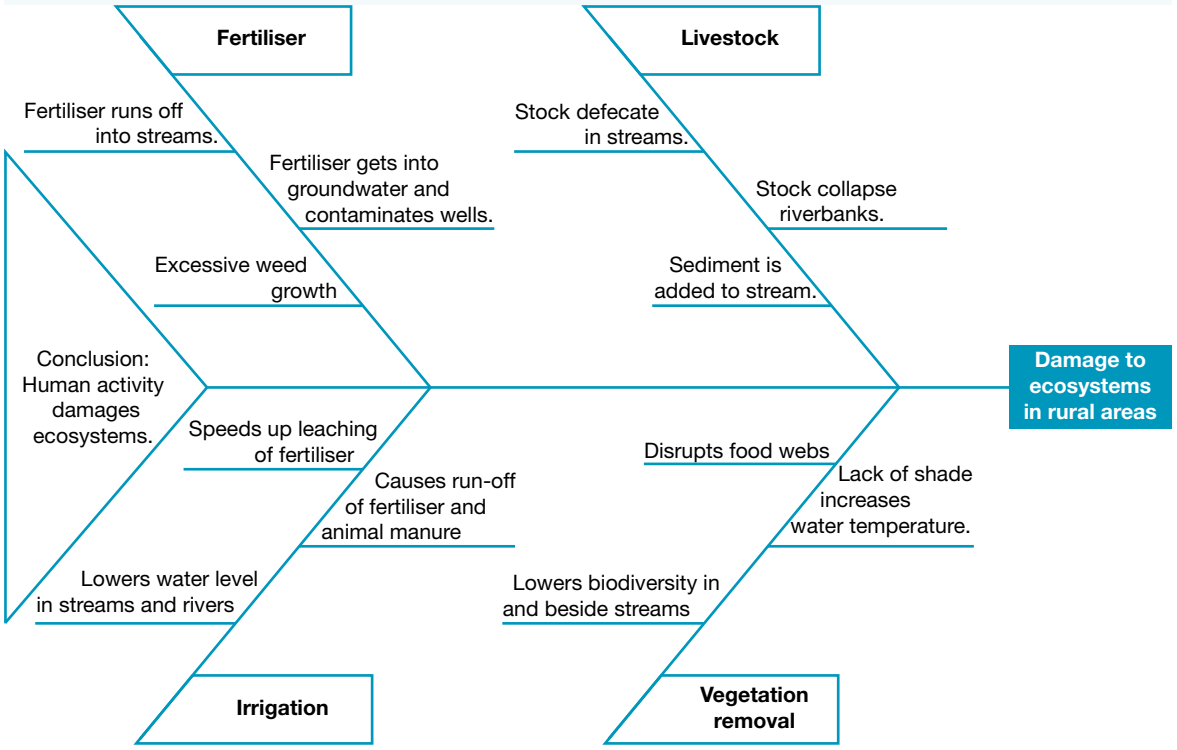
Step 4

Consider another category and its related causes. Complete the bones of the fish with all your ideas.

Step 5

Now in the tail of the fish you can draw your conclusion. How do you assess the causes of damage to rural ecosystems, given the four categories you considered?

FIGURE 5 Conclusion shown on fishbone diagram



Resources

Video eLesson Creating a fishbone diagram (eles-1748)

Interactivity Creating a fishbone diagram (int-3366)

10.5.3 Let me do it

Complete the following activities to practise this skill.

10.5 ACTIVITIES

1. Referring to subtopics 15.2, 15.3 and 15.4, complete a fishbone diagram on the causes of damage to inland water resources. Use the checklist to ensure you cover all aspects of the task.
2. Apply your skills to answer the following questions.
   a. What were the four main categories you used? Were your categories the same as those used by others in the class?
   b. Could you think of more causes than the lines provided?
   c. Did you share your ideas about possible causes with other class members to build up your responses?
   d. What did you conclude about the damage to inland water resources?
   e. Did the fishbone diagram help you to find the causes of the problem? Explain your answer.

Checklist

I have:

- drawn in pencil
- ruled all lines
- identified and labelled causes
- identified and labelled the effect
- provided a clear title.

10.6 SkillBuilder—Reading topographic maps at an advanced level

LEARNING INTENTION

This SkillBuilder shows you how to read a topographic map at an advanced level. Reading a topographic map is part of the Analysing HASS skill.

10.6.1 Tell me

What is reading a topographic map at an advanced level?

Topographic maps are more than just contour maps showing the height and shape of the land. They also include local relief and gradients and allow us to calculate the size of various areas. Reading this information requires more advanced skills.

Why is reading a topographic map at an advanced level useful?

All topographic maps use similar symbols to show the main features in the landscape. These conventional symbols make it easy for map readers to quickly identify the features shown in the legend. Using advanced skills in map reading, you can make inferences about the interconnection of environments, landforms, climate and human activity. You can learn a great deal about an environment with advanced topographic map-reading skills.

Topographic maps are also useful for:

- showing the changing shape of the land
- determining water flows across a region
- considering infrastructure, such as roads and railways
- revealing land use, such as farming.

A good reading of a topographic map at an advanced level uses:

- the key, or legend, to locate features
- grid references to locate places
- spot heights to calculate local relief
- contours to calculate distances, contour interval and gradient
- scale to calculate area.

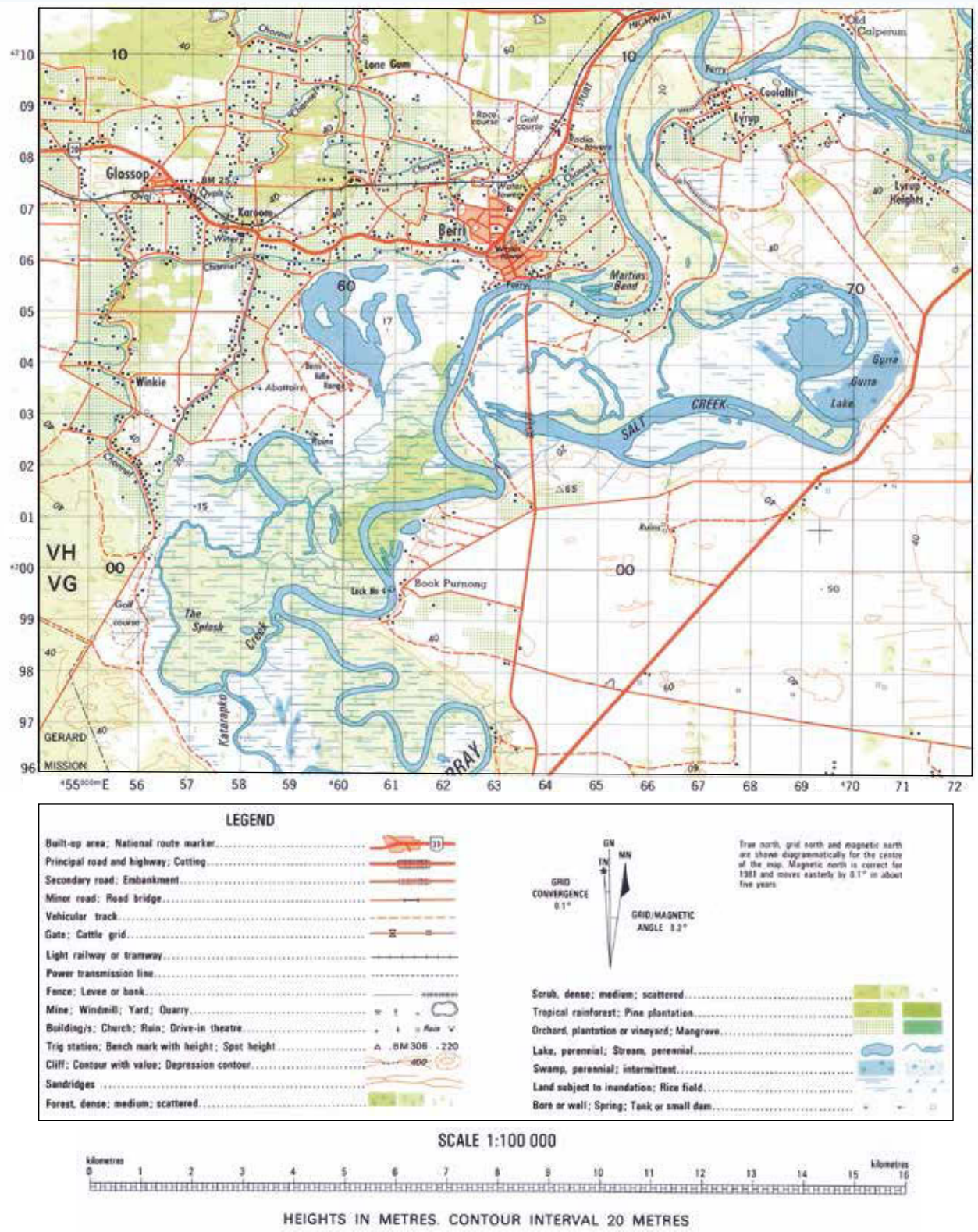
10.6.2 Show me

How to read a topographic map at an advanced level

Model

The local relief between Berri township and the village of Lone Gum (602098) is 20 metres. You will notice there is a 20-metre contour in Berri and a 40-metre contour in Lone Gum, so the local relief is 20 metres. The gradient of the area is 1:200. The area of Gurra Gurra Lake is 1.5 square kilometres, and the township of Berri covers an area of three square kilometres. It is surrounded by an irrigation area to the west and south-west of about 34 square kilometres.

FIGURE 1 Topographic map of Berri, South Australia



Source: Map supplied by MAPLAND, Environmental and Geographic Information, Department for Environment and Heritage, South Australia.

You will need:

- a topographic map of the region being considered
- a piece of tracing paper
- a pencil
- a ruler.

Procedure

To calculate local relief, gradient and area, you must have a topographic map and identify an area to study.

Step 1

Revise your skills: check the legend symbols, determine the map scale and check your grid reference skills. These skills should have been covered in your previous Geography studies.

Step 2

Cast your eye over the map, and make interpretations of the area. What are the obvious features of this map? In **FIGURE 1**, the land is not high and much of the land use is irrigated land. Are there any unusual features as well? In **FIGURE 1** there is a large area that is covered by water with unusual water features. Can the road system tell you anything about the importance of Berri in the region?

Step 3

Look very closely at the map. Discovering the local relief of the area is best done using spot heights. A symbol for spot heights should be included in the key/legend. These are small dots on the map with a number written beside them. Spot heights are used to indicate the highest or lowest point, but can also be given across a map when the land is flat and few contours appear. Find a spot height of 17 metres (grid reference 608047) southwest of Berri township.

Step 4

Calculate the local relief within the region. Local relief is the measure of the difference in height between the highest and lowest points within a relatively small area. In **FIGURE 1**, in the Berri township area, the highest point is 60 metres and the lowest point is 20 metres or less, so the local relief is 40+ metres. Because this is a low number, the change in height across the area is minimal.

Step 5

Gradient is the measurement of the steepness of the land between two places. To calculate the gradient, you need (a) the difference in height between two places — the vertical interval or 'rise' — and (b) the horizontal distance between two places — called the 'run'. The gradient is expressed as a ratio, so both the rise and the run must be expressed in the same units of measurement, generally metres. The example below calculates the gradient between the township of Winkie (40 metres) and the abattoirs at 582035 (20 metres) with a distance of two kilometres (2000 metres) between the places.

$$\frac{\text{Vertical interval rise}}{\text{Horizontal distance run}}$$

$$= \frac{20}{2000}$$

$$= \frac{1}{500}$$

= The land rises one metre in height for every 100 metres in distance.

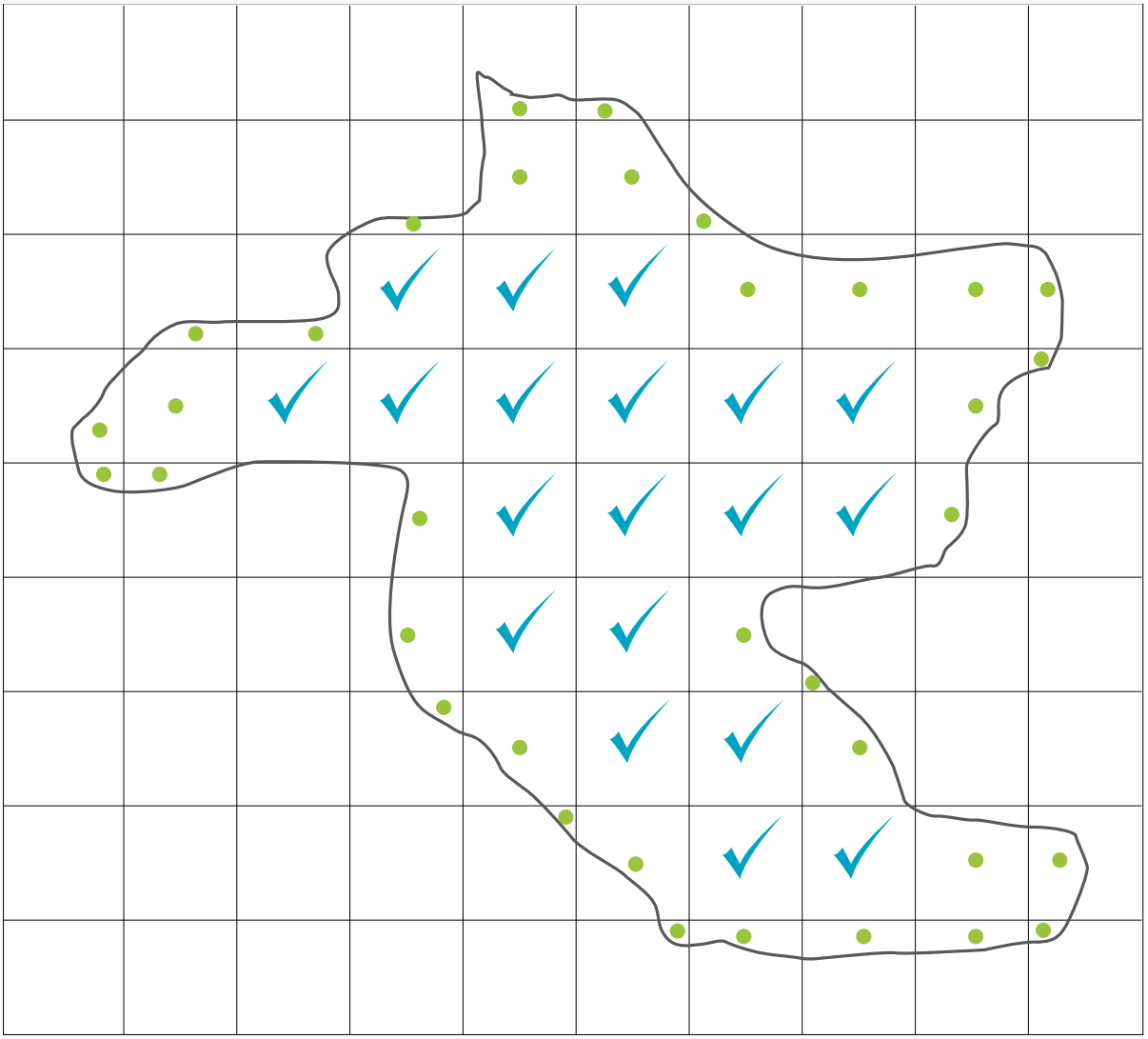
Step 6

To calculate the area of an unusual shape on the map, a scaled grid can be placed over the map and the parts can be added up to give a squared area. On a piece of tracing paper, use a pencil and ruler to draw a grid in accordance with the scale of the map. Maps of 1:100 000 mean that each grid square is one square kilometre. That is, each side of the grid square is one square kilometre. If the scale is 1:500 000, then you need to draw a grid with each line two centimetres apart. Each complete square then represents one square kilometre.

Step 7

Lay the tracing paper over the mapped area and mark the squares that are complete in the mapped area. Add up this number. In the example shown in **FIGURE 2**, there are 19 complete squares — these are shown with a green tick. In the case of Berri township, there is one complete square.

FIGURE 2 In this example, there are 19 complete grid squares and 35 incomplete grid squares. Halving the number of incomplete grid squares and adding this number (17.5) to 19 gives a total of 36.5 complete squares.



Step 8

Now mark the incomplete squares and count them as half squares; that is, halve the number of incomplete squares. In **FIGURE 2**, there are 35 incomplete squares. When halved, this comes to 17.5. Berri township has two incomplete squares, so when halved, you get one. Add up the number of markings from steps 7 and 8 to obtain the total size of the area identified. For example, Berri township has an area of two square kilometres.

Resources

Video eLesson	Reading topographic maps at an advanced level (eles-1749)
Interactivity	Reading topographic maps at an advanced level (int-3367)
Digital documents	Topographic map of Berri, South Australia (doc-11570)
	Topographic map of Wentworth, New South Wales (doc-11569)
Google Earth	Berri

10.6.3 Let me do it

Complete the following activities to practise this skill.

10.6 ACTIVITIES

1. Use the topographic map for the region west of Wentworth provided in the Resources tab (doc-11569) to complete the following calculations. Use the checklist to ensure you cover all aspects of the task.
   a. Calculate the local relief between Cappits Creek and the Murray River.
   b. Calculate the local relief between Frenchmans Creek, Bunberoo Creek and the Murray River.
   c. Calculate the gradient from the top of the map to the bottom of the map.
   d. Calculate the size of the area of land between Frenchmans Creek and the Murray River.
   e. Calculate the area of Pink Lake.
2. Apply your skills to answer the following questions.
3. How would you describe the topography of the mapped area? Refer to local relief.
4. Using your understanding of gradient, explain why it is necessary to control Frenchmans Creek with levees.
5. Calculate the area that is prone to inundation and shown as wetland.
6. What time of year would be the best time to drive on the road network of this region? Explain your answer.
7. Use grid references to suggest where an oxbow lake might form. Explain what will happen.

Checklist

I have used:

- the key/legend to locate features
- grid references to locate ***places***
- spot heights to calculate local relief
- contours to calculate distances, contour interval and gradient
- scale to calculate area.

10.8 SkillBuilder—Using geographic information systems (GIS)

LEARNING INTENTION

This SkillBuilder shows you how to use a geographic information systems. Using a geographic information systems is part of the Analysing HASS skill.

10.8.1 Tell me

What is GIS?

GIS is a computer-based system of layers of geographic data. Just as an overlay map allows you to interchange layers of information, GIS allows you to turn layers on and off to make comparisons between pieces of data.

Why is GIS useful?

GIS is a sophisticated system of presenting data. The information is based on primary data that has been gathered and mapped. At any one time, you can look at a single series of data or as many as you need in order to see the interconnections between the data. For example, you may turn on one layer to see the topography. Then you might turn on the road system to see if the land has influenced the pattern of roads. To this you might add settlements to see if both the road system and topography have influenced town locations. Then you might turn off the road system to see if the greater influence was indeed the topography.

GIS is useful when:

- you want to see the interconnections between features
- you need to show an overlay of features across a region
- when you want to best locate a business; for example, retailers and fast-food chains use GIS to determine the best location for a new store
- you want to predict risk situations; for example, emergency services can use it to study the spread of bushfires and flood waters
- you need to map global trends, such as the movement of refugees between countries.

Using GIS involves:

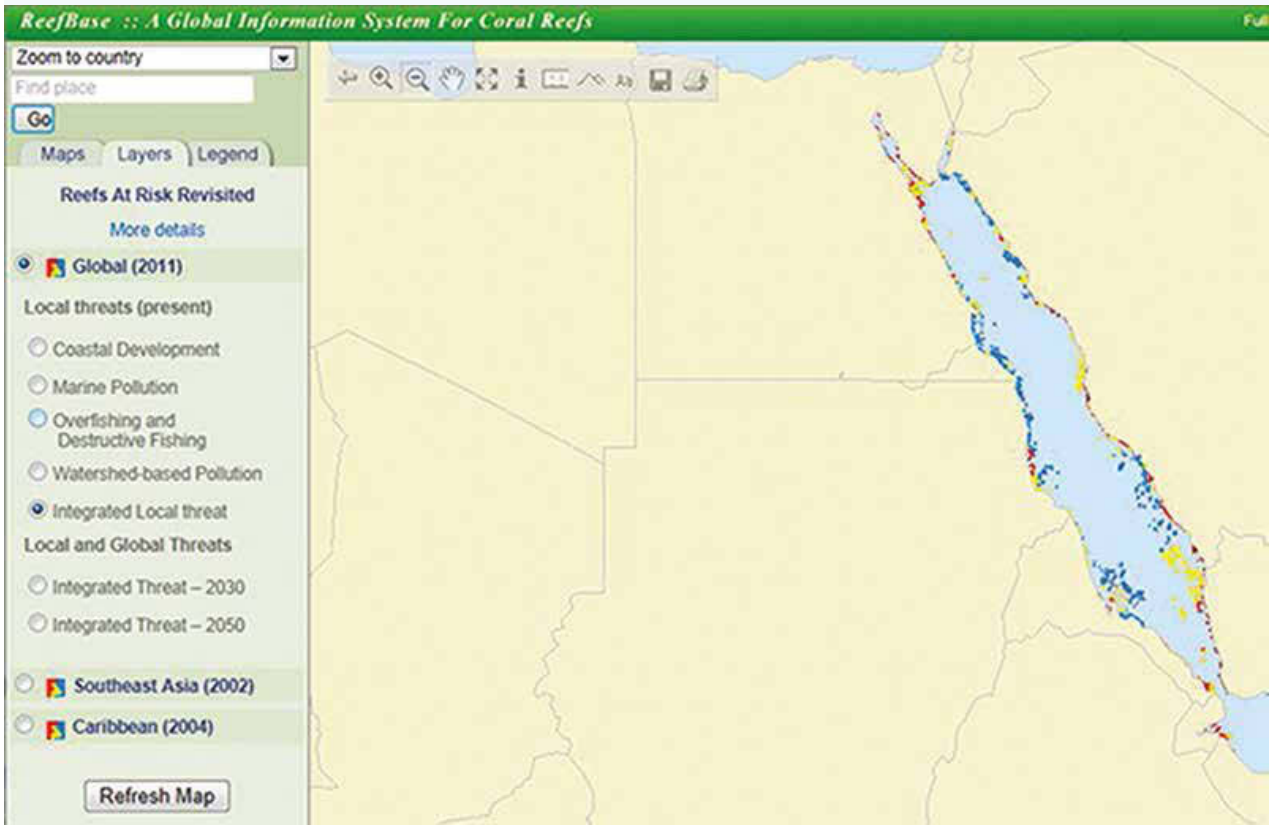
- using GIS-mapped geographic data
- interpreting map legends
- interpreting map layers
- looking for interconnections between map layers
- clearly representing and communicating data.

10.8.2 Show me

Model

Like most reefs across the world, coral reefs in the Red Sea are under threat from natural and human impacts. The Red Sea reefs are fringing reefs, making them prone to a range of diseases, especially in a 1200-kilometre stretch along the east coast. Coral bleaching occurs at only a low level because the number of degree heating weeks is low. (A degree heating week measures thermal stress on a reef. A degree heating week occurs when sea surface temperatures are 1 °C warmer, for one week, than the expected summertime maximum.) The reefs most at risk in the Red Sea appear in the north-west; otherwise, reefs at risk are scattered across the region. Most of the risk is from marine pollution. The risk to the Red Sea coral reefs is expected to increase by 2030, and by 2050 they will show significant impacts. Monitoring of the northern reefs is ongoing, and some areas in the north, in particular, have been set aside as marine protected areas. The coral reefs of the Red Sea need constant management to ensure the sustainability of the environment.

FIGURE 1 Studying marine reefs using GIS on the Red Sea



You will need:

- a computer or tablet connected to the internet
- a website developed with GIS techniques
- an atlas.

Procedure

You need to identify a GIS website. Use the **ReefBase GIS** weblink in the Resources tab, for example, to access a great deal of mapped data on coral reefs around the world.

Open the ReefBase site shown in **FIGURE 2**.

FIGURE 2 A base map on the ReefBase website



Step 1

As with any map you explore, you need to begin by checking the information provided to assist you to interpret the maps. On the left of the ReefBase website, you will find a table of contents (see **FIGURE 2**). The Maps tab provides a list of 12 maps, including a photo site. Select any of these for the map to open.

Step 2

In the same table of contents, once you open a map, the program lists the different layers available for that map. Choose a map and explore some of these layers. Select one of the circles or boxes to apply an aspect of the layer, and then select Refresh Map at the bottom of the layers panel, so that a new map appears. In **FIGURE 3**, the Location of Coral Reefs map has been selected and the table of contents shows the layers available for this map. The Legend tab will help explain terminology.

FIGURE 3 Layers available in map of location of coral reefs



Between each choice that you make, you need to select Refresh Map to ensure your map updates with the new layers you have selected.

FIGURE 4 shows another example of the material available from the coral bleaching map.

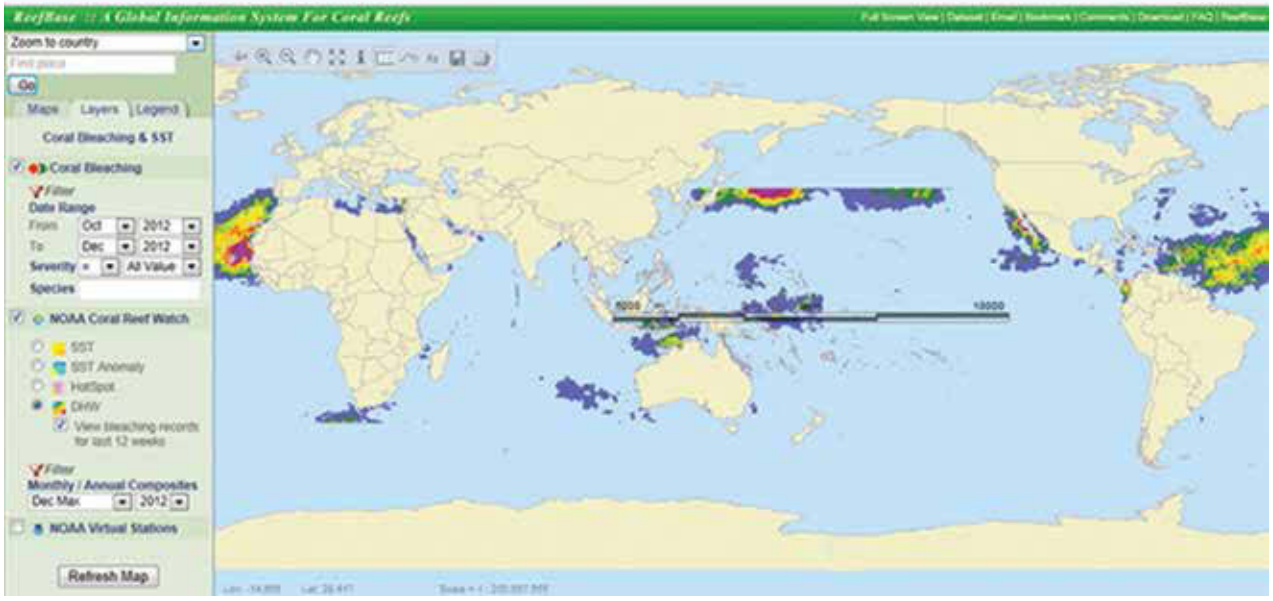
FIGURE 4 Coral bleaching, October to December 2012



Step 3

Along the top of the map, there is also a tool bar to explore (see **FIGURE 5**). Hovering over each symbol, will give you an explanation of its use. The Distance tool is especially useful, because you can use the linear scale that appears at the base of the map to measure distances on the map. It can be moved to wherever you want it.

FIGURE 5 Applying the distance tool on the coral bleaching map



Being able to shift the linear scale allows you to calculate distance and area. In this instance, the scale is set to calculate the area of coral bleaching north-east of the Solomon Islands. Alternatively, if you want to calculate a distance between two points, select the Distance tool, move the cursor to the first point and select it; then drag the cursor to the second point, and the number of kilometres will appear on the screen.

Step 4

On the global map, zoom in on the coral reefs of the Red Sea (see **FIGURE 6**). Did you know there were reefs there? Turn the various layers on and off until you have an understanding of the state of the coral in this region. Also consider the layers that show the management of the region.

FIGURE 6 Coral reefs in the Red Sea experiencing diseases, 1970–2013



Step 5

You can now develop a description of the natural and human impacts on the Red Sea coral reefs. Then you can discuss the management processes that are in place to ensure the sustainability of the environment. A paragraph should begin with an opening sentence. Where possible, provide evidence of using the site by quoting specific numbers. The paragraph should conclude with a statement about the sustainability of the environment. See the Model paragraph for an example.

on Resources

Video eLesson	Using geographic information systems (GIS) (eles-1752)
Interactivity	Using geographic information systems (GIS) (int-3370)
Weblink	ReefBase GIS

10.8.3 Let me do it

Complete the following activities to practise this skill.

10.8 ACTIVITIES

1. Continue to use the ReefBase site to explore the layers of information about the Great Barrier Reef, using the features and data available in the maps, layers and legend. Write a paragraph describing the natural and human impacts on the reef and the management processes that are in place to ensure the ***sustainability*** of the ***environment***. Use the checklist to ensure you cover all aspects of the task.
2. Apply your skills to answer the following questions. Each question requires you to change maps, layers and legend.
   a. Name three diseases that have affected the Great Barrier Reef.
   b. Which part of the Australian coastline has experienced the worst coral bleaching since 2000?
   c. How do you rate the threats to the Great Barrier Reef? (***Hint:*** The legend provides a colour rating.) Turn on the layers for diseases and coral bleaching to see if these threaten the Great Barrier Reef.
   d. With the aid of an atlas, name the coastal places where the reef is at greatest risk.
   e. What types of management programs are used on the Great Barrier Reef?
   f. Turn on all the layers applicable to the Great Barrier Reef. List the range of issues affecting the Great Barrier Reef near Cairns.

Checklist

I have:

- used GIS-mapped geographic data
- used the map legends
- used the map layers
- made ***interconnections*** between map layers
- clearly represented and communicated the data.

10.13 SkillBuilder—Evaluating alternative responses

LEARNING INTENTION

This SkillBuilder shows you how to evaluate alternative responses. Evaluating alternative responses is part of the Communicating and reflecting HASS skill.

10.13.1 Tell me

What are alternative responses?

Alternative responses are a range of different ideas/opinions on an issue. These ideas may have advantages or disadvantages, be positive or negative, have strengths or weaknesses and costs or benefits. You may or may not agree with the alternative responses. Evaluating ideas involves weighing up and interpreting your research to reach a judgement or a decision based on the information.

Why are alternative responses useful?

Evaluating alternative responses is useful because it ensures that you have thought of a range of possibilities or options and made a judgement about each possibility. To help with your decision making, you can consider ideas from a range of perspectives, such as economic, environmental, social justice, historic, political or technological viewpoints. These perspectives act as thinking tools for your analysis of a topic. They are also useful for:

- providing input to a discussion
- ensuring that all aspects are considered

- assisting in decision making
- justifying an action taken.

A careful evaluation of alternative responses:

- considers a wide range of alternative responses and weighs up the advantages and disadvantages of each
- examines a wide range of data on a topic
- undertakes open-minded discussion
- makes a decision on which is a better option and justifies it.

Consider the question 'Should tourist numbers on Fraser Island be limited?' Alternative responses to be considered include:

- allowing tourism to develop without restraint
- restricting tourist numbers to the island
- restricting tourist numbers only in the peak season
- banning tourists from the island
- introducing tighter rules on tourist movements on the island.

10.13.2 Show me

Model

The following is an evaluation of the alternative responses to the Fraser Island tourism question. **FIGURE 1** details the data and alternative responses upon which this evaluation is based.

After considering the impacts on Fraser Island by tourists, I consider that tourist numbers should be limited, especially in the peak tourism season (*evaluation*). The risk of damage to the special environment that may be caused by tourists, such as destruction of the rainforest and pollution of lakes, outweighs the economic gains made by the tourism industry. (More than 32 per cent of tourism in the region revolves around Fraser Island.) With the government acknowledging this special environment by making greater funding available, particularly to reduce road-related erosion, I believe that limiting the tourist numbers (340 000 tourists in 2001–02) will ensure that the ecotourism is not put under pressure; that dingoes and people can co-exist along with camping facilities; and that four-wheel drive vehicles can be managed with driver education and specific regulation for Fraser Island. In the past, Fraser Island has not always been well managed but I believe restricting tourism numbers will allow this special environment to be sustained into the future.

FIGURE 1 Alternative responses to the question 'Should tourist numbers on Fraser Island be limited?'

A special environment

The island's special features include:

- long surf beaches and rocky headlands
- about 40 crystal-clear freshwater lakes. Some of these are perched lakes (that is, they sit, or perch, on an impermeable layer of rock or hardened organic matter lying above the watertable). There are also 'window' and barrage lakes. Window lakes appear when depressions in the land surface dip below the watertable, thus exposing part of it. Barrage lakes form when shifting sand dunes block running water and cause it to pool.
- many streams and creeks
- coloured sand cliffs, some 35 kilometres in length
- salt pans, lagoons, mangrove forests and wetlands
- thick rainforests, some of which are so dense that sunlight does not penetrate the canopy
- offshore seagrass beds to support colonies of dugong
- over 25 species of mammals, including dingoes thought to be the purest strain of the species in Australia
- over 350 species of birds. One of Australia's rarest birds, the endangered ground parrot, is found on the island.
- vast sandblows (that is, tracts of sand moved by the wind) and lofty sand dunes.

Past land uses

Fraser Island once had a sand-mining industry (mining its tracts of mineral-rich black sand). This was stopped in 1976 following a federal government inquiry. There was also a timber industry, disbanded in December 1991 by the Queensland Government after a separate inquiry.

Tourists

Hundreds of thousands of tourists now visit the Fraser coast region every year, injecting some $366 million into the region in 1999. It is estimated that 32 per cent of this visitor expenditure was contributed by tourists to Fraser Island itself. The most obvious risks that tourism brings to the national park have to do with land-clearing, waste, increased traffic and disturbance of the islan's flora and fauna.

Ecotourism facilities

The island's Kingfisher Bay Resort and Village has the highest level of accreditation as an ecotourism facility. An environmental impact statement was prepared before the proposed facility was approved for construction.

Dingo management

In the past, many tourists fed the dingoes that roam the island. In April 2001, however, a young boy was tragically killed by dingoes. Tourists are now provided with a 'Dingo Smart' brochure, and are heavily fined if caught feeding a dingo or trying to encourage its attention. Any dingoes known to be a problem are culled.

Managing camping facilities

There are six government-owned camps — at Central Station, Lake Boomanjin (the largest perched lake in the world), Lake McKenzie, Dundubara, Waddy Point and Wathumba — and two that are privately owned. People can also camp on a restricted number of beach areas, but not within 50 metres of a creek, stream or lake. Beach camping areas are temporarily closed sometimes to allow vegetation to regrow or to halt erosion.

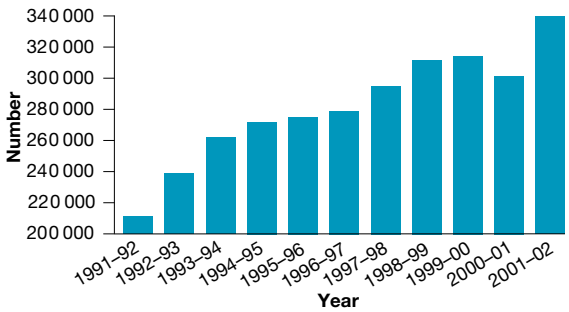
Managing four-wheel drive vehicles

Four-wheel drive vehicles are needed to travel around the island. Left unmanaged, these large vehicles could have a significant impact on the island's flora and fauna and on levels of erosion, especially because touring parties tend to drive in the same areas. It is the most attractive parts of the island that are often the most vulnerable.

All vehicles travelling on the island have to display a purchased permit and, more recently, driving and parking on sand dunes have been made illegal. The Environmental Protection Agency has started a campaign to educate four-wheel drivers about the impacts their vehicles have on the island's environment.

Government funding

In 2004, the Australian government's Natural Heritage Trust granted $300 000 to reduce road-related erosion, provide environmentally friendly amenities and better direct pedestrian movement around Fraser Island. Barriers along the sides of the island's roads and better planning have reduced the degree of erosion from run-off. The idea was partly to make pedestrian travel a more attractive option, as well as draw pedestrians away from the island's vulnerable dunes. To do this, boardwalks were built along the banks of Eli Creek (see the photograph on page 26). Stretches of dunes are also regularly closed for rehabilitation. Although the potential threat from tourism-related erosion remains, the stability of the island's sand dun es is improving.



Visitor numbers to Fraser Island

Please tourists, don't pee in the lake

So, we're sure your momma told you not to pee in the swinning pool — but did she also tell you it's bad to pee in a lake? Down in Australia, the beautiful Basin Lake on Fraser Island off Queensland isn't doing well these days, and one of the causes is high levels of urine in the water. The official word is that too many tourists are using the lake as a toilet and that's led the Queensland Parks and Wildlife Service to consider closing one of the access tracks to reduce visitor numbers. Right now 35 000 people visit the lake every year and since there's no in-or outflow from the lake; whatever goes in, stays in. Our alternative suggestion is to simply stick up a big notice advertising the current urine levels in the lake. We're fairly sure most people would skip the swim.

Source: Fraser Island Travel Guide, 17 October 2008.

You will need:

- a wide range of data on a topic
- a range of responses to an issue involved in that topic.

Procedure

To evaluate alternative responses, you will need a wide range of data on a topic, like that shown in **FIGURE 1** about Fraser Island.

Step 1

You need to read through all the data, seek clarification of ideas, and develop a viewpoint on the information. Read about the environment's special features, past and present uses, including ecotourism, camping and four-wheel-drive vehicles. Consider how the area might be managed, both locally to control dingoes and by the federal government with its funding proposals and regulations.

Step 2

Divide a page into two columns and head the columns with Advantages/Disadvantages, Positives/Negatives, Strengths/Weaknesses, Costs/Benefits. In each column, list the information from the data that you believe is important to determine your viewpoint on the issue (the number of tourists visiting Fraser Island).

You need to consider a range of perspectives:

- economic — money is the basis of this viewpoint
- environmental — consider how the environment will be affected
- social justice — consider people and their cultures in a fair and just manner
- historic — look at how the past has affected decision making
- political — governments play a role in community environments
- technological — examine whether there are any technological implications
- sustainable — how the decision will affect the future and provide for people in the long term.

Step 3

Consider your completed columns. Which column outweighs the others? Are there more points in one column than another? Are some arguments stronger than others? Use the answers to these questions to shape your opinion and help you decide which responses are better than others.

TABLE 1 Table of alternative responses

Alternative responses	Advantages	Disadvantages
1. Allow tourism to develop without restraint		
2. Restrict tourist numbers to the island		
3. Restrict tourist numbers only in the peak season		
4. Ban tourists from the island		
5. Introduce tighter rules on tourist movements on the island		

Step 4

Refer to the evaluation that the responses in **FIGURE 1** are based on. This is a considered opinion based on a range of alternative responses to the issue.

on Resources

Video eLesson Evaluating alternative responses (eles-1744)

Interactivity Evaluating alternative responses (int-3362)

10.13.3 Let me do it

Complete the following activity to practise this skill.

10.13 ACTIVITIES

Our ecological footprint is one means of measuring human demand for ecological services. Using the information in **FIGURE 4** in subtopic 11.2 evaluate whether all six aspects — carbon, forests, cropland, grazing land, fishing grounds and built-up land — have an equal role in determining the measure of global hectares (gha).

Consider the following questions, and use the checklist to ensure you have covered all aspects of the task.

a. Is there one aspect that is more important to you? Is there any aspect that seems to have little relevance to you? Justify your answer.
b. Which alternative response has the most advantages? Which has the fewest advantages?
c. In which response do the advantages outweigh the disadvantages?
d. What perspectives dominate a consideration of the ecological footprint?
e. Survey the class to see if the class shares an opinion on the ecological footprint idea. Has the class adopted a similar viewpoint to the ecological footprint?

Checklist

I have:
- considered a wide range of alternative responses and weighed up the advantages/disadvantages of each
- examined a wide range of data on the topic
- undertaken open-minded discussion
- made a decision on which is the best option and justified my decision.

10.14 SkillBuilder—Drawing a futures wheel

LEARNING INTENTION

This SkillBuilder shows you how to draw a futures wheel. Drawing a futures wheel is part of the Evaluating HASS skill.

10.14.1 Tell me

What is a futures wheel?

A futures wheel is a series of bubbles or concentric rings with words written inside each to show the increasing impact of change. It helps show the consequences of change.

Why is a futures wheel useful?

A futures wheel is a thinking tool. It allows you to put down your ideas and to brainstorm or explore widely the implications of each idea or change. It is a method of predicting and evaluating change.

Futures wheels are useful for predicting change when you are:
- considering the implications of actions
- working with groups of people to develop ideas
- implementing policy changes in social issues
- considering impacts of natural disasters
- explaining the consequences of a change.

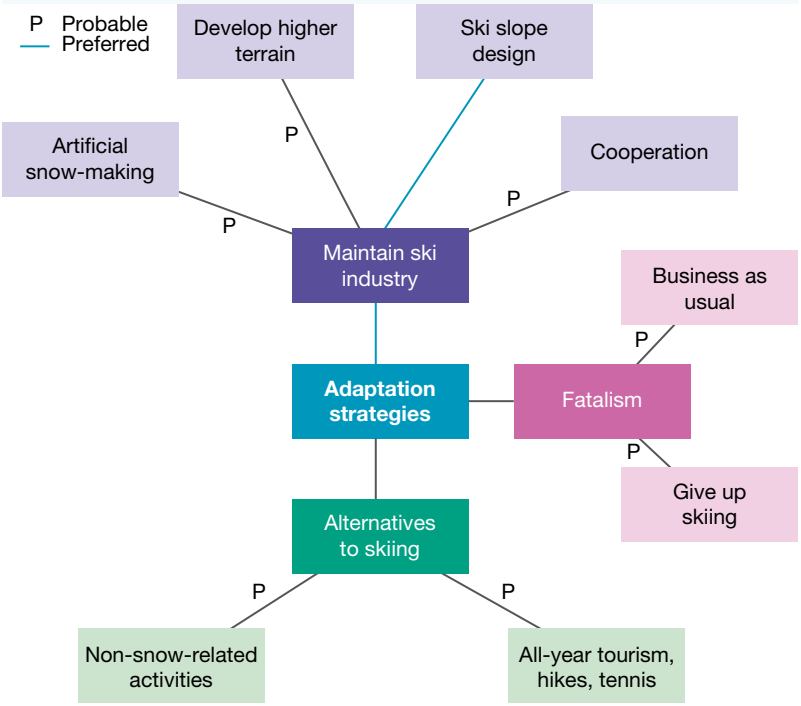
A good futures wheel has:

- a number of concentric rings or bubbles
- more than one idea in each ring or level
- probable and preferred options
- neat presentation
- a clear title.

10.14.2 Show me

Model

FIGURE 1 Possible responses by the ski and alpine resort industry to climate change



You will need:

- a mathematical compass to draw concentric rings, or the Bubbl.us weblink in the Resources tab for creating bubbles
- a light-grey lead pencil
- coloured pencils.

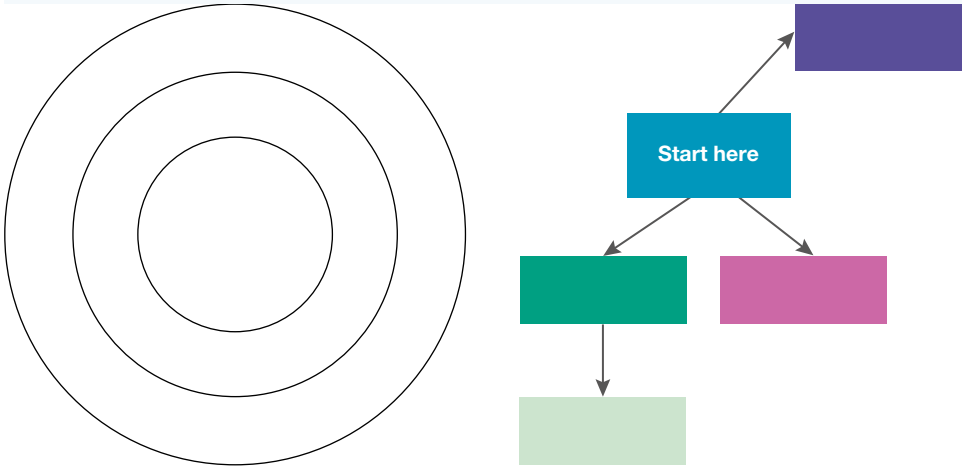
Procedure

To complete a futures wheel, first brainstorm a wide range of ideas in groups or while participating in a class discussion.

Step 1

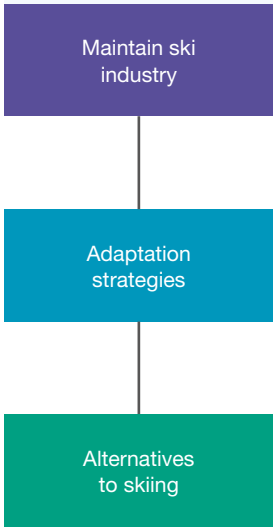
Draw a number of concentric rings — four is a good starting point. Make sure the inner circle is big enough to write in.

FIGURE 2 Examples of futures wheels



Step 2

FIGURE 3 Starting the futures wheel



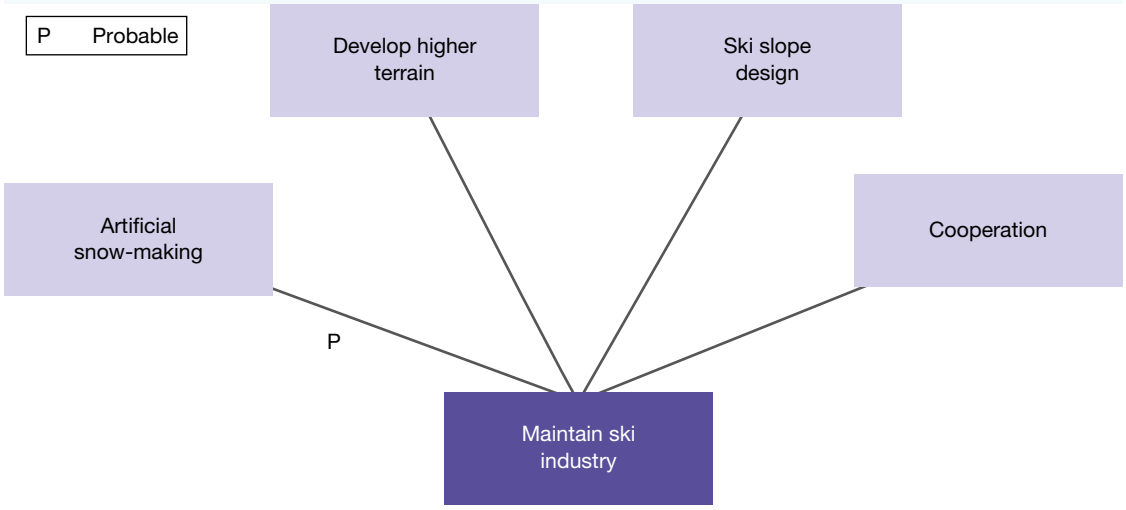
In the inner circle or bubble, write the issue that you are considering, such as possible responses by the ski and alpine resort industry to climate change (see **FIGURE 1**).

Step 3

In the first ring out from the centre, write the immediate thoughts that come to mind on the issue. See **FIGURE 3** for examples on the first bubble or concentric ring out from the centre. These thoughts are those that you see as most possible. Draw a square block around these possible ideas.

Step 4

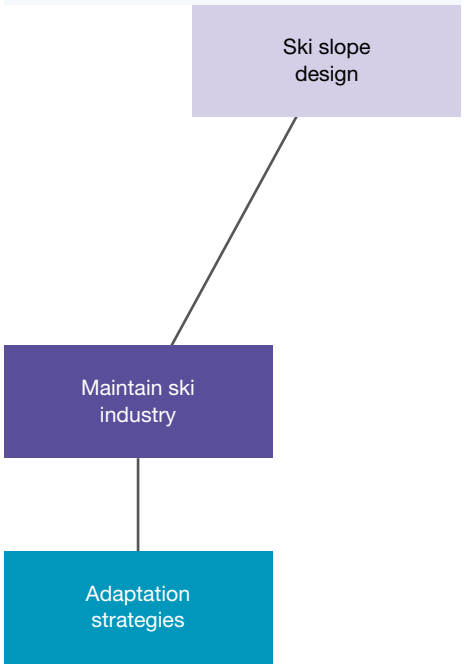
FIGURE 4 Some probable ideas on the futures wheel



In the next layer out, take each of the points from the previous ring and think of two or more impacts that this change would involve. These thoughts are those that you see as most probable — a view of things that could happen. Label each of these ideas with a P. **FIGURE 4** shows the start of this level.

Step 5

FIGURE 5 Identifying a preferred option in the eyes of a ski-lift operator



Continue presenting ideas. The outer ring will have a whole range of ideas, whereas the rings closer to the centre of the wheel will have fewer ideas.

Step 6

You may notice that there are interconnections between ideas. If you can see a link, you should draw a line between the interconnecting components. In **FIGURE 1**, 'Business as usual' and 'Cooperation' could be linked if this is what you believed.

Consider the different connections that you have made between ideas. Find a route that you consider the preferred option — a view that you see as most desirable. Colour this route in some way to show the thread of ideas. Can you justify your choice?

Step 7

Give your futures wheel a title. In this case, **FIGURE 1** is titled 'Possible responses by the ski and alpine resort industry to climate change'.

on Resources

Video eLesson	Drawing a futures wheel (eles-1745)
Interactivity	Drawing a futures wheel (int-3363)
Weblink	Bubbl.us

10.14.3 Let me do it

Complete the following activities to practise this skill.

10.14 ACTIVITIES

1. Using the information on climate ***change*** in topic 11, complete a futures wheel to show the consequences of climate ***change***. Identify layers as possible, probable and preferred. Use the checklist to ensure you cover all aspects of the task.
2. Apply your skills to answer the following questions.
   a. Is the issue explored in the futures wheel a big picture issue or a more specific idea?
   b. What are two key consequences that you can see on the futures wheel?
   c. Which of the consequences has been developed in greater depth? Why might this be the case?
   d. Which of the consequences has been developed in the least depth? Why might this be the case?
   e. Do you now have a greater understanding of the consequences of ***change***? Explain your answer.

Checklist

I have:

- included a number of concentric rings or bubbles
- put more than one idea in each ring or level
- indicated probable and preferred options
- drawn neatly
- provided a clear title.

10.15 SkillBuilder—Comparing aerial photographs to investigate spatial change over time

LEARNING INTENTION

This SkillBuilder shows you how to compare aerial photographs to investigate spatial change over time. Comparing aerial photographs is part of the Analysing HASS skill.

10.15.1 Tell me

What is an aerial photo?

Aerial photos are images taken above the Earth from an aircraft or satellite. Aerial photos — either oblique or vertical — record how a place looks at a particular moment in time. They allow a place to be captured in greater detail than is possible with a photo taken at ground level. Some aerial photos are also satellite compilations; that is, they have been created by a number of images transmitted from a satellite.

FIGURE 1 Lake Urmia (a) in 1988 and (b) in 2016



Why is it useful to compare aerial photographs?

Comparing aerial photographs is useful because each aerial photograph captures details about a specific place at a particular time. Two images taken at different times, from the same angle and placed side by side show change that has occurred over time. Distribution patterns and the interconnection of different features are readily seen. You will find that the comparison of aerial photographs shows you a lot about places, spaces and environments, as well as change that takes place over time and the interconnection of features.

Aerial photographs are useful for showing:

- changing patterns and the implications of events
- interconnections between events and impacts
- damage caused by hazards such as landslips, cyclones and floods
- the growth of cities, especially on the urban fringe
- degradation of land over time.

A good aerial photograph comparison:

- identifies patterns and features that are similar over time
- identifies patterns and features that have changed over time
- indicates the interconnection of features.

10.15.2 Show me

How to compare aerial photographs

Model

Use the **Hurricane Sandy** weblink in the Resources tab to see how Hurricane Sandy changed the coastline of the United States. By hovering and sliding over the image, you can see the before and after images of Casino Pier and Breakwater Beach Park. Hurricane Sandy destroyed the theme park on the Casino Pier, and the waves removed the sand on the beach, especially on the northern side of the pier. On this side of the pier, debris built up on the sand. Inland, the water spread throughout buildings but very few of them were lost to wave surge. Storm waves have the energy to destroy buildings and move sand.

You will need:

- at least two aerial photographs of the same place taken at different times but at the same angle — oblique or vertical, or
- the Hurricane Sandy weblink in the Resources tab, which also shows change over time in aerial imagery of other global disasters (such as the Japanese tsunami).

Procedure

To complete a comparison of aerial photographs, take at least two aerial photographs of the same place, taken at different times, at the same angle, and place them side by side. Alternatively, use the **Hurricane Sandy** weblink in the Resources tab.

Step 1

Identify patterns or features that are similar over time; that is, they appear in both of the aerial photographs being studied. For example, the theme parks are identifiable in both photographs you saw via the **Hurricane Sandy** weblink in the Resources tab. Inland, the water spread throughout the buildings but very few of these buildings were lost to the wave surge. Consider other patterns and features that are similar across the aerial photographs.

Step 2

Identify patterns and features that have changed over time; that is, they appear altered from one photograph to the next, when the photographs were taken at different times. For example, the northern coastline has changed in the ‘after’ aerial photograph of Breakwater Beach Park. In the earlier photo, the coastline is seen, but in the later photo the coastline is more covered by water. Another example is the end of the pier, which has been destroyed. Consider other patterns and features that have changed across the aerial photographs you are examining.

Step 3

Try to explain the processes at work that have changed the environment. In analysing the images of Breakwater Beach Park, it is necessary to mention the power of the storm and its ability to move sand. For example, you could say 'Storm waves have the energy to destroy buildings and move sand'.

on Resources

Video eLesson	Comparing aerial photographs to investigate spatial change over time (eles-1750)
Interactivity	Comparing aerial photographs to investigate spatial change over time (int-3368)
Weblink	Hurricane Sandy

10.15.3 Let me do it

Complete the following activities to practise this skill.

10.15 ACTIVITIES

1. Use the **Hurricane Sandy** weblink in the Resources tab to view the aerial photograph of the coastal area of Mantoloking, New Jersey. Now write a description of the ***changes*** that can be seen in the coastline after the storm. Use the checklist to ensure you cover all aspects of the task.
2. Apply your skills to answer the following questions.
   a. What happened to the bridge in the storm?
   b. How was the land ***changed*** by the storm?
   c. What happened to the houses on the ocean side of the land?
   d. Are the boat moorings still useful? Explain your answer.
   e. On a scale of 1 to 5 (with 1 being 'little damage' and 5 being 'total devastation'), rate the damage caused by Hurricane Sandy to the Mantoloking coastal community. How has the area ***changed***?

Checklist

I have:

- identified patterns and features that are similar over time
- identified patterns and features that have changed over time
- indicated the ***interconnection*** of features.

10.16 SkillBuilder—Describing change over time

LEARNING INTENTION

This SkillBuilder shows you how to describe change over time. Describing change over time is part of the Analysing HASS skill.

10.16.1 Tell me

What is a description of change over time?

A description of change over time is a verbal or written description of how far a feature moves, or how much it alters, over an extended time period.

Why is a description of change over time useful?

A description of change over time is used to show us the distance that a feature has moved, or the extent to which it has altered, and to alert us to the possible impacts over a wider region. For example, the intensity of earthquake tremors indicates that energy has moved across a region.

The study of change over time is useful for:

- describing cyclones and indicating a potential path
- providing tsunami warnings from one side of an ocean to the other
- anticipating the location of waste in oceans as ocean currents shift the waste
- mapping the spills from mining activities, whether it be in oceans or in rivers.

A good description of change over time:

- refers to a map with timeframes marked
- uses scale to indicate distance
- discusses direction
- clearly represents and communicates the data.

10.16.2 Show me

How to describe change over time

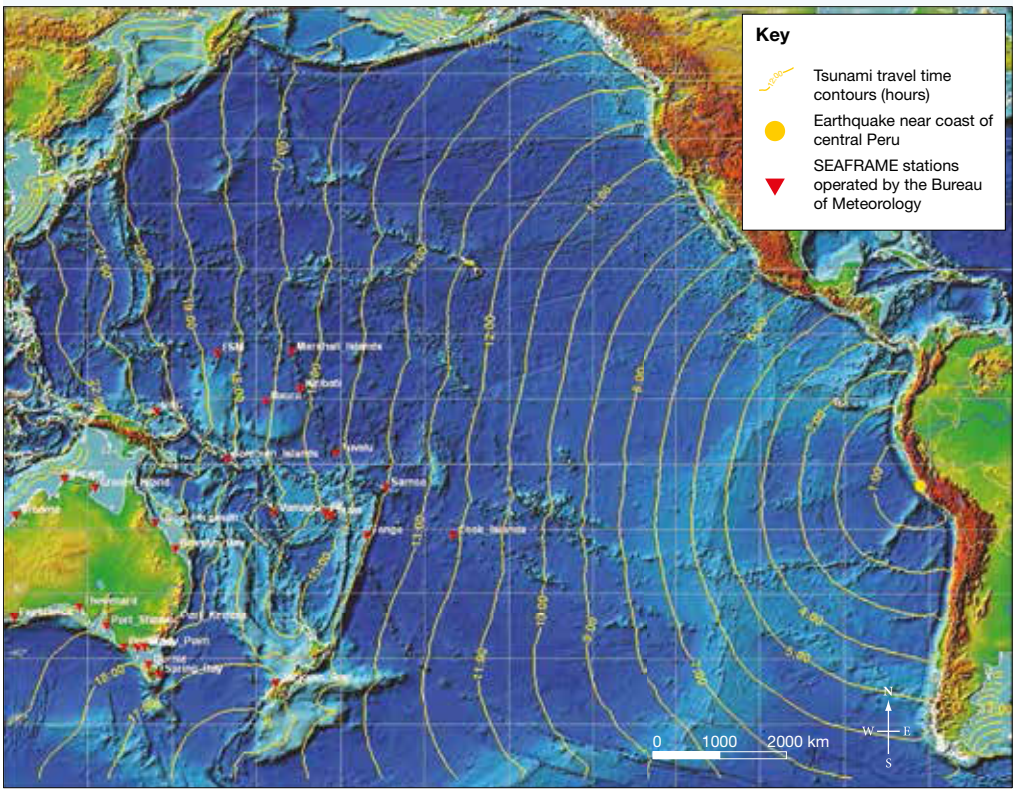
You will need:

- a map with movement timeframes on it
- an atlas to name places and calculate distances
- a piece of paper to help you use scale and calculate distances.

Model

The following paragraph describes change over time as detailed in the **FIGURE 1** map, showing tsunami mapping from Peru on 15 August 2007.

FIGURE 1 Tsunami mapping from Peru, 2007 showing the magnitude 8.0 earthquake that occurred on 15 August. SEAFRAME stations on Pacific slands detected a tsunami.



On the 15th of August 2007, a magnitude 8.0 earthquake struck near the coast of Peru. The earthquake was monitored using advanced equipment from SEAFRAME (SEA Level Fine Resolution Acoustic Measuring Equipment) and a warning was sent across the Pacific, based on the timeframes of the tsunami's energy movement. The tsunami began off the coast of Peru. Authorities estimated that within three hours, the wave energy would reach the Galapagos Islands, 1500 kilometres away. The energy continued to spread in concentric circles for nine hours until the energy spread into parallel lines as it neared French Polynesia. The Cook Islands would not expect to see any change in the ocean until 12 hours after the earthquake struck, providing ample time for precautions to be taken. The energy patterns were distorted further by the landmasses they met: the islands throughout the Pacific, New Zealand and Australia. Countries across the Pacific had been monitored in order to decide the likelihood of any impact on Australia. In Port Kembla, New South Wales, more than 11 200 kilometres from the epicentre, a small wave change occurred 18 hours after the Peru earthquake. Although the world watched and waited for a tsunami, the impact was minimal.

Procedure

To track change over time, you need a map constructed by an authorised organisation — that is, a reliable source. **FIGURE 1** was distributed by the Pacific Tsunami Warning Center.

Step 1

To understand the topic that has been mapped, read the map title, key or legend, and any captions attached.

Step 2

Study the movement lines across the map and relate these to places, either by name, latitude and longitude, or direction from other places. An atlas will be helpful here. For example, in **FIGURE 1**, the tsunami began off the coast of Peru. Authorities estimated that within three hours the wave energy would reach the Galapagos Islands, a distance of 1500 kilometres.

Step 3

Begin writing an analysis of the map by using an opening statement that generalises about what has been mapped; f or example, 'In **FIGURE 1**, the Peru 2007 magnitude 8.0 earthquake was monitored, and a warning was sent across the Pacific based on the timeframes of movement of the tsunami's energy'.

Step 4

Next, focus on some specific statements about places affected close to the time of origin of the event. For example, within three hours the wave energy would have reached the Galapagos Islands, a distance of 1500 kilometres.

Step 5

From the timeframes discussed in **Step 4**, infer what impact the event will have on people and places at different times. For example, the Cook Islands would not expect to see any change in the ocean until 12 hours after the earthquake occurred. Another place that you might mention is New Zealand, which would experience tidal movement two hours later, at the same time as Samoa.

Step 6

Conclude your analysis with an overall statement about the level or magnitude of the event.

The Model text has this example: 'Although the world watched and waited for a tsunami, the impact was minimal'.

Resources

Video eLesson	Describing change over time (eles-1753)
Interactivity	Describing change over time (int-3371)
Weblink	Oil spill

10.16.3 Let me do it

Complete the following activity to practise this skill.

10.16 ACTIVITY

Use the **Oil spill** weblink in the Resources tab to view interactive maps showing **change** over time, and write an analysis of the event. Answer the following questions to guide your analysis. Use the checklist to ensure you have covered all aspects of the task.

a. Which area of the United States was most affected by the oil spill?
b. What distance, and in which directions, did the oil spread?
c. How long did it take for the Gulf of Mexico to be clear of oil movement?
d. What role did ocean currents play in the movement of the oil?
e. Did the oil spread further than predicted?

Checklist

I have:

- referred to a map with timeframes marked
- used scale to indicate distance
- discussed direction
- clearly represented and communicated the data.

10.17 SkillBuilder—Building a map with geographic information systems (GIS)

LEARNING INTENTION

This SkillBuilder shows you how to build a map with geographic information systems. Building a GIS map is part of the Analysing HASS skill.

10.17.1 Tell me

What is GIS?

A geographic information system (GIS) is a computer-based system that consists of layers of geographic data. Just as an overlay map allows you to interchange layers of information, a GIS allows you to turn layers on and off to make comparisons between data.

Why is GIS useful?

A GIS is a sophisticated system of presenting data. The information is based on primary data that has been gathered and mapped. At any one time, you can see one series of data or as many as you need to see the inter-connections between the data. For example, you may turn on one layer to see the topography. Then you might turn on the road system to see if the land has influenced the pattern of roads. To this you might add settlements

to see if both the road system and topography have influenced town locations. Then you might turn off the road system to see if the greater influence was indeed the topography.

A GIS map is useful when:

- you want to see the interconnections between features
- you need to show an overlay of features across a region
- retailers want to determine the best location for a new store; for example, fast- food chains use this technique to determine site selection
- emergency services want to predict risk situations, such as the spread of bushfires and flood waters
- you need to map global trends, such as the movement of refugees between countries.

Using GIS involves:

- using GIS-mapped geographic data
- interpreting map legends
- interpreting map layers
- looking for interconnections between map layers
- clearly representing and communicating data.

10.17.2 Show me

How to use GIS

Building a map with geographic information systems (GIS) eles-1754

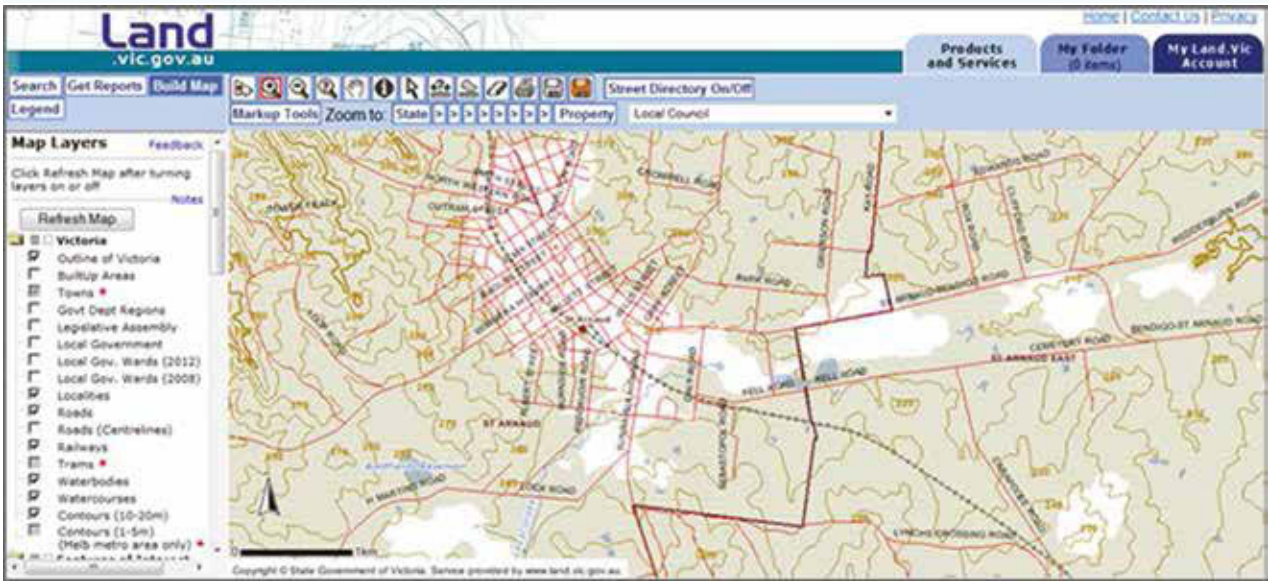
You will need:

- a computer or tablet connected to the internet
- a website developed with GIS techniques.

Model

The following paragraph describes St Arnaud and its environs, as depicted in the **FIGURE 1** GIS image.

FIGURE 1 St Arnaud and its environs



Source: © The State of Victoria, Department of Environment and Primary Industries, 2013. Reproduced by permission of the Department of Environment and Primary Industries.

St Arnaud is a town north-west of Melbourne. It lies east of a range of hills that rises to 300 metres. The built environment follows the railway line, and major regional roads pass through the town. The area has a few waterways, and a reservoir provides town water. The town is surrounded by land that is prone to bushfire, and some streets, particularly in the south-west and west, are at risk. In future, any growth in the town is likely to be along the railway line and Sunraysia Highway, in order to avoid fire-prone areas, and will probably be on the flatter land toward the south.

Procedure

Use the **Land Victoria** weblink in the Resources tab to locate the map shown in **FIGURE 2**.

FIGURE 2 A base map of Victoria



Step 1

As with any map that you explore, you need to begin by checking the information that is provided. On the left of the screen you will find a list of the map layers (see **FIGURE 2**). Select the option of Build Map. Select any box to turn on a layer of the map. Note that some layers apply only at a specific scale; the cursor will tell you this when you try to turn on the layer.

Step 2

Select Horsham and you will see surrounding towns. Next, select St Arnaud and make this the focus of a study of its built environment. To build a map on St Arnaud and its immediate environs, choose a scale that will give you more detail. To do this, use the tool bar at the top of the map. Hover your mouse over the > symbols to the right of the words 'Zoom to'. A scale ratio will then appear in a box below each > symbol. A good choice here would be 1:25 000.

FIGURE 3 Beginning to build a map

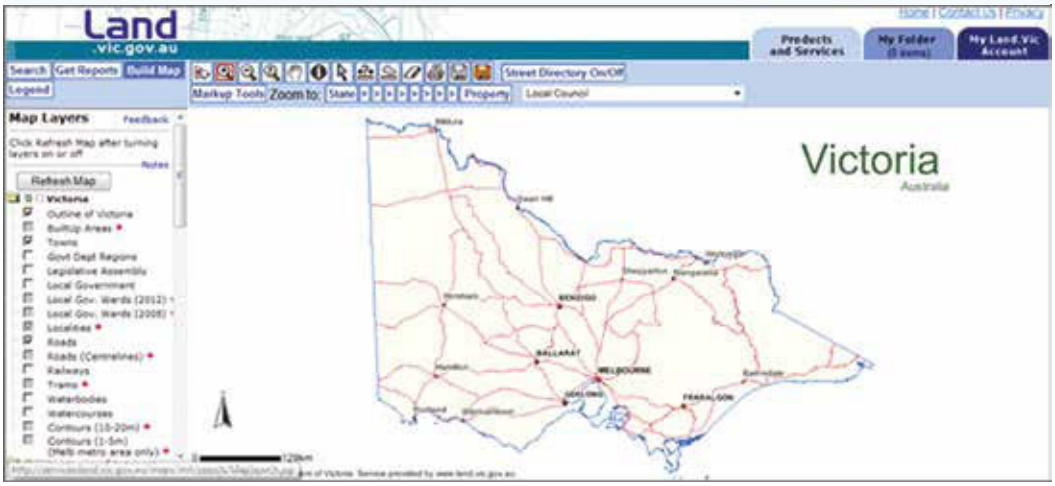
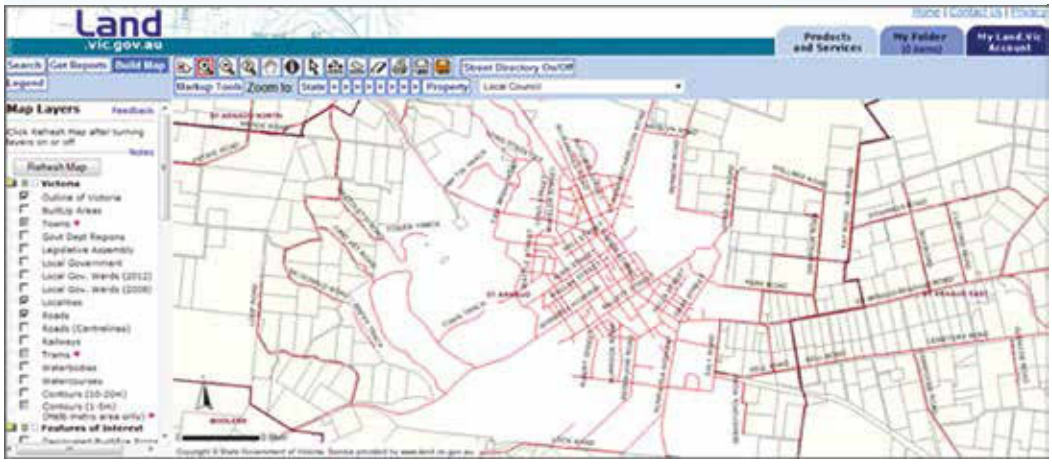


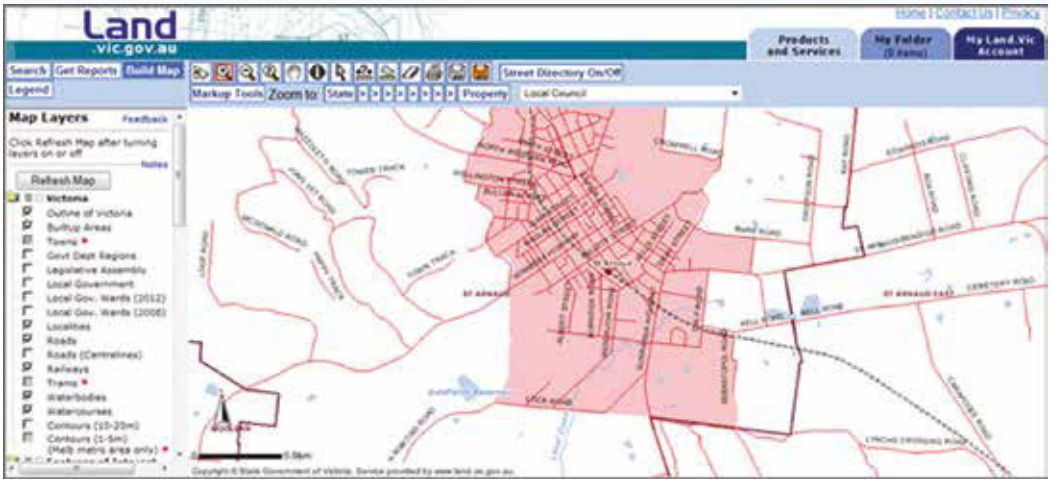
FIGURE 4 St Arnaud 1:25 000



Step 3

Choose some layers to explore on the map. To apply a layer, select the box and then select the Refresh Map panel at the top or bottom of the list; an updated map will then appear. In **FIGURE 5**, the map of St Arnaud has the layers of roads, waterways, railway lines and built environment turned on.

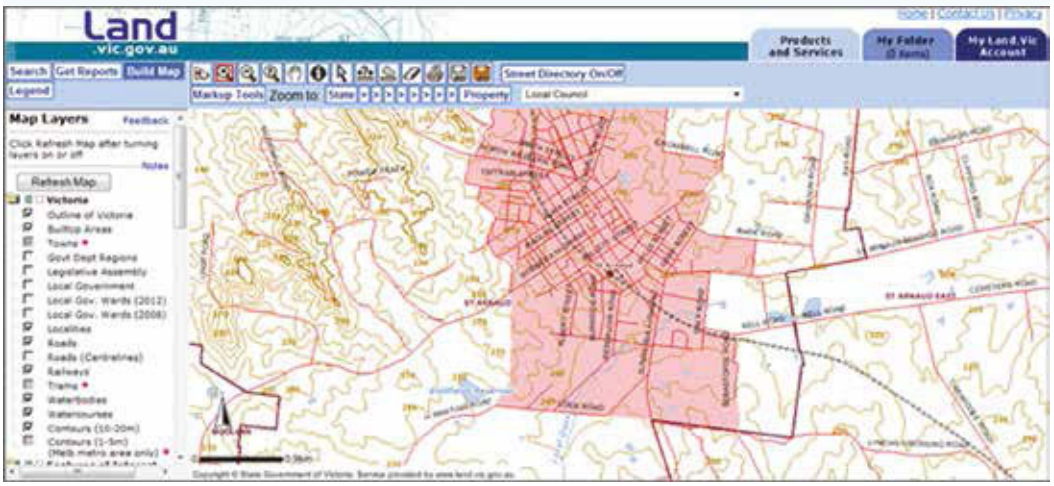
FIGURE 5 Sample layers available in map of St Arnaud region



After each choice that you make, in order for your map to be updated with the new layer, you need to select the Refresh Map panel at the top or bottom of the list.

FIGURE 6 shows another example with additional layers (contour lines 10–20 metres) turned on for the St Arnaud region.

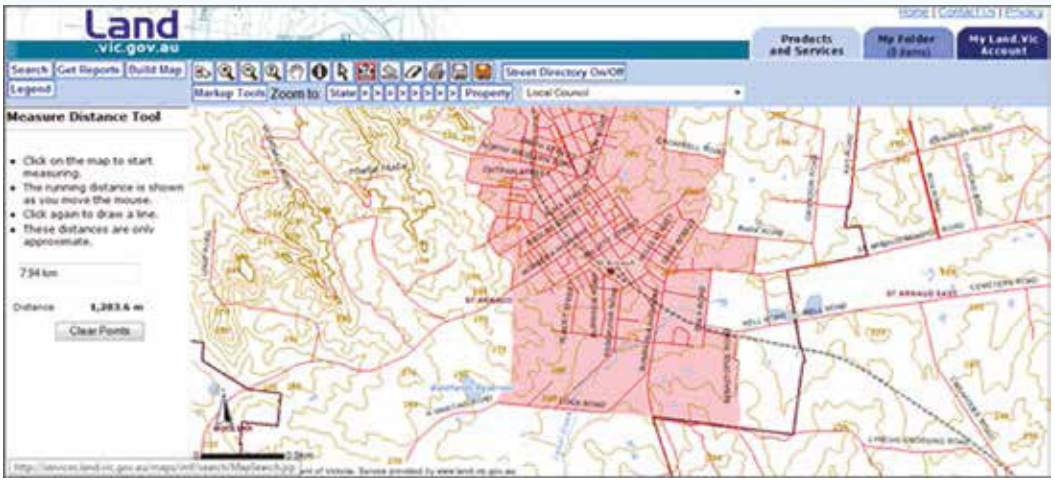
FIGURE 6 St Arnaud region with contours of 10–20 metres added



Step 4

Along the top of the map there is also a tool bar to explore. Hover over each of the symbols and the name of the tool will pop up. The Distance tool and the Area tool are especially useful. If you select a tool, an explanation of how to use it appears to the left of the map. Note that these are running measurements, so you need to be organised in determining the points between which you want to measure. In **FIGURE 7**, the length of Box Road (see the bright red colour in the north-east of **FIGURE 7**) is 1283.6 metres. (Note that the distances are approximate and depend on the exact points that you select.)

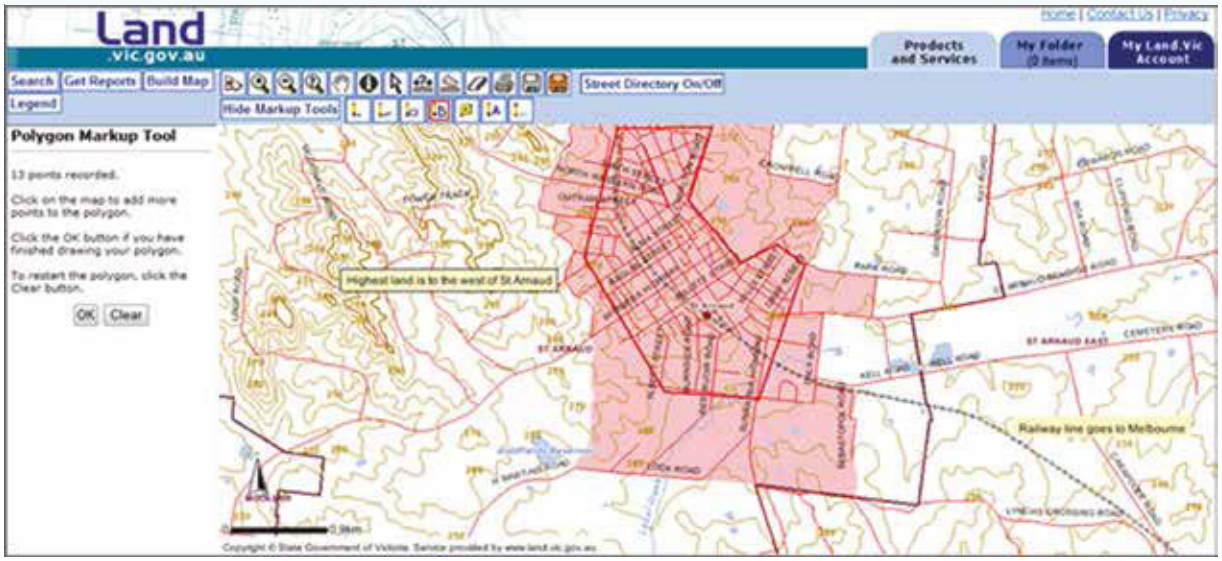
FIGURE 7 Applying the distance tool on the St Arnaud map



Step 5

Now select the Markup Tools button. These tools allow you to highlight significant points or areas and to label anything you wish to comment on. **FIGURE 8** uses the Polygon Markup tool to mark the boundary of the main streets of St Arnaud, the Callout Text Markup tool to indicate high land and the Text Markup tool to indicate the main train line to Melbourne.

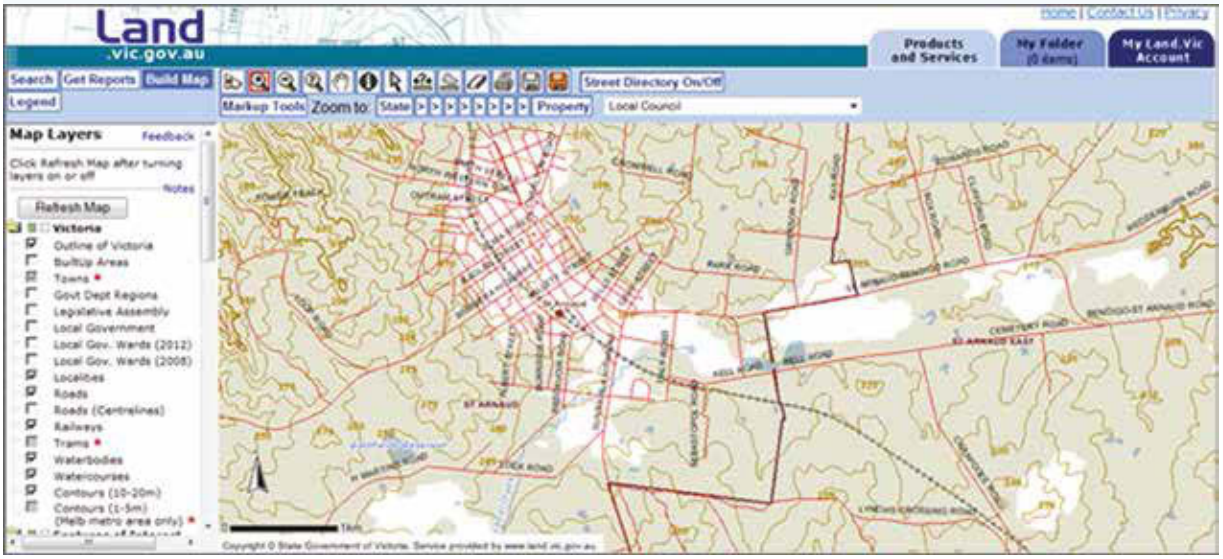
FIGURE 8 Labelling on the St Arnaud map



Step 6

In applying your information about the area, you might like to turn on the layer for bushfire hazard. Are there streets in St Arnaud that are in the bushfire risk area?

FIGURE 9 St Arnaud with an overlay of bushfire risk



Step 7

Describing the built environment of St Arnaud requires you to make a statement about each of the layers that you have turned on and to discuss any implications that the layer might have for the development of the town. For example, the town is likely to continue to grow along the railway and the major road, the Sunraysia Highway.

on Resources

Video eLesson	Building a map with geographic information systems (GIS) (eles-1754)
Interactivity	Building a map with geographic information systems (GIS) (int-3372)
Weblink	Land Victoria

10.17.3 Let me do it

Complete the following activities to practise this skill.

10.17 ACTIVITY

1. Continue to use this website to explore the layers of information on other built ***environments*** in Victoria. Choose somewhere else to explore. Write a paragraph describing the natural ***environment*** and the way in which it affects the development of the built ***environment***. Use the checklist to ensure you cover all aspects of the task.
2. Apply your skills to answer the following questions. Each question requires you to change maps and layers.
   a. Does water play a significant role in the ***environment*** that you are studying?
   b. Name and measure a significant road on your map.
   c. Use the Area tool to calculate the size of your built ***environment***.
   d. Use at least two m arkup tools to add information to your map.
   e. Using the Bushfire Risk layer, assess the risk of bushfire in your chosen built ***environment***.

Checklist

I have:

- used GIS-mapped geographic data
- interpreted map legends
- interpreted map layers
- looked for ***interconnections*** between map layers
- clearly represented and communicated data.

10.18 SkillBuilder—Using Excel to construct population profiles

LEARNING INTENTION

This SkillBuilder shows you how to use Excel to construct population profiles. Using Excel to construct population profiles is part of the Analysing HASS skill.

10.18.1 Tell me

Why do we use Excel to construct population profiles?

When constructing population profiles, there is a large amount of data and large numbers to handle. The use of an Excel spreadsheet simplifies the process.

Why is drawing population profiles with Excel useful?

Excel allows actual population figures, which are generally large numbers, to be handled simply. Once the data is placed in the spreadsheet, the computer can create the graph.

Excel is useful in creating population profiles because it:

- improves the time taken to create a population profile
- allows you to work with numbers rather than percentages
- plots the information accurately
- makes comparisons between population profiles reliable.

A good population profile created with Excel:

- includes carefully entered data
- meets geographic standards — for example, the bars are aligned
- has labelled axes
- has a clear title.

10.18.2 Show me

How to draw a population profile using Excel

You will need:

- a set of population statistics
- the Excel program on your computer.

Model

FIGURE 1 Population pyramid, or profile, created from the Excel spreadsheet of population statistics for the United States, 2010

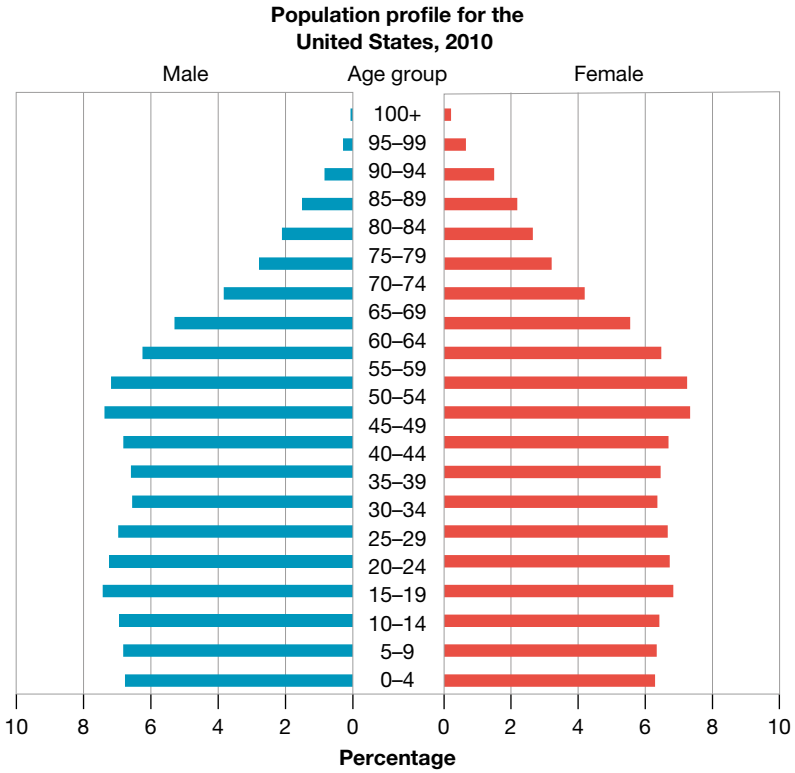


TABLE 1 Population table of the United States, 2010

Age	Male	Female
0–4	10 319 427	9 881 935
5–9	10 389 638	9 959 019
10–14	10 579 862	10 097 332
15–19	11 303 666	10 736 677
20–24	11 014 176	10 571 823
25–29	10 635 591	10 466 258
30–34	9 996 500	9 965 599
35–39	10 042 022	10 137 620
40–44	10 393 977	10 496 987
45–49	11 209 085	11 499 506
50–54	10 933 274	11 364 851
55–59	9 523 648	10 141 157
60–64	8 077 500	8 740 424
65–69	5 852 547	6 582 716
70–74	4 243 972	5 034 194
75–79	3 182 388	4 135 407
80–84	2 294 374	3 448 953
85–89	1 273 867	2 346 592
90–94	424 387	1 023 979
95–99	82 263	288 981
100+	9 162	44 202
All ages	151 781 326	156 964 212

Procedure

Step 1

Open an Excel spreadsheet and create a layout. Do this by having five columns:

- column 1 (A) is for the age groups
- column 2 (B) is for the raw population figures for each age group of males
- column 3 (C) is for a percentage calculation
- column 4 (D) is for the raw population figure for each age group of females
- column 5 (E) is for a percentage calculation.

The number of rows required is one for the column titles and one for each age group. (This should come to 22 rows.) **FIGURE 2** shows what this will look like before the data is entered.

FIGURE 2 Part of the spreadsheet layout for the population profile

	A	B	C	D	E
1	Age group	Number of males	Males	Number of females	Females
2	0-4				
3	5-9				
4	10-14				
5	15-19				
6	20-24				
7	25-29				
8	30-34				
9	35-39				
10	40-44				
11	45-49				
12	50-54				
13	55-59				
14	60-64				

Step 2

Into columns B and D, carefully enter the raw numbers of males and females in each age group.

FIGURE 3 The spreadsheet with raw data added

	A	B	C	D	E
1	Age group	Number of males	Males	Number of females	Females
2	0-4	10,319,427		9,881,935	
3	5-9	10,389,638		9,959,019	
4	10-14	10,579,862		10,097,332	
5	15-19	11,303,666		10,736,677	
6	20-24	11,014,176		10,571,823	
7	25-29	10,635,591		10,466,258	
8	30-34	9,996,500		9,965,599	
9	35-39	10,042,022		10,137,620	
10	40-44	10,393,977		10,496,987	
11	45-49	11,209,085		11,499,506	
12	50-54	10,933,274		11,364,851	
13	55-59	9,523,648		10,141,157	
14	60-64	8,077,500		8,740,424	
15	65-69	5,852,547		6,582,716	
16	70-74	4,243,972		5,034,194	

Step 3

Click on cell A23 and type 'Total'. Then, use the computer to total the numbers in column B and column D. Your raw data in the table may have included this number but it is a good idea to practise this skill in Excel. Click on cell B23 and click on the Greek letter Σ (AutoSum) found in the toolbar on your screen. This command will produce a display that asks you to check if these are the row numbers that you wish to total. If it is correct, then press Enter and the total will appear. Do the same for the Column D. (Alternatively, select cells D2 to D22 and click Σ AutoSum. The total should appear in cell D23. Do the same for B2 to B22. Ensure that all the numbers appear either *with* commas or *without* spaces. Spaces may cause AutoSum to not work correctly.)

FIGURE 4 The spreadsheet showing the totals completed

	A	B	C	D
10	40-44	10,393,977		10,496,987
11	45-49	11,209,085		11,499,506
12	50-54	10,933,274		11,364,851
13	55-59	9,523,648		10,141,157
14	60-64	8,077,500		8,740,424
15	65-69	5,852,547		6,582,716
16	70-74	4,243,972		5,034,194
17	75-79	3,182,388		4,135,407
18	80-84	2,294,374		3,448,953
19	85-89	1,273,867		2,346,592
20	90-94	424,387		1,023,979
21	95-99	82,263		288,981
22	100+	9,162		44,202
23	Total	151,781,326		156,964,212

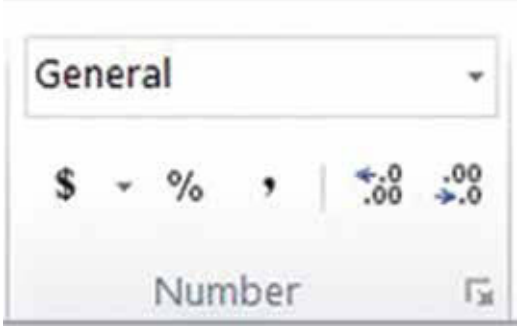
Step 4

Now you need to calculate percentages. Allow Excel to do this for you. You are going to fill columns C and E with the results. Calculate the first percentage for males aged 0–4 years by clicking on the cell in column C, row 2. In the space you need to type = and then move the cursor to the cell with the male population of 0–4 year olds (cell B2). You will then see =B2 appear in the calculation cell. After that, insert a division symbol (/) and click on the cell that shows the total number of males (C23) and press Enter. A figure will appear as a decimal number, but you need to make this into a percentage. Your version of Excel may do this for you, but if not, you need to complete this task by finding the % symbol in the toolbar and clicking on it; you will see a percentage number appear in your place in column C. This will usually appear as a whole number. To select the number of decimal places for your calculation, click on the symbol .0/.00 in the toolbar (see **FIGURE 6**). One button shifts the decimal place to the right, the other to the left.

FIGURE 5 Calculating percentage using Excel

	A	B	C	D	E
1	Age group	Number of males	Males	Number of females	Females
2	0-4	10,319,427	-6.8%	9,881,935	6.3%
3	5-9	10,389,638		9,959,019	
4	10-14	10,579,862		10,097,332	
5	15-19	11,303,666		10,736,677	
6	20-24	11,014,176		10,571,823	

FIGURE 6 Symbols in the toolbar



At this point you will need to convert your percentage for males to a negative number. This is because we want to line up males and females opposite each other on a population pyramid — males on the left, females on the right — and a negative number tricks Excel into doing this. Simply type a minus sign in your formula (in the formula bar above your column headings), which now becomes =B2/B23. Do this only for the males. (If you find that putting a minus sign in the formula doesn't work, click on cell C2, for example, and type 6.8. Repeat this for all other cells.)

To complete the column, you can now save time by copying your newly created formula. First you need to change some parts of your formula from a relative address to a fixed address. A relative address is B23, which your spreadsheet interprets to mean 'one column back and 23 rows down'. A fixed address adds a dollar sign in front of the row and/or column: $B$23. The spreadsheet interprets this as 'the specific cell B23 only'. This addressing becomes important when you are copying formulas and want to keep reference to a particular cell, such as the total population of males in this case.

Change your formula for the C2 cell now so that the address SUM reads as =B2/$B$23.

FIGURE 7 The spreadsheet showing the application of a 'fixed' address. The headings of columns C and E have now been changed so that this wording appears in the legend of the graph.

C2 =-B2/$B$23

	A	B	C	D	E
1	Age group	Number of males	Males	Number of females	Females
2	0-4	10,319,427	-6.8%	9,881,935	
3	5-9	10,389,638		9,959,019	
4	10-14	10,579,862		10,097,332	
5	15-19	11,303,666		10,736,677	
6	20-24	11,014,176		10,571,823	

Now select all the cells in Row C for each age crowd (excluding the 'Total' row). Click on the Fill button in the Editing group on the toolbar and select Down.

All the percentages figures will now appear.

(If this process does not work for you, add the minus signs manually.)

Repeat the whole process for females, remembering that this time you no longer need the minus sign.

Now you are ready to let the computer create the population profile.

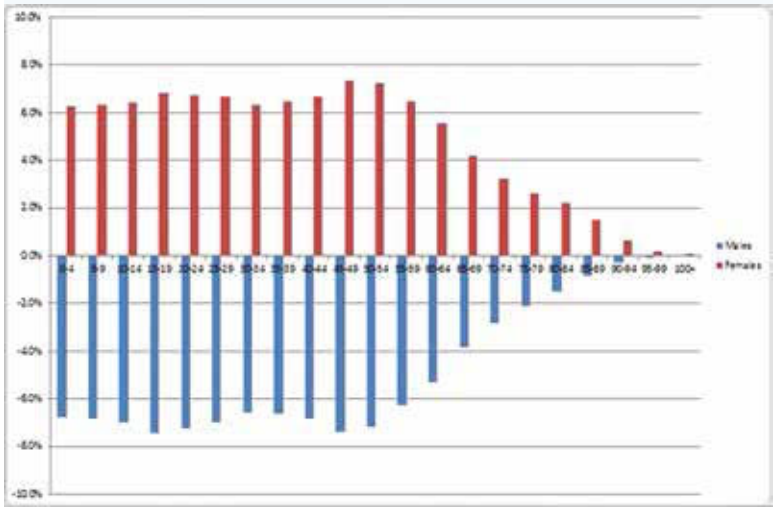
Step 5

Making the bar chart for the country requires you to select the appropriate information. You require:

- the data in the column with age groupings (these will be your labels on the vertical axis)
- the percentage column for males
- the percentage column for females (do not include the totals).

Select the data in column A and hold down the Control key; select the data in column C (including its heading, 'Males') and, keeping the control key down, select the data in column E (including its heading, 'Females'). Now let go of the Control key and press F11. The graph should come out a bit like **FIGURE 8**.

FIGURE 8 The bar graph that Excel generates

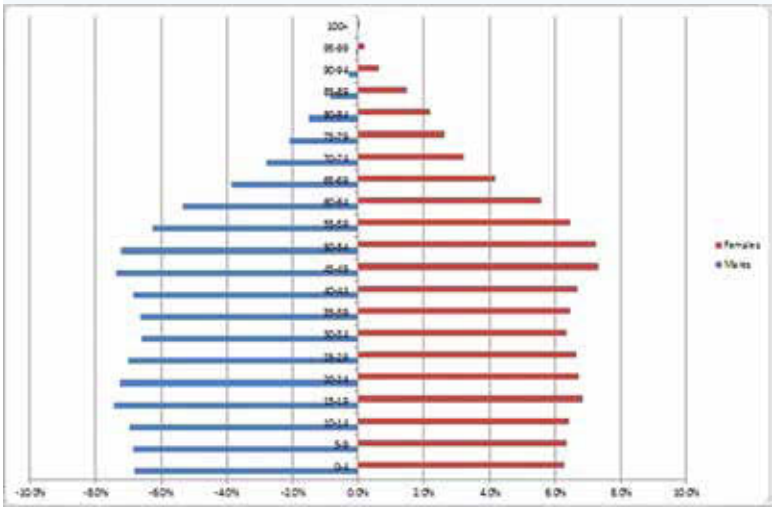


The next step is to change it. All versions of Excel are slightly different as to how this part is achieved and you may need to work your way through this by trial and error.

Step 6

You now need to change this graph to suit geographic conventions. In the toolbar, go to Design and then Change Chart Type, on the far left of the toolbar. There you will find a horizontal bar graph. Click on this, and now your two bars should be horizontal. You should get something like **FIGURE 9**. It is close to a population pyramid, but the male and female bars are not lined up and our axis labels have yet to be sorted out.

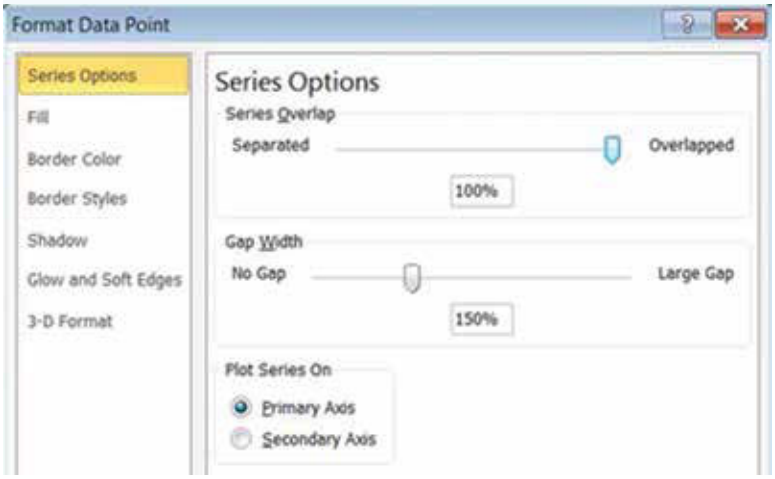
FIGURE 9 The graph now

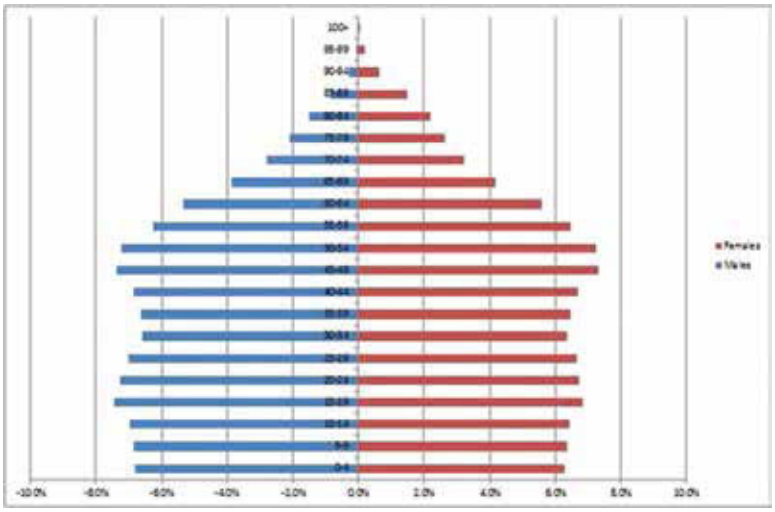


Step 7

It is now time to line up the bars. Click on any bar and highlight just one bar, then right-click your mouse and select Format Data Point… from the pop-up menu. You should get a menu like the one shown in **FIGURE 10**. Select the slider under Series Overlap and move it right until the window reads 100% and click Close. Your male and female bars should now be aligned.

FIGURE 10 Aligning the profile bars





Step 8

You are nearly finished. All you need to do is remove the negative signs in the formatting of the male column (which was just a tool) and make a chart title.

First, click on the horizontal (%) axis at the bottom of the graph so that the axis is highlighted. Then right-click and a pop-up menu like the one shown in **FIGURE 11** will appear. Click on Format Axis and then select Number. You will see a little Format Code window displaying 0.0%. Change this to #0.0%;#0.0% as shown in **FIGURE 12**, then click Add and then Close. This ensures that the Excel graph ignores any sign in front of the % figure.

FIGURE 11 The Format Axis menu

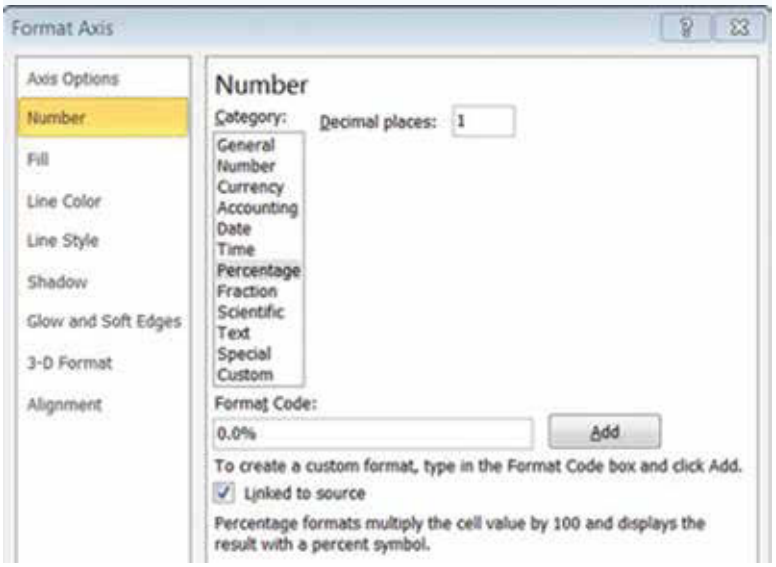
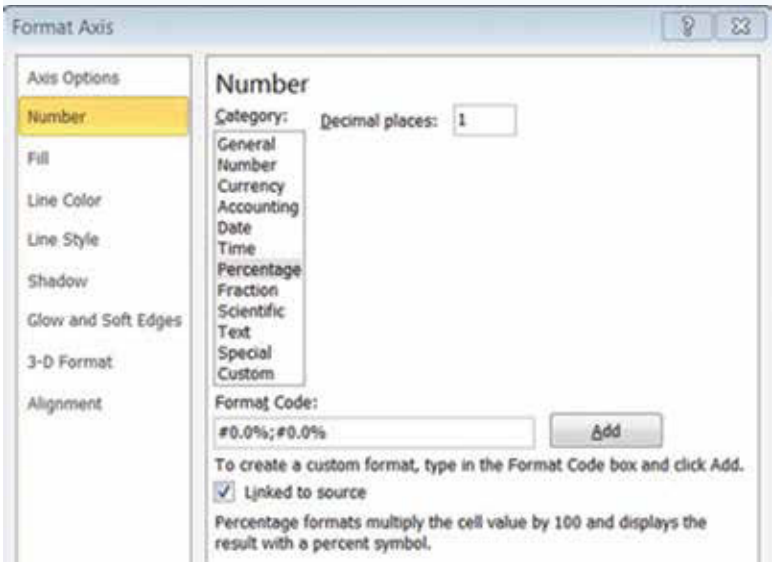
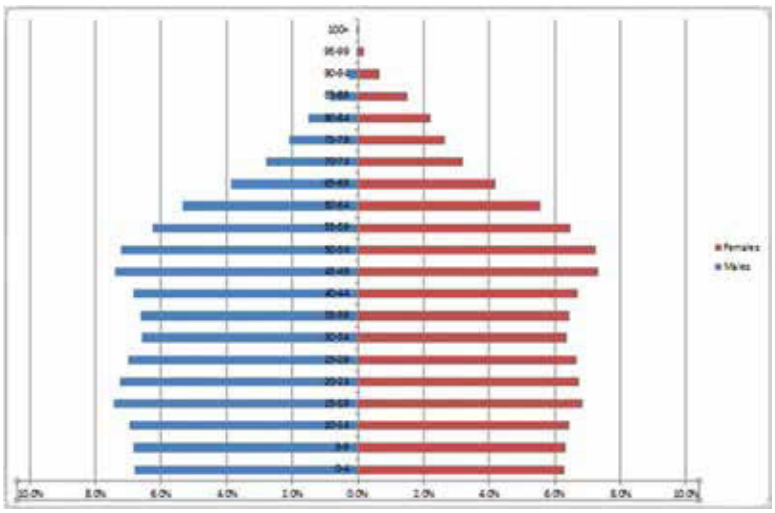


FIGURE 12 Removing the negative signs

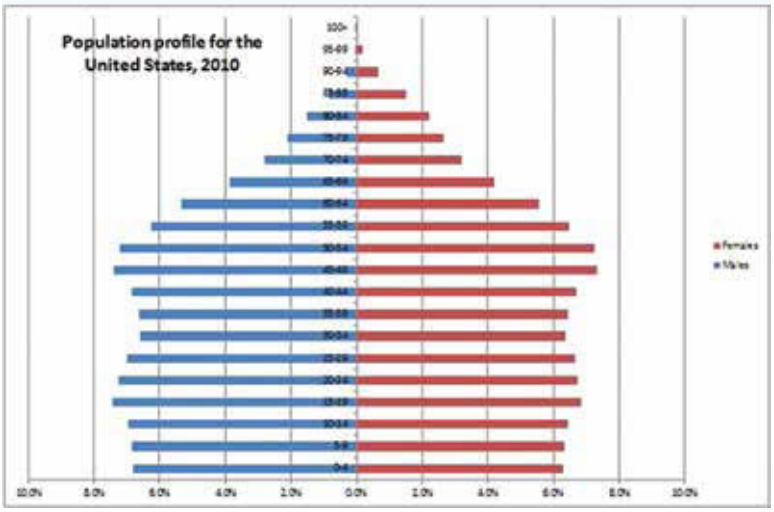




Step 9

Close this window and go back to the Excel main menu bar, click on the Layout tab and click on Chart Title to add your title (**FIGURE 13**).

FIGURE 13 Adding the chart title



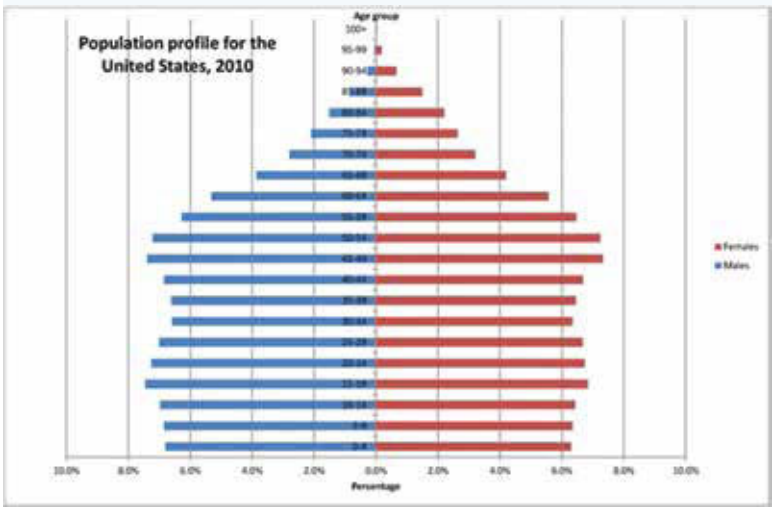
Step 10

Label the horizontal axis 'Percentage' and the vertical axis 'Age group'. Go to Chart Tools, select Layout tab and click on the Axis Titles button. Select Primary Horizontal Axis Title and Title Below Axis. Type the word 'Percentage' into the box that appears below the horizontal axis. Click on the Axis Titles button and then select Primary Vertical Axis Title and Horizontal Title. Type the words 'Age group' into the box that appears beside the vertical axis. Manually move the vertical axis title to sit above the population profile. You may also need to manually adjust the position of the chart title.

Before you save your graph, check that you have:

- included a clear title — the place name and date of the data
- made the *x*-axis the percentage of the population
- made the *y*-axis the age groups
- put the male category on the left and the female category on the right.

FIGURE 14 Population profile for the United States, 2010



Resources

Video eLesson Using Excel to construct population profiles (eles-1758)

Interactivity Using Excel to construct population profiles (int-3376)

10.18.3 Let me do it

Complete the following activities to practise this skill.

10.18 ACTIVITY

1. Using the Singapore Census data in **TABLE 2**, complete a population profile using Excel. Use the checklist to ensure you cover all aspects of the task.

TABLE 2 Singapore residents by age group and sex, end June 2012

	Total	0–4 years	5–9 years	10–14 years	15–19 years	20–24 years	25–29 years	30–34 years	35–39 years
Total	3818.2	186.7	206.3	233.3	258.9	264.5	254.6	295.4	314.0
Males	1880.0	94.9	105.0	119.7	132.1	132.7	123.1	140.7	152.3
Females	1938.2	91.7	101.3	113.6	126.8	131.8	131.5	154.7	161.7

	40–44 years	45–49 years	50–54 years	55–59 years	60–64 years	65–69 years	70–74 years	75–79 years	80–84 years	85 + years
Total	308.8	320.9	310.4	271.8	214.0	128.9	104.4	67.7	44.1	33.6
Males	151.2	161.1	156.6	136.4	105.8	62.4	47.9	29.7	17.5	11.1
Females	157.6	159.8	153.8	135.4	108.2	66.5	56.5	38.0	26.6	22.5

2. Apply your skills to answer the following questions.
   a. Is your population profile that of a young population or an aged population?
   b. Which age group has the largest number of people?
   c. What percentage of the population is made up of children aged under 15?
   d. What percentage of the population is made up of people aged over 65 years?
   e. List two factors that the planners in this country need to take into consideration for the future wellbeing of the people.

Checklist

I have:

- carefully entered data
- met geographic standards — for example, the bars are aligned
- labelled the axes
- included a clear title.

10.19 SkillBuilder—How to develop a structured and ethical approach to research

LEARNING INTENTION

This SkillBuilder shows you how to how to develop a structured and ethical approach to research. Developing a structured and ethical approach to research is part of the Communicating and reflecting HASS skill.

10.19.1 Tell me

What is a structured and ethical approach to research?

A structured and ethical approach to research involves organising your work clearly and meeting research standards without pressuring anyone into providing material and without destroying environments while gathering the data. Your work must also be your own, and anything that is someone else's work must be referenced in the text and included in the reference list.



Why is a structured and ethical approach to research useful?

A structured and ethical approach to research ensures that the material:

- is gathered appropriately
- causes no harm
- avoids plagiarism, which means using someone else's words or ideas without acknowledgement
- avoids dispute over the ownership of material.

A structured approach involves understanding an issue, gathering the facts, and developing and presenting the research, including any recommendations.

An ethical approach avoids plagiarism, or using someone else's words or ideas. You must be able to say that a piece of work is all your own, unless you acknowledge input from others by referencing and footnoting. An ethical approach means that you have not coerced anyone or used deception to get them involved in your research; that you respect the privacy of those providing information; and that you will ensure no-one comes to harm through your research. In fieldwork activities, you must seek permission to enter private property, minimise damage to the environment and be safe in gathering your data. If your research is sensitive to an individual's or organisation's wellbeing, you must ensure the security of any data gathered or provided.

A structured and ethical approach to research is important for:

- developing skills that will serve you well into the future in whatever occupation you take up
- ensuring a report is honest
- providing reports for an audience such as a consultancy group, legal company or planning authority
- undertaking authentic university research in future.

A good structured and ethical approach to research:

- uses primary data as its basis
- acknowledges secondary data appropriately
- contains text that is all your own work — it does not plagiarise
- clearly identifies the data to be collected
- includes facts that support the idea
- develops a reasoned response.

10.19.2 Show me

How to conduct structured and ethical research

Model

FIGURE 1 A sample of a contribution form

Name:

School:

The research that I have undertaken has contributed to my understanding of the topic. At all times I have acted in such a way as to not harm the feelings of people or destroy the environment. This research is presented in my own words and is my understanding of the topic.

I, _____[name], certify the accuracy of this statement of contribution.

Signature:Date:

TABLE 1 A table of Australia's population, September 2012, with a source line at its foot

Preliminary data	Population at end Sept. quarter 2012 ('000)	Change over previous year ('000)	Change over previous year (%)
New South Wales	7314.1	86.0	1.2
Victoria	5649.1	94.8	1.7
Queensland	4584.6	91.4	2.0
South Australia	1658.1	16.4	1.0
Western Australia	2451.4	81.7	3.4
Tasmania	512.2	0.5	0.1
Northern Territory	236.3	4.2	1.8
Australian Capital Territory	376.5	7.4	2.0
Australia	22 785.5	382.5	1.7

Source: Australian Bureau of Statistics, www.abs.gov.au/ausstats/abs @.nsf/mf/3101.0

You will need:

- to gather data
- to present the data.

Procedure

Step 1

Determine the features that you are going to explore in the community (your primary data) or to research (your secondary data). Set up an inquiry question to explore, such as 'Does our neighbourhood need a skateboard park?' or 'Does public transport service our community well?'

Primary data will need to be collected by you. Use of secondary data is when you refer to someone else's work, such as a newspaper report, historical account or planning document. You must make sure you acknowledge the source of your information.

Step 2

You will need to undertake fieldwork to gather primary data on the factors. This is likely to mean that you will have to survey the community. A range of survey techniques is available:

- observation
- questionnaires
- interviews
- judgement surveys — agree, disagree, strongly disagree
- perspective surveys — 3 to minus 3
- attitudinal surveys — strongly agree, agree, neutral, disagree, strongly disagree.

Photographs and sketches may be needed to support ideas. At all times, the work must be completed with an ethical approach. You must maintain privacy of the sources, and cannot coerce anyone to provide responses or cause any harm in acquiring the information.

Step 3

Data gathered in the field will need to be analysed and presented as text, tables, graphs and annotated photographs or sketches.

Step 4

Any secondary data will need to be summarised or attributed appropriately to avoid plagiarism.

Step 5

A report needs to be presented with the following structure and parts.

- The statement of the report's aim or purpose should identify an issue or problem and develop a geographical question that will investigate the issue and find an answer to the problem. At this stage, you are observing, questioning and planning (step 1).
- The collection, recording, evaluation and representation of primary and secondary data should be checked for reliability and bias (step 2).
- The analysis should make sense of the information gathered. It identifies order, diversity, trends, patterns, anomalies, generalisations and cause-and-effect relationships. Both quantitative and qualitative data should be provided. The results should be interpreted to provide conclusions (steps 3 and 4).
- The information should be communicated by a variety of methods, such as written, oral, audio, visual and mapping, as appropriate to the topic, purpose and audience.
- The reflection on and response to the research is important. Reflect on what you have learned, the processes you have undertaken (and their effectiveness) and any actions that have been or should be undertaken (step 6).
- The reference list is crucial (step 7).

Step 6

Conclusions need to be drawn. Conclusions should come from the data presented without allowing any bias you might have on a topic to be apparent.

Step 7

If secondary sources are used, a list of references should be provided. Your teacher will guide you on the most appropriate style to adopt.

Step 8

Write a brief statement, or complete a form provided by your school, to verify that your report is all your own work.

Resources

Video eLesson	How to develop a structured and ethical approach to research (eles-1759)
Interactivity	How to develop a structured and ethical approach to research (int-3377)

10.19.3 Let me do it

Complete the following activities to practise this skill.

10.19 ACTIVITIES

1. Undertake an investigation into the wellbeing of your local community, and write a report on it. This may be undertaken as fieldwork using primary data, or by using secondary data from the Australian Bureau of Statistics to show differences between two ***places*** — both urban, both rural, or one urban and one rural. Use the checklist to ensure you have covered all aspects of the task.
2. Apply your skills to answer the following questions.
   a. By your assessment, which ***place*** has the higher level of wellbeing?
   b. List three factors that you have used to come to this conclusion.
   c. Which factor would you hope to see improvement in? Why did you choose this factor?
   d. What ***changes*** in this factor would result in improvements to the community's wellbeing?
   e. Has your data been gathered with an ethical approach? Explain.

Checklist

I have:

- clearly identified the data to be collected
- found facts that support the idea
- developed a reasoned response
- used primary data as the basis of my report
- acknowledged secondary data appropriately
- written text that is all my own work and does not plagiarise.

10.20 SkillBuilder—Understanding policies and strategies

LEARNING INTENTION

This SkillBuilder shows you how to how to understand policies and strategies. Understanding policies and strategies is part of the Evaluating HASS skill.

10.20.1 Tell me

What are policies and strategies?

Policies are the guiding rules or broad aims of an organisation. They present the 'big picture' of what the organisation wants to achieve. Generally, policies are in place for long periods of time. For example, a school may have a policy that its students should be protected, as far as possible, from the effects of ultraviolet radiation during school hours, and this policy may have been in place for 20 years.

Strategies, on the other hand, are a range of steps and activities that ensure the policy is met. The strategies may be short term or long term; they may be modified or added to. In the above example, a short-term strategy might be that students should be involved in designing a new casual hat to be worn within the school grounds. Long-term strategies might include the involvement of teachers in checking that students are wearing hats during lunch hours and a three-year construction program to create shaded areas within the school grounds.



Why are policies and strategies useful?

Policies are principles and guidelines that allow organisations to shape their behaviour and decisions, and to clarify future directions. Strategies ensure that the key components of a plan are implemented. Policies and strategies are particularly useful in large organisations, where information needs to be spread to all employees.

Policies and strategies are useful for:

- arranging the order of a range of initiatives to be developed
- keeping organisations on target
- bringing structure to an organisation's activities
- guiding future directions.

A good understanding of policies and strategies:

- clearly identifies the difference between a policy and a strategy.

10.20.2 Show me

How to develop an understanding of policies and strategies

Model

FIGURE 1 Metcalfe Boys' High School student numbers policy

Policy
The Metcalfe Boys' High School must maximise student numbers in order to remain viable and to offer a broad range of subjects.

Strategies
Long term

- The Metcalfe Boys' High School is to become a coeducational school. It will do this over a six-year period, beginning with Year 7.
- It must achieve a gender balance in the classes within six years.
- Awards for girls should be developed.
- Associations for past students should be created.

Short term

- Design and create a uniform for the girls.
- Create facilities such as toilets and gymnasium change rooms.
- Consider school camp facilities.
- Consider the need to join other sporting organisations such as softball and girls' competitions.

You will need:

- to show knowledge of a particular field of study.

Procedure

Step 1

Seek out the general statement of an organisation's aims. These should be big picture guiding rules, aims or principles. Understand that a policy is not achieved without a set of strategies to make it become reality. In **FIGURE 1** the policy is stated as 'The Metcalfe Boys' High School must maximise student numbers in order to remain viable and to offer a broad range of subjects'.

Step 2

Look for a series of strategies or specific actions that can be taken to achieve a policy. Each strategy is likely to have a set of programs within it that help make the strategy successful. Discover these programs and assess whether they are making a difference; that is, are the programs supporting the change required by the policy? The policy shows the strategies to be:

- become a coeducational school over a six-year period, beginning with Year 7
- achieve a gender balance in the classes within six years
- develop awards for girls
- create associations for past students
- design and create a uniform for the girls
- create facilities such as toilets and gymnasium change rooms
- consider school camp facilities
- consider the need to join other sporting organisations such as softball and girls' competitions.

Resources

Video eLesson	Understanding policies and strategies (eles-1760)
Interactivity	Understanding policies and strategies (int-3378)
Weblink	Indigenous education

10.20.3 Let me do it

Complete the following activities to practise this skill.

10.20 ACTIVITIES

1. Use the **Indigenous education** weblink in the Resources tab to research the government's policy in this area. Write down the government's main policy on Indigenous schooling. This will be expressed as its broadest aim. Also list a number of short-term and long-term strategies that the government has put in place. Use the checklist to ensure you cover all aspects of the task.
2. Apply your skills to answer the following questions.
   a. The policy on education for Indigenous children is part of a broader policy. What is that broader policy called?
   b. Research to discover when this policy came into being.
   c. List three strategies to support the education policy.
   d. Which strategy do you find the most interesting? Why?
   e. Suggest reasons why education is an important policy area for people's wellbeing.

Checklist

I have:

- clearly identified the difference between a policy and a strategy.

10.21 SkillBuilder—Debating like a geographer

LEARNING INTENTION

This SkillBuilder shows you how to how to debate like a geographer. Debating like a geographer is part of the Evaluating HASS skill.

10.21.1 Tell me

What does debating like a geographer mean?

Debating like a geographer involves being able to give the points for and against any issue that has a geographical basis, and supporting the ideas with arguments and evidence of a geographical nature. Geographic evidence uses skills that you have developed over years of studying Geography. You should use maps; discuss scale, direction and distance where appropriate; look for distribution patterns, anomalies, trends, relationships and interconnections; and support your viewpoints with quantitative and qualitative data.

How is it useful to be able to debate like a geographer?

Debating like a geographer is useful for showing the different points of view on a wide range of global, national and local issues that affect our lives. We are entitled to opinions on environmental, social and planning issues, provided we support our arguments with geographic evidence. Show your geographic understanding by using the concepts of place, space, environment, interconnection, sustainability, scale and change. At Year 10, there is a focus on world views, so support your ideas with global examples. Change and management strategies are also an important part of the course, and these can be brought into the debate. The promotion of a sustainable future allows you to round off your line of argument.

Debates are also useful for:

- resolving planning decisions
- determining laws to protect the environment
- attracting attention to issues such as logging of forests
- making political decisions.

A good geographic debate involves:

- presenting both sides of the argument
- providing evidence in the form of maps, statistics, graphs and data
- arguing points well
- presenting challenging arguments.

10.21.2 Show me

How to debate like a geographer

You will need:

- a topic of a geographic nature
- two teams of three debaters
- a chairperson
- a timekeeper
- a panel of judges
- an audience.

Procedure

To complete a geographic debate, you need a topic (contention), time to research and prepare arguments, a formal debate format and an outcome that is adjudicated by judges.

Step 1

Determine the contention to be debated, for example, 'Japan should be allowed to conduct whaling expeditions in the Southern Ocean'.

Step 2

Create two teams of three debaters. One team must argue in favour of the contention (the affirmative) and one team must argue against the contention (the negative). Select class members for each team.

Step 3

Appoint the other members of the debating squad: the chairperson, judges and timekeeper. The chairperson introduces the speakers and keeps order during the debate. The judges (usually three of them) use a set of criteria to score the points made by each of the speakers. The timekeeper ensures that each speaker has equal time to convey their points.

Step 4

Each debating team needs to be given time to research and prepare arguments — they might need as much as a week. The **FIGURE 1** model shows some ideas that could be explored. To support these ideas, geographical information is required: maps, statistics, graphs and data.

Step 5

Prepare the classroom for a formal debate. The chairperson and timekeeper sit facing the audience. The affirmative team is to their right, with the first speaker closest to the chair. The negative team is to the left of the chairperson and timekeeper, with the first speaker closest to the chair. The judges sit almost in the audience, facing the debaters. The adjudicated outcome is given when the judges have considered three key aspects of the debate: geographical matter, method and manner.

Model

FIGURE 1 Palm cards for a debate on whaling in the Southern Ocean

Affirmative speaker 1
(Introduces key ideas)
- Where is the Southern Ocean?
- Who is whaling?
- Which countries are involved in the issue?
- How far is it from Japan?
- Whale species
- Uses of whale meat
- The role of tradition
- Scientific research

Negative speaker 1
(Negates affirmative speaker 1 and introduces key ideas)
- Southern Ocean is a whale sanctuary
- Why don't the trawlers work closer to home?
- What is so important about the whale hunting that the benefits outweigh the costs?
- Global food chains affected
- Animal cruelty

Affirmative speaker 2
(Negates negative speaker 1 and expands on key ideas—provides the facts, statistics, emotional argument)
- Whale numbers
- Scientific research: what is research achieving?
- Importance of tradition

Negative speaker 2
(Negates affirmative speaker 2 and expands on key ideas—provides the facts, statistics, emotional argument)
- Global food chains: facts
- How are whales caught? Is it humane?
- The work of Greenpeace, its actions, the conflict
- International Whaling Commission, its work, the global ban

Affirmative speaker 3
(Negates negative speaker 2 and sums up key ideas)
- Emphasises that resource is well managed: whaling is not the only threat to species

Negative speaker 3
(Negates affirmative speaker 3 and expands on key ideas)
- Emphasises the resource is being degraded and conflict is rife

Resources

Video eLesson	Debating like a geographer (eles-1762)
Interactivity	Debating like a geographer (int-3380)

10.21.3 Let me do it

Complete the following activities to practise this skill.

10.21 ACTIVITIES

1. Consider the debate topic 'Australia should increase its intake of asylum seekers'.
   a. With a partner, undertake further research on the arguments for and against this contention.
   b. Using the framework provided in **FIGURE 1** in the Show me section, prepare a set of palm cards for that might be used in this debate by:
      i. the affirmative team
      ii. the negative team.
2. Organise a class debate on the topic. If you are not one of the active participants in the debate, ensure that you listen carefully to points raised by both sides so that you are able to complete activity 3.
3. Based on what you have learned in this SkillBuilder, apply your skills to answer the following questions. Use the checklist to ensure you cover all aspects of the task.
   a. What was the key argument for an increase in Australia's intake of asylum seekers?
   b. What was the key argument against an increase in Australia's intake of asylum seekers?
   c. Which team provided the most convincing arguments? Why?
   d. Which argument(s) did you not believe?
   e. What is your personal response to the issue after listening to both sides of the debate? Has your viewpoint been altered? Write a paragraph outlining your view.

Checklist

In debating like a geographer, I have:

- either developed arguments or listened intently to the arguments
- considered my opinion on the issue and am now better informed
- been able to write a paragraph summarising my views, based on the arguments presented.

11 Introducing environmental change and management

11.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

The Earth is our home and provides us with everything we need to live. What are we doing to it in return?

11.1.1 Introduction

Across the world, humans have caused many environmental changes: pollution, land degradation and damage to aquatic environments. People have different points of view, or world views, on many of these changes. Climate change is a major environmental change as it affects all aspects of the biophysical environment such as plants and animals, our land, inland water resources, and coastal, marine and urban environments. It is vital that we respond intelligently to, and effectively manage, all future environmental changes to minimise negative social and economic impacts.

Human-induced climate change has led to increased severe weather events such as drought. Rivers can dry up, with consequent loss of plant and animal life.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6151)

Video eLesson What are we doing? (eles-1707)

FIGURE 1 Climate change could have significant effects on the natural environment, and on human access to the resources we need in order to survive.



11.2 Interacting with the environment

LEARNING INTENTION

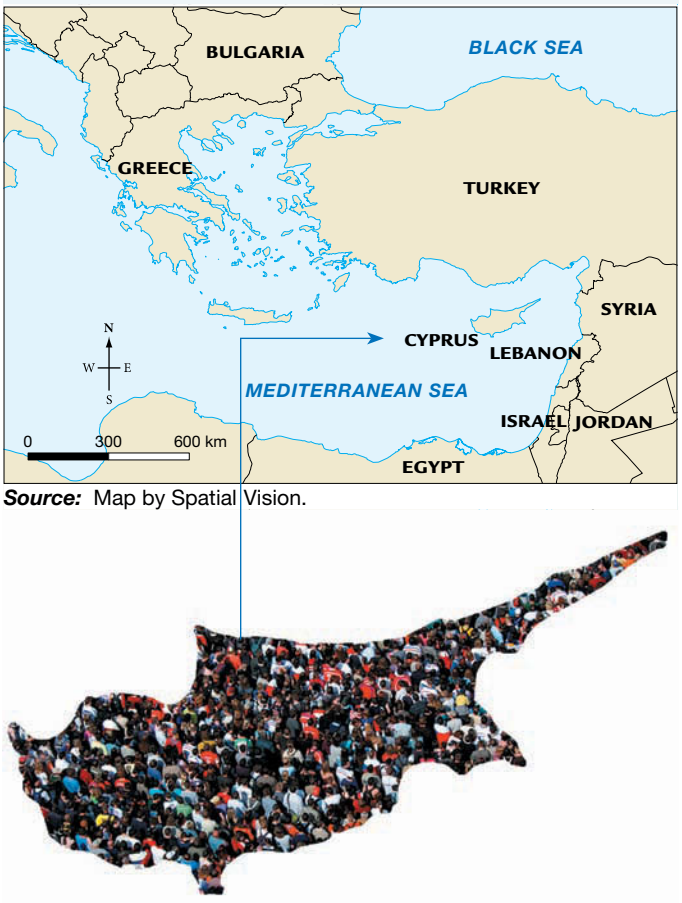
By the end of this subtopic you will be able to explain the interconnection of people and the environment, and describe the concepts of ecological services, biocapacity and ecological footprint.

11.2.1 How much space do we need?

If you gathered all 7.8 billion humans from around the world and gave each person a space of one square metre, the island of Cyprus, which is approximately 8000 square kilometres, would provide standing room for everyone (see **FIGURE 1**). Clearly this would be impractical, and providing services to ensure human wellbeing in an area with a density of almost 1 000 000 per square kilometre would be impossible.

While it is unrealistic to suggest that 0.005 per cent of the total space on Earth is sufficient for humanity, it suggests we need to think about how little personal space we occupy as individuals and, more importantly, how our needs for the Earth's resources can only be satisfied by major modifications to biomes.

FIGURE 1 Humanity crowded onto the island of Cyprus



Source: Map by Spatial Vision.

11.2.2 Human interaction with the environment

Over 200 years ago, an English scholar named Thomas Malthus proposed that England's population growth would eventually outstrip agricultural production. Malthus's Earth-centred **environmental world view** foretold of problems with supplies of food and warned that there would be more deaths because of famine and wars over resources. In 1798 he wrote, 'The power of population is so superior to the power in the earth to produce subsistence for man …' At the time Malthus wrote his thesis, England was moving into a period known as the **Industrial Revolution**; a time when the human-centred environmental world view of the government and leaders of industry was that the Earth's resources were limitless and the development of the economy should take priority over the preservation of the natural world.

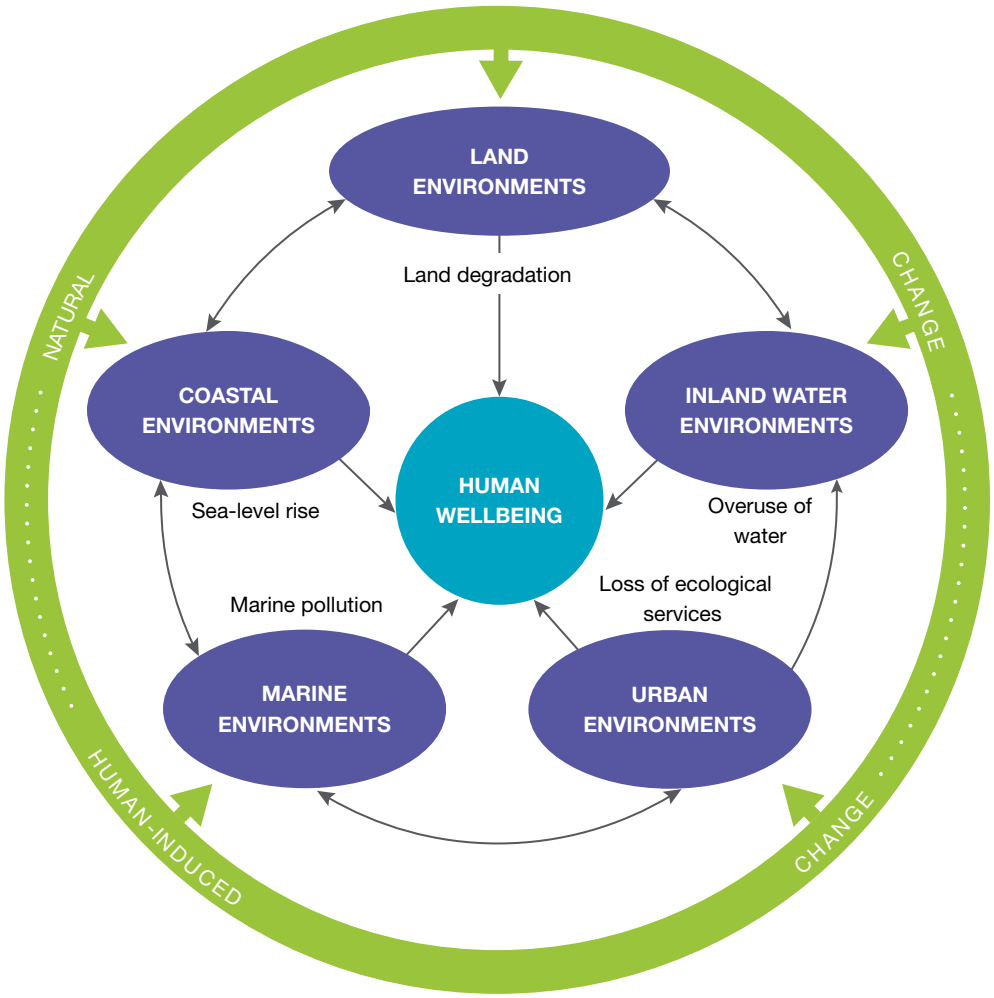
Today, many environments have become overloaded with the growing demands for food, land and other resources. This pressure on biomes and ecosystems has led to land degradation, with a consequent loss of habitats and biodiversity. Further consequences of this change are a reduction in human wellbeing and a struggle for social justice as land becomes unproductive because of overuse. Nevertheless, we should remember that change can happen naturally as well as being induced by humans.

environmental world view varying viewpoints, such as Earth-centred as opposed to human-centred, in managing ecological services

Industrial Revolution the period from the mid 1700s into the 1800s that saw major technological changes in agriculture, manufacturing, mining and transportation, with far-reaching social and economic impacts

Some topics that can help us explore change and the need for careful management include marine environments and coasts, the land, inland waters, and urban or built environments (see **FIGURE 2**).

FIGURE 2 Interaction of environmental change with human wellbeing



11.2.3 What are ecological services?

A new view of the relationship between the environment and people is one of an **ecological service** or 'what nature provides for humanity'.

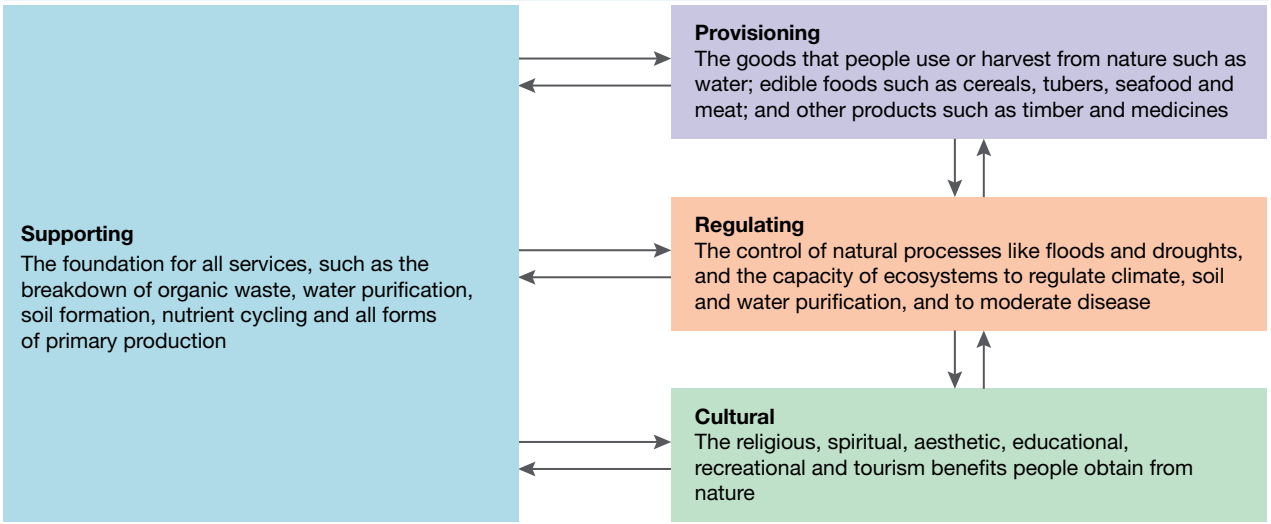
Ecological services can be thought of as biological and physical processes that occur in natural or semi-natural ecosystems and maintain the habitability and livelihood of people on the planet. These services are shown in **FIGURE 3**.

Understanding the link (interconnection) between ecological services and human action is important as it can lead to more sustainable practices. The idea of ecological management takes an Earth-centred environmental world view, promoting **stewardship** or custodial management. This view considers caring for the land and the ecological services it provides as paramount. By applying this Earth-centred viewpoint to human uses and management of the environment, future options for human wellbeing will be sustainable. The question is: how do we evaluate human impacts on the environment and what management strategies can be implemented to reverse damage and create a sustainable future? As such, we need to consider the costs and benefits, or more simply,

ecological service the benefits to humanity from the resources and processes that are supplied by natural ecosystems

stewardship the caring and ethical approach to sustainable management of habitats for the benefit of all life on Earth

FIGURE 3 Ecological services



the advantages and disadvantages of changes we make to the environment, as there will be consequences in terms of economic viability and social justice.

The ecological footprint

The **ecological footprint** is one means of measuring human demand for ecological services. The footprint takes into account the regenerative capacities of biomes and ecosystems, which are described as the Earth's **biocapacity**. The footprint is given as a number, in hectares of productive land and sea area, and is calculated by measuring a total of six factors, shown in **FIGURE 4**. The ecological footprint is a useful indicator of environmental sustainability.

FIGURE 5 compares the ecological footprint with biocapacity. The elephants represent each region's footprint (per capita) and the balancing balls represent the size of the region's biocapacity (per capita). The dark green background represents the gross footprint of regions that exceed their biocapacity and the light green background represents those regions that use less than their biocapacity.

In 2019 the total global ecological footprint was estimated at 1.75 planet Earths, which means that humanity used ecological services at 1.75 times the biocapacity of the Earth to renew them. The 1.75 ecological footprint figure represents an average for all regions of the Earth.

The United States, however, has an ecological footprint of 4.97, which is well above this average. The United States ecological footprint per person is 8.1, much higher than the worl average of 2.75 global hectares. This level of resource use is not sustainable into the future and raises questions of economic viability, environmental benefit and social justice. **FIGURE 6** shows a map of the Earth's ecological debt. Note there can be a surprising relationship between ecological footprint and a country's wealth and/or population. For example, the United States and much of Europe and Japan are wealthy countries with large ecological footprints and small biocapacities, and thus have large ecological deficits. China and India are highly populated countries but have small ecological footprints; however, they also have small biocapacities, resulting in large ecological deficits. Australia has a large ecological footprint despite its relatively small population. But like New Zealand, which has a small ecological footprint due to our high biocapacity, we have an ecological reserve. It should be noted, though, that both Australia's and New Zealand's biocapacities are diminishing, which will result in a smaller reserve in the future; thus, we need to continue taking steps to reduce our ecological footprint.

ecological footprint a measure of human demand on the Earth's natural systems in general and ecosystems in particular; the amount of productive land required by each person for food, water, transport, housing, waste management and other purposes

biocapacity the capacity of a biome or ecosystem to generate a renewable and ongoing supply of resources and to process or absorb its wastes

FIGURE 4 Measuring the Earth's ecological footprint

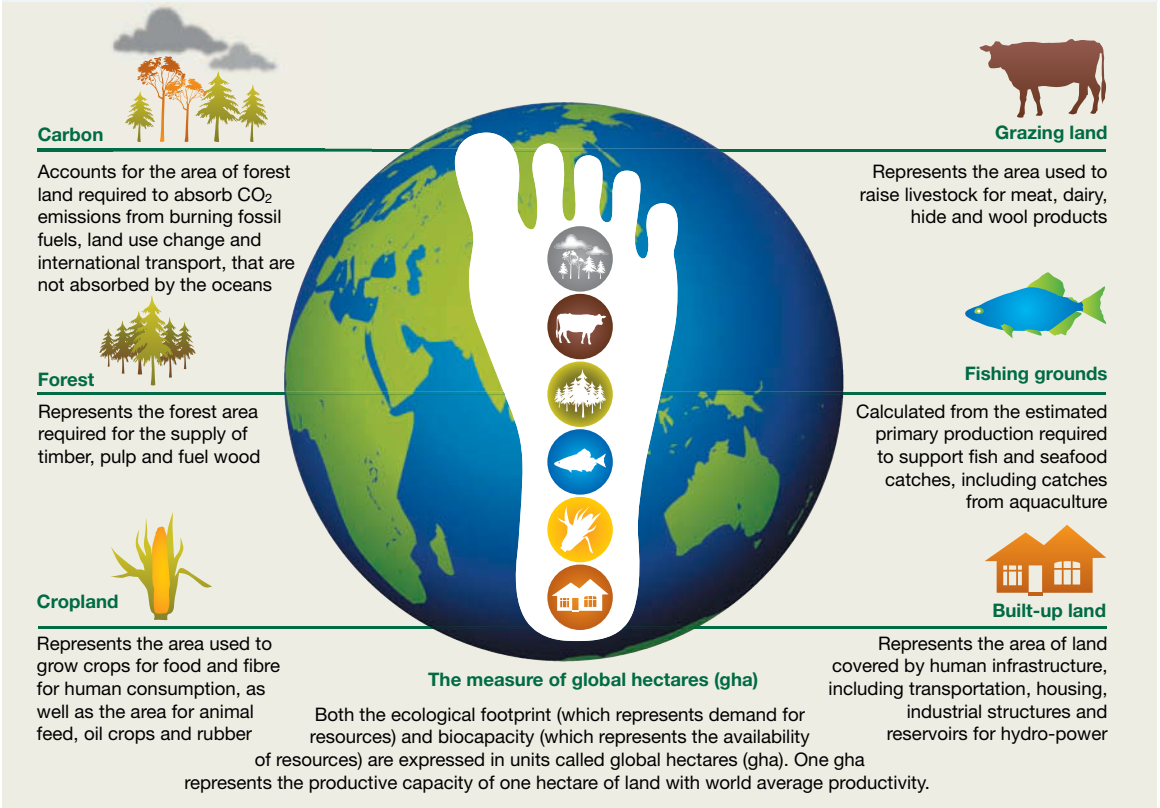
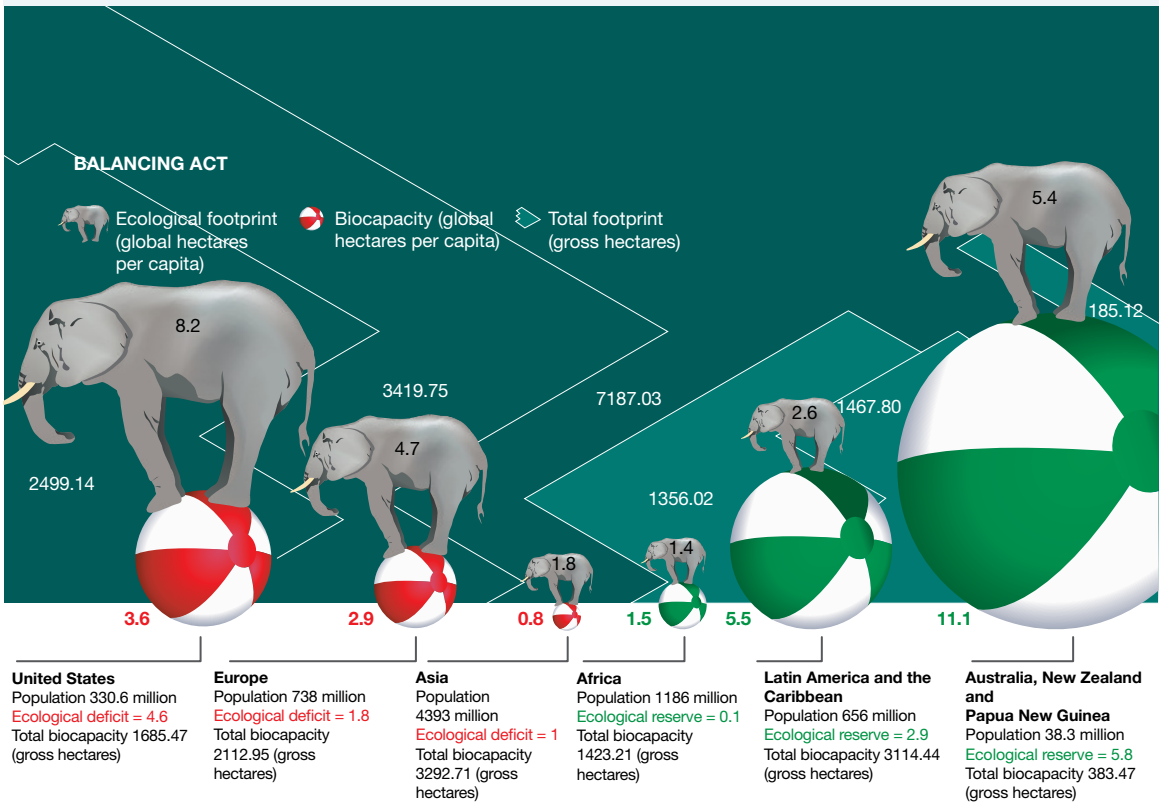


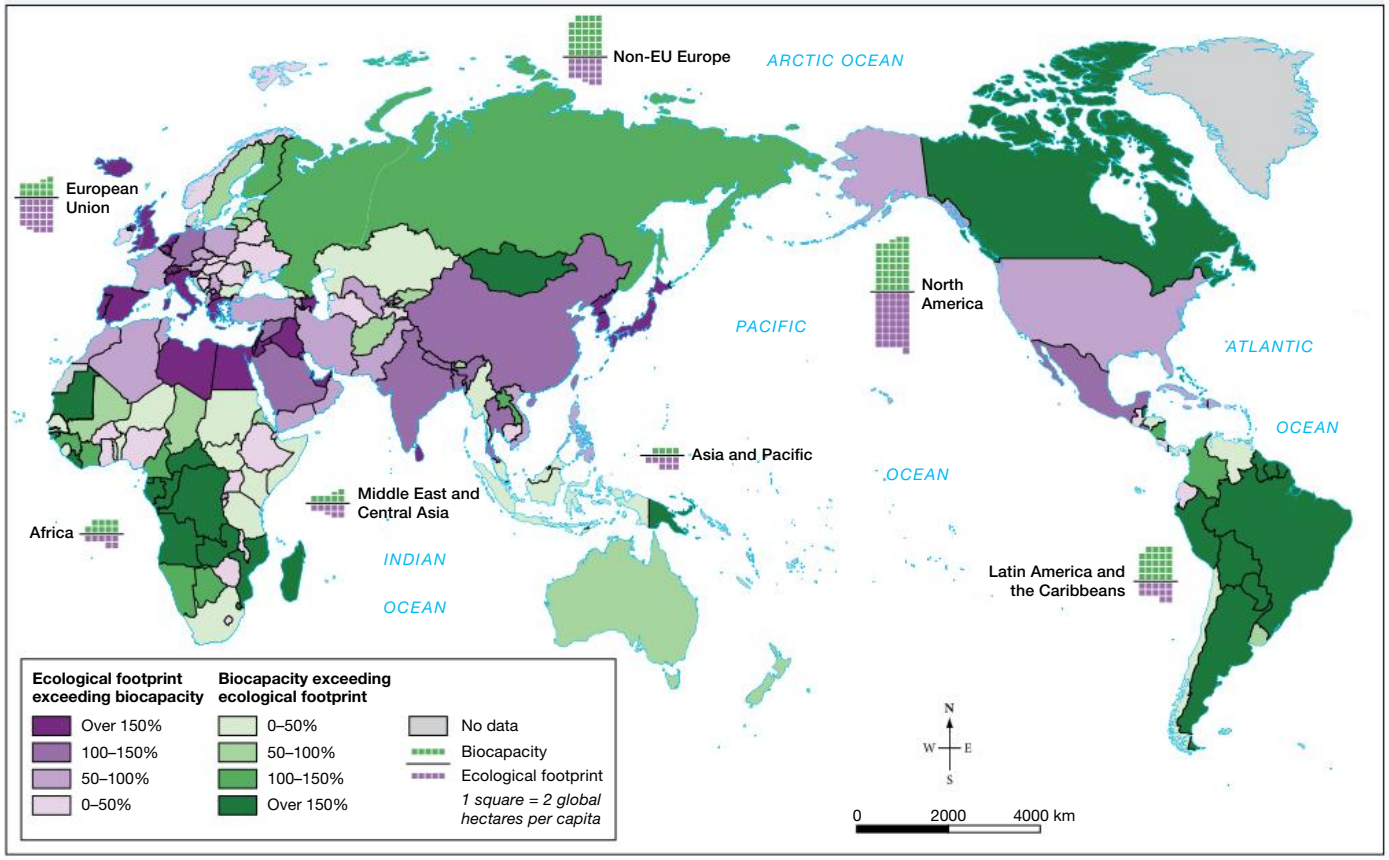
FIGURE 5 Biocapacity and ecological footprint



Source: Data from The Footprint Network, 'Biocapacity and ecological footprint data', https://data.footprintnetwork.org.

int-7950

FIGURE 6 Ecological debt map



Source: Global Footprint Network.

What is a sustainable world?

A range of indices have been developed in recent years to examine the link between ecological services, human wellbeing and sustainability. These include the Human Development Index (HDI), the Sustainable Society Index (SSI) and the Happy Planet Index (HPI), and each gives a slightly different perspective on human activity and/or sustainability.

The SSI gives values to 21 factors across a range of social, political, economic and environmental considerations. It asserts that sustainable human action must:

- meet the needs of the present generation yet not compromise the ability of future generations to meet their own needs
- ensure that people have the opportunity to develop themselves in a free, well-balanced society that is in harmony with nature. It is worthwhile investigating these indices as they offer many sound ideas about human wellbeing and the sustainability of the ecological services of the natural world.

DISCUSS

Consider the criteria for the Sustainable Society Index (SSI). Discuss the extent to which Australia might be considered 'a free, well-balanced society that is in harmony with nature'.

Geography concept: Sustainability
General capability: Personal and social capability

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate Australian Curriculum topics > Year 10: Environmental change and management > **Global biodiversity**
- Investigate Australian Curriculum topics > Year 10: Environmental change and management > **Indigenous Australians — Caring for Country**

on Resources

Interactivity Nature's bounty (int-3287)

11.2 ACTIVITY

Complete the **Treading lightly** worksheet to explore this subtopic's themes further.

HASS skills: Analysing
Geography concept: Sustainability

11.2 EXERCISE

The answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 6	Questions 5, 7, 8	Questions 3, 9, 10

Check your understanding

1. Define 'ecological service'.
2. What is an ecological footprint?
3. Explain the concept of biocapacity.
4. Look at **FIGURE 4**. What does one global hectare (gha) represent?
5. Outline the four ecological services.

Apply your understanding

6. Outline six factors that are considered when measuring ecological footprint.
7. What are the main criteria that the Sustainable Society Index uses to qualify *sustainable* human action?
8. Refer to **FIGURE 4**.
   a. What reasons can you suggest for the United States having such a large ecological deficit?
   b. Is Australia in ecological deficit or reserve? How might this be explained?
9. Study **FIGURE 5**. Name three countries with biocapacity exceeding ecological footprint by over 150 per cent. What features of these countries might account for this position?
10. Refer to **FIGURE 5**. Of the world regions identified on the map, which ones have ecological footprint in excess of biocapacity? Why might this be the case?

For sample responses to every question, go to www.jacplus.com.au.

11.3 Is climate change heating the Earth?

LEARNING INTENTION

By the end of this subtopic you will be able to explain the processes through which the Earth's atmosphere is heated, and describe the role of human activity in the enhanced greenhouse effect.

11.3.1 Climate change and global warming

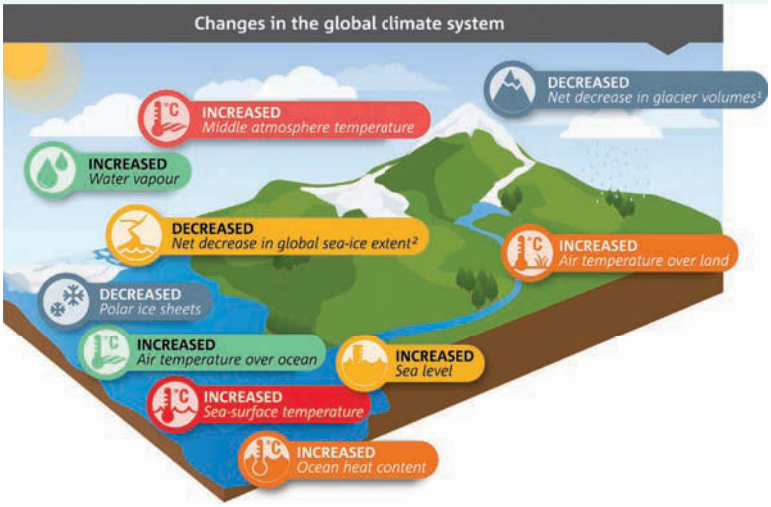
The world's climate has been changing for millions of years but, more recently, the concentration of greenhouse gases in the atmosphere has increased, leading to **global warming**. In particular, it is believed that burning fossil fuels such as coal and oil has led to what is known as the **enhanced greenhouse effect**, which is heating the Earth and its atmosphere. Despite ongoing debate about the nature and extent of climate change, the majority of the scientific community agrees that global warming and climate change exist and will result in ongoing changes to world weather patterns and, in the longer term, climates from the equatorial to polar regions. The wider consequences of global warming will also lead to environmental change across a wide range of biophysical systems (see **FIGURE 1**).

global warming t heo bservable rising trend in the Earth's atmospheric temperatures, generally attributed to the enhanced greenhouse effect

enhanced greenhouse effect increasing concentrations of greenhouse gases in the Earth's atmosphere, contributing to global warming and climate change

Climate, which can be defined as the long-term weather patterns of a particular area, is highly variable over the Earth's surface. As such, climates in the tropics contrast markedly with climates near the poles. Climate also varies over extensive periods of time, and scientists have described these changes —which date back millions of years, long before the emergence of the human species — as warm periods and ice ages. Currently the Earth is in a warm period, having moved out of ice age conditions as recently as 6000 years ago. Today we realise that human activity is

FIGURE 1 Consequences of changes in the global climate



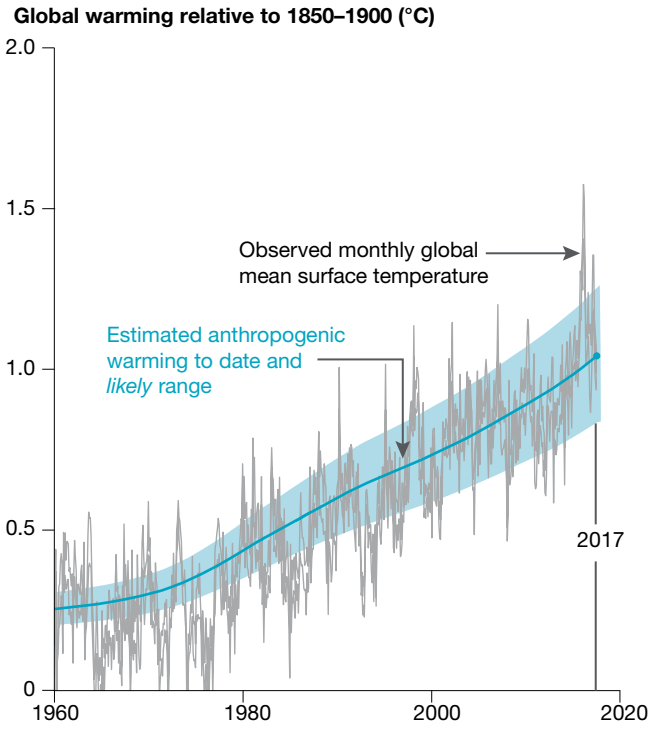
Source: Bureau of Meteorology and CSIRO.

increasing the rate of global warming leading to **climate change**, particularly in the past few hundred years, and this can have serious consequences for the planet (see **FIGURE 2**).

11.3.2 The greenhouse effect

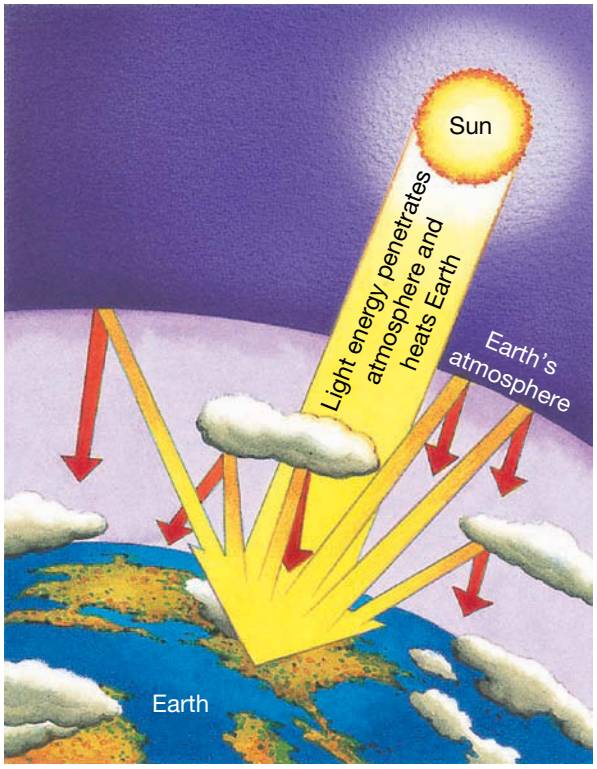
The greenhouse effect is the mechanism where solar energy is trapped by water vapour and gases in the atmosphere, heating the atmosphere and helping to retain this heat, as in a glasshouse (see **FIGURE 3**). The three most important gases responsible for the greenhouse effect are carbon dioxide, nitrous oxide and methane. Without this greenhouse effect, the atmosphere would be much cooler, and ice age conditions would prevail over the planet, making life as we know it impossible.

FIGURE 2 Global temperature change to 2017



Source: IPCC, *Special Report 2018: Global Warming of 1.5 °C. Summary for Policymakers*, figure SPM.1 a), p. 6.

FIGURE 3 How the greenhouse effect works



Human activity and the enhanced greenhouse effect

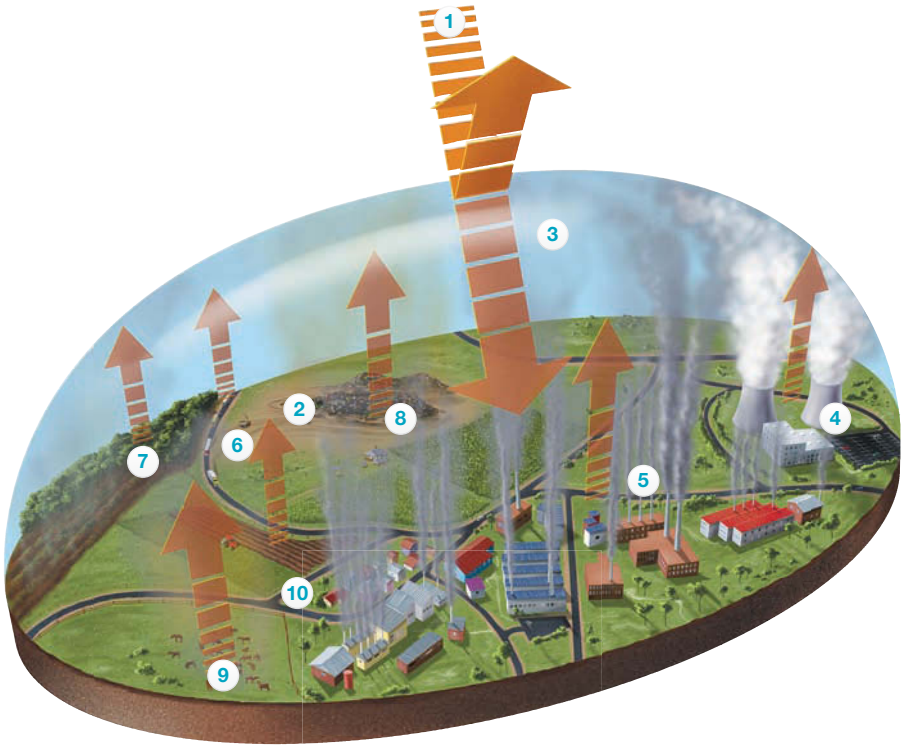
Changes in the balance of the greenhouse gases are a natural event, leading to the different climatic conditions on the planet as experienced over geological time. The issue today is how much impact human activity is having on the natural cycle of events, and how this activity is leading to climate change and global warming.

The term 'enhanced greenhouse effect' has been developed to show that heating of the atmosphere is moving at a rate that is above what could be expected by natural processes of change (see **FIGURE 4**). Recent research by government and non-government organisations has indicated that all parts of the world are vulnerable to the impacts of the enhanced greenhouse effect and associated climate change. Six key risks that have been identified in Australia alone include higher temperatures, sea-level rise, heavier rainfall, greater wildfire risk, less snow cover, reduced run-off over southern and eastern Australia, and more intense tropical cyclones and storm surges along the coast.

climate change any change in climate over time, whether due to natural processes or human activities

int-7951

FIGURE 4 The enhanced greenhouse effect



1 Heat from the sun
2 Heat trapped by greenhouse gases
3 Heat radiating back into space
4 Greenhouse gases produced by power stations burning fossil fuels
5 Greenhouse gases produced by industry burning fossil fuels
6 Greenhouse gases produced by transport burning fossil fuels
7 Greenhouse gases released by logging forests and clearing land
8 Methane escaping from waste dumps
9 Methane from ruminant (cud-chewing) livestock, e.g. cattle, sheep
10 Nitrous oxide released from fertilisers and by burning fossil fuels

11.3.3 What can we do?

A switch to renewable energy sources such as solar, wind, water (hydro) and geothermal (heat from inside the Earth's crust) will lead to sustainable energy use in the future and reduce carbon emissions into the atmosphere, thereby reducing the enhanced greenhouse effect. At the household level, using energy-efficient light bulbs and appliances and installing solar panels to produce hot water and electricity can lead to a significant reduction in greenhouse gas emissions. You could even think of purchasing a new motor vehicle that uses electricity or has a higher fuel efficiency rating.

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Climate change > **Causes of climate change**
- Investigate additional topics > Climate change > **Larsen Ice Shelf break-up**
- Investigate additional topics > Climate change > **Impacts on polar bears**
- Investigate additional topics > Climate change > **Climate change and Australia**
- Investigate additional topics > Climate change > **Global warming and Antarctica**

11.3 ACTIVITIES

1. In groups, prepare a report that explains how the enhanced greenhouse effect operates, based on the information in **FIGURE 4**. You may wish to also carry out further research. Prepare a presentation for the class that includes your suggestions about what we can do to reduce the impacts of the enhanced greenhouse effect.

   HASS skills: Questioning and researching, Communicating and reflecting
2. Research the scientific debate on climate change and global warming, and present cases for both sides of the argument. **HASS skills: Questioning and researching, Communicating and reflecting**

11.3 EXERCISE

The answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 6	Questions 3, 7, 8	Questions 5, 9, 10

Check your understanding

1. What are the differences between climate change and global warming?
2. What is the greenhouse effect and what are the three atmospheric gases responsible for this effect?
3. What would happen to the Earth if there was no greenhouse effect?
4. What changes have occurred to the Earth's climate over geological time?
5. Explain why sea levels would be much lower in an ice-age period.

Apply your understanding

6. Outline the role that trees play in the carbon cycle and in controlling the level of greenhouse gases.
7. What impacts will global warming, and in particular higher water temperatures, have on a marine ecosystem such as the Great Barrier Reef?
8. Refer to **FIGURE 2**.
   a. What is the time period shown in the graph?
   b. What is the total temperature increase shown between the start and end points of the graph?
   c. What is the general trend shown by the graph?
9. Why is the greenhouse effect crucial to maintaining life on Earth?
10. In what energy-saving actions does your household participate? Suggest other actions that could be taken in the future.

For sample responses to every question, go to www.jacplus.com.au.

11.4 Tackling climate change

LEARNING INTENTION

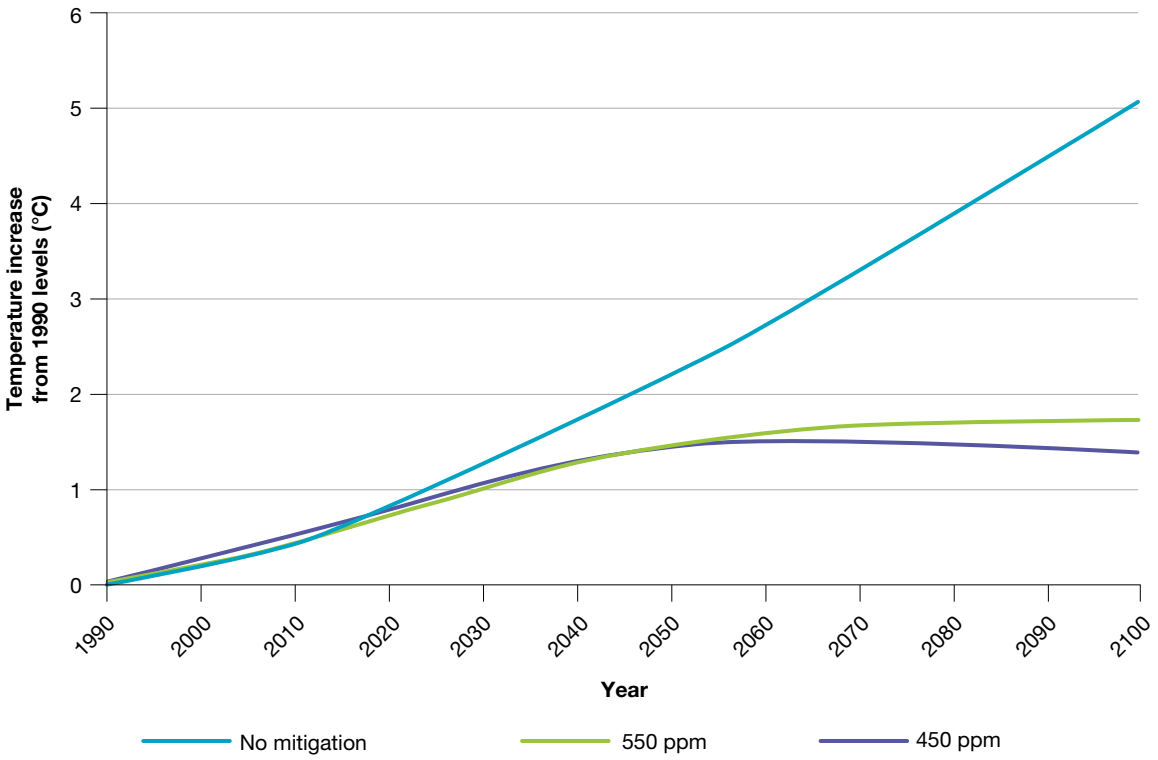
By the end of this subtopic you will be able to discuss responses to human-induced climate change at a range of scales, and explain the impact of fossil fuels and alternative energy sources.

11.4.1 Global action

Climate change is a global phenomenon. The greenhouse gases produced in one country spread through the atmosphere and affect other countries. Action by only a few countries to reduce greenhouse gases will therefore have little impact — it requires international cooperation, especially by the largest polluters.

Since the 1990s, countries have met at the United Nations Intergovernmental Panel on Climate Change (IPCC) conferences and agreed to take steps to reduce emissions of greenhouse gases. An early conference developed the **Kyoto Protocol**, an agreement that sets targets to limit greenhouse gas emissions, and 128 countries have agreed to this protocol. Further conferences in 2009 in Copenhagen, Denmark, in 2010 in Cancun, Mexico, and in 2015 in Paris, France, led to an important new direction, with all countries agreeing to contain global warming within 2 °C. This means that emissions of CO_2, which were at 395 parts per million (ppm) in 2013, must be kept below 550 ppm to reach this target. If no actions (mitigation measures) are taken, temperatures could increase by 5 °C, as shown in **FIGURE 1**. To date, 192 of the world's 195 countries have signed the Kyoto Protocol; however, close to half have modified their commitment to reach targets for greenhouse emission reductions set for 2020. The United States has signed the Protocol but has not ratified emission targets and Canada has withdrawn from the Protocol.

FIGURE 1 Global average temperature outcomes for three emissions cases, 1990–2100*



*projected

Source: *The Garnaut Climate Change Review 2008*, p. 88.

To meet the greenhouse gas emissions targets defined by these agreements, countries must make changes that reduce their level of emissions. They can also meet the targets in two other ways.

1. A country can carry out projects in other countries that reduce greenhouse gas emissions and offset these reductions against their own target.
2. Companies can buy and sell the right to emit carbon gases. For example, a major polluter, such as a coal power station, is allowed to emit a certain volume of greenhouse gases. If it is energy efficient, and emits less than its limit, it gains **carbon credits**. It has the right to sell these credits to another company that is having difficulty reducing its emissions. Companies can also gain credits by investing in projects that reduce greenhouse gases (such as renewable energy), improve energy efficiency or act as carbon sinks (such as tree planting and underground storage of CO_2).

Kyoto Protocol an internationally agreed set of rules developed by the United Nations aiming to reduce climate change through the stabilisation of greenhouse gas emissions into the atmosphere

carbon credit a tradable certificate representing the right of a company to emit one metric tonne of carbon dioxide into the atmosphere

11.4.2 Australia's action

The 2011 Garnaut Report and the findings of the 2018 IPCC state that it is in Australia's national interest to do its fair share in a global effort to mitigate climate change (see **TABLE 1**). The findings of the 2011 report were confirmed at the IPCC meeting in Paris in 2015. In 2019, the Australian government announced the Climate Solutions Package, a $3.5 billion investment to deliver on Australia's 2030 Paris climate commitments. The plan will help Australia meet its Kyoto Protocol commitments by:

- providing a $2 billion Climate Solutions Fund to reduce greenhouse gases across the economy through the existing Emissions Reduction Fund, giving farmers, small businesses and Indigenous communities the chance to improve the environment and benefit from new revenue opportunities
- securing our energy future through investments in a high-tech expansion of the Snowy Mountains Scheme and a second interconnector, Marinus Link, between Victoria and Tasmania
- helping households and businesses improve energy efficiency
- implementing a National Electric Vehicle Strategy to ensure a planned and managed transition to new vehicle technology and infrastructure
- helping create green and clean local environments by supporting local communities.

TABLE 1 Potential impacts for each of the three emissions cases by 2100

Emissions case	450 ppm	550 ppm	No action
Likely range of temperature increase from 1990 level	0.8–2.1 °C	1.1–2.7 °C	3–6.6 °C
Percentage of species at risk of extinction	3–13%	4–25%	33–98%
Area of reefs above critical limits for coral bleaching	34%	65%	99%
Likelihood of starting large-scale melt of the Greenland ice sheet	10%	26%	100%
Threshold for starting accelerated disintegration of the West Antarctic ice sheet	No	No	Yes

Source: *The Garnaut Climate Change Review 2008*, p. 102.

11.4.3 Taking personal action

Australian households produce about one-fifth of Australia's greenhouse gases through their use of transport, household energy and the decay of household waste in landfill. This amounts to about 15 tonnes of CO_2 per household per year. (A tonne of CO_2 would fill one family home.) The Australian Conservation Foundation has suggested a ten-point plan that every Australian household can follow to reduce its level of greenhouse gas pollution (see **FIGURE 2**).

FIGURE 2 The Australian Conservation Foundation Plan

1. ***Switch to green power***
   Choose renewable energy from your electricity retailer and support investment in sustainable, more environmentally friendly energies. Make sure it is accredited GreenPower [electricity produced using renewable resources] — see www.greenpower.gov.au for a list of who qualifies.

GreenPower®
Accredited Renewable Energy

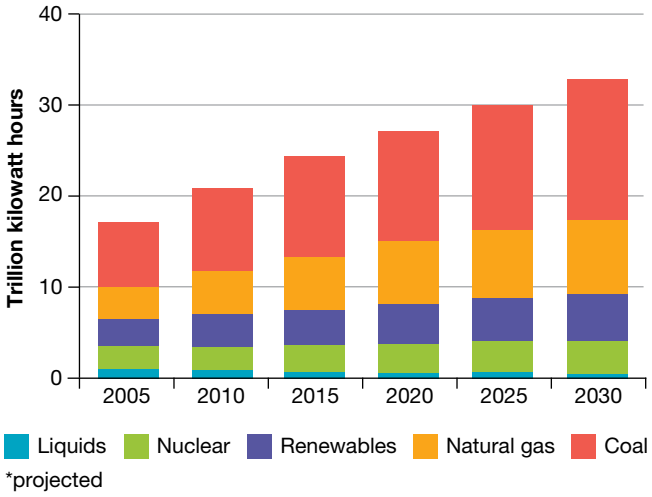
2. ***Get rid of one car in your household***
   A car produces seven tonnes of greenhouse pollution each year (based on travelling 15 000 km per year). This does not include the energy and water used to build the car — 83 000 litres of water and eight tonnes of greenhouse pollution. So share a car with your family.
3. ***Take fewer air flights***
   A return domestic flight in Australia creates about 1.5 tonnes of greenhouse emissions (based on Melbourne to Sydney return). A return international flight creates about 9 tonnes (based on Melbourne to New York return). Holiday closer to home.

4. ***Use less power to heat your water***
   A conventional electric household water heater produces about 3.2 tonnes of greenhouse pollution in a year. Using less hot water will reduce your pollution. Using the cold cycle on your washing machine will save 3 kg of greenhouse pollution. Switching off your water heater when you're away will also reduce your energy use.
5. ***Eat less meat***
   Meat, particularly beef, has a very high environmental impact, using a lot of water and land to produce it, and creating significant greenhouse pollution. If you reduce your red meat intake by two 150-gram serves a week, you'll save 20 000 litres of water and 600 kg of greenhouse pollution a year.
6. ***Heat and cool your home less***
   Insulate your walls and ceilings. This can cut heating and cooling costs by 10 per cent. Each degree change can save 10 per cent of your energy use. A 10 per cent reduction is 310 kg of greenhouse pollution saved.
7. ***Replace your old showerhead with a water-efficient alternative***
   This will save about 44 000 litres of water a year and up to 1.5 tonnes of greenhouse pollution from hot water heating (on average).
8. ***Turn off standby power***
   Turning appliances off at the wall could reduce your home's greenhouse emissions by up to 700 kg a year.
9. ***Cycle, walk or take public transport rather than drive your car***
   Cycling 10 km to work (or school) and back twice a week instead of driving saves about 500 kg of greenhouse pollution each year and saves you about $770. Besides, it's great for your health and fitness!
10. ***Make your fridge more efficient***
    Ensure the coils of your fridge are clean and well ventilated — that will save around 150 kg of greenhouse pollution a year. Make sure the door seals properly — this saves another 50 kg. Keep fridges and freezers in a cool, well-ventilated spot to save up to another 100 kg a year. If you have a second fridge, turn it off when not in use.

11.4.4 The role of fossil fuels and renewable energy

Climate authorities have declared that global warming is possibly the most important issue affecting life on Earth now and into the future. The burning of **fossil fuels**, which generate greenhouse gases, is causing the atmosphere to heat up, and it is believed that a sustainable future, in terms of energy use, can be achieved only by reducing the consumption of energy and/or switching to renewable energy forms. While use of fossil fuels is a significant factor in global warming, it should also be recognised that there are a number of other human activities that lead to greenhouse gas emissions.

FIGURE 3 World electricity generation by fuel, 2005–30*



*projected

Source: Energy Information Administration.

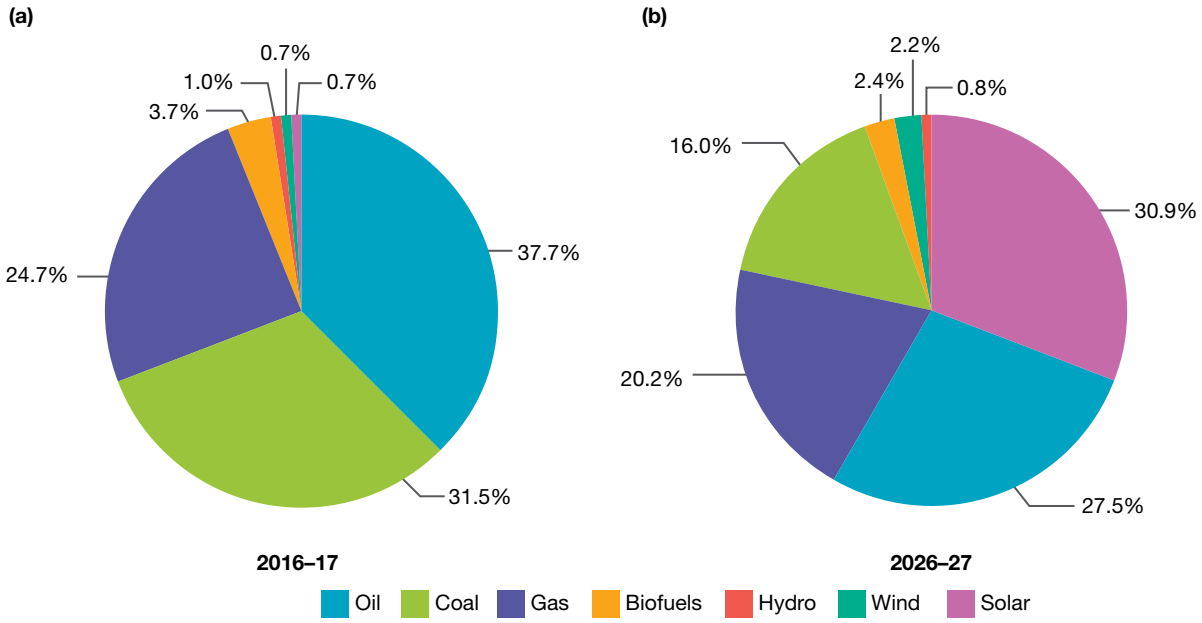
Fossil fuels have been widely used for energy production by human societies since the Industrial Revolution. Burning of wood in fires was the earliest use of fuels, and today coal, oil and gas are the fossil fuels of choice. Much of the energy used in society today for transport, domestic use and all forms of industry is from electricity generated by power stations that are fired by fossil fuels (see **FIGURES 3** and **4**).

The environmentally friendly alternative to fossil fuels is renewable energy. This includes hydro-power, solar, wind, wave and tidal, **geothermal** and bioenergy sources to generate electricity. These sources do not produce greenhouse gases and are replenished in relatively short periods of time (see **FIGURE 5**). The movement to environmentally friendly alternative energy fuels will confirm a significant change in thinking, from a human-centred to an Earth-centred worldview. This change in thinking will lead to a more sustainable use of energy with a significantly lower impact of greenhouse gas emissions on the environment.

fossil fuels carbon-based fuels formed over millions of years, which include coal, petroleum and natural gas. They are called non-renewable fuels as reserves are being depleted at a faster rate than the process of formation.

geothermal (power) power that is generated from molten magma at the Earth's core and stored in hot rocks under the surface. It is cost-effective, reliable, sustainable and environmentally friendly.

FIGURE 4 Australia's primary energy sources: (a) 2016–17 and (b) projected for 2026–27



Source: Department of Environment and Energy, *Australian Energy Update 2018*.

FIGURE 5 Some sources of renewable energy: (a) solar, (b) wind, (c) hydro-electric and (d) geothermal



Many countries throughout the world are now using or developing sustainable energy industries. The United States, for example, has established the Clean Energy Plan and currently produces 1.66 per cent of its energy needs from solar power, with renewable energy sources comprising 10 per cent of its total electricity generation. In Europe, Germany has made great progress in harnessing renewable energy sources, which today provide 29.5 per cent of its power generation needs. Wind energy alone provides just over one-third of this amount.

In Australia, with expansive desert regions, there is huge potential to generate solar power. In recent years, the installation of solar panels for domestic households has increased, and this has been supported by a federal government subsidy scheme; however, currently solar energy accounts for only 1.24 per cent of Australia's latest total energy requirements. In other renewable energy fields, wind farms have become more widespread in southern Australia, and there are companies investigating the potential for geothermal energy production.

11.4.5 Future action

In 2015, the IPCC confirmed the 2007 recommendations to reduce greenhouse gas emissions. They cover a wide range of human activities, with suggestions for management to mitigate global warming (see **TABLE 2**).

For each mitigation action shown in **TABLE 2** there are economic, social and environmental consequences. For example, considering the 'developing safer and cleaner nuclear energy' action, there may be positive economic consequences, such as the creation of energy security and job opportunities, but also negative consequences, such as the cost of waste disposal. Similarly, the social and environmental consequences may be positive, such as reduced air pollution, and negative, such as nuclear accidents.

TABLE 2 Reducing greenhouse gas emissions

	Ways to reduce greenhouse gas emissions
Energy supply	• Increasing use of renewables such as hydro-power, solar, wind, wave and tidal, geothermal and bioenergy • Switching from coal to gas • Carbon capture and storage (CCS) at fossil fuel electricity generating facilities • Developing safer and cleaner nuclear energy (although this is also debated in terms of its sustainability)
Transport	• More fuel-efficient vehicles such as electric, hybrid, clean diesel and biofuels • Changing from road to rail and bus transport systems • Promoting cycling and walking to work
Buildings	• Installing more efficient lighting and day-lighting systems and electrical appliances for heating and cooling, cooking and washing • Increased use of photovoltaic (PV) solar panels • Improved refrigeration fluids including the recovery and recycling of fluorinated gases
Industry	• More efficient electrical equipment • Heat and power recovery • Material recycling and substitution • Control of gas emissions
Agriculture	• Improved crop yields and grazing land management • Increased storage of carbon in the soil and reduction of methane gas emissions from livestock manure • Restoration of cultivated soils and degraded lands • Improved nitrogen fertiliser application techniques to reduce nitrous oxide emissions • New bioenergy crops to replace fossil fuels

TABLE 2 *(continued)*

	Ways to reduce greenhouse gas emissions
Forestry/forests	• Planting new forests • Better harvested wood management • Use of forestry products for bioenergy to replace fossil fuel use • Better remote sensing technologies for analysis of vegetation and mapping land-use change
Waste	• Landfill methane recovery • Waste incineration with energy recovery • Composting of organic waste • Controlled waste water treatment • Recycling and waste minimisation

Source: UN IPCC Report 2007.

DISCUSS

Is it the responsibility of the ordinary citizen or the government to accept the consequences of climate change and do something about it? Discuss your view. **General capability: Ethical understanding**

11.4 ACTIVITIES

1. Review and summarise what the latest *State of the Climate* report, produced by the Australian Bureau of Meteorology and the CSIRO, has to say about the impacts of climate change on Australia's environment.
   HASS skills: Questioning and researching, Analysing
   Geography concept: Change
2. Create a poster to communicate the main points of the Australian Conservation Foundation's ten-point strategy to reduce greenhouse gases.
   HASS skills: Communicating and reflecting
3. Use the internet to research geothermal energy and its potential as a future energy source.
   HASS skills: Questioning and researching
4. Considering nuclear power plant accidents from the past and their impacts on the environment, how might nuclear energy be managed as a safe energy source into the future? Is this a sustainable option? Conduct research into this topic and write a page outlining your findings and your view.
   HASS skills: Questioning and researching, Evaluating
   Geography concept: Sustainability
5. Use the internet to access and peruse the IPCC's Climate Change Report. Analyse the environmental, social and economic impacts of climate change mitigation for one of the following: transport, buildings, energy systems or industry. Create an infographic to demonstrate your understanding.
   HASS skills: Analysing, Communicating and reflecting
6. Complete the **Tackling climate change** worksheet to explore the concepts in this subtopic further.
   HASS skills: Communicating and reflecting

on Resources

Interactivity Small acts, big changes (int-3288)

11.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 5, 6, 9	Questions 3, 7, 10, 11, 12	Questions 4, 8, 13, 14

Check your understanding

1. Which arm of the United Nations is involved in formulating measures to tackle climate change?
2. What is the Kyoto Protocol?
3. Explain why the two basic strategies developed by the Kyoto Protocol can sustainably reduce the amount of greenhouse gases in the atmosphere.
4. Explain why organisations such as the Australian Conservation Foundation would have different views about climate change and global warming than companies that produce electricity.
5. What is meant by the term 'fossil fuel'?
6. List five major renewable energy sources.
7. Outline three negative impacts if all fossil fuels were banned tomorrow.
8. What do you think would be the most effective and safe renewable energy source for the future? Give reasons for your selection.

Apply your understanding

9. Refer to **FIGURE 1**. How much will temperatures increase by 2070 if no mitigation actions are taken? What emissions case would reduce temperature change the most by 2100?
10. Refer to **TABLE 1** and the 450 ppm emissions case. What is the percentage of species at risk of extinction? What might happen to the Great Barrier Reef under the 550 ppm case?
11. What part do international forums play in helping to solve climate change?
12. Refer to **FIGURE 4**. What percentage of Australia's energy currently comes from renewable sources, and by how much is this projected to change by 2026–27?
13. Explain why the use of fossil fuels isn't sustainable.
14. What would be the environmental, social and economic consequences of the different management strategies adopted for renewable energy use in Australia, the United States and Germany, outlined in section 11.4.4?

For sample responses to every question, go to www.jacplus.com.au.

11.5 Is Australia's climate changing?

LEARNING INTENTION

By the end of this subtopic you will be able to explain the interconnection of people with the environment, and evaluate the impacts of climate change on Australia.

11.5.1 Impacts of climate change in Australia

Research by government and non-government organisations, such as the Bureau of Meteorology (BOM), the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and the IPCC in 2018, has indicated that Australia is particularly vulnerable to climate change. The consequent changes that will affect all Australian biophysical systems have been identified as eight key risks, which are outlined in **FIGURE 1**.

The challenge for the future is how to manage these risks to minimise negative consequences for the Australian environment, economy and social systems.

FIGURE 1 Key climate and severe weather risks for Australia



Source: Bureau of Meteorology and CSIRO.

What changes are we seeing?

Australia's year-by-year climate statistics can be quite variable against long-term climate records, and floods and droughts have always occurred, breaking records in various regions. These variations in weather patterns are often referred to as climatic anomalies. The concern raised by global warming and climate change is the degree of climate variability and the likelihood of more extreme weather events. For instance, will we experience worse floods and droughts and more bushfires and severe cyclones, tornadoes and the like? Scientific evidence supports the view that there have been more extreme weather events in recent years and that the climate of Australia has undergone significant regional change (see **FIGURE 2**).

FIGURE 2 The *State of the Climate 2018* report

The *State of the Climate 2018* report, produced by the BOM and CSIRO made the following summary points.

- Australia's climate has warmed just over 1 °C since 1910, leading to an increase in the frequency of extreme heat events.
- Oceans around Australia have warmed by around 1 °C since 1910, contributing to longer and more frequent marine heatwaves.
- Sea levels are rising around Australia, increasing the risk of inundation.
- The oceans around Australia are acidifying (the pH is decreasing).
- April to October rainfall has decreased in the southwest of Australia. Across the same region May–July rainfall has seen the largest decrease, by around 20 per cent since 1970.
- There has been a decline of around 11 per cent in April–October rainfall in the southeast of Australia since the late 1990s.
- Rainfall has increased across parts of northern Australia since the 1970s.
- Streamflow has decreased across southern Australia. Streamflow has increased in northern Australia where rainfall has increased.
- There has been a long-term increase in extreme fire weather, and in the length of the fire season, across large parts of Australia.

Recent severe weather events

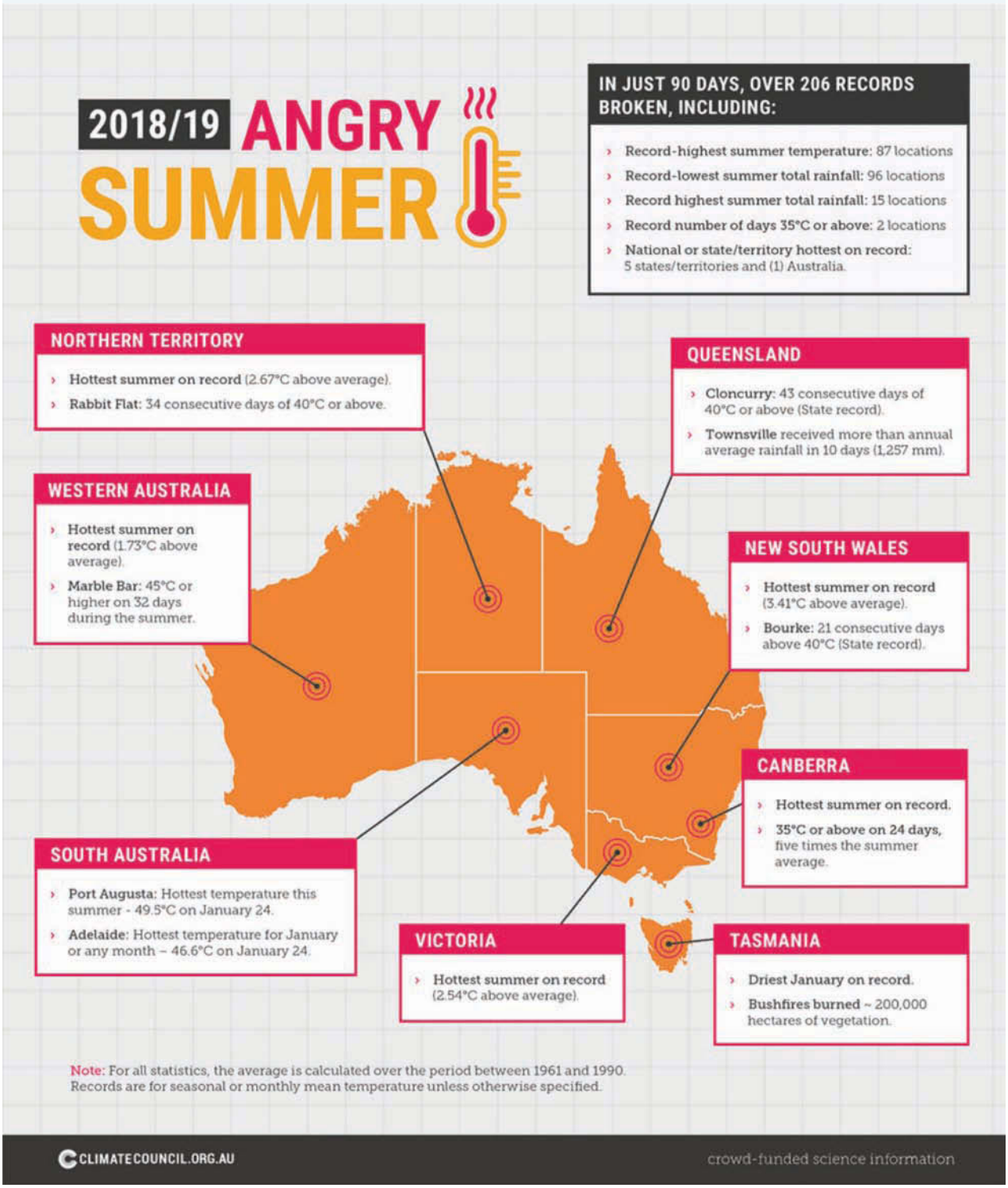
In 2018, in their annual report Extreme Weather, the Climate Council of Australia wrote:

> Climate change is influencing all extreme weather events as they are occurring in a more energetic climate system. Australia is one of the most vulnerable developed countries in the world to the impacts

of climate change. Heatwaves are becoming longer, hotter and starting earlier in the year. In the south of the country, where many Australians live and work, dangerous bushfire weather is increasing and cool season rainfall is dropping off, stretching firefighting resources, putting lives at risk and presenting challenges for the agriculture industry and other sectors, such as tourism.

FIGURE 3 outlines records of climatic change for 2018.

FIGURE 3 Indications of climatic change from the Climate Council of Australia



11.5.2 Impacts on the environment, economy and social systems

Some of the impacts of climate change that will require management by governments and communities include:

- impacts on fragile and diverse biomes and ecosystems; for example, the Great Barrier Reef, where warming of 1 °C is expected to have significant impacts on biodiversity, with losses of species and associated coral communities and the potential for up to 97 per cent of the reef to be subject to coral bleaching
- changed temperatures and rainfall regimes affecting the potential of agriculture and forestry to maintain crop yields such as wheat, and timber yields from forests
- reduced river flows in the Murray–Darling Basin with significant impacts on agriculture, industry and urban household use
- more extreme weather events such as heatwave conditions, with an increase in the number of days when the forest fire index rating is very high or extreme
- more severe tropical cyclones, with associated property damage due to strong winds and flooding
- spread of tropical diseases such as dengue fever and malaria to southern regions.

FIGURE 4 Climate change is projected to have a significant impact on the biodiversity of the Great Barrier Reef.



Managing the impact of severe weather

Scientific experts agree that environments will change due to global warming and climate change and this will have a range of economic and social consequences, to which society will need to adapt. Where particular industries such as agriculture and forestry may be affected, there could be a need for governments and other agencies to encourage and facilitate the development of employment opportunities in alternative industries, such as renewable energy.

In dealing with the potential impact of severe weather events, a number of approaches may be taken. The redesign of urban infrastructure to improve storm water drainage is a management strategy to reduce the threat of flooding. If redesign is not able to solve the problem, there may be a need for some people to consider relocating away from the flood-prone coastal and riverine locations in which they currently live.

Successful management strategies in relation to events such as cyclones and bushfires include the development of improved tropical cyclone warning systems, with monitoring conducted and warnings issued by the Bureau of Meteorology, and bushfire

FIGURE 5 Floods in Townsville, February, 2019, due to tropical cyclone Omar



warnings, issued by relevant state fire authorities. National and state-based agencies such as State Emergency Management Committee WA, Emergency Management Victoria and Emergency New South Wales all provide a range of information and resources aimed at minimising the impacts on communities of severe weather events, and assisting with management strategies such as emergency evacuation planning. Improved building design to withstand these severe weather events is another successful form of management strategy.

Government Disaster Relief programs that offer financial and other assistance to individuals and communities to recover after events such as flood, fire and drought are further examples of impact management.

Perhaps most importantly, the root causes of severe weather events as a consequence of global warming and climate change need to be addressed. The Australian Conservation Foundation's ten-point plan (see **FIGURE 2** in section 11.4.3) suggests a range of personal energy-use management strategies that aim to minimise individuals' contribution to greenhouse gas emissions, such as switching to solar energy and other renewables. If adopted by businesses and the general community, these strategies will go a long way towards reducing the environmental impacts of climate change and global warming, thereby mitigating the social and economic impacts.

11.5 ACTIVITY

Use the internet to find out about Pacific Island nations that are threatened by rising sea levels because of climate change. Where are they located? Are any plans in place to protect these areas? Discuss your findings with a partner.

HASS skills: Questioning and researching

11.5 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 5	Questions 4, 6, 7	Questions 2, 8, 9

Check your understanding

1. How are Australia's temperatures expected to alter because of climate change?
2. Name three extreme weather events that are expected to increase in frequency due to climate change.
3. Study **FIGURE 3**, which outlines climatic records broken in Australia.
   a. Describe the general pattern of temperature and rainfall extreme weather events for the 2018 period outlined.
   b. List the types of temperature and rainfall changes recently experienced where you live.
   c. By how much has Australia's climate warmed since 1910?

Apply your understanding

5. Develop an evacuation plan for a house or town in a bushfire-prone area.
6. Suggest how climate change might affect tourism in the Margaret River region of Australia.
7. How will rising sea levels affect Australia's state capital cities that are located on the coast?
8. What strategies do you think people who live in tropical cyclone-prone areas could adopt to cope with increased severe weather events?
9. Identify three key points from the *State of the Climate* report (**FIGURE 2**) that you consider to be of greatest concern. Justify your choices.

For sample responses to every question, go to www.jacplus.com.au.

11.6 Thinking Big research project — Wacky weather presentation

11.6.1 Scenario



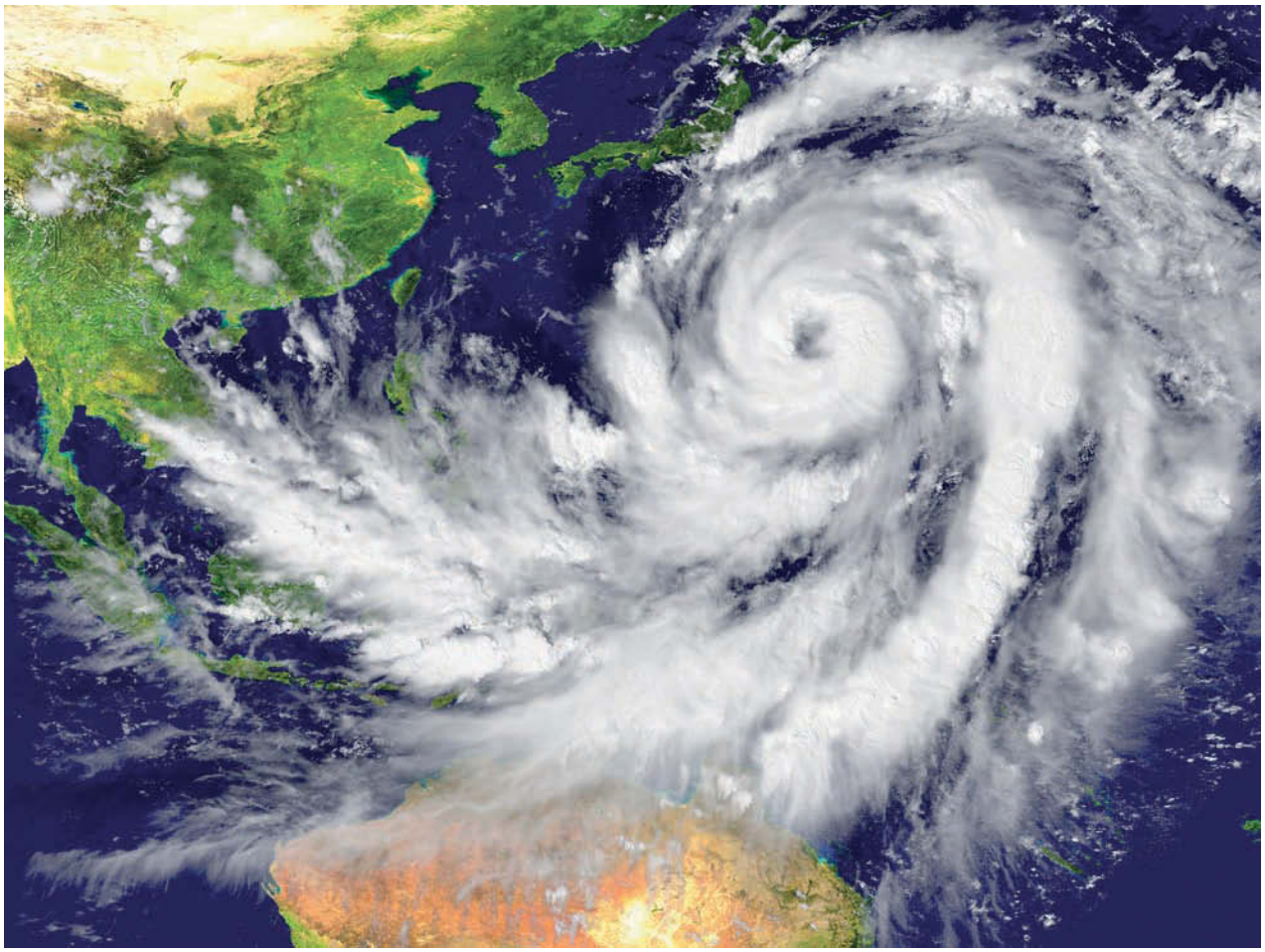
As the regular weather presenter for an evening news program, you have been asked by the producer to compile a segment on the history of extreme weather events in Australia, to outline the link between these events and climate change, and to respond to claims, made by 'climate change sceptics', that climate change is not occurring.

11.6.2 Task

For your segment, you will need to create a presentation and an accompanying speech that:

- addresses the link between extreme weather events and climate change
- outlines what Australia is doing to tackle global warming and climate change
- considers and responds to the views of climate-change sceptics.

The presentation should consist of at least 15 annotated images; your accompanying speech should discuss each image, expanding on the annotations to provide further information.



11.6.3 Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group so you can work collaboratively. Working in groups of two will enable you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish.
- Conduct research into:
  - recent extreme weather events in Australia. You may also add some events from other places if you wish to provide further examples.
  - the suggested links between extreme weather events and global warming–induced climate change, and the views of climate-change sceptics who reject these links
  - what Australia is doing to tackle global warming and climate change. Consider aspects such as renewable energy and emissions targets, and actions at government, business and individual levels.

  The weblinks in the **Media centre** will provide a useful starting point. Remember to record details of your sources so you can create a bibliography.
- Find or create appropriate images, maps and diagrams to include in your presentation. Annotate these to highlight key points that you can expand upon in your speech. The last slide of your presentation should contain your bibliography.
- Remember to formulate and include a response to the views of climate-change sceptics.
- Write your speech and, with your partner, decide how you will share the presentation. Practise and then deliver your presentation in class for assessment.
- Print out your speech and submit it, along with your presentation file, to your teacher.



on Resources

ProjectsPLUS Thinking Big research project — Wacky weather presentation (pro-0211)

11.7 Review

11.7.1 Key knowledge summary

11.2 Interacting with the environment

- Although the world is a huge space, population increases over the past 200 years have put a strain on the capacity of ecological services to sustain modern day societies.
- Changes in thinking about the environment from a human-centred to Earth-centred approach are offering hope that a sustainable world can be achieved by reducing the pressure of human activities on ecological services.

11.3 Is climate change heating the Earth?

- The greenhouse effect has been affected by human activities, particularly activities to produce power, such that an enhanced greenhouse effect is leading to global warming of the Earth's atmosphere and oceans.
- Renewable energy sources such as solar, wind, tidal and hydro for power generation will reduce the level of global warming.

11.4 Tackling climate change

- Meetings of world government bodies such as the IPCC have set goals for reducing greenhouse gas emissions.
- The Australian government, as a signatory to the Kyoto Protocol, which aims to reduce human-induced greenhouse gas emissions, has developed national plans to manage sustainable power sources.
- Fossil fuels are a major source of greenhouse gas emissions and many nations are seeking ways to develop renewable energy sources such as solar, wind, hydro, tidal, biomass and geothermal methods of producing electricity.
- The IPCC has set forth a wide range of management strategies to reduce greenhouse gas emissions.

11.5 Is Australia's climate changing?

- Australia's climate has been changing in the recent past because of the effects of global warming on temperature and precipitation regimes.
- Severe weather events have become more common with wider fluctuations of temperature and rainfall that can be attributed to climate change.
- The impact of climate change on the environment, economy and social systems is a major focus of management strategies for all levels of government in Australia.

11.7.2 Key terms

biocapacity the capacity of a biome or ecosystem to generate a renewable and ongoing supply of resources and to process or absorb its wastes

carbon credit a tradable certificate representing the right of a company to emit one metric tonne of carbon dioxide into the atmosphere

climate change any change in climate over time, whether due to natural processes or human activities

ecological footprint a measure of human demand on the Earth's natural systems in general and ecosystems in particular; the amount of productive land required by each person for food, water, transport, housing, waste management and other purposes

ecological service the benefits to humanity from the resources and processes that are supplied by natural ecosystems

enhanced greenhouse effect increasing concentrations of greenhouse gases in the Earth's atmosphere, contributing to global warming and climate change

environmental world view varying viewpoints, such as Earth-centred as opposed to human-centred, in managing ecological services

fossil fuels carbon-based fuels formed over millions of years, which include coal, petroleum and natural gas. They are called non-renewable fuels as reserves are being depleted at a faster rate than the process of formation.

geothermal (power) power that is generated from molten magma at the Earth's core and stored in hot rocks under the surface. It is cost-effective, reliable, sustainable and environmentally friendly.

global warming the observable rising trend in the Earth's atmospheric temperatures, generally attributed to the enhanced greenhouse effect

Industrial Revolution the period from the mid 1700s into the 1800s that saw major technological changes in agriculture, manufacturing, mining and transportation, with far-reaching social and economic impacts

Kyoto Protocol an internationally agreed set of rules developed by the United Nations aiming to reduce climate change through the stabilisation of greenhouse gas emissions into the atmosphere

stewardship the caring and ethical approach to sustainable management of habitats for the benefit of all life on Earth

11.7.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry questions posed in the Overview:

The Earth is our home and provides us with everything we need to live. What are we going to do in return?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6151)
Reflection (ewbk-6150)
Crossword (ewbk-6149)
Student Learning Matrix (ewbk-6142)

Interactivity Introducing environmental change and management crossword (int-7669)

11.7 Review exercise

Multiple choice

1. Which of the following is another word for stewardship?
   - A. Ecological service
   - B. Biocapacity
   - C. Habitability
   - D. Custodial management

2. Which place has the largest ecological footprint?
   - A. The United States
   - B. Asia
   - C. Australia
   - D. Africa

3. Which of these statements is true about Australia?
   - A. Our biocapacity exceeds our ecological footprint.
   - B. Our ecological footprint exceeds our biocapacity.
   - C. Our biocapacity is more than twice our ecological footprint.
   - D. Our ecological footprint is more than twice our biocapacity.

4. What is global warming?
   - A. Changes in climate over time
   - B. Rising trends in global atmospheric temperatures
   - C. Human impact on the environment from carbon emissions
   - D. Long-term weather patterns

5. Which of the following is *not* one of the three most important gases for creating the greenhouse effect in our atmosphere?
   - **A.** Carbon dioxide
   - **B.** Nitrous oxide
   - **C.** Methane
   - **D.** Carbon monoxide

6. Which of these in not *one* of the six key risks to Australia of the enhanced greenhouse effect?
   - **A.** Sea levels rising
   - **B.** Increased risk of wildfires
   - **C.** Lighter rainfall in coastal areas in the south-west
   - **D.** More intense tropical cyclones

7. What can people do on a local scale to reduce their carbon emissions into the atmosphere?
   - **A.** Walk to work.
   - **B.** Buy an older car.
   - **C.** Use gas hot water.
   - **D.** Remove house insulation.

8. What is the IPCC?
   - **A.** United Nations' Intergovernmental Panel on Climate Change
   - **B.** United Nations' Intergovernmental Panel on Climate Crisis
   - **C.** United Nations' International Panel on Climate Change
   - **D.** United Nations' International Panel on Climate Crisis

9. What is a carbon credit?
   - **A.** A tax benefit to reward households who install solar panels
   - **B.** A subsidy for companies importing electric vehicles into Australia
   - **C.** A year in which the average global ocean temperature does not rise
   - **D.** A tradable certificate representing the right of a company to emit a specific amount of carbon dioxide into the atmosphere

10. How can industry reduce its greenhouse emissions?
    - **A.** More efficient equipment and power recovery
    - **B.** Loosening controls on gas emissions
    - **C.** Sending used fluorinated refrigeration gases to landfill
    - **D.** Ensuring all office buildings and workspaces maximise heat loss in cold weather

Short answer

11. Outline the aims of the Kyoto Protocol.
12. List three ways that you could improve your carbon footprint at home.
13. Identify a place in Western Australia that would be negatively affected by some of the impacts of climate change. Explain how that place would be affected, and what the impacts would be.
14. How might the enhanced greenhouse effect change the economy in your local area? Identify and describe one way in which it would be affected.
15. Identify and describe one of the social benefits of reducing greenhouse gas emissions in urban areas.
16. Suggest two ways that Australia could better use its natural environment to create sustainable energy.
17. Create your own Sustainable Society Index that outlines eight key rules which humans must follow to ensure their actions are sustainable. Include two social, two political, two economic and two environmental rules.
18. On balance, what is your world view? Is it more human-centred or Earth-centred? Give reasons to explain your perspective.
19. How would you counter arguments from people who do not believe that there is a rising trend in global atmospheric temperatures caused by human action? Base your rebuttal on data, and use language that is factual and emotionally neutral.

20. Many Pacific island nations are threatened by rising sea levels. Do you think the global community has a responsibility to provide aid and relocation for people whose homes and traditional lifestyles are no longer possible because of climate change? Give reasons to support your view.
21. Indian activist and leader of the movement against British rule in India, Mahatma Gandhi, suggested that the Earth provides enough to satisfy everyone's needs, but not everyone's greed.
    Provide an argument with an Earth-centred viewpoint about this quote and then a counter argument based on a human-centred viewpoint. Ensure that your arguments are logical, clearly expressed and supported by evidence. Discuss and compare your arguments with a partner.

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 11 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

11.1 Overview

Video eLesson
- What are we doing? (eles-1707)

11.2 Interacting with the environment

eWorkbook
- Why do environments change? (ewbk-6143)
- Treading lightly (ewbk-6144)

Interactivity
- Nature's bounty (int-3287)

MyWorld Atlas
- Global biodiversity
- Indigenous Australians — Caring for Country

11.3 Is climate change heating the Earth?

eWorkbook
- Climate change — heating the Earth (ewbk-6145)

MyWorld Atlas
- Causes of climate change
- Larsen Ice Shelf break-up
- Impacts on polar bears
- Climate change and Australia
- Global warming and Antarctica

11.4 Tackling climate change

eWorkbook
- Tackling climate change (doc-31745)
- Slowing down climate change (ewbk-6146)
- Greenhouse gases (ewbk-6147)

Interactivity
- Small acts, big changes (int-3288)

11.5 Is Australia's climate changing?

eWorkbook
- Impact of global warming: mind map (ewbk-6148)

11.6 Thinking Big research project — Wacky weather presentation

ProjectsPLUS
- Thinking Big research project — Wacky weather presentation (pro-0211)

11.7 Review

eWorkbook
- Reflection (ewbk-6150)
- Crossword (ewbk-6149)
- Student Learning Matrix (ewbk-6142)

Interactivity
- Introducing environmental change and management crossword (int-7669)

To access these online resources, log on to **www.jacplus.com.au**

12 Land environments change and management

12.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

From housing to food production, we use land for many different things. What impact are we having on this important resource?

12.1.1 Introduction

Land is one of our most valuable resources. Left alone, it exists in a state of balance, and if managed wisely, will continue to do so. However, the land is under increasing pressure as a direct result of population growth; agriculture, mining and expanding settlements all have the potential to interfere with natural processes and cause environmental damage. Our challenge is to balance the needs of our growing population with sustainable land management practices, to protect this precious resource for future generations.

on Resources

- **eWorkbook** Customisable worksheets for this topic ewbk-6179
- **Video eLesson** Wasting our land (eles-1708)

FIGURE 1 Without careful land management, severe environmental damage can occur.



12.2 The causes and impacts of land degradation

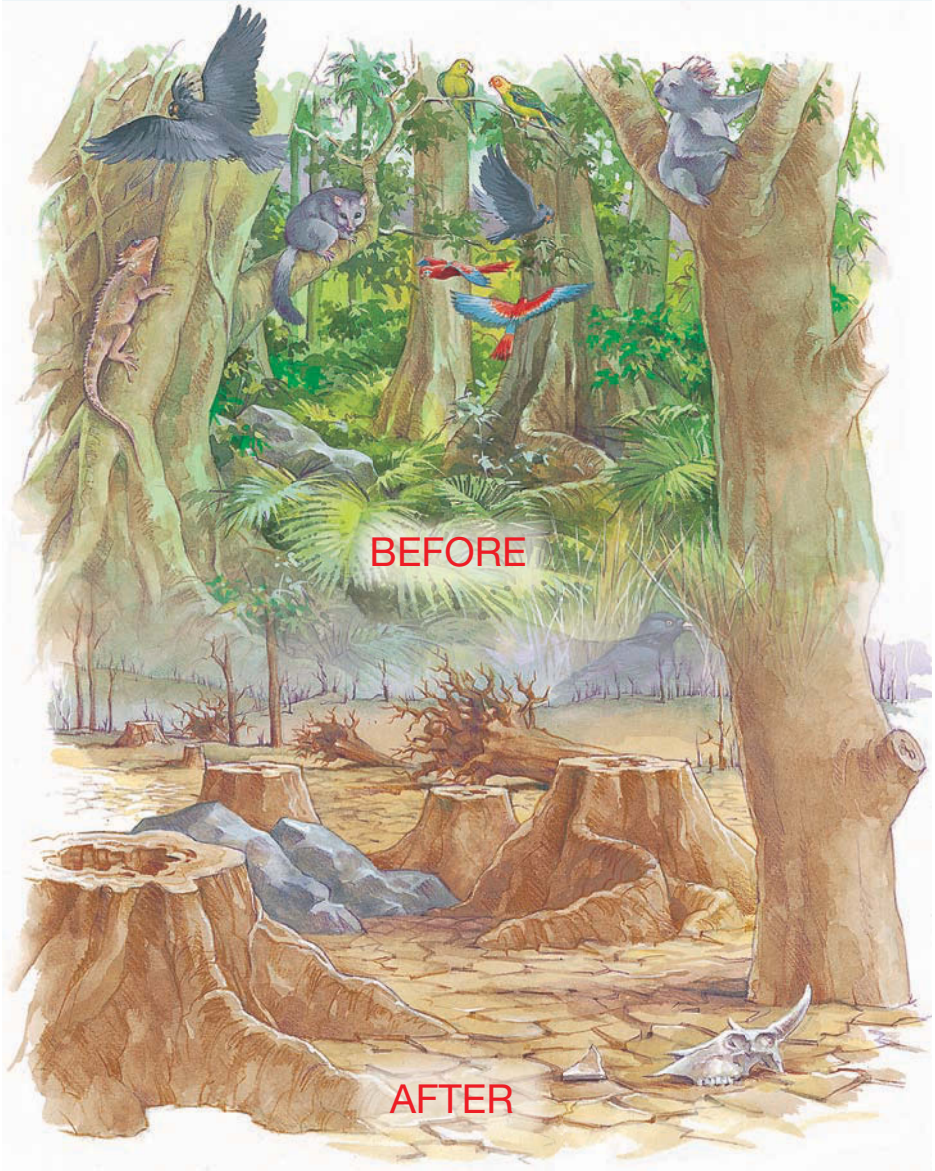
LEARNING INTENTION

By the end of this subtopic you will be able to explain what land degradation is and describe its causes and impacts.

12.2.1 Explaining land degradation

Land degradation is the process that reduces the land's capacity to produce crops, support natural vegetation and provide fodder for livestock. Land degradation causes physical, chemical and biological changes; the natural environment deteriorates and the landscape undergoes a dramatic change (see **FIGURE 1**). Common causes of land degradation include soil erosion, increased salinity, pollution and desertification.

FIGURE 1 Land degradation causes physical, chemical and biological changes to the natural environment.

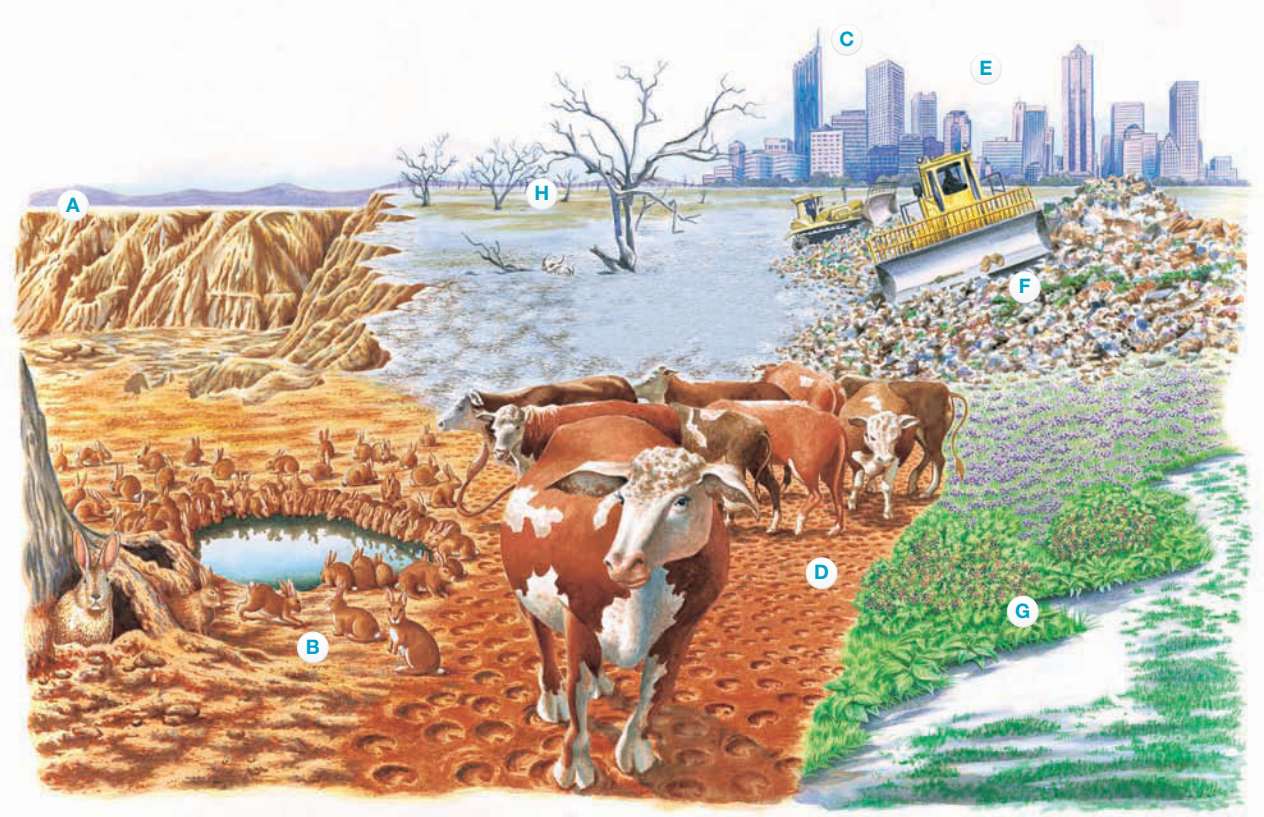


12.2.2 What causes land degradation?

Land can be degraded in many ways, but most of the causes can be traced back to the influences of human activity on the natural environment. **FIGURE 2** outlines these activities and their impacts.

int-5591

FIGURE 2 Why land degrades



A When land is cleared or overgrazed, it becomes vulnerable to erosion by wind and water. The nutrient-rich soil is either washed or blown away, reducing the quality and quantity of crop yields. Dust storms result and sediment is transported to rivers, where it can smother marine species.

B Introduced species such as rabbits eat grass, shrubs and young trees (saplings) down to the soil, thus exposing it to erosion. Their burrows increase erosion as they destabilise the soil. Rabbits also compete with native animals for food and burrows.

C Tourism encourages the clearing of sand dunes for high-density housing, and mountain slopes for ski runs, leaving the surface exposed to erosion.

D Overgrazing leads to nutrient-rich soil being washed or blown away. Animals with hard hoofs such as sheep and cattle trample vegetation and compact the soil, making it increasingly difficult for native species to grow. This leads to increased run-off after heavy rain.

E Climate change will affect land degradation in the future. Higher sea levels will flood low-lying coastal areas. Expanding cities, removal of vegetation and use of concrete reduces the ability of the land to absorb moisture. This not only increases erosion, but can reduce the amount of rainfall in an area.

F Urban communities produce large quantities of waste, which is deposited in landfills. Much of the rubbish remains toxic or, in the case of plastic bags, takes hundreds of years to break down. Liquid and solid waste seeps into groundwater and runs off into rivers and eventually into the sea, killing marine species.

G Introduced plant species such as blackberries and Paterson's Curse (Salvation Jane) choke the landscape and compete with native vegetation. Their dense groundcover prevents light from reaching the soil.

H Salinity occurs naturally in areas where there is low rainfall and high evaporation and where the land was below sea level millions of years ago. Salinity is also caused by excess irrigation and clearing natural vegetation. In some cases the watertable rises, bringing salt to the surface.

FACTORS THAT CONTRIBUTE TO LAND DEGRADATION

- Poor management leads to the loss of nutrients vital for plant growth.
- Removal of vegetation makes the land vulnerable to erosion by wind and water.
- When urban development encroaches on agricultural land, vegetation is removed and the waste generated is disposed of in landfill.
- Poor agricultural practices, especially related to irrigation and the use of chemical fertilisers, can lead to the soil becoming saline or acidic.

FIGURES 3 and **4** show that agricultural activities and overgrazing combined account for more than 50 per cent of land degradation in the Asia–Pacific region and globally.

FIGURE 3 Causes of land degradation in the Asia–Pacific region; Australia is ranked fifth in clearing of native vegetation.

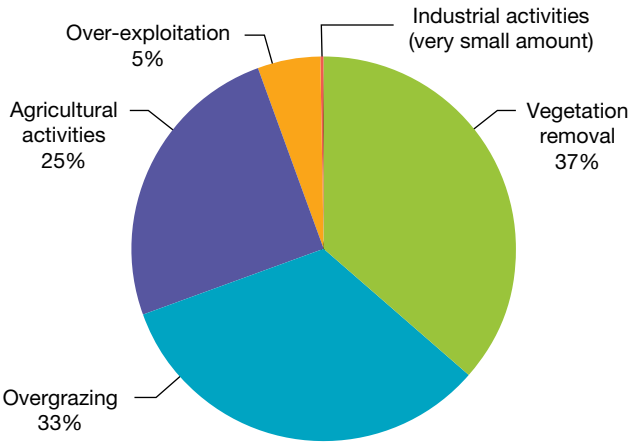
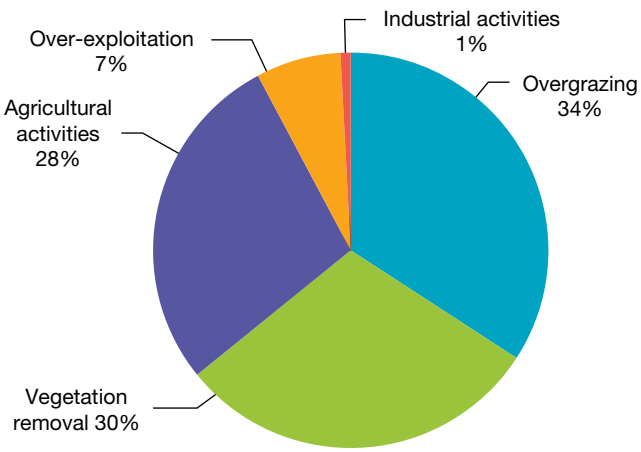


FIGURE 4 Main causes of land degradation globally



12.2.3 The effects of land degradation

Even small changes can have dramatic effects on the land. The shortcut students take from the oval to the classroom can soon reduce a grassy area to dust. Drought can quickly reduce the productivity of an area used for farming. A farmer who neglects the land after one growing season may still be able to raise a good crop the following season, but if the land is neglected year after year it will eventually become unproductive.

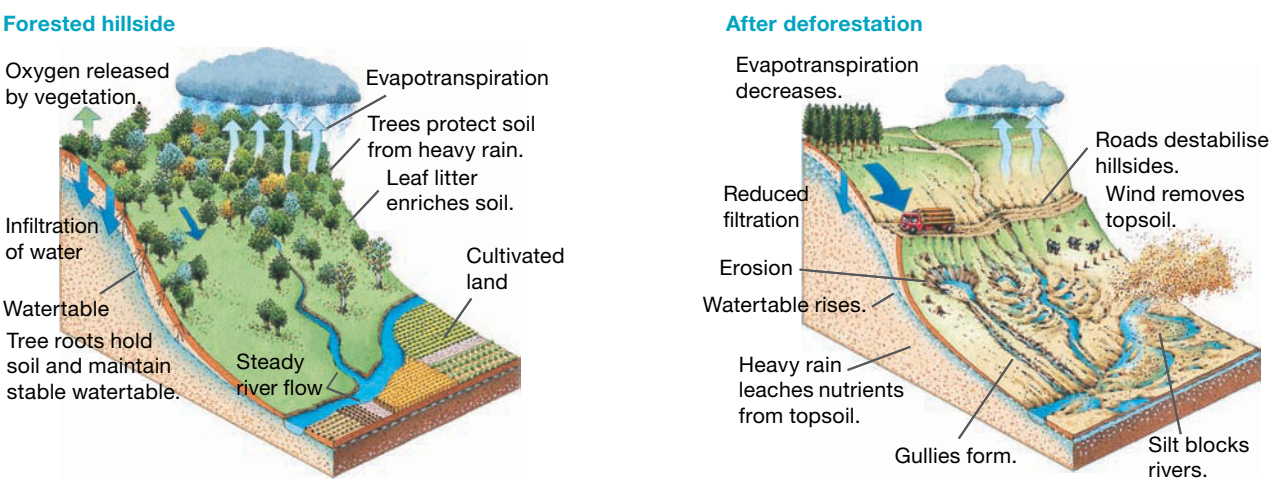
The effects of land degradation are far-reaching. Farmland productivity diminishes and yields drop because the soil becomes exhausted through overuse or deforestation (see **FIGURE 5**). Costs increase, as the land requires more treatment with fertiliser, and **topsoil** and nutrients in the soil need to be replaced. Valuable topsoil is often washed away into rivers and out to sea. Nutrients cause foul-smelling blue–green **algal bloom** that choke waterways. These blooms decrease water quality, poison fish and pose a direct threat to other aquatic life.

topsoil the top layers of soil that contain the nutrients necessary for healthy plant growth

algal bloom rapid growth of algae caused by high levels of nutrients (particularly phosphates and nitrates) in water

FIGURE 5 Land clearing and deforestation leave the land vulnerable to erosion. When rain falls on a well-vegetated hillside, the water is absorbed by plant roots and held in the soil. However, if the vegetation is removed, there is nothing to stabilise the soil and hold it together, especially when it rains. Rills and gullies form (see **subtopic 12.4**) where the unprotected soil is washed away, and landslides may occur.

int-7952



12.2.4 How has agriculture degraded the Australian landscape?

Climate, topography, water supply and soil quality are the major physical factors that determine how land can be used. When white settlers first colonised Australia they brought seeds and hoofed animals from Europe with them. They intended to farm here as they had always done at home; they undertook large-scale clearing of trees and shrubs and planted crops and pasture. However, the Australian landscape is very different to the land they had left behind. Australia's soils are naturally low in nutrients and have a poor structure. Much of the vegetation is shallow-rooted and easily disturbed when the land is ploughed and made ready for cultivation. Even in areas where the soil is fertile, over-irrigation and deforestation can raise the **watertable** and bring salt to the surface, decreasing soil fertility. Australia also has variable rainfall, and drought can last for years. This leaves the earth dry, parched, barren and unproductive. Floods can wash away a farmer's livelihood and leave the land flooded.

FIGURE 6 A former freshwater lake affected by salinity. The high salt levels have killed the native eucalypts; the smaller plants are more salt tolerant.



Are kangaroos the answer?

Australia's early economic growth and development depended on the success of agriculture. The first settlers knew they had to be self-sufficient, for their own survival and that of the new colony. They had to learn quickly how to farm soil that was often hard, stony and exposed to a variety of climatic extremes. Overgrazing by heavy,

watertable upper level of groundwater; the level below which the earth is saturated with water

hard-hoofed animals such as sheep and cattle increased the rate of land degradation, especially in arid and semi-arid regions. Kangaroo farming has been presented as an alternative sustainable solution to this problem.

Those in favour of kangaroo farming claim it would be more environmentally friendly as kangaroos are not hard-hoofed; issues such as soil compaction and vegetation trampling would be lessened. There could also be human health benefits as kangaroo meat contains less fat and fewer calories than both lamb and beef. Those against the idea argue that because of various species characteristics, kangaroo farming is not commercially viable in the long term (see **FIGURE 7**).

FIGURE 7 Comparing commercial viability of kangaroo farming with sheep farming

- Young dependent on mother for 14 months
- Cannot be sold live
- One-off use (meat and skin)
- 18 months before meat can be harvested
- A 60-kilogram kangaroo yields 6 kilograms of prime meat; the rest is suitable only as pet food
- Can meet only 0.5 per cent of current needs



- Young dependent on mother for a few months
- Can be sold live
- Multiple uses (wool, meat and skin)
- Breed from 12 months; multiple births possible
- Meat can be harvested from 3–6 months
- Yields 20 kilograms of prime meat
- Easier to herd and care for



12.2.5 Where is the land degrading?

In 1961, globally, there were 0.37 hectares of arable (productive) land available to grow food for every man, woman and child. By 2016, this figure had fallen to 0.19 hectares. **TABLE 1** shows changes to arable land availability over time for Australia and the world. These changes are due to factors such as population growth, urban sprawl, land degradation and climate change. In Australia, approximately two-thirds of the land used for agricultural production is degraded. **FIGURES 8** and **9** show the severity of land degradation in Australia and globally.

TABLE 1 Arable land per person over time

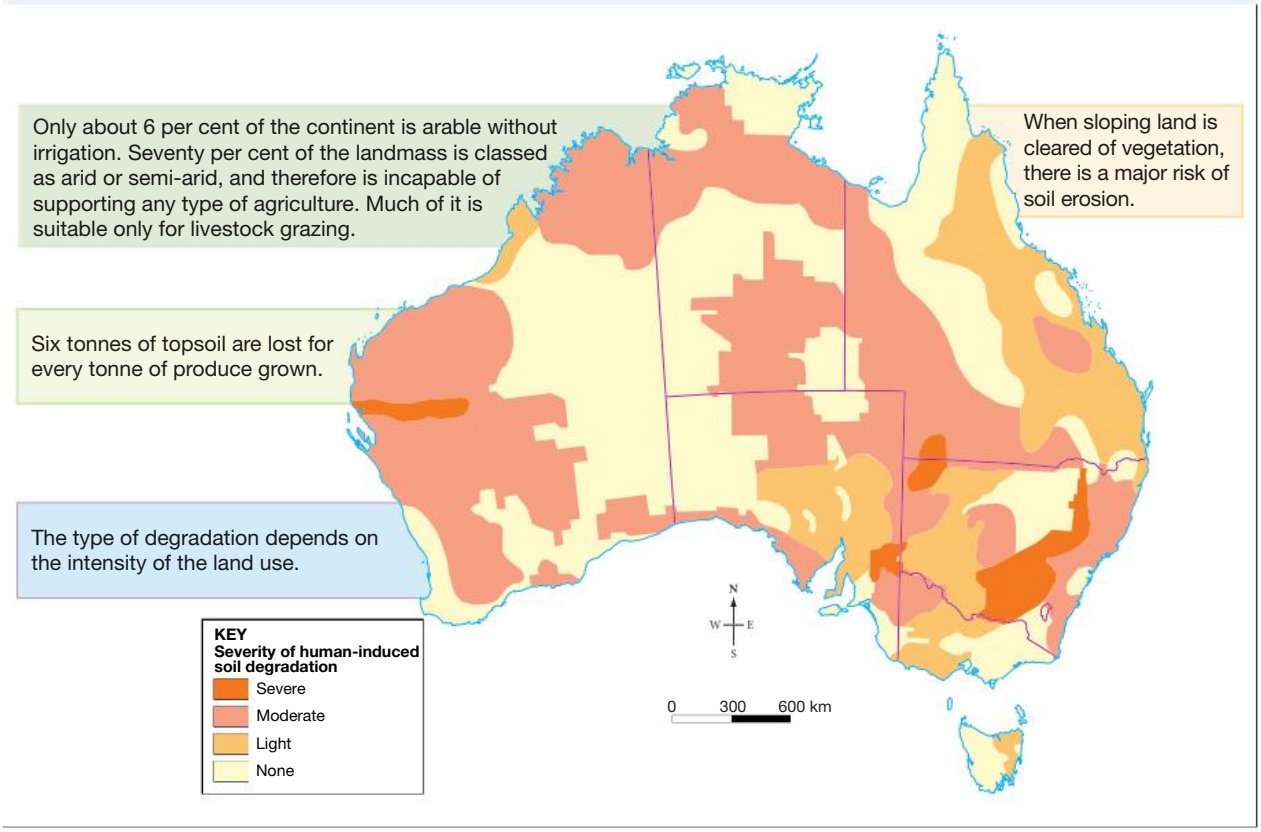
	Arable land per person (hectares)	
Year	Global	Australia
1961	0.37	2.88
1976	0.29	3.0
1991	0.23	2.64
2016	0.19	1.90

According to the United Nations, around 42 per cent of the world's poorest people live on the most degraded lands. Areas where the land degradation is most rapid are also those where population growth is greatest. In sub-Saharan Africa, for example, the annual rate of population growth is 2.7 per cent annually — significantly higher than the world average of 1.15 per cent. Africa is one of the most vulnerable continents, having lost 65 per cent of its arable lands and 25 per cent of its overall land area to desert. Experts estimate that 10 million hectares of land needs to be rehabilitated each year to reverse the current trends in land degradation.

In 1950, about 65 per cent of the world's population lived in developing nations; however, this figure is expected to rise to 85 per cent by the year 2030. These people are dependent on the most fragile environment for their survival.

int-7953

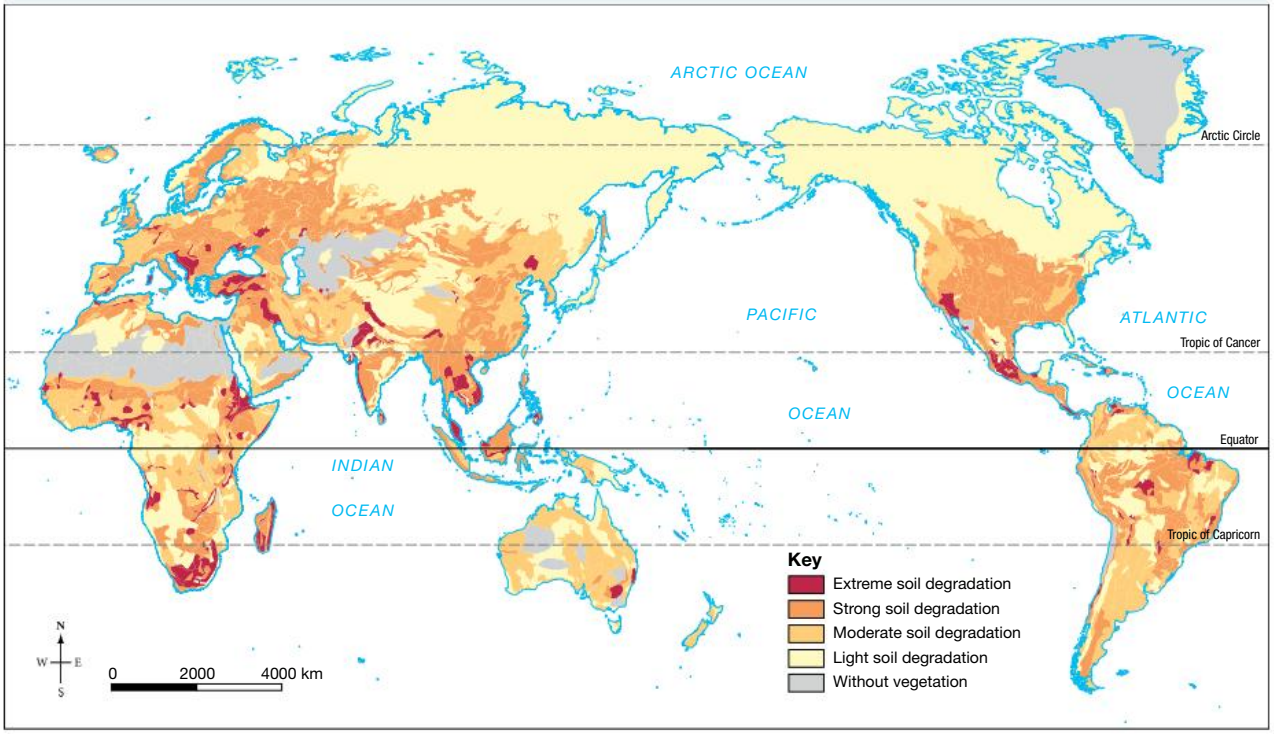
FIGURE 8 Severity of soil degradation in Australia



Source: MAPgraphics Pty Ltd Brisbane.

int-5597

FIGURE 9 Soil degradation is a global problem affecting every permanently inhabited continent.



Source: © Commonwealth of Australia Geoscience Australia 2013. © Commonwealth of Australia Department of Sustainability, Environment, Water, Population and Communities 2013. Map by Spatial Vision.

12.2.6 Challenges to food production

Today, there are more than three times the number of people living on the Earth than in 1950: over 7.8 billion, compared with 2.5 billion. Our primary energy use is five times higher and our use of fertilisers has increased eightfold. In addition, the amount of nitrogen pumped into our oceans has quadrupled. While the global population is increasing, the land upon which food is grown to feed this population is degrading.

Everyone on Earth relies on the land. Apart from providing us with a place to live, the land also provides most of our food and products such as oil and timber. Since 1990, the amount of land irrigated for agriculture has doubled and agricultural production has trebled. With the world's population expected to reach 9.8 billion by 2050 and 11.2 billion by the end of the century, the land and its resources will be placed under even more pressure.

Globally, 75 per cent of the Earth's total land area is classed as degraded, and around 60 per cent of this degraded land is used for agricultural production. In 2017 alone, 24 billion tonnes of fertile soil was lost worldwide, with the worst affected areas being in sub-Saharan Africa. Global food production is already being undermined by land degradation and shortages of both farmland and water resources, making feeding the world's rising population even more daunting.

Land degradation is a global problem. If the current trends continue, our ability to feed a growing world population will be threatened. Although we have a better understanding of factors that contribute to land degradation, the challenge is to manage the land sustainably for the future and reverse the trends.

FIGURE 10 Sustainable land use will be important for ensuring the health of the land while increasing our capacity to feed the Earth's growing population.



on Resources

Interactivity Destroying the land (int-3289)

12.2 ACTIVITIES

1. Investigate a particular type of land degradation and produce an annotated visual display to show the parts of Australia affected by it. Cover major contributing factors and possible management strategies. Add an inset diagram that examines a particular ***place, scale*** and rate of ***change*** associated with this type of degradation. Include your own recommendations for ***sustainable*** use of the ***environment*** to combat the issue you have investigated.
   HASS skills: Questioning and researching
   Geography concepts: Change, Sustainability
2. a. In small groups, prepare a fold-out educational pamphlet outlining the damage caused by the waste produced by urban communities each year. Make sure you clearly outline the interconnection between human activity and ***environmental*** harm. Devise a strategy to reduce this waste and estimate the difference this would make to the amount of waste generated.
   HASS skills: Communicating and reflecting
   Geography concepts: Environment, Sustainability
   b. In your group, evaluate your own and others' contributions to this group task, critiquing roles including leadership, and provide useful feedback to your peers. Evaluate your group's task achievement and make recommendations for improvements in relation to team goals.
   General capability: Personal and social capability
3. Create an overlay theme map. Prepare a base map that shows the extent of land degradation around the world. Prepare an overlay map showing land use. Annotate your overlay with any similarities and differences between the two maps.
   HASS skills: Communicating and reflecting
   Geography concept: Scale
4. a. Investigate alternatives to traditional livestock farming of sheep and cattle, such as kangaroos or emus. Use the information presented in this subtopic as a starting point. Present a reasoned argument for or against this type of farming as a ***sustainable*** alternative.
   HASS skills: Evaluating
   Geography concept: Sustainability
   b. Evaluate emotional responses and the management of emotions in terms of this type of farming.
   General capability: Personal and social capability
5. Working in pairs, create a presentation showing the different ways people use and manage the land in another country.
   a. Design a suitable symbol for land degradation and use this to highlight any uses you think might result in land degradation.
   b. Add annotations to explain how highlighted activities might degrade environments, and the scale of this ***change.***
   c. Suggest a possible ***sustainable*** solution for each type of degradation identified.
   HASS skills: Communicating and reflecting
   Geography concepts: Change, Sustainability

12.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 4, 7	Questions 5, 6, 8	Questions 2, 9, 10

Check your understanding

1. List the different ways in which the land can become degraded.
2. Outline the impact of land degradation on water resources.
3. Explain why land degradation is a current geographical issue.
4. Describe in your own words what land degradation is.
5. Why were European farming methods unsuitable for the Australian environment?

Apply your understanding

6. Do you think land degradation is happening on a small or large scale? Explain.
7. Study **FIGURES 1** and **5**.
   a. In your own words, describe the damage that has occurred to the environment.
   b. Suggest how these changes have come about.
   c. How would you try to restore these places and manage their resources in a sustainable manner?
8. Study **TABLE 1**. What is the difference in arable land per person for 1961 and 2016, globally and in Australia?
9. Land degradation is often the result of many little actions and events, the effects of which interact and build up over time. Identify some things that you do, consciously or unconsciously, that might be contributing to land degradation where you live. Explain the impact of these actions.
10. Describe an area or place that is near where you live, that you have visited recently or you have heard about in the media, and that you think is degraded. Give reasons for your choice and suggest how and why you think this degradation came about.

For sample responses for every question, go to www.jacplus.com.au.

12.3 Managing land degradation

LEARNING INTENTION

By the end of this subtopic you will be able to identify the causes and likely consequences of environmental change, and identify and explain solutions to an environmental issue.

12.3.1 The development and importance of soil

Soil is a mixture of broken-down rock particles, living organisms and **humus**. Over time, as surface rock breaks down through the process of **weathering** and mixes with organic material, a thin layer of soil develops and plants are able to take root (see **FIGURE 1**). These plants then attract animals and insects and when these die their dead bodies decay, making the soil rich and thick.

FIGURE 1 Wild flowers taking root in cracks in the rocks



Soil formation is a complex process brought about by the combination of time, climate, landscape and the availability of organic material. In some areas it takes hundreds of years to develop, while in others soil can form in a few decades.

The land is one of our most valuable resources. We depend on it for food, shelter, fibres and the oxygen we breathe. Yet the demands of an ever-increasing population place great pressure on it. To meet our needs, swamps and coastal marshes have been drained, vegetation removed and minerals extracted from the ground. Large-scale clearing and poor agricultural practices have left the land vulnerable. While erosion is a natural process, farming land clearing and the construction of roads and buildings can accelerate the process.

humus decaying organic matter that is rich in nutrients needed for plant growth

weathering the breaking down of rocks

12.3.2 How is soil being lost?

Sheet erosion

Sheet erosion (see **FIGURE 2**) occurs when water flowing as a flat sheet flows smoothly over a surface, removing a large, thin layer of topsoil. Sheet erosion might happen down a bare slope. It occurs when the amount of water is greater than the soil's ability to absorb it.

Strategies to combat this form of erosion include planting slopes with vegetation and adding **mulch** to the exposed soil so that it can absorb greater volumes of water. Another solution is to 'terrace' the landscape — to form the land into a series of steps rather than a steep slope.

FIGURE 2 What evidence of sheet erosion can you observe?



Rill erosion

Rill erosion (see **FIGURE 3**) often accompanies sheet erosion, occurring where rapidly flowing sheets of water start to concentrate in small channels (or rills). These channels, less than 30 centimetres deep, are often seen in open agricultural areas. With successive downpours, rills can become deeper and wider, as fast-flowing water scours out and carries away more soil.

Strategies to combat rill erosion include tilling the soil (turning it over before planting crops) to slow the development of the rills. Building contours in the soil and planting a covering of grass can help slow the flow of water and hold the soil in place.

FIGURE 3 In which direction do you think the water is flowing? Why?



Gully erosion

Gully erosion (see **FIGURE 4**) often starts as rill erosion. Over time, one or more rills may deepen and widen as successive flows of water carve deeper into the soil. Gully erosion may also start when a small opening in the surface such as a rabbit burrow or a pothole is opened up over time. Soil is often washed into rivers, dams and reservoirs, muddying the water and killing marine species. Large gullies need bridges or ramps to allow vehicles and livestock to cross.

Strategies to combat gully erosion largely involve stopping large water flows reaching the area at risk, through measures such as planting vegetation or crops to soak up the water. Other strategies include building diversion banks to channel the water away from the area, and constructing dams.

FIGURE 4 What impact will the falling water have? How could further damage be prevented?



Tunnel erosion

Sometimes water will flow under the soil's surface — for example, under dead tree roots or through rabbit burrows — carving out an underground passage or tunnel (see **FIGURE 5**). The roof of the tunnel may be thin and collapse under the weight of livestock or agricultural machinery. When these tunnels collapse they create a pothole or gully.

mulch organic matter such as grass clippings

FIGURE 5 What do you notice about the ground around these tunnels? What do you think will happen if water flows through them?



FIGURE 6 Wind erosion results when wind picks up and carries away fine soil particles. Did you know that soil from China has been deposited in the United States?



Strategies to combat tunnel erosion include planting vegetation both to absorb excess water and to break up its flow. Sometimes major earthworks are needed to repack the soil in badly affected areas.

Wind erosion

When the surface of the land is bare of vegetation, the wind can pick up fine soil particles and blow them away (see **FIGURE 6**). It is more common during periods of drought or if the land has been overgrazed. The soil can be transported large distances and deposited in urban areas.

Strategies to combat wind erosion include planting bare areas with vegetation, mulching, planting wind breaks and avoiding overgrazing.

12.3.3 CASE STUDY: Managing land degradation in Costerfield, Victoria

How has Costerfield changed over time?

Costerfield is around 100 kilometres north of Melbourne (see **FIGURE 7**). The landscape is characterised by gentle slopes with undulating (wavelike) pastures. It has an average annual rainfall of around 575 millimetres, but with relatively high average evaporation rates, the climate is described as semi-arid or **Mediterranean**. Summers are hot and dry, and winters cool and wet. The area is also subject to climate extremes, so heavy rain, drought, frost and dust storms are not uncommon.

Costerfield once had a dense covering of trees, predominantly eucalyptus. Native grasses also dominated the area. Soils in the area are generally considered to have a low **carrying capacity** for livestock because of poor fertility levels. Bushfires were a constant threat throughout the nineteenth century.

The first **pastoral run** was established in 1835, and the land was extensively cleared. Settlers introduced sheep, cattle, rabbits and foxes soon afterwards. Sheep grazing soon became the dominant activity in the region. The lack of native vegetation cover allowed rainfall to flow across the surface, eroding soil and making the run-off **turbid**. It also allowed rainfall to infiltrate the subsoil, leading to sheet,

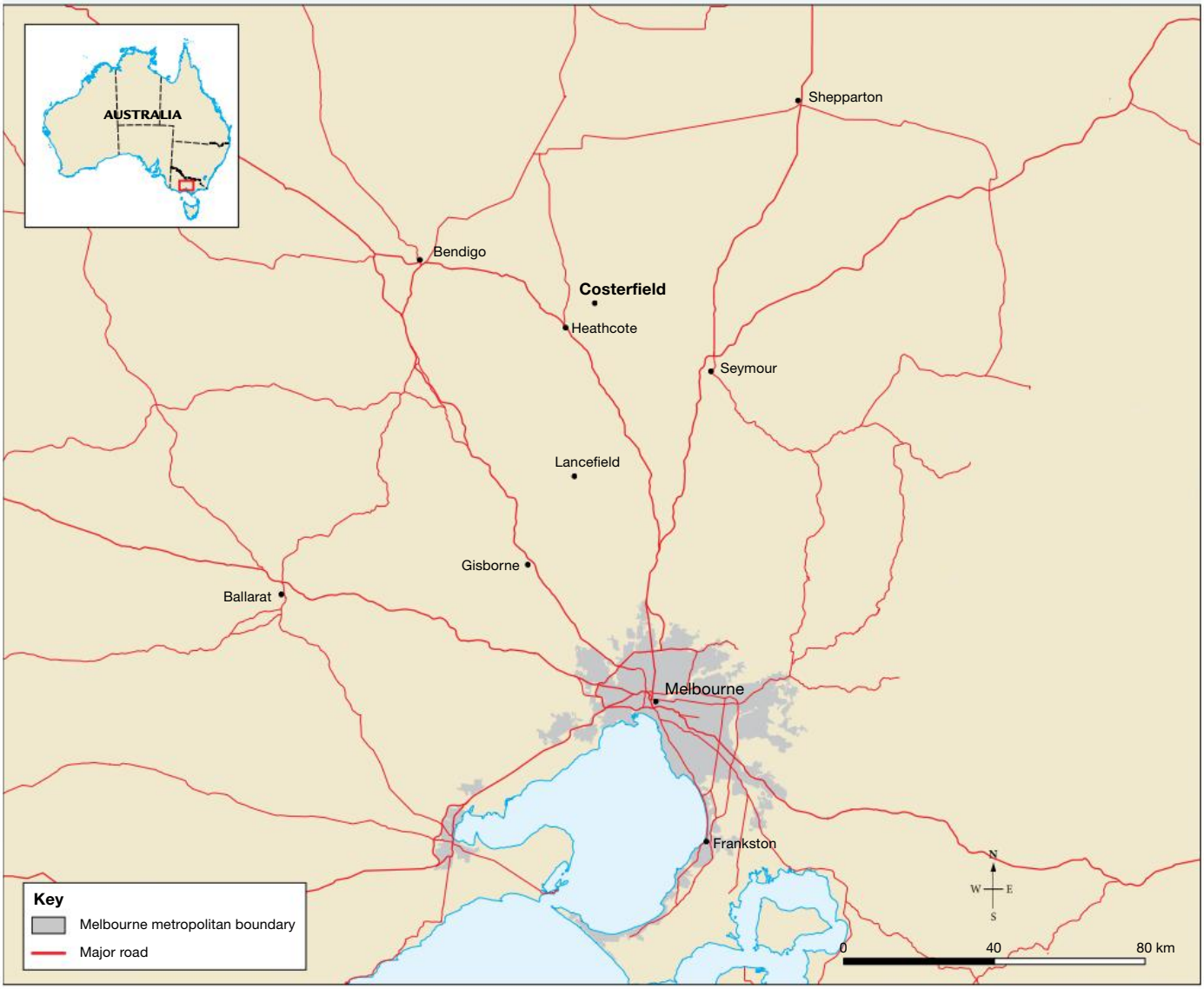
Mediterranean (climate) characterised by hot, dry summers and cool, wet winters

carrying capacity the ability of the land to support livestock

pastoral run an area or tract of land for grazing livestock

turbid water that contains sediment and is cloudy rather than clear

FIGURE 7 Costerfield lies approximately 100 kilometres north of Melbourne.



Source: © The State of Victoria, Department of Environment and Primary Industries 2013.

rill, gully and tunnel erosion (see **FIGURES 8** and **9**). The problem was further exacerbated by the rabbit population. Subdivision plans were drawn up in the early 1850s; however, in 1852 gold was discovered at Mclvor Creek, which led to an influx of up to 40 000 gold prospectors in the region, causing the land to become even more degraded.

Following the gold rushes and into the twentieth century, the area around Costerfield was largely used for grazing livestock, predominantly sheep. However, there is evidence that both horses and cattle were raised in the region on a much smaller scale.

FIGURE 8 A dead tree stump or old fence post can allow water to infiltrate the soil.



It is much easier to prevent gully erosion than control it once it has developed. Without intervention, gullies can continue to become larger and larger. A number of measures were introduced by local Landcare groups to tackle the issues in the Costerfield area.

The gullies were stabilised by constructing banks, gully check dams (see **FIGURE 10**) and terracing, all aimed at reducing and redirecting run-off. Other strategies included:

- re-establishing ground cover, especially plants and grasses that are native to the region (see **FIGURE 11**)
- rabbit eradication programs to control the population and reduce burrowing activities that can create access points for run-off to enter the subsoil and promote development of new gullies. In addition, they protect the newly sown grasses from being eaten by the rabbits
- introduction of chemicals such as lime and gypsum to improve soil structure and pH levels to assist in the revegetation process
- protection of revegetated areas by preventing access, especially by livestock, during the restoration process.

FIGURE 9 Notice that tunnel erosion forms where the surface of the land is bare. What do you think is likely to happen next?



FIGURE 10 Permanent check dams may be constructed using logs or stone. Sometimes they are lined to prevent seepage into the ground so that the water is trapped and can be used for irrigation purposes. They also trap sediment and prevent it being washed into waterways. Additionally, some are designed to trap nutrients and so help maintain water quality. Outlet pipes allow water to be redirected and control the flow of water across the landscape.

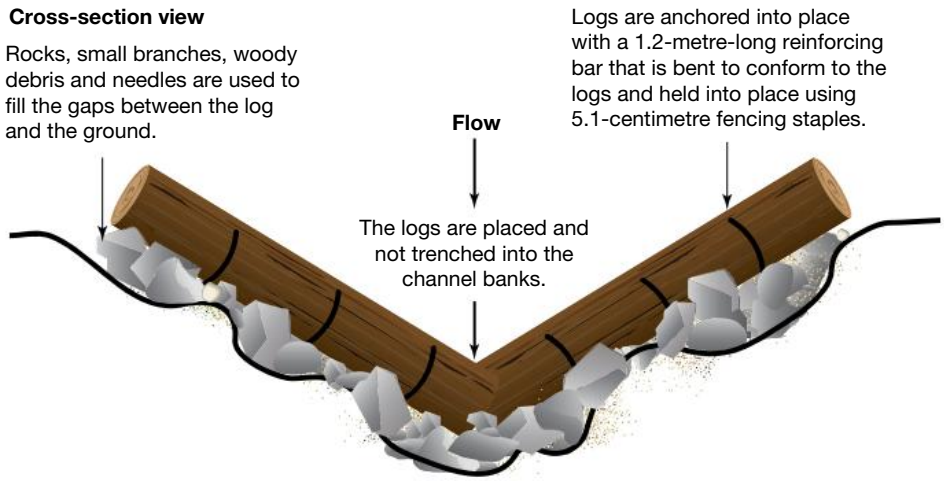


FIGURE 11 Revegetated area near Costerfield



Resources

Interactivity Down in the dirt (int-3290)

12.3 ACTIVITIES

1. With the aid of a flow diagram, show the ***interconnection*** between sheet, rill and gully erosion. Use the captions and the questions that appear with each image to help you.

   HASS skills: Communicating and reflecting
   Geography concept: Interconnection
2. Working with a partner, use the internet to investigate an international environment, such as the Dust Bowl in the United States or the Yellow River in China, that has been degraded because of soil erosion.
   a. Annotate a sketch of this ***environment*** to explain what has happened to the area. Include an inset sketch map that shows the location of this ***place,*** and describe the ***scale*** and rate of ***change***.
   b. Swap your eroded ***environment*** sketch with another pair who will devise a series of management strategies to rehabilitate the ***environment*** and allow it to be used in a ***sustainable*** manner. Add these to your annotated sketch

   HASS skills: Questioning and researching, Communicating and reflecting
   Geography concept: Environment

12.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 5, 6	Questions 4, 7, 9	Questions 2, 8, 10

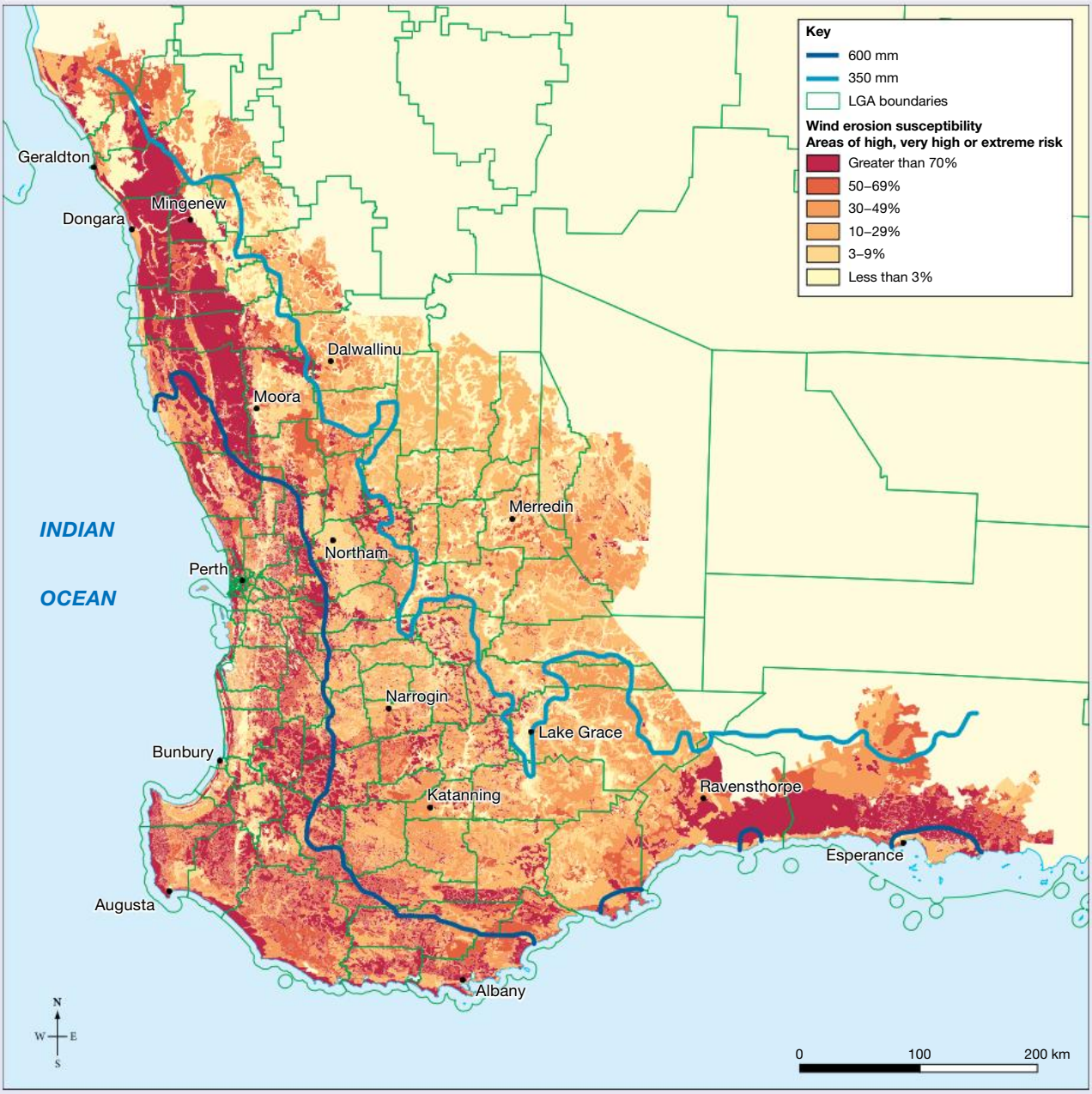
Check your understanding

1. Explain the interconnection between the removal of native vegetation and land degradation.
2. Explain in your own words how the use of a check dam might reduce the development of gullies.
3. Identify the types of soil erosion that occurred in Costerfield.
4. Explain what is meant by the phrase ‘making the run-off turbid’.
5. Explain the term ‘pastoral run’.

Apply your understanding

6. Why do you think soil erosion in all its forms is such a significant cause of land degradation?
7. How would the arrival of gold prospectors increase land degradation? Explain the type of erosion that would most likely occur and the activities relating to gold mining that might cause these changes to develop.
8. Explain the interconnection between rill erosion and gully erosion.
9. An important part of any land management program is the control of introduced species such as rabbits. Explain why rabbits are a problem in areas where the land has been degraded.
10. Look at **FIGURE 12**, which depicts the scale of soil erosion from wind in south-west Western Australia.
    a. In which parts of the state is erosion highest?
    b. Use your atlas to find a map showing vegetation in Western Australia. Explain why wind erosion is more common in areas north of Perth and near Esperance.

FIGURE 12 Soil erosion in Western Australia



Source: Department of Primary Industries and Regional Development, WA Government.

For sample responses for every question, go to www.jacplus.com.au.

12.4 Environmental change and salinity

LEARNING INTENTION

By the end of this subtopic you will be able to:

- explain the causes of salinity
- describe why it is a serious environmental issue
- identify possible solutions to issues related to salinity.

12.4.1 Where does the salt come from?

Salinity is not a new problem. In fact, it was an environmental issue for the earliest civilisations some 6000 years ago. Historical records indicate that the Sumerians, who farmed the land between the Tigris and Euphrates rivers in the area known as Mesopotamia, ruined their land as a result of their poorly managed irrigation practices.

Salt has become a major contributor to land degradation in Australia. Rising from below the land surface, it is destroying native vegetation and threatening the livelihood of many Australians. As plants die as a result of salinity, other problems emerge: the soil no longer has a protective cover of vegetation, which means it is more easily blown away or eroded.

salinity an excess of salt in soil or water, making it less useful for agriculture

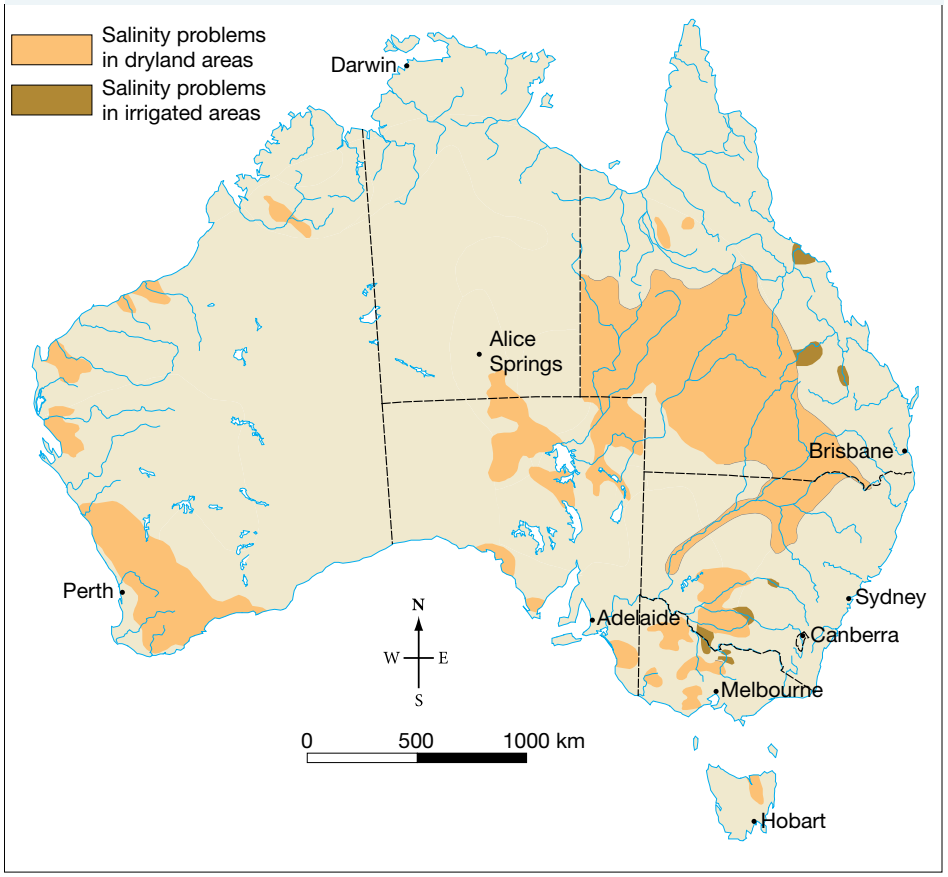
groundwater water held underground within water-bearing rocks or aquifers

Some 140 million years ago, parts of the Australian continent were covered by shallow seas and saltwater lakes. The salt stores from these waters have lain dormant below the surface of the land, much of them in the **groundwater**. In addition, salt continues to be deposited on the land's surface by rain and winds blowing in from the oceans, and by the weathering of mineral-carrying rocks.

Australia's native vegetation had built up some tolerance to the salt levels in the soil. The deep-rooted vegetation also soaked up water in the soil before it could seep down into the groundwater. This meant that the watertable stayed at a fairly constant level, and that the concentrated salt stores stayed where they were. This natural balance changed with the arrival of European settlers. The farming and land-clearing practices they introduced were, and still are according to many experts, unsuited to Australia's generally harsh, dry climate, as well as to its geological history.

Salt has now become a serious problem. There are two ways in which the soil can become too salty: dryland salinity and irrigation salinity. The areas in Australia affected by salinity are shown in **FIGURE 1**.

FIGURE 1 Salinity distribution

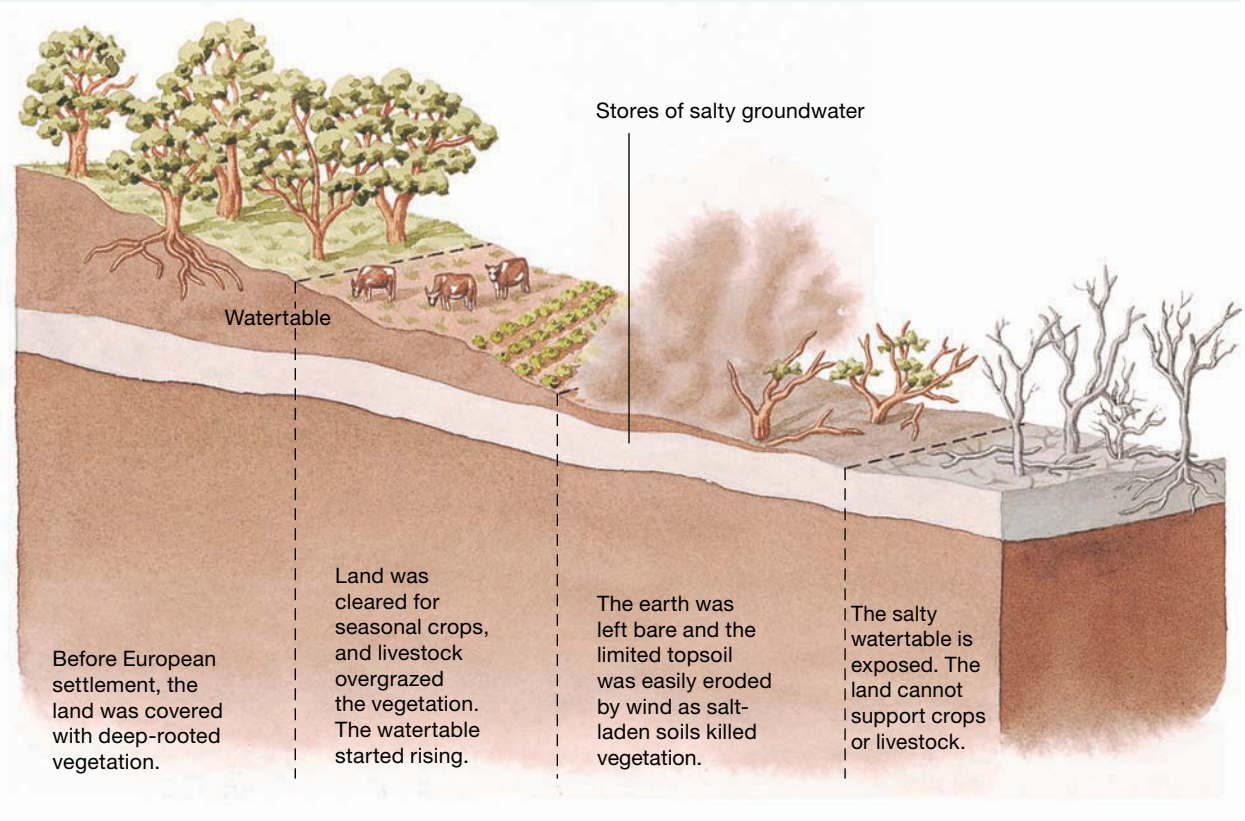


Source: Spatial Vision.

12.4.2 What is dryland salinity?

Dryland salinity occurs in areas that are not irrigated. When settlers cleared the land, they replaced deep-rooted native vegetation with crop and pasture plants. These plants generally have shorter roots and cannot soak up as much rainfall as native vegetation. Excess moisture seeped down into the groundwater, raising the watertable and bringing concentrated saline water into direct contact with plant roots (see **FIGURE 2**). Vegetation, even salt-tolerant plants, started dying as the salt concentrations rose. Once the vegetation dies off, the soil is left bare and is prone to erosion. Often layers of salt, known as **salt scald**, are visible on the surface of the land.

FIGURE 2 The effects of a rising watertable



12.4.3 What is irrigation salinity?

One-third of the world's food is produced on irrigated land. Irrigation salinity occurs in irrigated regions and is a direct result of overwatering. When more water is applied to crops or pasture plants than they can soak up, the excess water seeps down through the soil into the groundwater, causing the salty watertable to rise to the surface. Some of this salt is washed into rivers, either as run-off or groundwater seepage, and transported to other places.

salt scald the visible presence of salt crystals on the surface of the land, giving it a crust-like appearance

HOW MUCH LAND AROUND THE WORLD IS AFFECTED BY SALINITY?

- Africa: 2 per cent of Africa's landmass
- China: 21 per cent of arid lands or around 30 million hectares of land
- Western Europe: 10 per cent of the land area
- United States: Land across 17 states
- South America: Most countries have areas of land affected
- Australia: 2.5 million hectares
- Worldwide: Estimated that 10 million hectares of arable land succumb to the effects of irrigation-related salinity each year and that, without intervention, the affected area might triple by 2050

How do we solve the problem?

Many programs are in place to identify and monitor problem areas. Action being taken includes:

- changing irrigation practices to reduce overwatering
- planting deep-rooted native trees and shrubs in open areas
- developing new crops that are more salt tolerant, such as new strains of wheat
- replacing introduced pasture grasses with native vegetation such as saltbush (see **FIGURE 3**)
- using satellite technology to map areas at risk to enable early intervention.

FIGURE 3 Native plants such as saltbush help solve the problem of salinity on Australian grazing lands.



12.4.4 CASE STUDY: Salinity in the Murray–Darling Basin

The Murray–Darling Basin is Australia's largest **drainage area**. Extending across parts of four states and the entire Australian Capital Territory, it contains the country's three longest rivers: the Murray (2508 kilometres), the Darling (2740 kilometres when including its three main tributaries) and the Murrumbidgee (1690 kilometres). It is also one of the country's most significant agricultural regions, producing close to 45 per cent of the nation's food. Because it receives very little rainfall, the area depends heavily on irrigation. In fact, 70 per cent of Australia's irrigation occurs here.

FIGURE 4 The earliest signs of salinity: the watertable has risen, bringing salt to the root zone. Look carefully at the trees in the background. What do you observe?



Over time, human activities in the Murray–Darling Basin have increasingly threatened the basin's **ecology** (see **FIGURE 4**). These activities have included introducing non-native plant and animal species, changing the natural flow of the river for irrigation purposes, clearing the land and over-watering crops. It is the last two activities that have particularly contributed to the region's salinity. (Although, in 1829 when explorer Charles Sturt discovered the Darling River during the dry season, he observed that the water was too salty to drink.) It has been estimated that by 2050, 1.3 million hectares (or 93 per cent) of land in the region could be salt affected.

drainage area (or basin) an area drained by a river and its tributaries

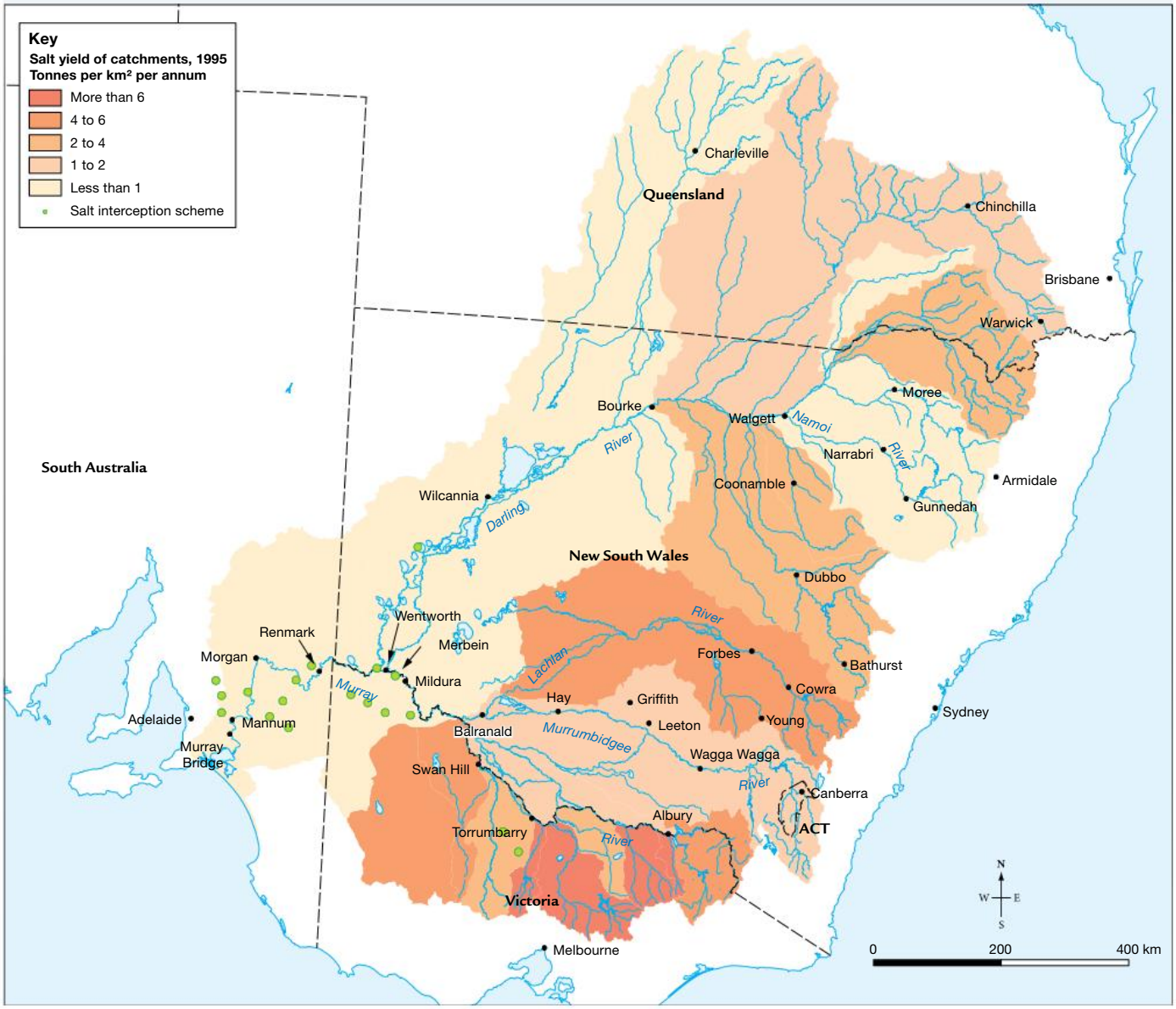
ecology the environment as it relates to living organisms

Tackling the problems

Over the years, a range of strategies have been investigated to better manage the Murray–Darling Basin and reduce salinity problems. Strategies have included the development of action plans such as revegetation programs and educational programs. In 2008, the Commonwealth Government took control of the region to allow for the implementation of a comprehensive management strategy that would provide for the needs of all states and also be environmentally sustainable. The Murray–Darling Basin Authority (MDBA) was created to oversee the entire project.

As part of the measures to control salinity, salt-interception schemes have been established along the Murray River (see **FIGURE 5**). Collectively, they remove 500 000 tonnes of salt annually from groundwater and drainage basins (see **FIGURE 6**). Prior to these schemes, the Murray River carried huge amounts of salt — for example, 250 tonnes per day and 100 tonnes a day, respectively, past Woolpunda and Waikerie, between Renmark and Morgan in South Australia. Recent surveys show that salinity levels have decreased to less than 10 tonnes a day in each area.

FIGURE 5 Salt interception in the Murray–Darling Basin



Source: © Commonwealth of Australia Geoscience Australia 2013. Map by Spatial Vision.

FIGURE 6 Salt harvested from evaporation ponds is exported all around the world.



Murray–Darling Basin Royal Commission 2018

In 2018, a report by the ABC program *Four Corners* levelled serious allegations of inadequate management, negligence and water theft in the Murray–Darling Basin. Following this, the South Australian Government ordered a **Royal Commission** into the management of the Basin.

The Royal Commission found that the existing management strategies were in need of a complete overhaul to ensure that more water was diverted from irrigation and back into the environment.

The report was also highly critical of the Menindee Lakes project (in NSW), which involved shrinking and emptying the lakes more often to save water from evaporation — an action that failed to take into account the impact not only on the environment when river flow stopped, but also on those further downstream in Victoria and South Australia.

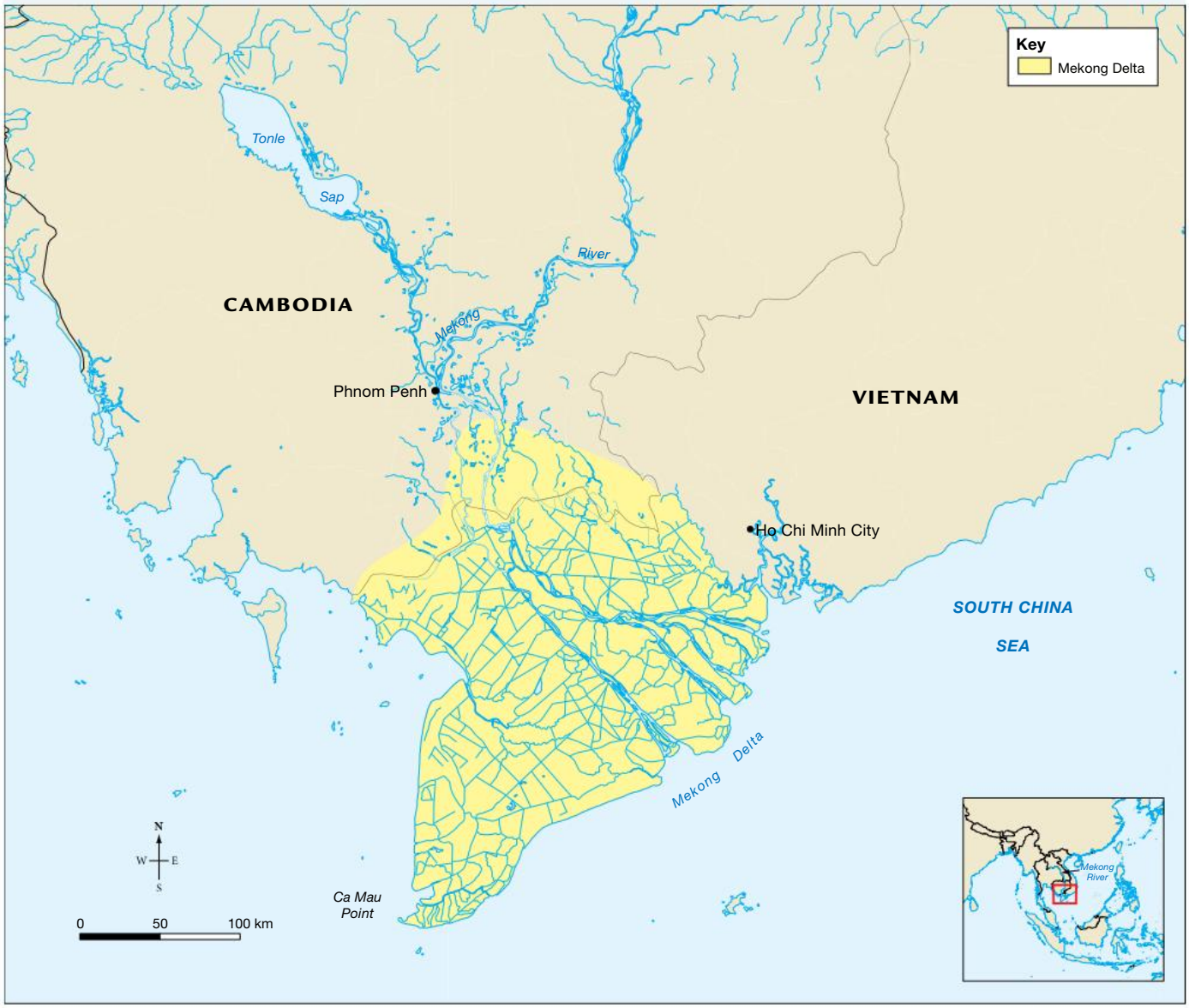
The report argued the aim of the MDBA should be to share limited water resources and ensure that the needs of the environment, agriculture, Indigenous communities and 2.6 million people who depend on the Murray–Darling River system to supply their water should be considered — especially those who live downstream and all the way to the mouth of the river where it empties into the sea. The sustainable management of this vital water resource remains an ongoing challenge.

12.4.5 CASE STUDY: Vietnam — adapting to salinity issues

Vietnam's Mekong Delta region (see **FIGURE 7**) is a major exporter of both rice and shrimp. Drought and the early arrival of the dry season, which is being attributed to climate change, is allowing sea water to encroach on valuable farming land.

Royal Commission a public judicial inquiry into an important issue, with powers to make recommendations to government

FIGURE 7 The Mekong Delta



Source: Vector Map Level 0 Digital Chart of the World. Map by Spatial Vision.

While rice is a water-thirsty crop, it does not like to be completely submerged for its entire growing season. Rice grows best in fertile soils where there is an abundant supply of water that can be controlled throughout the growing season, but it can adapt to a variety of growing conditions.

Scientists are now developing strains of rice that are not only salt-resistant but can also withstand being submerged in water for almost three weeks, whereas traditional strains die within a week of being flooded and fully submerged.

FIGURE 8 Dry rice husks suitable only for poultry are the result of brackish water from the sea flowing inland.



Additionally, in some regions, farmers are making use of the **brackish** water that results from periods of saltwater intrusion. While brackish water is not suited to rice farming, it is ideal for cultivating shrimp. With the onset of the monsoon season, the farmers rely on the heavy rains to flush out the salt water and allow them to plant their rice crops.

brackish (water) water that contains more salt than fresh water but not as much as sea water

Explore more with myWorld Atlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate Australian Curriculum topics > Year 10: Environmental change and management > **Salinity in the Murray–Darling Basin**

on Resources

Interactivity A pinch of salt (int-3291)

12.4 ACTIVITIES

1. Investigate the history of agriculture in an ancient civilisation, such as Mesopotamia.
   a. Include a sketch map of the area. Annotate this map to show how the region was affected and why.
   b. What lessons might modern farmers learn from ancient practices?

   HASS skills: Questioning and researching, Analysing
2. In groups, investigate a method of combating salinity and ***sustainable*** practices that will improve the productivity of agricultural land. Before you begin, decide as a class which groups will cover dryland salinity and which will focus on irrigation salinity. Present your findings as a news report.

   HASS skills: Questioning and researching, Communicating and reflecting
   Geography concept: Sustainability
3. Find out the total land area of Australia and of the world. If areas affected by irrigation salinity are expected to triple by 2050, estimate the proportion of land that will be affected on a national and global ***scale.*** Use your findings as the basis for writing a letter to the Editor, urging governments to take action and halt this trend.

   HASS skills: Analysing
   Geography concept: Scale
4. In groups, investigate the Mekong River, its delta and its importance to Vietnam.
   a. Prepare a report on how the river is used and the issue of land degradation. In your report make reference to the ***scale*** of the problem and the rate at which change is occurring.
   b. What strategies have been suggested or used to deal with this issue? Are these strategies a sustainable option for caring for the ***environment***? Why, or why not?

   Questioning and researching, Communicating and reflecting
   Geography concepts: Scale, Environment
5. Investigate land use in the Murray–Darling Basin and explain the ***interconnection*** between land use and salinity in this region.

   HASS skills: Questioning and researching, Communicating and reflecting
   Geography concept: Interconnection
6. With a partner, investigate how saltbush may help to reduce salinity. Create an annotated diagram of a saltbush plant and its root system to explain this role.

   HASS skills: Questioning and researching, Communicating and reflecting

12.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 5, 6	Questions 3, 7, 8	Questions 4, 9, 10

Check your understanding

1. Explain the interconnection between soil salinity and land degradation.
2. Why would planting deep-rooted trees help solve the problem of salinity?
3. What actions could an irrigation farmer take to reduce the risk of salinity?
4. Why is the Murray–Darling Basin a significant part of the Australian environment?
5. Refer to **FIGURE 1**. Describe the distribution of dryland salinity areas in Australia.

Apply your understanding

6. Which general area of the Murray–Darling Basin is most affected by salinity: the north-east, the western region or the south-east? Describe the scale of the problem.
7. With the aid of a diagram, explain what a delta is and why it is important.
8. Refer to **FIGURE 5**.
   a. What is the aim of such salt-interception schemes? Explain.
   b. Do you think this is a sustainable management strategy? Explain.
   c. Discuss the impact of this scheme on river ecosystems.
   d. What do you think happens to the salt that is extracted?
   e. Do you think a similar scheme could be developed for the Mekong Delta? Justify your point of view.
9. With the aid of a Venn diagram, compare salinity issues that exist in the Murray–Darling Basin and Vietnam's Mekong Delta. Include references to the scale of the issue and the rate of change.
10. What factors have contributed to the degradation of the Murray–Darling Basin's land and water resources since the arrival of Europeans?

For sample responses for every question, go to www.jacplus.com.au.

12.5 Desertification: the drylands are spreading

LEARNING INTENTION

By the end of this subtopic you will be able to explain the causes of desertification and the areas most at risk, and discuss and evaluate strategies to deal with desertification.

12.5.1 Which regions are most at risk from desertification?

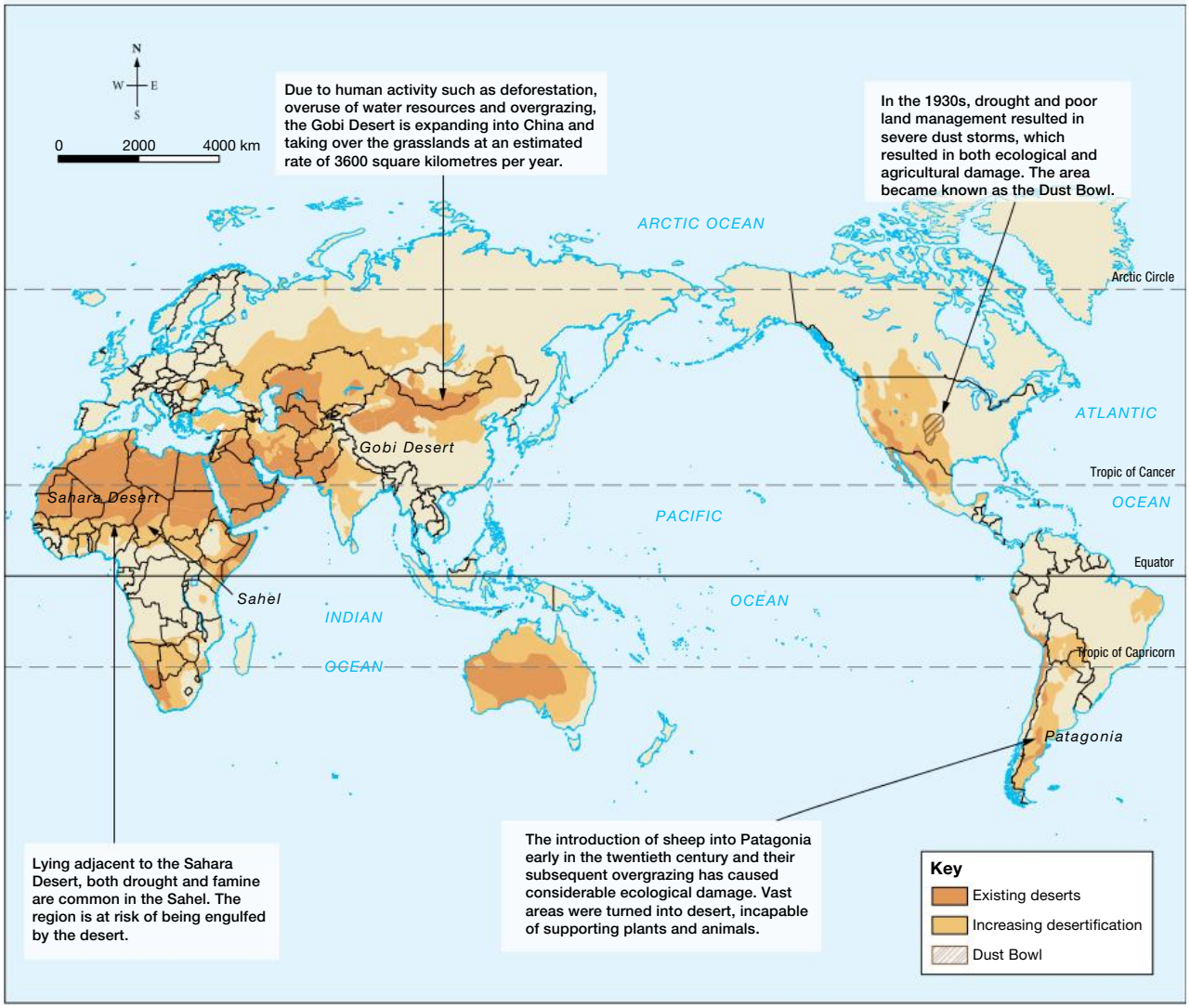
As the Earth's population increases, more pressure is placed on the land to provide both food and shelter. In many parts of the world this has meant that land has been overused and become exhausted. This is especially true in **dryland** regions. Many of these areas have become so degraded that they are at risk of being turned into desert, placing the survival and livelihood of the people who depend on them in jeopardy.

dryland ecosystems characterised by a lack of water. They include cultivated lands, scrublands, shrublands, grasslands, savannas and semi-deserts. The lack of water constrains the production of crops, wood and other ecosystem services.

The United Nations estimates that approximately 41 per cent of the Earth's land surface is at risk of turning into desert. This is a process known as **desertification**, an extreme form of land degradation that affects arid, semi-arid and dry sub-humid areas of the Earth. These dryland regions often border existing deserts but, unlike deserts, they support population and agriculture. Drylands are fragile environments that degrade rapidly when the land is not carefully managed.

The areas affected are home to more than two billion people in 168 countries. **FIGURE 1** shows the Earth's desert areas and those places most at risk from desertification.

FIGURE 1 The drylands of the Earth are spreading. It is estimated that 12 million hectares of productive land (an area three times larger than Switzerland) is lost annually due to desertification.



Source: UNEP World Conservation Monitoring Centre.

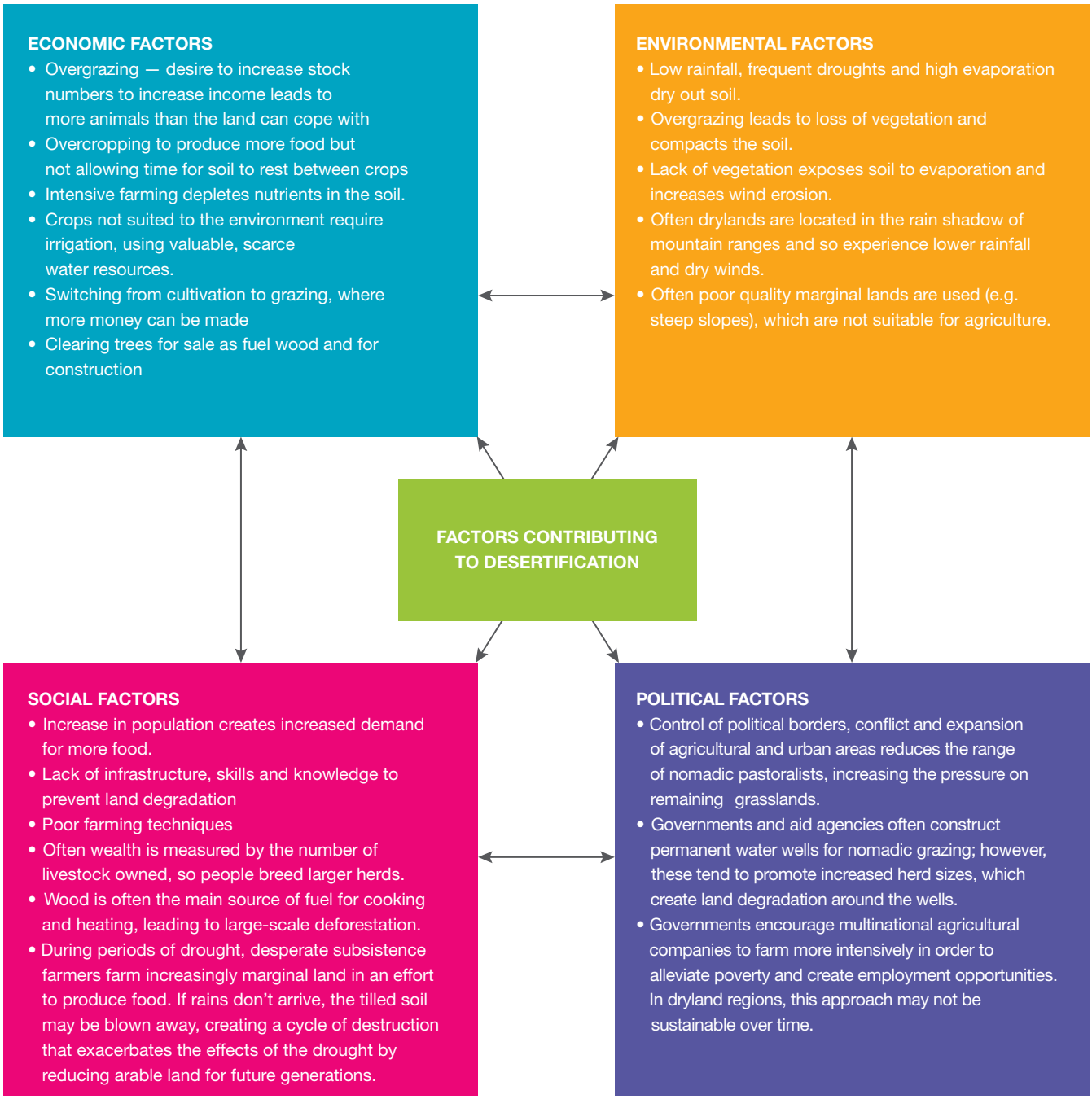
Estimates predict that by 2025, without intervention, two-thirds of the arable lands in Africa will be lost, along with one-third in Asia and one-fifth in China. Based on current trends, Bangladesh will have no fertile soil available in 50 years. Desertification is a global issue as it is present on all continents in both developed and developing economies.

desertification t he transformation of land once suitable for agriculture into desert by processes such as climate change or human practices such as deforestation and overgrazing

12.5.2 What causes desertification?

Desertification is largely a result of human-induced environmental change, caused by the complex interconnection of environmental, political, cultural and economic factors. It generally arises from the poor management of dryland environments. Increasing populations, the demand for more agricultural production and overuse of the soil degrades the land to the extent that once productive places turn into wastelands (see **FIGURE 2**).

FIGURE 2 Factors contributing to desertification



12.5.3 The impacts of desertification

Currently, the world loses approximately 12 million hectares of land annually, an area almost three times the size of Switzerland, enough to grow 20 million tonnes of grain. The cost to global economies is estimated to be $490 billion per annum.

Desertification brings about environmental change as the loss of topsoil and protective vegetation enables desert sand dunes to migrate and smother former farmland (see **FIGURE 3**).

FIGURE 3 Fence drowned by a huge sand dune in the United Arab Emirates



Desertification also affects the wellbeing of over one billion people in the world. While poverty can contribute to desertification, it is also a consequence of it, as poverty forces people to over-exploit the land, which can then accelerate land degradation. It can also increase the risk of food insecurity as food production decreases. As the land fails, social and cultural networks become lost as whole villages can effectively be abandoned as people leave farming in search of employment in urban areas.

12.5.4 Tackling the problem

Desertification, climate change and the loss of biodiversity were identified as the greatest challenges to sustainable development during the 1992 Rio Earth Summit. As a result of this, the United Nations developed the United Nations Convention to Combat Desertification (UNCCD), an agreement supported by 197 parties with the aims of:

- improving living conditions for people living in drylands
- maintaining and restoring land and soil productivity
- reducing the impacts of drought.

This worldview encourages cooperation in exchanging knowledge and technology between developed and developing countries and promotes the idea of a 'bottom-up' approach to a problem. This means encouraging and supporting people to develop their own solutions rather than a government-led 'top-down' approach.

12.5.5 CASE STUDY: Combating desertification in China

China is one of the countries most severely affected by desertification; it affects about 25 per cent of the total land area (approximately 3327 million km^2) there and has a negative impact on 400 million people (see **FIGURE 4**).

FIGURE 4 The predicted scale of desertification in China



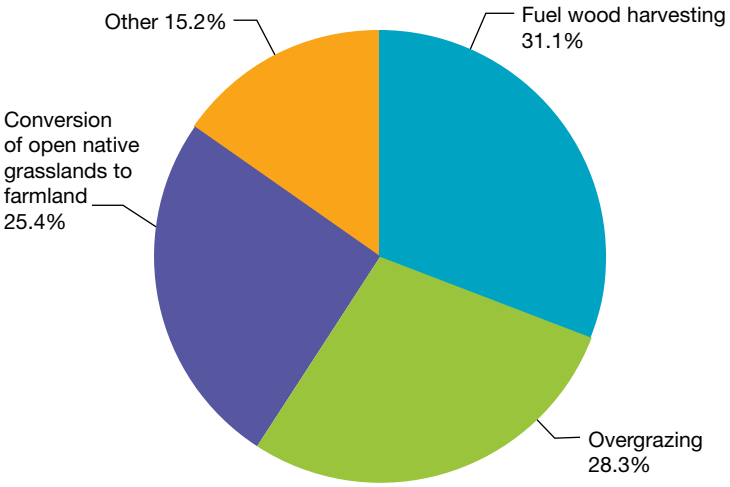
Source: United States Department of Agriculture, Natural Resources Conservation Service, Soil Survey Division, World Soil Resources; Paul Reich, Geographer. 1998. Global Desertification Vulnerability Map. Washington, D.C.

In the wake of rapid population growth (from 550 million in 1950 to 1.4 billion in 2019), the demand for food, fuel, construction timber and livestock feed surged. With a viewpoint of 'growth at all costs', more farmland was opened up on desert fringes and the number of livestock increased exponentially. This expansion was done without any consideration of the environmental impacts. Thus, human activities in the form of inappropriate land use have magnified the problem of desertification (see **FIGURE 5**).

Each year, the Gobi Desert in Mongolia swallows 360 000 hectares of grasslands, and dust storms remove 2000 square kilometres of topsoil. Sand and dust from the desert regions of China is carried eastwards by the prevailing winds, choking the city of Beijing: destroying crops, closing airports and creating a surge in respiratory ailments. The sand storms, or 'Yellow Dragon' as they were traditionally called, continue their journey and affect international communities in South Korea, Japan, Russia and even the United States (see **FIGURE 6**).

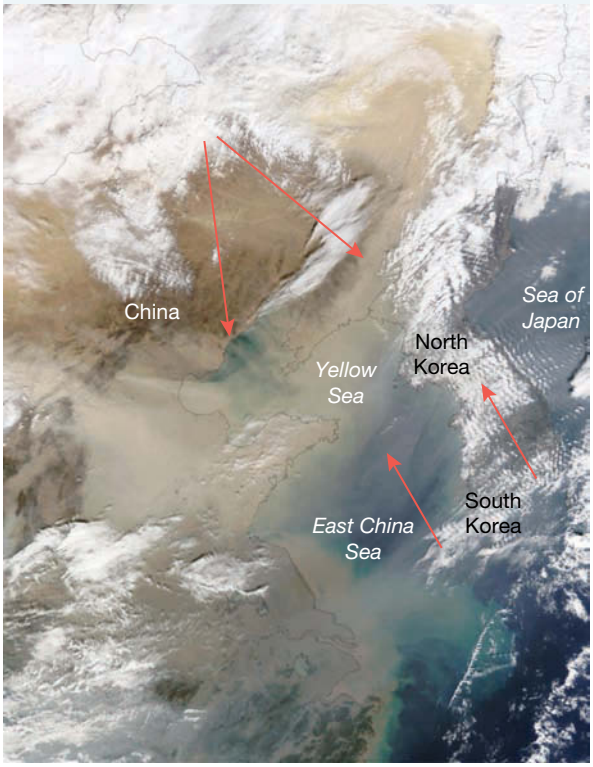
The Chinese government has been working relentlessly on the problem, implementing a range of schemes, two of which are described in section 12.5.6.

FIGURE 5 Causes of desertification in China



China currently spends $5 billion each year on combating desertification. The aim is to reclaim all the treatable land area by 2050. Already China has slowed the rate of desertification by more than one-third of 1999 levels, making it a world leader in this field.

FIGURE 6 A dust storm from China affecting neighbouring countries



12.5.6 The Great Green Wall of China

To halt the spread of deserts and reduce the impacts of climate change, the Chinese government embarked on a plan to create the Great Green Wall of China. Green walls are ambitious initiatives designed to act as a barrier against desert winds and prevent desertification. Both the **Sahel** region in Africa and China have embarked on massive replanting projects that are expected to reduce erosion, enhance biodiversity, provide new grazing lands, boost agriculture and provide employment (see **FIGURE 7**).

Sahel a semi-arid region in sub-Saharan Africa. It is a transition zone between the Sahara Desert to the north and the wetter tropical regions to the south. It stretches across the continent, west from Senegal to Ethiopia in the east, crossing 11 borders.

FIGURE 7 The Great Green Wall of China: an ambitious attempt to stop the advance of desert sands from the Gobi Desert



The Chinese government envisaged a 4800-kilometre series of forest strips spanning the country from east to west, and stretching 1500 kilometres from the southern edge of the Gobi Desert, to protect valuable farmland and waterways against wind erosion. To make this target a reality, every citizen over the age of 11 was expected to plant at least three saplings each year. Since the start of the millennium, Chinese citizens have planted over 66 billion trees. By 2016, the Chinese State Forestry Commission had succeeded in creating almost 30 million hectares of forest, with the goal of reaching a national forest cover of 42 per cent by 2050. However, an early study done by geographers at the University of Alabama noted that 'the reforestation efforts have done little to abate China's great yellow dust storms' (see **TABLE 1**).

TABLE 1 Impacts of planting green walls

Environmental benefits	Environmental drawbacks
• Mass planting of fast-growing species (known as monoculture) helps to slow desertification. • Trees act as windbreak and reduce erosion. • There is a long-term possibility of harvesting trees as a commercial wood crop or for pulp and paper. • Growth of trees acts as a carbon store, reducing greenhouse gases.	• Monoculture reduces biodiversity and provides poor habitat for endangered native animal and bird species. • Monoculture is highly susceptible to disease. A pest can wipe out an entire plantation, ruining decades of work. • Many tree species chosen were not native and after initial growth soon died. In some places up to 85 per cent of the plantings failed. • Initial rapid growth of trees used a lot of soil moisture and lowered watertables. • Trees out-competed native grasses, which have a more extensive root system for holding soil. • Plantations generate less leaf litter than native forests, so less nutrients are entering the soil.

While China reports an overall increase in forested areas, from 5 per cent to 12 per cent, Greenpeace reports that only 2 per cent of China's original vegetation remains. Many of the trees planted have a lifespan of only 40 years. Nevertheless, in areas where the local community is prepared to care for the newly planted trees, the spread of the desert appears to have been halted, with the area of land affected by desertification shrinking by almost 2000 square kilometres annually. Sandstorms are now also reported to have decreased by 20 per cent.

As one Chinese ecologist, Jian Gaoming, has stated, there is a need for 'nurturing the land by the land itself'. This is an Earth-centred approach to the problem of desertification. He noted through his research in Inner Mongolia that native grasslands will restore themselves in as little as two years, if protected from grazing animals and human activities.

Restoring grasslands

It is estimated that 80 per cent of China's natural grasslands (42 per cent of its land area) are degraded as a result of overgrazing. A wide range of rehabilitation programs are being introduced. These include:

- *moving people.* In places especially at risk of desertification, people are being resettled to prevent further damage and halt the spread of the desert. Relentless sandstorms threaten the traditional lifestyles and farming practices of nomads in both Tibet and Mongolia. Failing crops and a lack of pasture for grazing livestock is forcing them to join other climate refugees and move into new settlements (see **FIGURE 8**).
- *changing land use.* Land use is converted from grazing to tree crops and forests, with farmers receiving compensation for the loss of stock and income.
- *total grazing bans.* Between 2005 and 2010, a total ban was placed on animal grazing on 7 million hectares of land (an area twice the size of Germany). This was part of a larger plan to restore more than 660 million hectares of grasslands

monoculture cultivating a single crop or plant species over a wide area over a prolonged period of time

at an estimated cost of approximately A$4 billion. This has meant that more than 20 million animals had to be farmed indoors and hand fed. In test projects, after three years of grazing bans the vegetation rate increased from 20 per cent to over 60 per cent, and local sand storms have reduced. The grazing ban has since been extended, with farmers paid a subsidy to safeguard their livelihood. Additional bans were also put in place banning hunting and declaring some areas national parks. Money received by the traditional nomadic herders has been used to leave the land.

FIGURE 8 Nomadic grazing on grasslands in Mongolia. Why would this area be prone to desertification?



Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate Australian Curriculum topics > Year 10: Environmental change and management > **Desertification in Mauritania**

on Resources

Weblinks Great Green Wall of China (1)
Great Green Wall of China (2)

12.5 ACTIVITIES

1. Investigate one of the causes of desertification outlined in **FIGURE 2** and write a news report that explains the ***interconnection*** between this factor and ***environmental change.*** In your report include the following:
   a. a description of the impact of this factor over space
   b. an example of a ***place*** that has been ***changed*** as a result of this factor
   c. the ***scale*** of this ***change***
   d. a strategy for the ***sustainable*** management of the ***environment*** to combat this factor.

   HASS skills: Communicating and reflecting, Evaluating
   Geography concepts: Interconnection, Environment
2. Use the **Great Green Wall of China** weblinks in the Resources tab to find out more about the Great Green Wall of China. With a partner, discuss the actions taken. Do you think the plan will succeed? Why, or why not?

   HASS skills: Analysing

12.5 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 8	Questions 4, 6, 7	Questions 5, 9, 10

Check your understanding

1. What is the difference between deserts and drylands?
2. Why are drylands especially vulnerable to desertification?
3. Refer to **FIGURE 1**. Describe the distribution of those places in the world most at risk of desertification.
4. Identify an economic, social and environmental impact of desertification in China.
5. Explain in your own words what is meant by desertification and why it is a global issue.

Apply your understanding

6. How would you envisage the issue of desertification in China in the year 2050? Give reasons for your answer.
7. The Chinese ecologist Jian Gaoming's viewpoint on managing desertification is 'nurturing the land by the land itself'. How does this Earth-centred viewpoint compare to the green wall scheme, which is a human-centred viewpoint? Which do you think is the more sustainable approach? Outline and justify your views.
8. Explain the difference between a 'top-down' and a 'bottom-up' approach to resolving a problem.
9. How effective do you think a top-down approach can be in combating desertification in China? How effective do you think a bottom-up approach might be? Explain your view.
10. Evaluate, according to environmental, social and economic impacts, the effectiveness of:
    a. green walls
    b. grazing bans for combating desertification in China.

For sample responses to every question, go to www.jacplus.com.au.

12.6 Introduced species and land degradation

LEARNING INTENTION

By the end of this subtopic you will be able to explain the term invasive species and why they pose a threat to the Australian environment, and identify and explain possible strategies that can be used to control or eradicate invasive species.

12.6.1 What is an invasive species?

An invasive species (sometimes referred to as an **exotic species**) is any plant or animal species that colonises areas outside its normal range and becomes a pest. Such species take over the environment at the expense of those that occur naturally in the region, generally causing damage to native habitats and degrading the landscape. Invasive species are a major cause of land degradation. Often introduced for a specific reason, they can soon take over the environment, threatening indigenous plant and animal species and taking over what was once valuable farming land.

exotic species species introduced from a foreign country

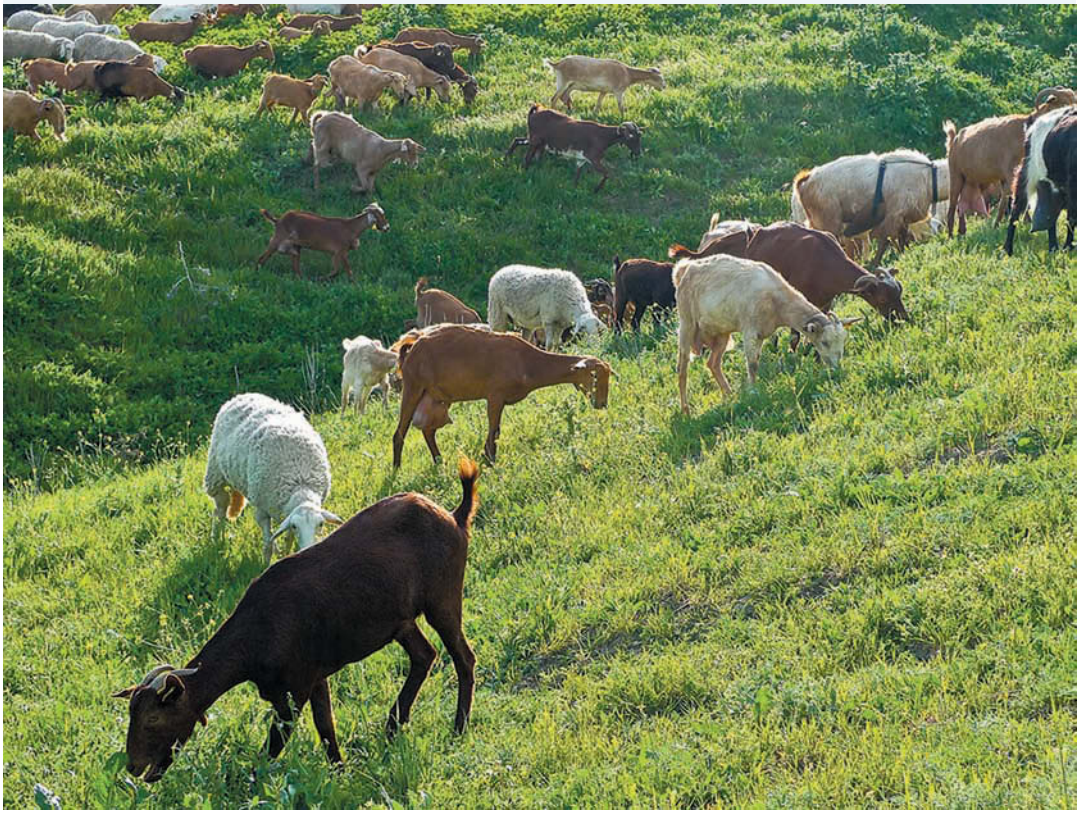
Many of the most damaging invasive species were introduced either for sport (rabbits and foxes), as pets (cats) or as livestock (goats) and pack animals (camels and horses). Some, such as the cane toad and mosquito fish, were introduced to control other species (the cane beetle and mosquitoes), and instead became pests themselves. Others, including rats and mice, arrived accidentally as stowaways on ships. Similarly, invasive plants were introduced in a variety of ways: as crops, pasture or garden plants, or to prevent erosion. However, some spread into the bush where they continued to thrive, causing immense damage to the environment.

12.6.2 Animal pests — goats, foxes and rabbits

Goats

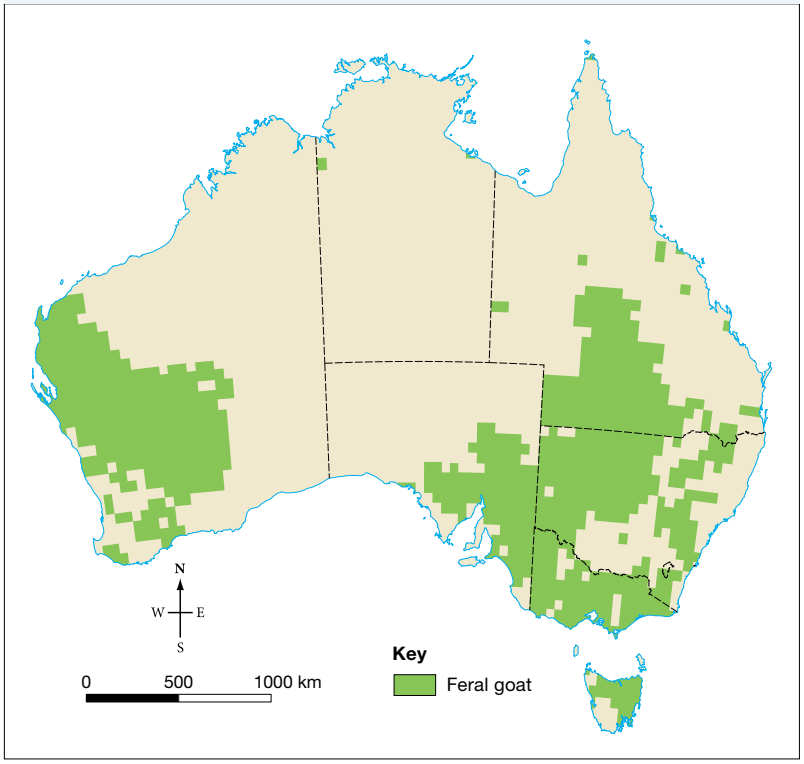
Goats were introduced into Australia with the arrival of the First Fleet in 1788 as a source of both milk and meat. Some breeds were later introduced for their hair. During the nineteenth century, sailors released goats onto some of the offshore islands and mainland areas as an emergency food source. Over time, however, domestic goats escaped, were abandoned or were deliberately released and became feral, posing a threat to inland pastoral areas and native forests.

FIGURE 1 Goats were a food source for early settlers and sailors alike. Their size, hardiness and ability to eat a range of plants made them an ideal source of both meat and milk.



It is now estimated that at least 2.6 million feral goats occupy approximately 28 per cent of Australia (see **FIGURE 2**), in concentrations of up to 40 animals per square kilometre. They are found in all states and territories and on offshore islands, but are most common in semi-arid regions. The absence of predators and the establishment of a water supply for sheep grazing has created ideal conditions in which goats can thrive. Their numbers have been adversely affected by drought and eradication programs; however, high fertility levels have meant they are difficult to control.

FIGURE 2 Spread of feral goats in Australia



Source: © Commonwealth of Australia Geoscience Australia 2013. © Commonwealth of Australia Department of Sustainability, Environment, Water, Population and Communities 2013. Map by Spatial Vision.

Feral goats cause widespread damage to native vegetation. They damage the soil and overgraze native grasses, herbs, trees and shrubs, causing erosion and preventing plant regeneration. They introduce weeds through seeds contained in their dung, and pollute water courses. They dramatically increase the rate of erosion on steep hillsides, where widespread gullying can quickly develop. By focusing on a favoured food source and preventing its regrowth, goats can totally remove some species of vegetation from an area, allowing more invasive plant species to take over.

During times of drought they also compete with native wildlife and domestic livestock for food, water and shelter, creating an additional imbalance in the food chain.

The impact of feral goats is worse in regions where rabbits are also out of control; together they can reduce to bedrock what was once a well-vegetated environment, leaving it open to erosion by both wind and water.

Foxes and rabbits

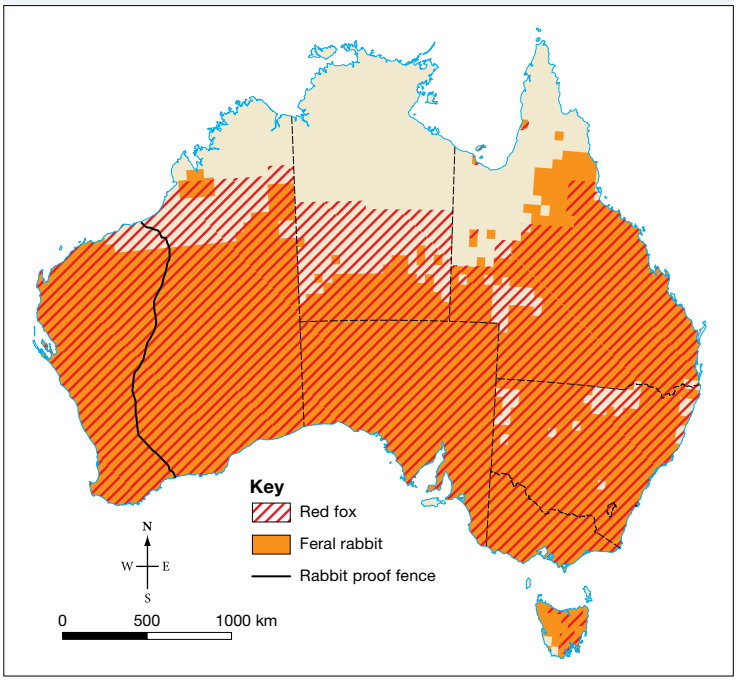
Both foxes and rabbits were introduced into Australia by the early settlers. With no natural predators, each species spread rapidly.

Left unchecked, foxes pose a significant threat to agriculture and native fauna. Fox predation accounts for one-third of new lamb deaths, and native animals such as the bandicoot are easy prey. Foxes carry a wide range of diseases and parasites such as hepatitis, distemper, mange and rabies.

Rapid-breeding feral rabbits place significant pressure on the environment, competing with native wildlife for food and damaging vegetation. Rabbits eat plant roots as well as foliage. They **ringbark** trees and eat seeds and seedlings, so plants cannot regenerate.

ringbark removing the bark from a tree in a ring that goes all the way around the trunk. The tree usually dies because the nutrient-carrying layer is destroyed in the process.

FIGURE 3 Distribution of red foxes and feral European rabbits in Australia



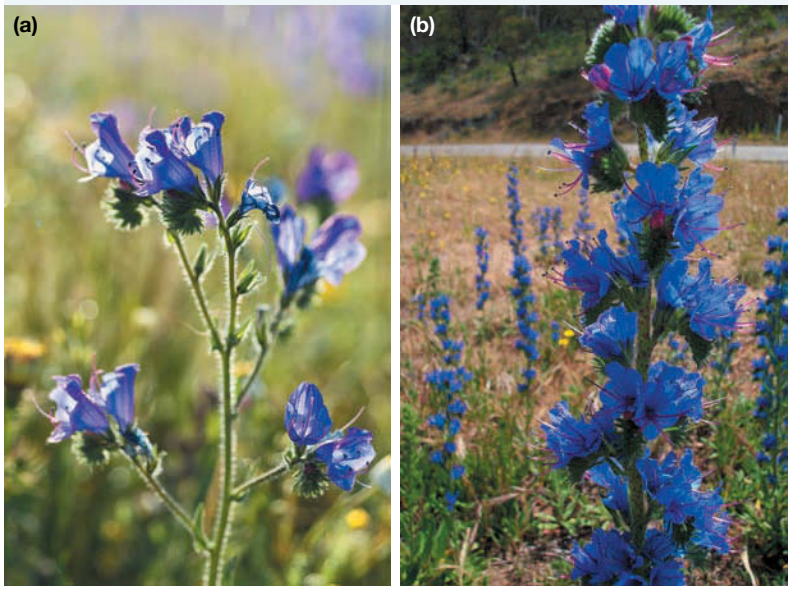
Source: © Commonwealth of Australia Geoscience Australia 2013. © Commonwealth of Australia Department of Sustainability, Environment, Water, Population and Communities 2013. Map by Spatial Vision.

12.6.3 The problem of introduced plants

Invasive plant species are often referred to as weeds. Many were introduced as garden plants, but soon spread to other areas and now pose a significant threat to both the natural environment and agricultural industries. Two of the most troublesome introduced plant species are Paterson's Curse and Viper's Bugloss (see **FIGURE 4**), both of which were introduced in the 1850s as garden plants because of their attractive flowers.

Paterson's Curse and Viper's Bugloss look similar, and are often found in similar regions, if not together. As their seeds germinate earlier than native plants, they are able to establish extensive root systems and spreading leaves, which crowd out other plant species. Their seeds can be spread in the fur of livestock or by water in

FIGURE 4 (a) Paterson's Curse has two long stamens protruding from the flower plus two shorter ones, and its flowers are more purple. (b) Viper's Bugloss has four long stamens protruding from the flower. Its flowers are more blue, and prickles are visible on the stem.



areas where erosion is already present and run-off levels are high. They thrive in areas where rainfall is high in winter and have adapted to cope with dry summers. The nutritional value of Paterson's Curse is low, and if livestock eat it in significant quantities it can be toxic, especially for horses and small animals. Their stomachs cannot fully process the plant and this leads to liver damage, loss of condition and, in extreme cases, death.

Contact with these plants can also cause skin irritations and other allergic reactions in humans and livestock. Once Paterson's Curse colonises an area, soil fertility is reduced. It has been estimated that 33 million hectares of land is infested across the nation, and that the cost to Australia's grazing industry is in excess of $250 million annually.

12.6.4 Controlling invasive species

Can one problem be part of the solution for another?

While we might want to remove invasive species from Australia and other parts of the world, in many cases this is not possible. Total eradication may be feasible in island communities where the risk of re-infestation is limited; however, on a large scale such as mainland Australia, control appears to be the best option.

Introduced species pose a serious threat to the productivity of land and diversity of natural environments. In Western Australia, trials have discovered that goats, which themselves pose a threat to both native vegetation and pasture land, can be used to control a wide variety of **invasive plant species**, such as saffron thistle (see **FIGURE 5**).

invasive plant species commonly referred to as weeds; any plant species that dominates an area outside its normal region and requires action to control its spread

weed any plant species that dominates an area outside its normal region and requires action to control its spread

While we know that some weeds are spread passing through the digestive systems of animals, this is not the case with goats. Less than 1 per cent of the saffron thistle seeds were found in the goat dung, and these would not germinate. Similar results were found in test sites for the control of blackberries (see **FIGURE 6**). Within 12 months of goats being allowed to feed on both **weed** types, there was a notable reduction in their spread. Goats can also be used to control hundreds of different invasive plant species such as English Ivy, Paterson's Curse and Viper's Bugloss, which are toxic to grazing livestock.

FIGURE 5 In Western Australian trials, goats almost completely eradicated saffron thistle within three years. Researchers will monitor the situation carefully, however, as seeds can lie dormant for up to ten years.

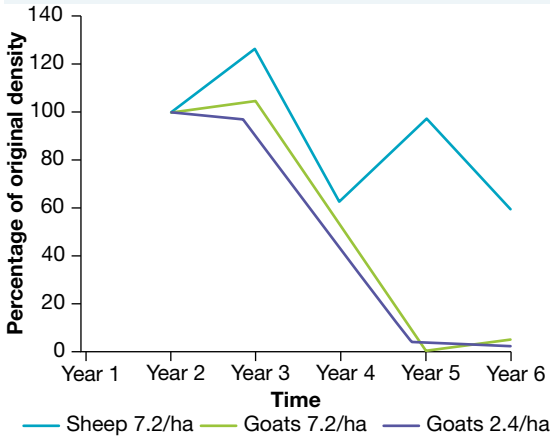


FIGURE 6 Goats have been used successfully in the Tolt River Dam region in Seattle, Washington. There, a herd of 200 goats is used to control the spread of blackberries on ground that is too steep and uneven for mowing by machinery.



Goats have the added advantage of being an environmentally friendly method of weed control. They eliminate the need for using herbicides and fertilisers. Soil quality is improved naturally by goat droppings. Fossil-fuel-burning machinery is not needed to remove the weeds, and goats can be used in environments

where other control methods are not viable, such as on steep slopes. In recent times, they have been used as a method of weed control in plantation forests and in limited numbers on large pastoral runs. They are also still kept as livestock.

Mainland quokkas

The quokkas of Rottnest Island are well known both locally and internationally. In recent times, they have become social media celebrities, and taking a quokka 'selfie' is a must-do when visiting the island. Bald Island on the Western Australia south coast is also home to a colony of quokkas.

FIGURE 7 Mainland quokkas are threatened by feral foxes.



The quokka population on Rottnest Island is estimated at 8000 to 12 000, and Bald Island is home to about 1000 of the small marsupials. While the status of both these island populations is considered stable, mainland populations are under threat and in decline. They are officially listed as 'vulnerable'. Mainland quokkas live in small isolated populations of often fewer than 50 and their conservation is considered important because these colonies contain higher levels of biodiversity than the island communities.

Foxes and feral pigs are two significant threats. Foxes were introduced in the late 1920s and have had a dramatic effect on quokka numbers. Feral pigs destroy dense swamp vegetation, allowing other predators to access these quokka habitats. Although fox baiting and pig control measures are considered partly effective, mainland quokkas remain severely threatened.

Can we control foxes and rabbits?

Both foxes and rabbits have proven difficult to control and pose the same risks today as they did in the past. Foxes are the only natural predator of rabbits. Currently, rabbits are controlled through the following methods:

- biological — introduction of viruses, such as myxomatosis and calicivirus
- chemical — laying poison baits or fumigating warrens
- mechanical — destroying warrens, shooting and laying traps.

Rabbits are highly destructive to the environment, but once they are eradicated from an area, the environment can regenerate (see **FIGURE 8**).

FIGURE 8 (a) Rabbits reduced Phillip Island (near Norfolk Island, off the east coast of Australia) to a wasteland. (b) After the rabbits were eradicated, the island's recovery was spectacular.





Hunting, baiting (poisoning) and shooting reduce adult fox populations in the short term; however, their populations soon recover. Scientists are now trialling biological controls and working to develop some form of virus or birth control that will interfere with the reproductive system of the fox, making them infertile and incapable of breeding.

Middle Island Maremma Project

Middle Island, a small rocky island about 2 hectares in size off the south-western Victorian coast near Warrnambool, is home to a Little Penguin colony. At low tide, less than 12 centimetres of water separates the island from the mainland, providing easy access for predators such as foxes.

In 1999, Middle Island had a thriving colony of Little Penguins, of about 600 birds. By 2005, foxes had reduced the population to fewer than 10, with only two breeding pairs remaining. In 2006 an ambitious experiment was launched using Maremma dogs to guard and protect the remaining penguins. This breed of dog has long been used to guard livestock, including chickens, with reports that once the dogs were on duty, fox kills stopped.

After some initial teething problems, the program has proved highly successful. Within a short time, there was evidence of the penguins breeding. By 2013 the Little Penguin population had rebounded to 180. In a cruel twist of fate, however, 70 penguins were killed in a fox attack in 2017, reducing the breeding population to just 14. The dogs had been taken off the island for the winter season due to high tides and bad weather. However, numbers appear to have started to grow again with five breeding pairs in residence for the 2019/20 breeding season.

FIGURE 9 Using Maremma dogs to guard the penguins on Middle Island from fox attacks proved to be a highly successful strategy. The island's penguin population, previously close to extinction, continues to grow under the protection of the dogs.



Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Endangered and introduced species > **Introduced species in Australia**

on Resources

Weblink Weed species

12.6 ACTIVITIES

1. Visit a local river or creek near your school and make a field sketch of the area. Survey the area around the creek and annotate your sketch to show the location of areas where there are invasive plant species. Add additional annotations to suggest a ***sustainable*** solution to this problem. **HASS skills: Evaluating**
Geography concept: Sustainability
2. a. Using information in this subtopic and your own general knowledge, copy and complete the table below. List as many species (both plant and animal) that were introduced into Australia as you can, and state why they might have been introduced. Use your atlas and the **Weed species** weblink in the Resources tab as other sources of information.

Introduced species	Reasons for introduction

   b. Refer to the table you completed in part (a). Find an image of one exotic plant and one exotic animal species in your table. Annotate your images with reasons for their introduction, and their impact on the ***environment.*** Compare your findings with those of other members of the class.
HASS skills: Questioning and research, Communicating and reflecting
Geography concept: Environment
3. Working in teams, devise your own ***sustainable*** and ***environmentally*** friendly strategy for controlling an invasive species. **HASS skills: Communicating and reflecting**
Geography concepts: Sustainability, Environment
4. Use the **Weed species** weblink in the Resources tab to prepare an educational leaflet that will assist people in recognising one of these plant species. **HASS skills: Communicating and reflecting**

12.6 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 7	Questions 4, 6, 8	Questions 5, 9, 10

Check your understanding

1. Why are goats an effective method of controlling invasive plant species?
2. Why do people say that rabbits cause the demise of native plant and animal species?
3. Describe the distribution over space of foxes and rabbits in Australia.
4. Explain why goats would be considered an environmentally friendly method of controlling invasive plant species.
5. Explain why it is easier to eradicate invasive species from island communities than from mainland Australia.

Apply your understanding

6. The invasive animal species described in this subtopic have proven more difficult to control than the plant species. Suggest a reason for this.
7. Why do you think that foxes are not found in Australia's tropical region?
8. Consider the three methods of rabbit control by completing the following tasks.
   a. Copy the following table. In the second column, write your own definition for each of the control methods.
   b. Complete the remaining columns, detailing the advantages and disadvantages of the three methods.

c. Compare the advantages and disadvantages of the three main methods of rabbit control. Which method do you think is the most effective? Give reasons for your answer.

Method	Definition of method	Advantage	Disadvantage
Biological			
Chemical			
Mechanical			

9. Examine **FIGURE 8**. Describe the appearance of the environment in each image. Do these images represent the same place? Suggest reasons for the changes that have occurred in this environment.
10. Devise your own sustainable and environmentally friendly strategy for controlling an invasive species. Outline the steps in your plan and why you think it would be successful.

For sample responses for every question, go to www.jacplus.com.au

12.7 Native species and environmental change

LEARNING INTENTION

By the end of this subtopic you will be able to explain the threats to biodiversity from introduced species and environmental change.

12.7.1 Protecting biodiversity

To protect native species, governments have established national parks. The world's first **national park** was Yellowstone National Park in the United States of America established in 1874. The second, the Royal National Park, was established in Sydney, Australia five years later. These parks are intended to provide safe habitats for native plant and animal species and thus help safeguard **biodiversity**. However, biodiversity is not just under threat from introduced species; left unchecked, native species can also cause widespread damage to the landscape.

national park an area set aside for the purpose of conservation
biodiversity the variety of plant and animal life within an area

12.7.2 Should we cull iconic Australian natives?

Many native Australian species have been threatened by the spread of urban settlements. As human populations expand, the natural range of animals such as koalas, kangaroos and wallabies are diminished. Despite the number of national parks that exist, native species can be found not only on the fringe of urban areas, but also taking refuge in our backyards where they face increasing risk from vehicles, domestic pets and poisons.

FIGURE 1 A koala drinking from a dog's water bowl in a suburban backyard



In some protected regions, the growth of the population can put entire colonies at risk. Koalas are preferential feeders and have only one source of

food — eucalyptus leaves. In times of drought and following extended favourable breeding conditions, there is simply not enough food to sustain the entire population. In the Otway Ranges and on French Island, for example, the situation has at times become so dire that koalas have faced starvation.

In 2013 and 2014, 700 koalas were killed in what the Victorian government described as humane euthanasia to prevent the animals from starving to death. Opponents of the move described it as a secret **cull**.

In late 2015, researchers called for koalas to be culled in parts of Victoria, New South Wales and Queensland, in areas where the local populations were infected with the disease **chlamydia**. In koalas, chlamydia can lead to a range of issues such as conjunctivitis, urinary tract infections, reproductive tract infections and pneumonia. Culling, the researchers suggested, would prevent further spread of the disease to healthy animals and allow the population to rebound over the next ten years. Others have argued that the disease, in its early stages, can be treated with antibiotics.

In 2019, the koala was listed as vulnerable in Queensland, New South Wales and the ACT, with loss of habitat cited as the major area of concern. Even within remaining habitats, a lack of diversity exists among eucalyptus species. Preferred control methods are sterilisation and relocation. Sterilisation prevents a population outstripping its food source; however, it does not allow the population to rebound after natural disasters such as bushfires. Relocation is only a short-term fix, as shown on Kangaroo Island — koalas relocated there have flourished, mainly because of their proximity to a commercial blue gum plantation; however, the population will once again be decimated once the trees are harvested.

DISCUSS

Conduct a class debate on the issue of culling as a method of controlling different species, both native and introduced. **General capability: Ethical understanding**

12.7.3 What about the African elephant?

In 1930, some 10 million elephants roamed across 37 countries in Africa. By 1979, almost 90 per cent of the wild elephant population had been wiped out, with their numbers estimated at 1.3 million. By 2007, the estimated range of elephant numbers had declined even further (see **FIGURE 2**). In 2018, the population had continued to decline with numbers down to around 415 000. At this rate, it is possible that they could become extinct in the wild by 2050. Some estimates put the number of animals killed at up to 100 per day, as poachers seek to make their fortune selling meat, ivory and body parts to the lucrative Asian market. From 2011 to 2014 the price of ivory alone tripled in China, peaking at $2100 per kilogram. In 2017, a ban imposed by the Chinese government on ivory saw the price fall to $750 per kilogram.

Elephants are also under threat from expanding human populations. As the number of people increases, so too does their need for land to grow crops and raise livestock, and people encroach further and further into the elephants' rangelands. Struggling farmers can also earn more from a single elephant kill than from a year of toiling on the land. When elephants enter these newly created farmlands and damage crops, the temptation to kill them intensifies.

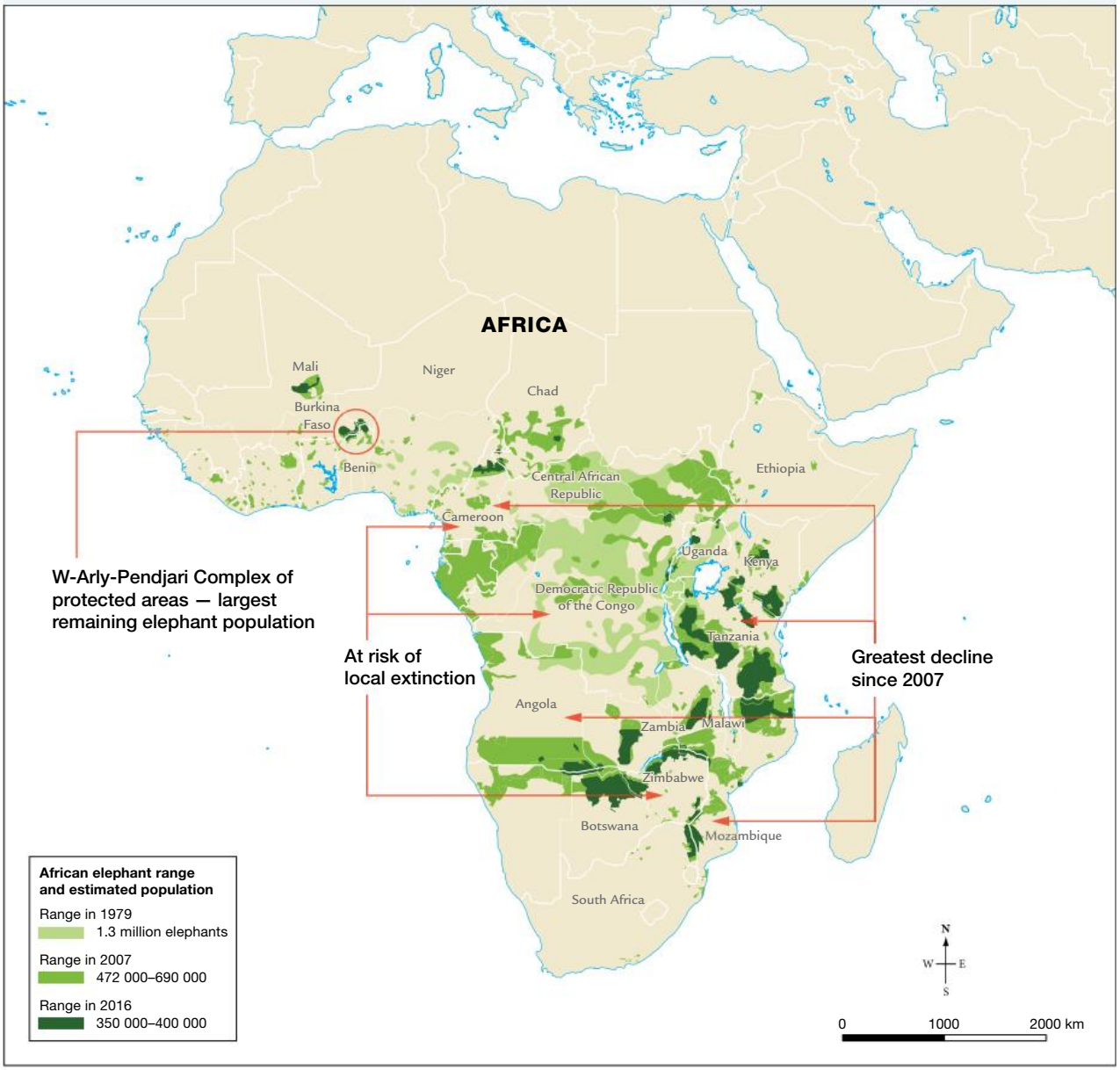
Elephants are a key ecological species, sometimes referred to as the caretakers of the environment. They create and maintain their ecosystem and in the process create the habitat for a wide range of plant and animal species with which they coexist. Up to 30 per cent of native African tree species, for example, are dependent on elephants to assist with dispersal and germination of their seeds. The loss of elephants poses a significant threat to local ecologies.

However, the practice of confining large animals such as elephants to national parks free from predation and with an abundant water supply can result in a population explosion. An adult elephant consumes up to 136 kilograms of food

cull selective reduction of a species by killing a number of animals

chlamydia a sexually transmitted disease infecting koalas

FIGURE 2 African elephant range and estimated population



Source: National Geographic and IUCN Red List.

in a single day. The search for food can see them cover vast distances, in the process stripping bark from, ripping branches off and pushing over trees. As the process of confining animals to reserves continues, traditional migration paths are interrupted. The population flourishes and the landscape becomes degraded as the rate of change speeds up.

Africa's first national park was established in 1926. Covering almost 20 000 square kilometres, it is one of the largest reserves in Africa. Culling of elephants within the national park was banned in 1994. While elephant numbers are declining elsewhere, within Kruger National Park they are increasing. This has prompted some to suggest that culling as a means of population control should be reinstated to limit numbers to a sustainable level of 7000 to 8000, rather than the current 17 000, which places both the elephants and their habitat in jeopardy.

12.7.4 Is it a pest?

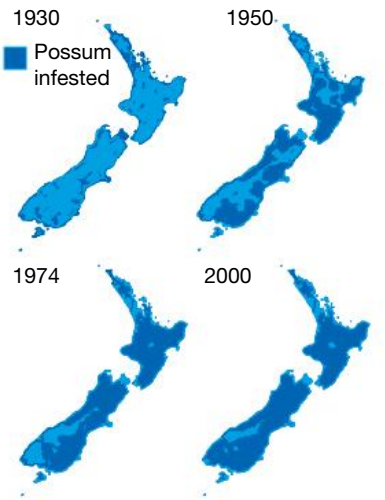
In Australia, the possum is a protected species that can cause considerable damage in urban areas. Because they are protected, control measures are largely centred on possum-proofing homes and gardens. There are strict regulations relating to the trapping of possums, and they generally must be released on the same property on which they were captured, within 50 metres of their capture site. The only exception is in the state of Tasmania, where they can be removed in order to protect crops and trapped for commercial trade in meat and pelts.

In New Zealand, however, possums are considered 'public enemy number one'. Originally introduced in 1837 to establish a fur trade, with no natural predators they spread rapidly and today some 30 million possums occupy 90 per cent of the landmass. The damage they cause to native forests is unmistakable, laying large expanses of new forest growth bare. They compete with native birds for habitat and food and have been observed raiding nests. Additionally, they are known to spread bovine tuberculosis, thus, posing a significant threat to dairy and deer farmers (see **FIGURE 3**). The main methods of possum control in New Zealand include trapping, baiting and shooting.

FIGURE 3 The spread of possums in New Zealand

Possum invasion

The introduced species has a population of 30 million in New Zealand, outnumbering humans almost sevenfold.



The invasion

- Introduced from Australia in 1830s, to establish a fur industry
- By the 1930s many batches of possums set free
- Damage to environment recognised by the 1950s
- 1951 government put bounty on animals
- By 1963 had spread to 84% of country



Possum fur fetches around $100 a kilo.

Retail fur sales add $150 million to local economies.

The damage

Pressure on native species as population thrives with no natural predators

Spread disease: bovine tuberculosis

Damage crops, orchards, eat pasture

Kill or stunt growth of trees by damaging bark, breaking upper branches

Alter habitat of native species

Prey on native birds, insects

DISCUSS

Consider the possible responses of vegetarians, environmentalists and farmers to this statement: 'Culling our native animals is cruel, unethical and unnecessary'. What different positions might each group have on this issue, and what cultural values and beliefs might influence their differing perspectives?

General capability: Ethical understanding

12.7 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 5, 6	Questions 2, 7, 8	Questions 4, 9, 10

Check your understanding

1. Describe the spread of possums over time in New Zealand.
2. Why do you think possums are considered a pest in New Zealand but are a protected species in Australia?
3. Explain how native species can cause the land to be degraded.
4. Explain how a national park can act as a safeguard for biodiversity.
5. Describe the distribution of elephants in Africa.

Apply your understanding

6. Explain how human population growth leads to the fragmentation of koala habitats.
7. Predict what might happen to the koala population, over time, in the Otway Ranges or on French Island if no action was taken to control the koala population.
8. Explain the threats to the African elephant population.
9. Referring to the threats to African elephants, what do you consider to be the greatest threat to the long-term survival of this species? Justify your response.
10. Do you think that culling is a viable solution to ensure the long-term survival of elephants or koalas? Give reasons for your answer.

For sample responses to every question, go to www.jacplus.com.au.

12.8 Indigenous communities and sustainable land management

LEARNING INTENTION

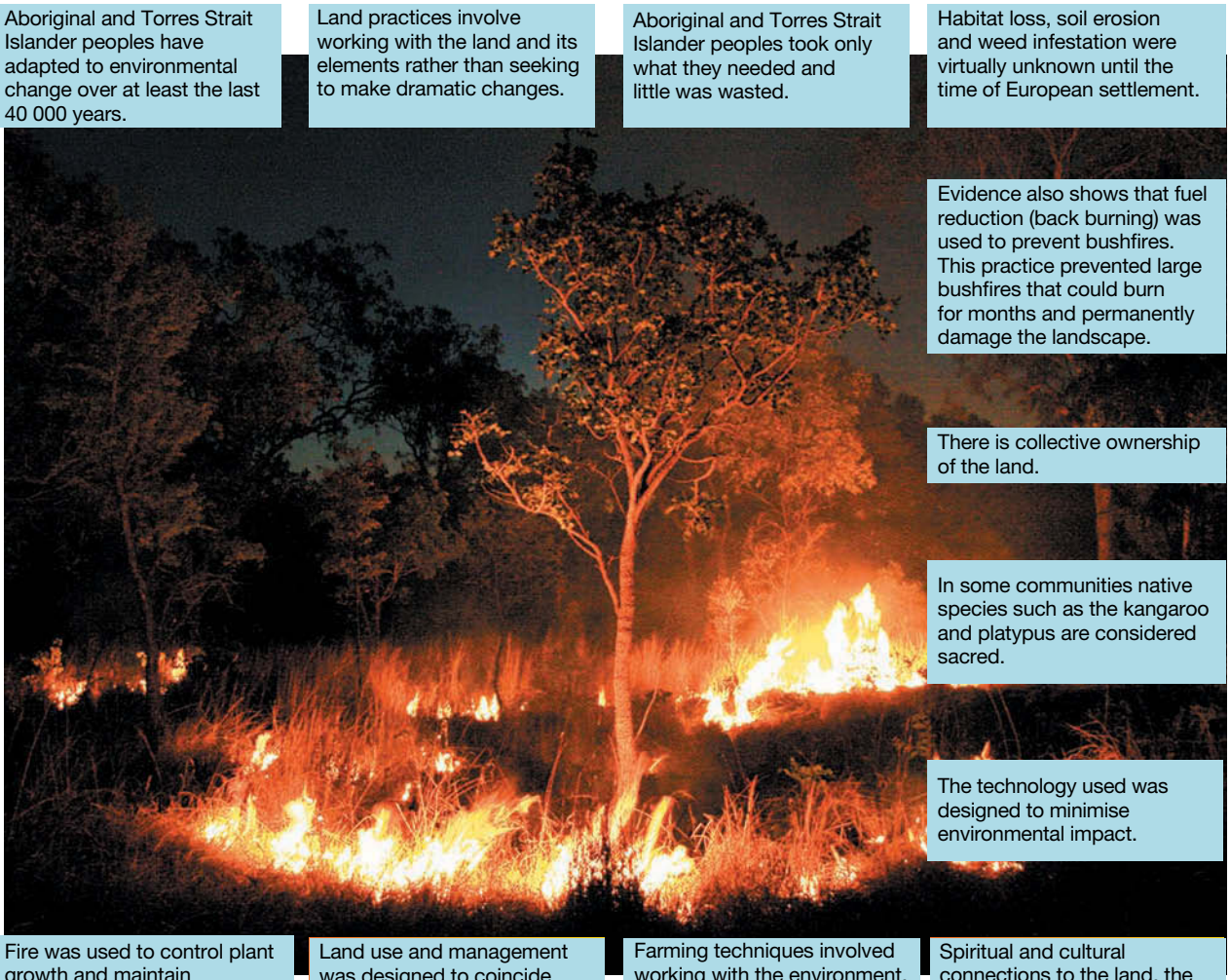
By the end of this subtopic you will be able to explain the traditional sustainable land management techniques used by Aboriginal and Torres Strait Islander peoples.

12.8.1 Traditional land management

Before the arrival of European settlers, Aboriginal and Torres Strait Islander communities had their own system of land management. For example, they maintained grasslands through the use of fire, which encouraged plant regrowth and attracted a variety of animals. Life was largely governed by the seasons, with each change dictating a change in the use of the land and its management.

Environmental change is not new. Indigenous communities around the world, including the Aboriginal and Torres Strait Islander peoples, have had to manage their environments carefully. In **FIGURE 1** you can see how fire was used to manage the landscape. It is interesting to note that the use of fire in this way over the past 50 000 years had a significant impact on the species of plants that thrive in Australia today. Those plants that adapted to the use of fire thrived; for example, eucalypts. Using fire was just one of a variety of strategies employed by Aboriginal and Torres Strait Islander peoples to ensure the land was used in a sustainable manner.

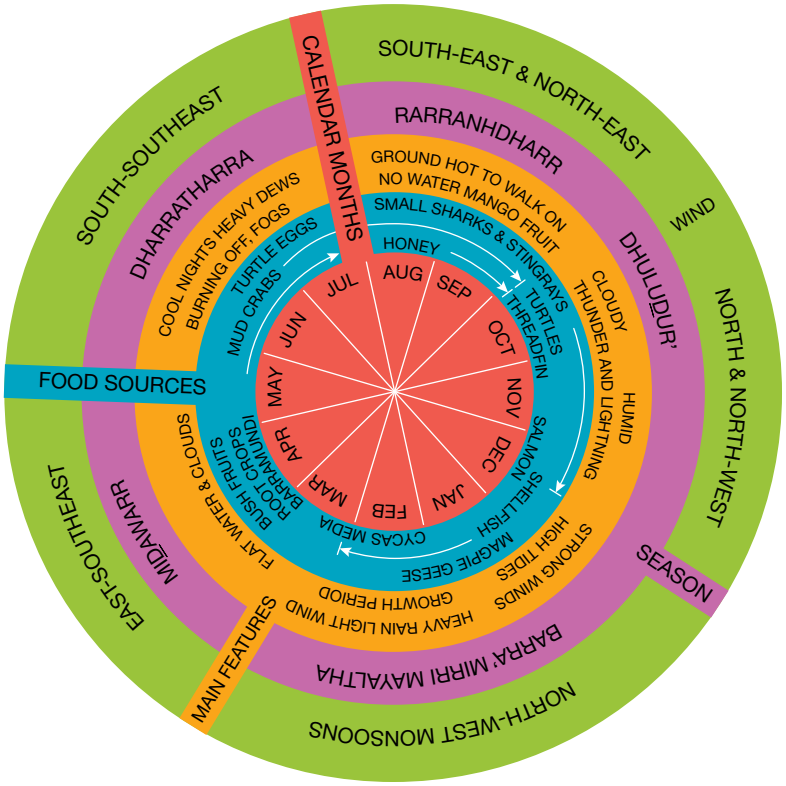
FIGURE 1 Traditional land management practices and connection to the land



12.8.2 What happens when?

FIGURE 2 is an example of a seasons calendar. It is for the Yolngu people who live in north-east Arnhem Land. The calendar relates the months of the year to aspects of the environment. Look carefully and you will see that this particular calendar includes information about the weather and the plants and animals that thrive across the year. In this example, the Yolngu hunted and fished for particular species and harvested bulbs, fruits and other edible vegetation at different times of the year. The calendar varied from place to place, but whatever the location, it enabled people to predict seasonal events; for instance, the arrival of march flies signalled the time to collect crocodile eggs and bush honey.

FIGURE 2 The activities of Aboriginal and Torres Strait Islander communities were defined by observable changes in the seasons.



12.8.3 CASE STUDY: Managing Kakadu wetlands

Kakadu is a kaleidoscope of both cultural and ecological biodiversity. The landscape varies from savannah and woodlands to escarpments and ridges as well as wetland, flood plains and tidal flats. The region includes more than 2000 plant species that have provided food, medicine and weaving materials for the Bininj (in the north) and Mungguy (in the south) communities that have inhabited the region for some 50 000 years. Over this time they have defined six distinct seasons, all signalled by subtle changes in the weather patterns that mark the transition from one season to the next. They managed and maintained the landscape through the use of fire.

The arrival of European settlers saw a massive change in the region. Buffalo were introduced in the early to mid 1800s to serve as a food supply for new settlers. However, once these new settlements were abandoned in the mid 1900s the buffalo population expanded from a modest population of less than 100 animals to more than 350 000. The impact on local habitats was extreme.

Natural habitats were devastated. The now feral buffalo took over wetland areas, disturbed native vegetation, caused significant soil erosion and changed the characteristics of the region's floodplains. Saltwater intrusion of freshwater wetlands caused the region to become further degraded, leading to a rapid decline in the flora and fauna including waterbirds that had sustained local communities.

In the late twentieth century, a massive culling program was commenced to remove the feral buffalo and allow the region to regenerate. However, an invasive native plant species that had once been the main food source of the buffalo spread unchecked. It choked the wetlands and prevented waterbirds from feeding and recolonising the region.

The CSIRO undertook extensive research into the Bininj's and Mungguy's sustainable land management practices. A joint management initiative was introduced into the area. At the heart of the initiative was traditional fire management.

The results have been dramatic and the wetlands are once again home to a rich assortment of flora and fauna. The project provides an internationally recognised example of sustainable land management using the practices developed and perfected by traditional owners over thousands of years.

FIGURE 3 Wetlands after removal of buffalo and before burning



FIGURE 4 Wetlands after burning



DISCUSS

There is much to learn from Aboriginal and Torres Strait Islander peoples' land management practices. Identify and analyse the challenges as well as the benefits of doing this.

General capability: Ethical understanding

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate Australian Curriculum topics > Year 10: Environmental change and management > **Indigenous Australians — Caring for Country**

12.8 ACTIVITIES

1. Land degradation such as salinity was not an ***environmental*** issue in Australia when Aboriginal and Torres Strait Islander peoples were its sole inhabitants. With the aid of diagrams, explain how land-use practices have changed over time. Make sure you include references to practices that promoted ***sustainable*** use of the ***environment.*** Include links to how these changes would have resulted in salinity and degraded the ***environment.***
   HASS skills: Questioning and researching, Analysing
   Geography concept: Environment
2. Consider the Yolngu calendar in **FIGURE 2.** Develop your own calendar that reflects the ***interconnection*** between the seasons and changes in your life.
   HASS skills: Commmunicating and reflecting
   Geography concept: Interconnection

12.8 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 5, 6	Questions 4, 7, 8	Questions 3, 9, 10

Check your understanding

1. Why wasn't land degradation an issue before European settlers arrived?
2. Explain the principles of how Aboriginal and Torres Strait Islander peoples managed the land before the arrival of European settlers.
3. How does the Yolngu calendar demonstrate an interconnection between their beliefs about the land and sustainable management of the environment?
4. Explain why the use of fire was an important component of managing the land.
5. Explain why water buffalo are considered a significant threat to the Kakadu wetlands.

Apply your understanding

6. The Yolngu calendar (**FIGURE 2**) demonstrates an intricate understanding of the environment.
   a. How long do you think it would have taken the Yolngu people to develop this understanding?
   b. How do you think this knowledge would have been passed from generation to generation?
7. It has been suggested that the four seasons currently used in Australia do not adequately reflect the changing nature of our seasons.
   a. Do you agree or disagree with this suggestion? Give reasons for your opinion based upon the area you live in.
   b. Do you think the Aboriginal and Torres Strait Islander seasons calendar of each region should be adopted and used as an additional strategy for the sustainable management of environmental issues? Justify your point of view.
8. Study **FIGURES 3** and **4**. Describe the environment shown in **FIGURE 3** and the changes that have occurred in **FIGURE 4**.
9. Describe the steps that might have been taken to turn the landscape shown in **FIGURE 3** to the one shown in **FIGURE 4**.
10. Do you think the land management practices used in Kakadu could be used in other parts of Australia, including Western Australia? Give reasons for your answer.

For sample responses for every question, go to www.jacplus.com.au

12.9 Thinking Big research project — Invasive species *Wanted!* poster

Scenario

The time has come to act, to eradicate invasive species before they cause further damage to the environment! The Department of Water and Environmental Regulation has published the following on its website:

A number of exotic or invasive species have been introduced into Australia since the arrival of the First Fleet in 1788. The time has come to take action and eradicate these species before they cause further damage to the environment.

The following species are of particular concern.

Brumbies	European rabbits
Cane toads	Feral cats
Dromedary camels	Red foxes
European carp	Water buffaloes

As an environmental crusader, you want to present an idea to the Department: to publish a series of *Wanted!* posters on its website to raise community awareness and, in particular, to educate upper primary and lower secondary school students about the damage that is caused by invasive species. You will start by creating one poster to help you pitch your idea to the Department.

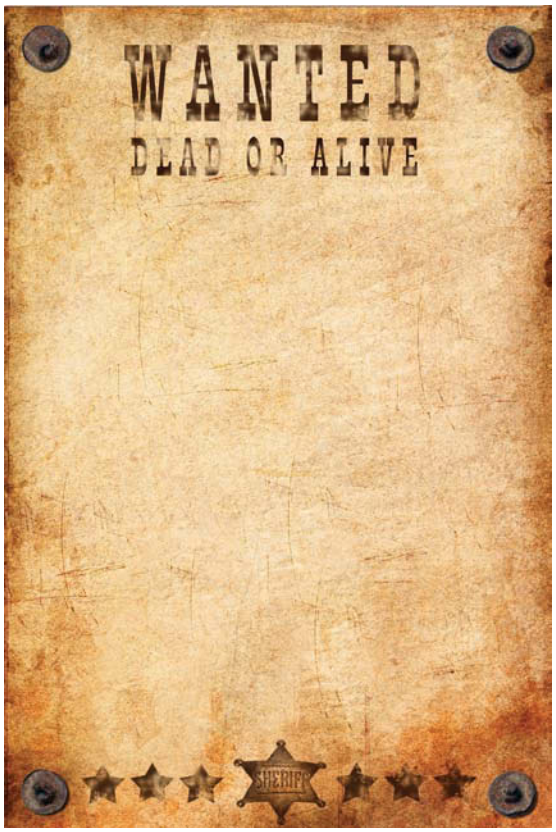


Task

Select one of the species listed in the **Scenario** section and create a *Wanted!* poster suitable to be featured on the website of the Department of Water and Environmental Regulation. You should include the following on your poster:

- name of the species
- when it first arrived in Australia and why it is a problem
- what has been/is being done to try and solve this problem
- map showing the species distribution throughout Australia
- what people should do if they see this species.

Ensure that on your poster you also explain what is meant by the terms 'exotic' and 'invasive' species.





Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and, if you wish to, set up your project group so you can work collaboratively. You can complete your poster individually or work with a partner to swap ideas and share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish.
- In the **Media centre** you will find an assessment rubric and some helpful weblinks that will provide a starting point for your research. Remember to record details of your sources so you can create a bibliography to submit along with your poster.
- Add your research notes and source details to the relevant topic pages in the Research forum. You can view, share and comment on research findings with your partner. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- When you are satisfied with your research, create your poster. Use headings to help organise and break up your information, and images to create interest. Ensure that the species name stands out on your poster, and that you have covered all the dot points listed in the **Task** section.
- Check that all maps follow geographic conventions (BOLTSS).
- Submit your poster and bibliography to your teacher for assessment and feedback.

on Resources

ProjectsPLUS Thinking Big research project — Invasive species Wanted! poster (pro-0212)

12.10 Review

12.10.1 Key knowledge summary

12.2 The causes and impacts of land degradation

- Land degradation is a complex issue; however, most of the causes of this degradation are human induced.
- As the population of the Earth increases the land is under more and more pressure to house and accommodate this growing population.
- The land becomes degraded when we alter its natural state, through vegetation removal and introduced species, predominantly to expand our cities and increase our agricultural land.
- Developing nations, where the population is growing fastest (especially those in sub-Saharan Africa) are most at risk; when the land becomes degraded, they lack the resources to deal with the issue.
- Land degradation presents challenges to future food production.

12.3 Managing land degradation

- A critical issue in land degradation is the loss of fertile soil. This soil has taken decades and, in some areas, hundreds or thousands of years to develop. However, clearing the land of vegetation leaves it vulnerable to erosion.
- Erosion of the topsoil may lead to rill, gully and tunnel erosion that affects the capacity of the land to support vegetation. Strong winds can pick up the soil and carry it large distances; this is a dust storm.
- The only way to repair the damage is through revegetation and programs designed to stabilise the soil.
- Costerfield is an example of how poor land management can have a devastating impact on the environment; however, it is also an example of how improving land management strategies can restore the land, enabling it to be used in a sustainable way.

12.4 Environmental change and salinity

- Salt occurs naturally in the environment; in Australia, it has lain dormant far below the surface in the groundwater.
- Poor irrigation practices and the removal of deep-rooted vegetation have seen this salt rise to the surface, reducing the fertility of the land.
- Salinity is a major issued in the Murray–Darling Basin and in other parts of the world such as in the Mekong Delta.
- In order for issues related to salinity to be addressed, it is essential to consider the needs of all stakeholders, and especially the needs of the environment.

12.5 Desertification: the drylands are spreading

- Experts estimate that 41 per cent of the Earth's surface is at risk of turning into desert, largely due to poor management of the semi-arid lands on the margins of the desert.
- Desertification is a human-induced problem; population growth and the need to increase food production place drylands under increasing pressure. Once the land has been overrun by the desert, it is difficult to reclaim.
- China is attempting to halt the spread of the desert by planting a massive green wall along the southern border of the Gobi Desert. A similar project is taking place in the Sahel in Africa to halt the spread of the Sahara Desert.

12.6 Introduced species and land degradation

- Introduced species can have a devastating impact on the environment. Early settlers brought animals and plants with them — animals as a source of food and plants for their gardens.
- Over time, these species can escape and take over the landscape. Goats, for example, have no natural predators, compete with native animals for food, damage the soil and overgraze the land. Introduced plants such as Paterson's Curse choke out natural vegetation and prevent sunlight from reaching the soil.
- Introducing goats to areas that are infested with invasive plant species can assist in reclaiming the land and keeping this pest at bay.

- Other species such as foxes and rabbits have been more difficult to control. However, Maremma dogs have been used to protect colonies of penguins from foxes.

12.7 Native species and environmental change

- Native species can also cause significant environmental change — koalas can literally eat themselves out of house and home. Koalas have, however, lost much of their original habitat, so issues related to food supply are largely caused by fragmented habitats; that is, they have nowhere to go.
- Elephants, because of their size, can cause damage to the environment. However, they are also an ecological species in that they maintain their ecosystem. Elephant numbers are declining in Africa, placing these ecosystems at risk.

12.8 Indigenous communities and sustainable land management

- Before the arrival of European settlers, Aboriginal and Torres Strait Islander peoples lived in harmony with the land; much of this management involved the use of fire, which maintained a grassland environment, encouraged new vegetation growth and assisted them in hunting animals.
- Aboriginal and Torres Strait Islander peoples also had their own unique calendar, linked to the environmental and seasonal changes that they observed. These changes governed their lifestyle and the food they ate throughout the year.
- Management practices were designed to ensure that there would always be a plentiful supply of food from year to year and the land would not be harmed.

12.10.2 Key terms

algal bloom rapid growth of algae caused by high levels of nutrients (particularly phosphates and nitrates) in water

biodiversity the variety of plant and animal life within an area

brackish (water) water that contains more salt than fresh water but not as much as sea water

carrying capacity the ability of the land to support livestock

chlamydia a sexually transmitted disease infecting koalas

cull selective reduction of a species by killing a number of animals

desertification the transformation of land once suitable for agriculture into desert by processes such as climate change or human practices such as deforestation and overgrazing

drainage area (or basin) an area drained by a river and its tributaries

dryland ecosystems characterised by a lack of water. They include cultivated lands, scrublands, shrublands, grasslands, savannas and semi-deserts. The lack of water constrains the production of crops, wood and other ecosystem services.

ecology the environment as it relates to living organisms

exotic species species introduced from a foreign country

groundwater water held underground within water-bearing rocks or aquifers

humus decaying organic matter that is rich in nutrients needed for plant growth

invasive plant species commonly referred to as weeds; any plant species that dominates an area outside its normal region and requires action to control its spread

Mediterranean (climate) characterised by hot, dry summers and cool, wet winters

monoculture cultivating a single crop or plant species over a wide area over a prolonged period of time

mulch organic matter such as grass clippings

national park an area set aside for the purpose of conservation

pastoral run an area or tract of land for grazing livestock

ringbark removing the bark from a tree in a ring that goes all the way around the trunk. The tree usually dies because the nutrient-carrying layer is destroyed in the process.

Royal Commission a public judicial inquiry into an important issue, with powers to make recommendations to government

Sahel a semi-arid region in sub-Saharan Africa. It is a transition zone between the Sahara Desert to the north and the wetter tropical regions to the south. It stretches across the continent, west from Senegal to Ethiopia in the east, crossing 11 borders.

salinity an excess of salt in soil or water, making it less useful for agriculture

salt scald the visible presence of salt crystals on the surface of the land, giving it a crust-like appearance
topsoil the top layers of soil that contain the nutrients necessary for healthy plant growth
turbid water that contains sediment and is cloudy rather than clear
watertable upper level of groundwater; the level below which the earth is saturated with water
weathering the breaking down of rocks
weed any plant species that dominates an area outside its normal region and requires action to control its spread

12.10.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

From housing to food production, we use land for many different things. What impact are we having on this important resource?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

on Resources

eWorkbook Customised worksheets for this topic (ewbk-6179)
Reflection (ewbk-6178)
Crossword (ewbk-6177)
Student Learning Matrix (ewbk-6165)

Interactivity Land environments under threat crossword (int-7670)

12.10 Review exercise

Multiple choice

1. Which three options explain some of the processes that can cause the land to degrade?
   - **A.** Land clearing
   - **B.** Introduced species
   - **C.** Undergrazing
   - **D.** Salinity
2. What is the link between soil erosion and the removal of vegetation?
   - **A.** Vegetation loosens the soil.
   - **B.** Vegetations stops the soil getting wet so it dries out and blows away.
   - **C.** Vegetation washes the topsoil away.
   - **D.** Without vegetation the rain falls on bare soil and washes the topsoil away.
3. What is the difference between dryland and irrigation salinity?
   - **A.** Irrigation salinity occurs in areas with irrigation.
   - **B.** Dryland salinity occurs in deserts.
   - **C.** Dryland salinity only involves the salt from groundwater.
   - **D.** Irrigation salinity is the result of human inaction.

4. What do both dryland and irrigation salinity cause to rise?
   - **A.** Watertable
   - **B.** Ground water
   - **C.** Bore water
   - **D.** Topsoil

5. What are two reasons that introduced species can cause land degradation?
   - **A.** They compete with native species for habitat and food.
   - **B.** Their manure fertilises the soil causing too much vegetation growth.
   - **C.** They take over the land and have the capacity to choke out native vegetation.
   - **D.** They are poisonous to their natural predators.

6. What does ringbarking mean?
   - **A.** To cut a tree by first marking a ring around its trunk
   - **B.** To remove the bark from a tree in a ring that goes all the way around the trunk
   - **C.** To remove the bark from a tree to stop a possum climbing it
   - **D.** To remove the bark from a tree to encourage new growth

7. Desertification is encouraged by which two human practices?
   - **A.** Deforestation and undergrazing
   - **B.** Overgrazing and reforestation
   - **C.** Deforestation and overgrazing
   - **D.** Climate change

8. What are *two* invasive species in Australia?
   - **A.** Rabbits and penguins
   - **B.** Cane toads and mosquitoes
   - **C.** Possums and foxes
   - **D.** Rabbits and foxes

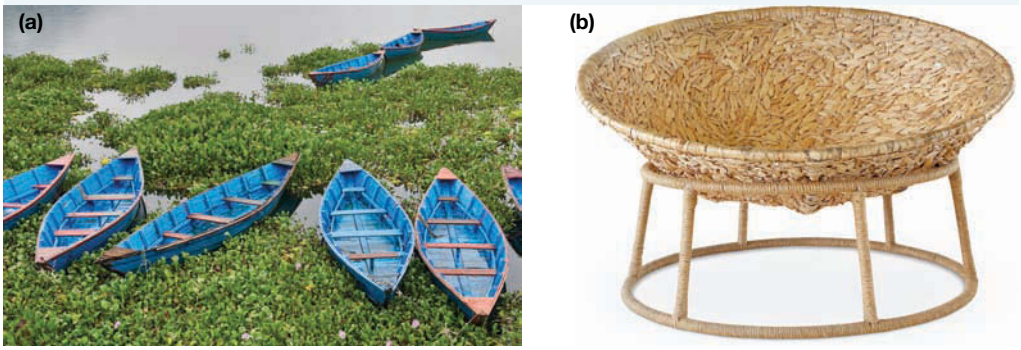
9. What are two deserts that are the site of green walls to prevent further desertification?
   - **A.** Sahel and Gobi
   - **B.** Sahel and Sahara
   - **C.** Gobi and Tanami
   - **D.** Tanami and Atacama

10. Why is topsoil important?
    - **A.** It stops weeds growing.
    - **B.** It provides a soft surface for hooved animals.
    - **C.** It contains the nutrients necessary for healthy plant growth.
    - **D.** It provides nutrients for the watertable.

Short answer

11. Invasive species are a major problem around the world. But it is not just the land that they invade. Exotic plants and animals also invade our waterways. Once a species takes hold it can be very difficult to control. Found on most continents, the water hyacinth spreads quickly. When not controlled it prevents sunlight from reaching native aquatic plants, starves the water of oxygen, killing fish and provides an ideal breeding ground for mosquitoes. However, when controlled it can be useful, and humans have found a number of uses for it, including cleaning industrial wastewater, as a source of biofuel and to make furniture.

FIGURE 1 (a) Water hyacinth, a serious problem in many parts of the world (b) Being used in other areas to make furniture

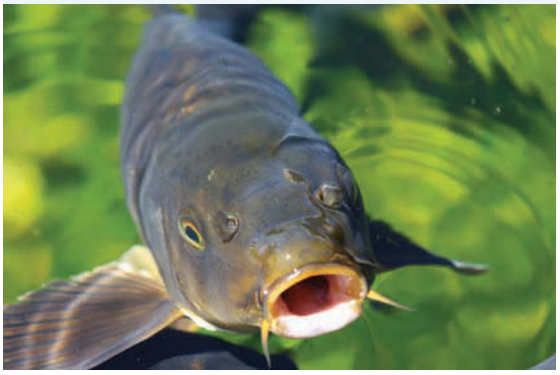


a. Do you think other invasive plant species could be used commercially? Give reasons for your answer.

b. Design an advertising campaign to convince people to purchase furniture made from water hyacinth.

12. Carp (see **FIGURE 2**) have long been a major problem in the waters of the Murray–Darling Basin. They have no natural predators and prey upon the young of native Australian fish species, muddy the water and cause the erosion of riverbanks. Carp have provided the foundation upon which a small business, Charlie Carp, was launched — this business harvests over 150 tonnes of carp annually and turns them into an environmentally friendly fertiliser.

FIGURE 2 Carp



a. Why do you think carp make such an effective fertiliser?

b. What advantages might a product such as Charlie Carp have over chemical-based fertilisers?

c. Could a product such as this eliminate the need for chemical fertilisers? Why, or why not?

13. Which type of salinity do you think is of most concern in Australia? Give reasons for your answer.



RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 12 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

12.1 Overview

Video eLesson
- Wasting our land (eles-1708)

12.2 The causes and impacts of land degradation

eWorkbook
- Land degradation (ewbk-6166)
- Why does land degrade? (ewbk-6167)

Interactivities
- Why land degrades (int-5591)
- Land clearing and deforestation leave the land vulnerable to erosion (int-7952)
- Severity of soil degradation in Australia (int-7953)
- Soil degradation — a global problem affecting every permanently inhabited continent (int-5597)
- Destroying the land (int-3289)

12.3 Managing land degradation

eWorkbook
- The impact of deforestation on sloping land (ewbk-6168)
- he different types of erosion (ewbk-6169)

Interactivity
- Down in the dirt (int-3290)

12.4 Environmental change and salinity

eWorkbook
- The effects of a rising watertable (ewbk-6173)
- Comparing salinity (ewbk-6174)
- Testing salt tolerance (ewbk-6175)

Interactivity
- A pinch of salt (int-3291)

MyWorld Atlas
- Salinity in the Murray–Darling Basin

12.5 Desertification: the drylands are spreading

eWorkbook
- Why are our drylands drying up? (ewbk-6170)

Weblinks
- Great Green Wall of China (1)
- Great Green Wall of China (2)

MyWorld Atlas
- Desertification in Mauritania

12.6 Introduced species and land degradation

eWorkbook
- Invasive species (ewbk-6171)
- Managing introduced species (ewbk-6172)

Weblink
- Weed species

MyWorld Atlas
- Introduced species in Australia

12.8 Indigenous communities and sustainable land management

eWorkbook
- Traditional management strategies (ewbk-6176)

MyWorld Atlas
- Caring for Country

12.9 Thinking Big research project — Invasive species Wanted! poster

ProjectsPLUS
- Thinking Big research project — Invasive species Wanted! poster (pro-0212)

12.10 Review

eWorkbook
- Reflection (ewbk-6178)
- Crossword (ewbk-6177)
- Student Learning Matrix (ewbk-6165)

Interactivity
- Land environments under threat crossword (int-7670)

To access these online resources, log on to **www.jacplus.com.au**.

13 Coast change and management

13.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

Although it may not be obvious, coasts are constantly changing. How do natural and human processes contribute to this?

13.1.1 Introduction

The coast is home to 80 per cent of the world's population, and is a popular place to settle for reasons of climate, water resources, land for agriculture and industry, access to transportation systems and recreation. Hence, it is essential to understand the changes that are occurring to coastal environments and how they will affect human settlements. The changes are both natural and human-induced. They are sometimes short term (as a result of storms and tsunamis) and sometimes long term (climate change leading to rising sea levels). To cope with these changes, careful planning and management is needed to ensure a sustainable future for human activity at the coast.

on Resources

- **eWorkbook** Customisable worksheets for this topic (ewbk-6202)
- **Video eLesson** Washed away (eles-1710)

FIGURE 1 Storm surges and rising sea levels pose a significant threat to some coastal communities.



13.2 Understanding coastal landscapes

LEARNING INTENTION

By the end of this subtopic you will be able to explain the ways in which coasts are constantly changing, and identify various coastal landforms and the processes by which they are formed over time.

13.2.1 The importance of the coast

Coasts are a dynamic natural system. The forces of nature are constantly at work, either creating new land or wearing it away. Over 85 per cent of Australians live within 50 kilometres of the coast. As well as being a favoured place to live, the coast is the most popular destination for tourists and visitors.

All forms of human activities can have impacts on coastal landforms and the **ecosystems** of plant and animal life. Australia's coasts need to be managed to achieve goals of sustainable living for all who share this common environment. In addition, there is a need to balance the diverse viewpoints of human-induced development with conservation principles.

13.2.2 The coastal zone

The coastal zone may be broadly defined as the zone where the land meets the sea (see **FIGURE 1**). It includes an area of water known as coastal waters (waters within 3 nautical miles of the shore) and an area of land called the **hinterland**, which extends several kilometres inland of the coast. The Australian coast, which is approximately 37 000 kilometres in length, consists of many different environments such as plains, rivers and lakes, rainforests, wetlands, mangrove areas, estuaries, beaches, coral reefs, seagrass beds and all forms of sea life found on the adjoining continental shelf.

ecosystems systems formed by the interactions between the living organisms (plants, animals, humans) and the physical elements of an environment

hinterland the land behind a coast or shoreline extending a few kilometres inland

FIGURE 1 Typical Australian coastal scenario, Point Danger, Tweed Heads, New South Wales



Many of Australia's World Heritage sites are found in these varied coastal environments, such as the Great Barrier Reef (see **FIGURE 2**), Lord Howe Island, Fraser Island and Shark Bay. The coast is also important for human settlement: urban complexes, ports and harbours. Many Aboriginal and Torres Strait Islander peoples lived and continue to live in coastal communities. Historical evidence of middens, art sites, fish traps, stone and ochre quarries, and burial and religious sites show the long history of peoples living by the Australian coast. It is important that we understand our coastal environments in order to ensure their sustainable management, to maintain marine biodiversity and so that they may be preserved for the many generations to come.

FIGURE 2 The Great Barrier Reef was placed on the World Heritage List in 1981.



13.2.3 Coasts as natural systems

Coasts are natural systems consisting of landforms (beaches, dunes and cliffs) as well as biotic elements (aquatic and terrestrial plants and animals). Geographers refer to all these things as biophysical elements. Coasts are also said to be in a state of **dynamic equilibrium**, which means they are constantly changing. Examples of small-scale and short-term agents of change are the tides, ocean currents and wave action. Examples of large-scale agents of change (which happen over vast periods of geological time) include continental drift, uplift and sinking of land, movement of sea levels due to ice ages and warm periods, and creation of islands by volcanic activity.

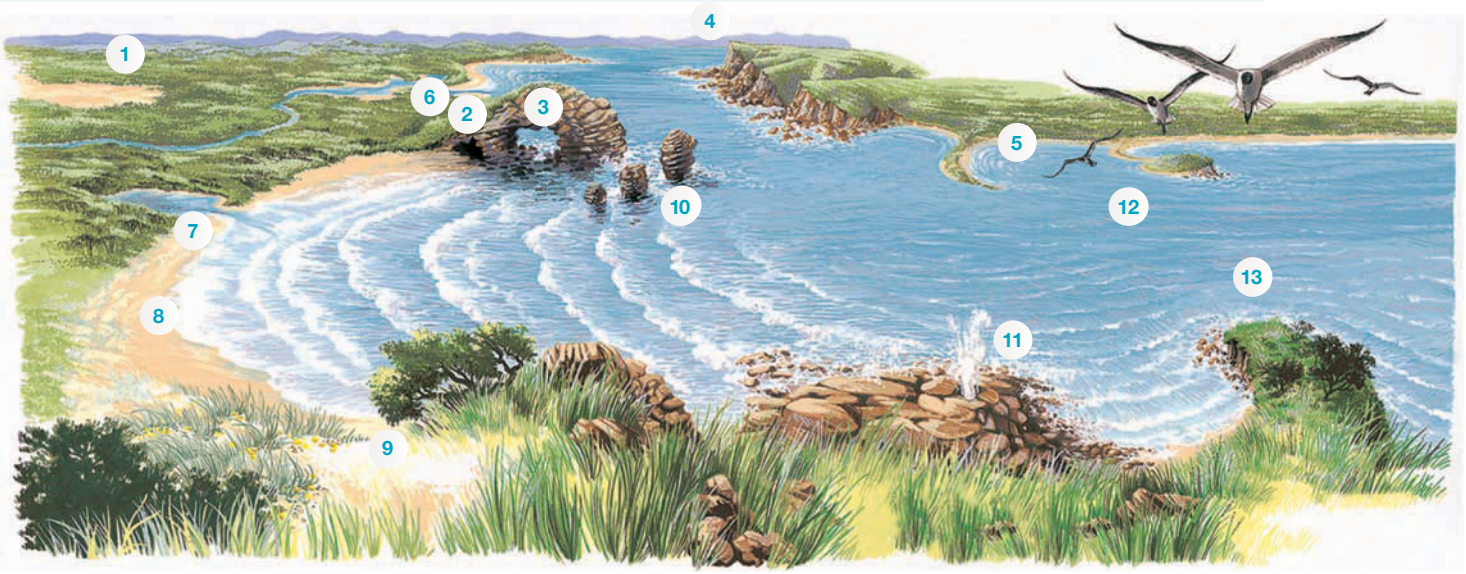
dynamic equilibrium when the input of a coastal system such as winds and waves moving sediments onshore is equal to the output that moves sediments offshore, the system is said to be in a steady state. It is therefore not unstable and it has a dynamic equilibrium.

13.2.4 Coastal landforms

There is a wide range of marine and terrestrial structures found at the coast. Many are familiar to us, such as the landforms of beaches, bays, dunes and cliffs (see **FIGURE 3**). Others such as fiords are unique to polar regions, which were affected by ice ages. Structures found under the sea are not so widely known and can include the continental shelf, canyons and trenches.

int-5594

FIGURE 3 The range of coastal landforms



1. Dune blowouts occur when loose sand is blown from the dune because vegetation has been removed.
2. Waves are refracted (bent) towards a headland and release energy either side of it. Caves will be formed where weak rocks are eroded on each side of a headland.
3. Over time the caves will erode on either side of a headland and join to form an arch.
4. Erosion between low and high tides undercuts rocks and a rock platform develops. This undercut section eventually becomes weak and collapses, creating a cliff.
5. Longshore drift moves sand and other material along a beach. If this drift occurs mainly in one direction, sand may extend along the coastline forming a spit.
6. Estuaries are the parts of a river that are tidal and occur at the sea. They catch mud, sand and nutrients.
7. A lagoon is formed when a sandbar begins to develop, eventually closing an estuary.
8. Beaches are formed when material is brought to the shore by waves. The material can be sand, stones or pebbles.
9. Dunes are formed when sand on a beach is stabilised by vegetation.
10. Further erosion of the rock supporting the arch will cause it to collapse, leaving a stack.
11. If caves develop in places exposed to the sea and waves, water rushes in and can cause pressure to build at the back of the cave. If a section of rock in the roof of the cave is weak, part of the roof may collapse and a blowhole is formed.
12. A spit can sometimes join two land areas. This is called a tombolo.
13. Headlands are formed when coastal rocks are very hard and resist erosion from the waves. Softer rocks either side of the headland are eroded and transported elsewhere.

13.2.5 Ocean processes

Waves and the movement of coastal waters caused by tides, currents, rips, storm surges and tsunamis are ongoing processes that mould the coast, creating and destroying landforms and submarine forms. Tides, which are generated by the gravitational pull of the moon and the sun, cause changes in sea level; this can vary between low and high tide by as much as 10 metres, such as is found in Broome, Western Australia.

Waves are generated by winds out at sea and this creates what is called swell; the larger the fetch area or distance to the coast, the greater the potential height of the wave, particularly in storm conditions. Waves that are generated in storm conditions are called destructive waves, and these lead to increased erosion of coastal forms (see **FIGURE 4**). Waves that are generated in calm conditions are known as constructive waves, and these may build up sediments, giving rise to beaches and dunes (see **FIGURE 5**).

FIGURE 4 Destructive wave

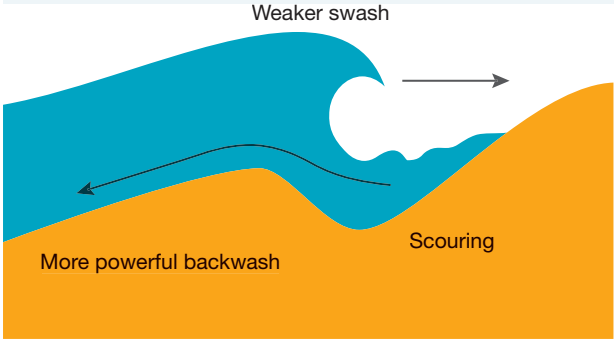
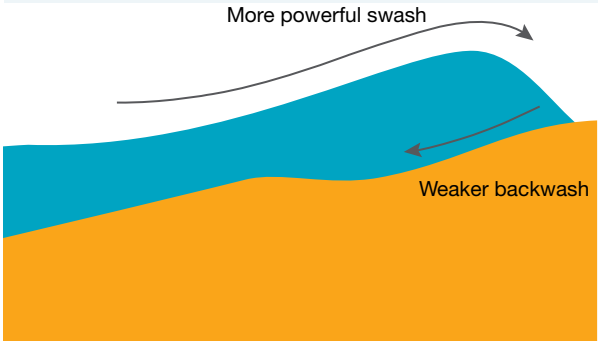


FIGURE 5 Constructive wave



As a wave approaches the coast it translates into a swash, or forward movement, and to a backwash, or return to the sea, after its encounter with the land. Surfers look for the swash element of waves to carry them actively forwards (see **FIGURE 6**). If waves come into the coast at an angle, the swash will move up the beach at that angle but the backwash returns under the action of gravity directly down the beach. This leads to what is called longshore drift (see **FIGURE 7**), which can move large quantities of sand along the coast and lead to spectacular forms such as spits, bars, barriers and tombolos.

FIGURE 6 How a wave breaks

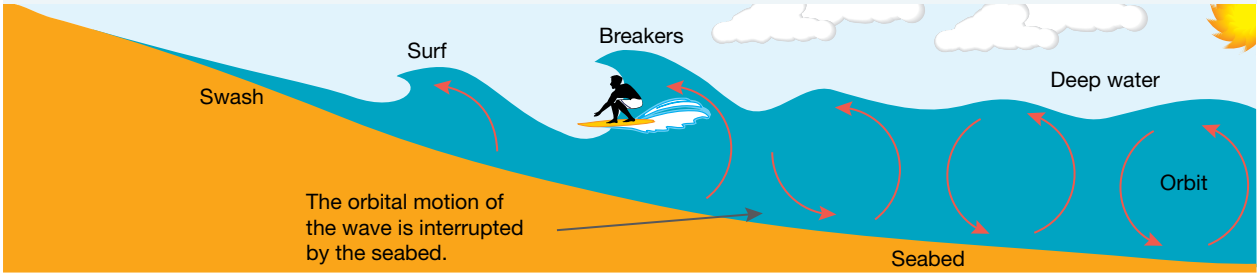
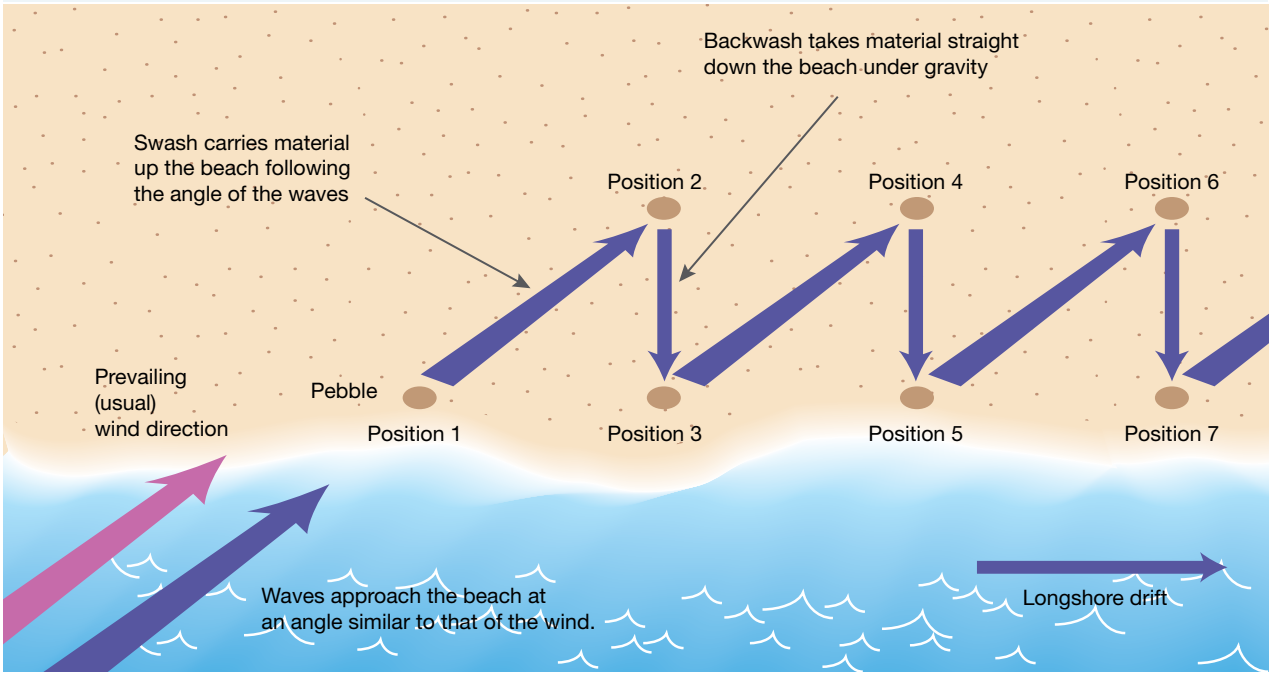


FIGURE 7 Longshore drift



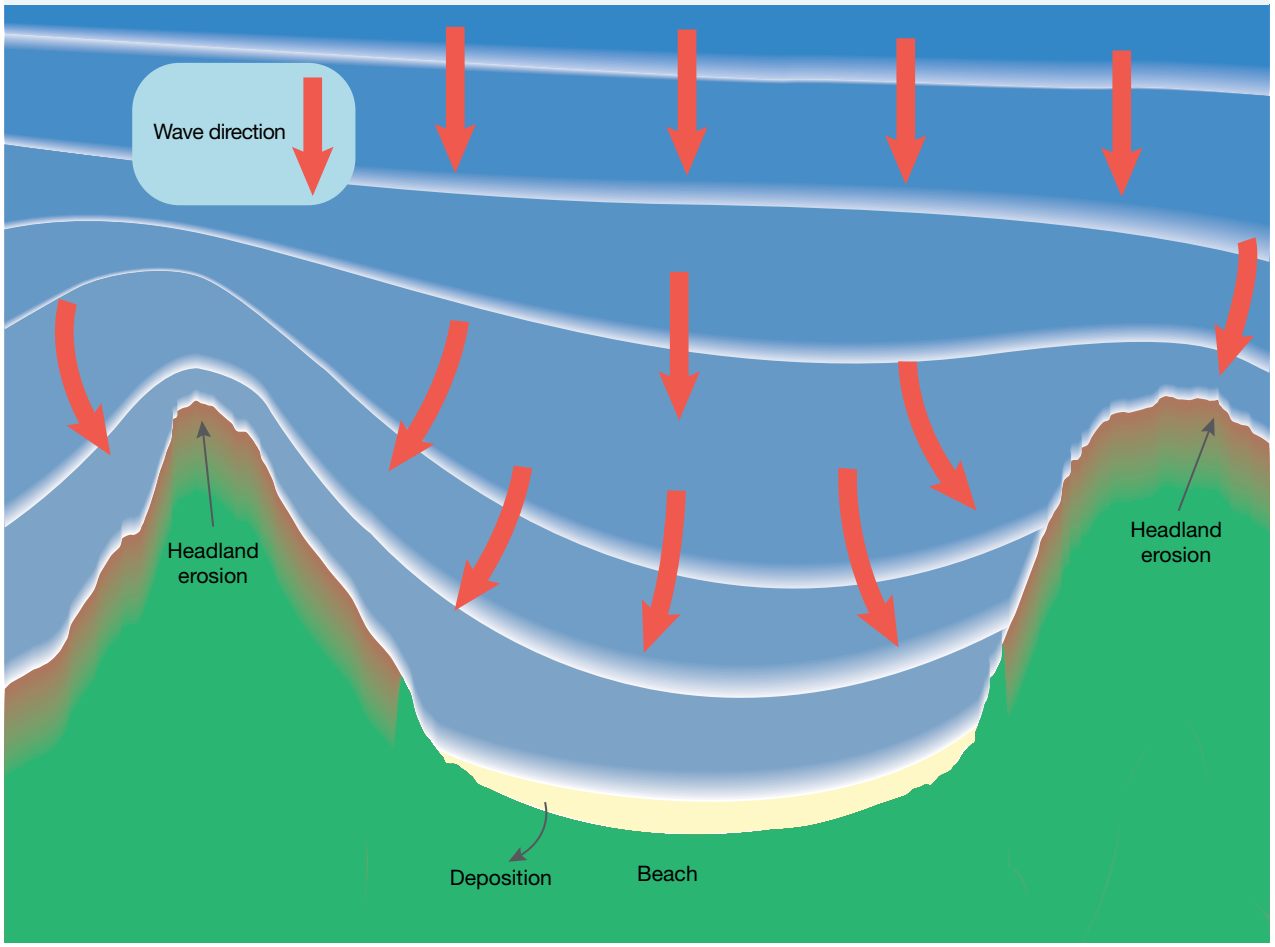
13.2.6 Erosional forms

As noted, erosion through the power of waves is significant in creating coastal landforms. For instance, during storm conditions it has been estimated that the hydraulic action or weight and pressure of water hitting the coast can amount to 10 tonnes per square metre. The mere contact of sea water with coastal rocks can lead to weathering, whereby rocks or loose sediments are either dissolved or abraded or worn away by the action of waves armed with pebbles and sediments. In some cases a section of the coast that is undermined by the sea may collapse; this is referred to as **mass wasting**. Erosional landforms include headlands, bays and bights, cliffs, platforms, caves, arches, blowholes and stacks.

Headlands and bays

Headlands and bays are created by a process of differential erosion. Some parts of the coast may be made up of harder rocks or rocks that have fewer fractures, and these areas form headlands that tend to resist erosion. Bays, on the other hand, are composed of softer or more fractured rocks that are more easily eroded, leading to coastline retreat (see **FIGURE 8**).

FIGURE 8 Refraction results in a convergence of waves on a headland and divergence in a bay.

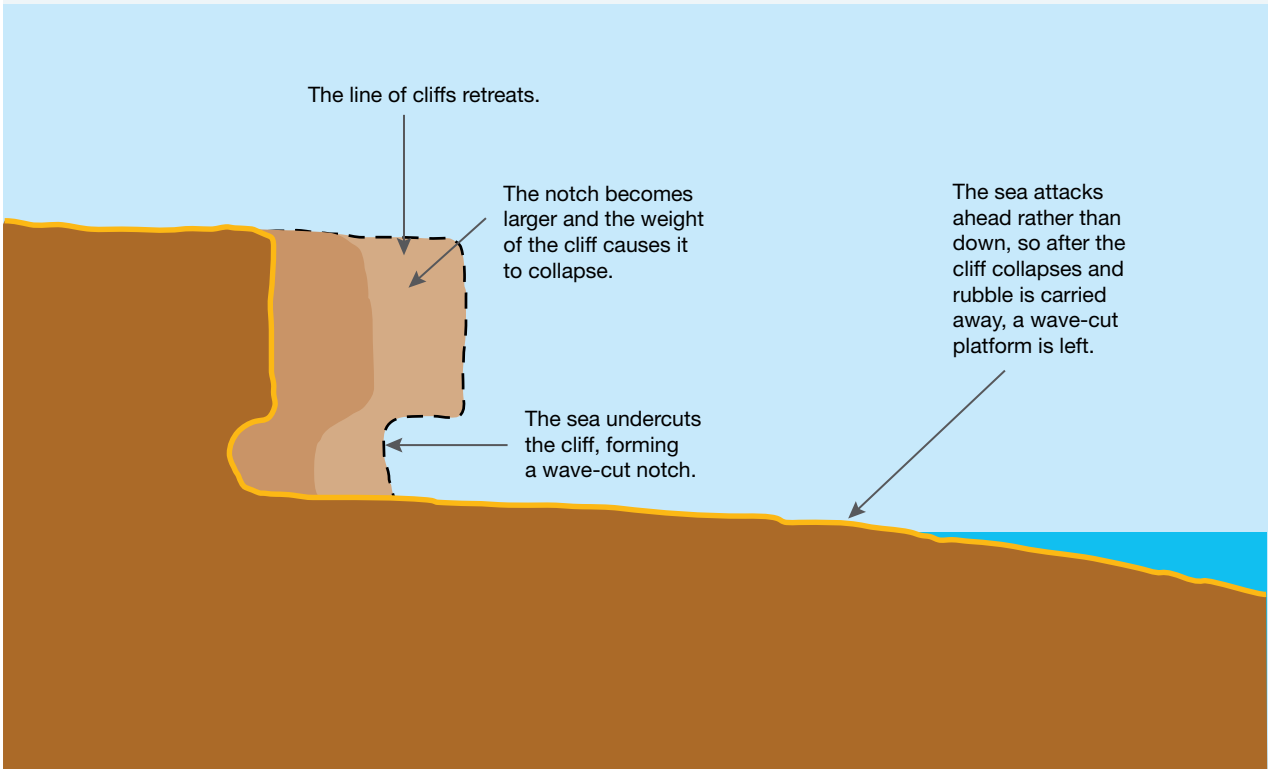


Cliffs and platforms

As waves approach the coast, their erosive powers will have an impact on rock structures. The force of the water acting on any raised rocky structure will create what is called a cliff. A notch, which is a zone where active wave energy is concentrated, will form at the base of the cliff, and this will lead to the cliff collapsing into the sea and the coastline retreating inland. With cliff retreat, as the active wave zone in the ocean waters becomes enlarged, a platform will develop (see **FIGURE 9**).

mass wasting the movement of rock and other debris downslope in bulk, due to a destabilising force such as undermining compounded by the pull of gravity

FIGURE 9 Formation of cliffs and rocky platforms



Caves, arches, blowholes and stacks

Differences in the hardness of rocks and its joints and fractures can be exploited by erosion to create features such as caves, arches (see **FIGURE 10**) and stacks. Caves are parts of the coast that have been more actively eroded from the surrounding rocky area, leaving a hollow in the cliff section. If part of the roof of the cave collapses, in-rushing waves may be channelled up this chimney structure, forcing water and air out at the horizontal land surface above (see **FIGURE 11**). Stacks are simply remnants of cliff areas that have resisted erosion and been left stranded out to sea.

FIGURE 10 Tasman Arch, Tasmania



FIGURE 11 Waves are forced upwards through the blowhole at Quobba Point near Carnarvon, Western Australia



13.2.7 Depositional forms

Depositional coastal forms include beaches, sand dunes, bars and barriers, spits, sand islands, tombolos and lagoons. Processes that create these features are generally associated with constructive waves, movement and accumulation of sands due to longshore drift, and wind blowing sandy sediments onshore.

Beaches

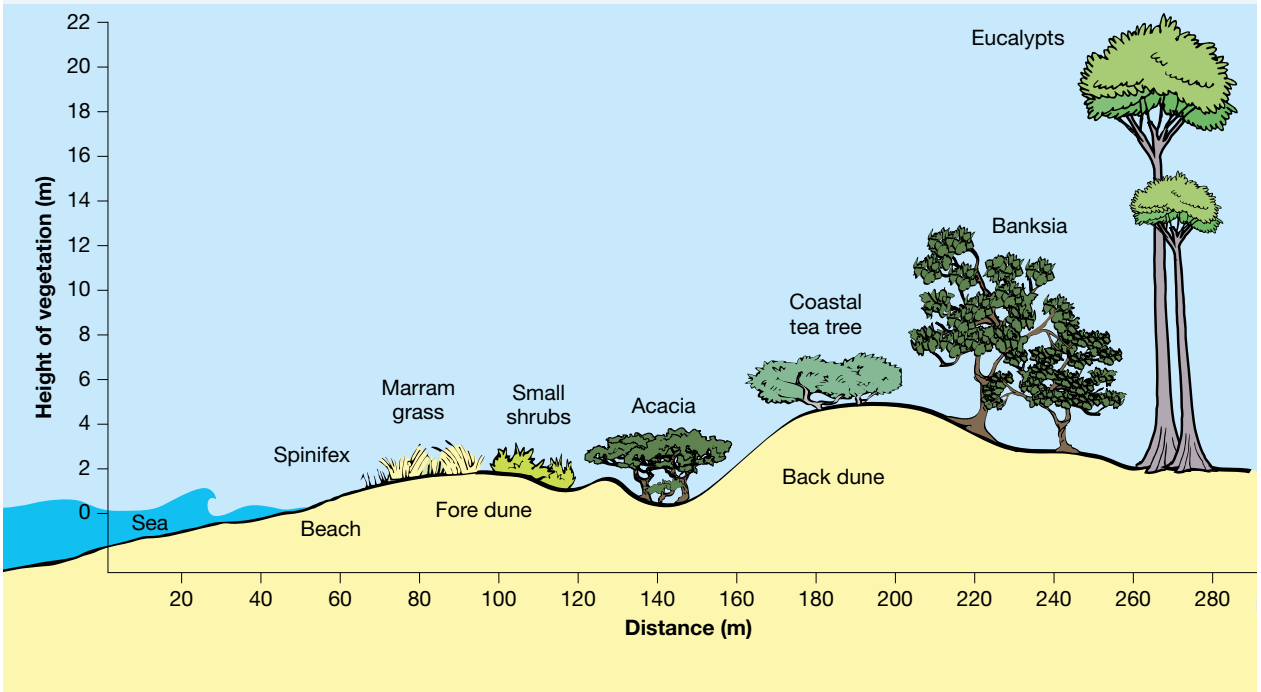
Australia has many beaches, and we are all familiar with their structure. Sediments and sands from which beaches are formed come from materials eroded from cliffs and, more particularly, sediments brought down to the coast by rivers. Waves wash these sediments onto shallow sloping coastal platforms. As beaches are composed of soft materials, they are easily eroded in storms, but generally sands that are taken offshore will return when calmer conditions return and constructive waves can move the sediments back.

Dunes

coastal dune vegetation succession the process of change in the plant types of a vegetation community over time — moving from pioneering plants in the high-tide zone to fully developed inland area vegetation

At the back of the beach and in the zones above high tide, sandy sediments dry out. The wind can then pick these up and move them onshore and inland. Usually a fore dune will form (see **FIGURE 12**) and a depression will be found just inland behind it. If sufficient sand is available, a secondary dune may form, and in some cases dune fields may result with many lines of dunes. The development of dune vegetation that has adapted to survive in harsh conditions is important to stabilise dunes. This vegetation becomes larger and more varied as soil and freshwater conditions on the dune improve inland; this process is known as **coastal dune vegetation succession**. Dunes, due to their sandy structure, are particularly fragile and need to be managed carefully so that pedestrian traffic does not disturb stabilising plant life. Fraser Island in Queensland is composed of sandy sediments and covered with dunes that were built up during the last ice age.

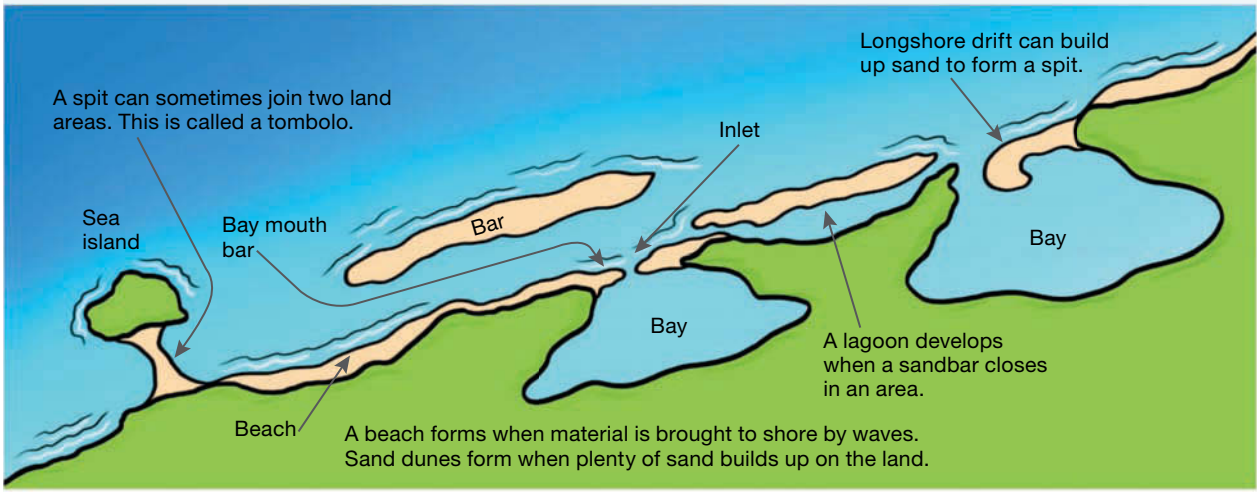
FIGURE 12 Transect showing the beach and stable and well-vegetated dunes



Other depositional coastal forms

Spits are sandy extensions of beaches formed by longshore drift currents (see **FIGURE 13**). There is a large spit at the mouth of the Noosa River in Queensland. Bars and barriers are sandy offshore structures that run parallel to the coast, and lagoons or wetlands may form behind them. The Coorong at the mouth of the Murray River in South Australia is an example of these features.

FIGURE 13 Coastal landforms created by transportation and deposition



Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Oceans and coasts > **Coastal processes**

13.2 ACTIVITIES

1. Investigate the location of World Heritage sites in the coastal zone. On a world map, label each site and note the reason for its significance.
   HASS skills: Evaluating
2. Coastal landforms can be formed by processes of erosion and deposition. Using the internet, find examples of well-known erosional and depositional landforms and present them as a poster.
   HASS skills: Questioning and researching, Communicating and reflecting
3. Using a series of labelled sketches, explain how a rocky shore platform is formed.
   HASS skills: Communicating and reflecting
4. Fraser Island is located off the coast of Queensland. It has been recognised as the largest sand island in the world and contains many specialised landforms and unique coastal ecosystems. Once mined for sand and logged for timber, it has become a popular ecotourism destination. An issue for today is how to sustainably manage the impacts of ecotourism and protect the environment of this World Heritage listed island.
   a. Research the past and present uses of Fraser Island.
   b. When did it become a World Heritage site?
   c. What are some of its unique features?
   d. What does the future hold for Fraser Island?

   HASS skills: Questioning and researching, Analysing, Evaluating

13.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 4, 7, 9	Questions 2, 6, 8, 10	Questions 5, 11, 12, 13

Check your understanding

1. Why are coasts important to people?
2. Refer to **FIGURE 1**. What land use is found at Point Danger? How might this affect the dynamic nature of the coastal zone?
3. What are the two main coastal processes that form coastal landforms?
4. What are the differences between constructive and destructive waves?
5. Refer to the vegetation transect in **FIGURE 12**.
   a. Why does the vegetation change as you move inland?
   b. What adaptations does dune vegetation show in terms of being adapted to dry, windy coastal environments?
   c. What would happen to the vegetation on the back dune if a blowout removed all the vegetation from the fore dune?
6. Explain how longshore drift moves sand along a coastline. What is likely to happen on a beach if a council constructs a rock barrier at right angles to the beach?
7. Explain the changes that high-energy waves can cause on coasts.

Apply your understanding

8. Explain why environmental, social and economic criteria must be applied to manage a coastal area such as that shown in **FIGURE 1**.
9. Predict what might happen to the Great Barrier Reef if it wasn't listed on the World Heritage List.
10. Draw and label a sketch of coastal depositional forms such as those shown in **FIGURE 3**. What role has transportation of materials by longshore drift had in the development of these features?
11. Refer to the photograph of Tasman Arch in **FIGURE 10**. What will happen to this coastal feature in the future? Explain how this change will occur.
12. Discuss what happens over millions of years to eroded material that falls into the sea.
13. Refer to the **FIGURE 8** wave refraction diagram. Why are headlands more vulnerable to erosion than bays?

For sample responses to every question, go to www.jacplus.com.au.

13.3 Challenges to coastal management

LEARNING INTENTION

By the end of this subtopic you will be able to:
- explain the human impacts on coasts
- identify the threat posed by rising sea levels due to global warming
- evaluate the impact on island nations.

13.3.1 Human impacts on coasts

Human activities along the coast can interfere with natural coastal processes, resulting in significant changes to coastal environments. Our day-to-day lives across the globe contribute to global warming and sea-level rise, which in turn also affect our coastlines.

Human impacts on coastlines include the construction of ports, boat marinas and sea walls; changes in land use — for example, from a natural environment to agricultural or urban environments — and the disposal of waste from coastal and other settlements.

The *World Ocean Review* series is published by a not-for-profit company that seeks to raise awareness of issues relating to marine science and sustainable use of our oceans. The 2015 Review suggested that for oceans and coasts to be sustainably managed into the future, new environmental policies must be implemented. The issues identified in the review that need to be addressed include the following.

- **Marine pollution**
  - Toxic substances and heavy metals from industrial plants (liquid effluent and gaseous emissions)
  - Nutrients, in particular phosphate and nitrogen, from agricultural sources and untreated wastewater (eutrophication of coastal waters)
  - Ocean noise pollution from shipping and from growing offshore industry (exploitation of oil and natural gas reserves, construction of wind turbines, future mineral extraction)

- **Growing demand for resources**
  - Exploitation of oil and natural gas reserves in inshore areas and increasingly in deep-sea areas, resulting in smaller or greater amounts of oil being released into the sea
  - Extraction of sand, gravel and rock for construction purposes
  - For the development of new pharmaceuticals: extraction of genetic resources from marine life such as bacteria, sponges and other life forms, the removal of which may result in damage to sea floor habitats
  - Future ocean mining (ore mining at the sea floor), which may damage deep-sea habitats
  - Aquaculture (release of nutrients, pharmaceuticals and pathogens)
- **Overfishing**
  - Industrial-scale fishing and overexploitation of fish stocks; illegal fishing
- **Habitat destruction**
  - Building projects such as port extensions or hotels
  - Clear-felling of mangrove forests
  - Destruction of coral reefs as a result of fishing or tourism
- **Bioinvasion**
  - Inward movement of non-indigenous species as a result of shipping transport or shellfish farming; changes in characteristic habitats
- **Climate change**
  - Ocean warming
  - Sea-level rise
  - Ocean acidification

FIGURE 1 Destruction of mangrove habitats has enormous impacts on biodiversity.



Source: *World Ocean Review* 2015.

The 2017 *World Ocean Review* explores the coastal habitat and the diverse demands on this habitat. It illustrates how the varied ecosystem services rendered by the coasts are being subjected to increasing pressure, and outlines measures that will be necessary in the future to respond effectively to the threats from both climate change and natural disasters.

Coastal environments have not always been managed sustainably. In the past, decision makers generally had less understanding of the delicately balanced nature of many coastal ecosystems and they had limited environmental worldviews about the use of coastal areas. Their aim was to develop coastal areas for short-term economic gains. This was based on the belief that nature's resources were limitless. Building apartment blocks and tourist resorts on sand dunes seemed like a good idea — little thought was given to the fragility of the coastline and the long-term suitability of such development in an environment subject to coastal storm erosion and, in more recent times, rising sea levels.

Over time, people have realised that sustainable coastal management requires an understanding of:

- the coastal environment and the effect of physical processes
- the effect of human activities within the coastal zone
- the different perspectives of coastal users
- how to achieve a balance between conservation and development
- how decisions are made about the ways in which coasts will be used
- how to evaluate the success of individuals, groups and the levels of government in managing coastal issues.

13.3.2 The threat of global warming

Perhaps the greatest threat to coasts today is rising sea levels. It is recognised that global warming is a result of the **enhanced greenhouse effect**, which is a human-induced phenomenon that is leading to the melting of polar ice caps and glaciers. Some of the changes to coastal environments that will result due to global warming include:

- increased intensity and frequency of storm surges and coastal flooding
- increased salinity of rivers and groundwaters resulting from salt intrusion
- increased coastal erosion
- inundation of low-lying coastal communities and critical infrastructure
- loss of important mangroves and other wetlands
- impacts on marine ecosystems such as coral reefs.

FIGURE 2 To bring attention to issues of global warming, in particular rising sea levels, a meeting was held on the sea floor by government representatives of the Republic of the Maldives.



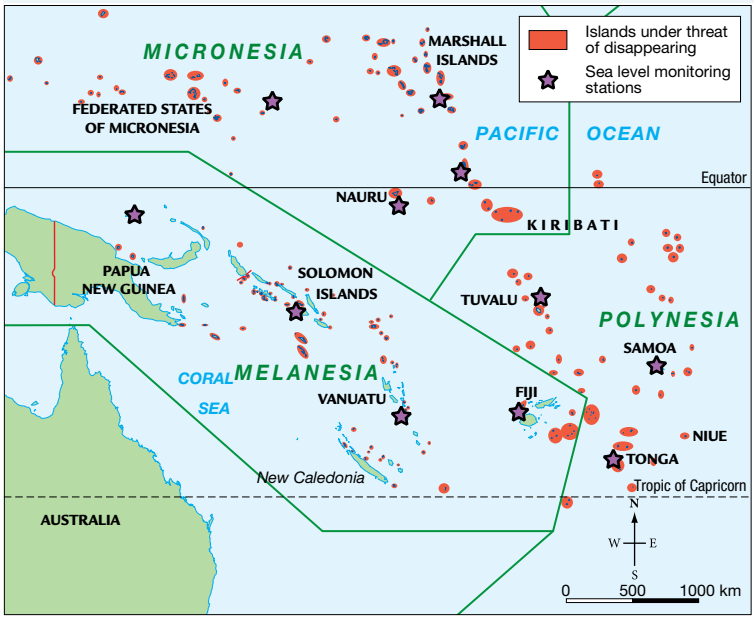
13.3.3 Our disappearing islands

As a result of climate change, it is currently anticipated that many low-lying islands will be flooded by the sea. Sea levels are currently estimated to be rising by about 2 to 3 millimetres each year. Melting glaciers and polar ice are adding to the water volume of the oceans; also, as the water warms, its volume increases. At current rates, many island groups in the Pacific and Indian oceans will be almost completely inundated by 2050.

Coastal storms, tsunamis, flooding, inundation, erosion, deposition and saltwater intrusion into freshwater supplies present a combined threat to coastal regions. With stronger windstorms possible, many low-lying communities will be at risk from storm surges (see **FIGURE 3** and **TABLE 1**).

enhanced greenhouse effect increasing concentrations of greenhouse gases in the Earth's atmosphere, contributing to global warming and climate change

FIGURE 3 Low-lying islands in the Pacific under threat of disappearing due to climate change



Source: MAPgraphics Pty Ltd, Brisbane.

TABLE 1 Selected Pacific Island nations, area and population

Island	Land area (km^2)	National extent (km^2)	Population	Gross income per person per year (US$)	Highest elevation (masl*)
Kiribati	717	3 550 000	116 398	4280	80
Marshall Islands	181	2 131 000	53 127	5590	10
Tuvalu	26	900 000	11 192	5780	5
Australia	7 690 000	7 690 000	25 464 116	47 160	2229

* metres above sea level

People living on low-lying islands will be among the first wave of 'climate refugees'. Due to environmental change, mainly through rising sea levels, some people have already had to move, and many more could be without a home in our lifetime.

13.3.4 Rising sea levels in the Pacific

Many of the Pacific Islands are small and can in some cases be described as **atolls**. Their national boundaries, which include the waters and economic zones they control, extend over vast distances, but their land area is limited. Islands such as Tuvalu and the Marshall Islands in the south-west Pacific, which are only a few metres above sea level, are particularly vulnerable to rising sea levels and associated severe storm activity due to climate change.

The economies of these Pacific Islands are small-scale and earnings are not high, with a reliance on what limited natural resources occur on the islands and in the surrounding ocean waters. Although rainfall can be plentiful, not much water can be retained, due to sandy soils and low altitudes; streams are few and groundwater is scarce. Hence, any incursion by sea water can be devastating for agricultural produce (see **FIGURE 4**), the urban environment and tourism, which has more recently become a money earner for these islands.

atoll a coral island that encircles a lagoon

Apart from the predicted rise in sea levels due to global warming, a secondary impact on the life of Pacific Islanders will be increases in the temperature of the sea, which will affect coral reefs and fish stocks that live in that environment. As for the Great Barrier Reef in Australia, bleaching and death of coral reefs can lead to the destruction of the whole aquatic ecosystem, and this will have devastating impacts on the Islanders' main diet, which is fish and other forms of seafood.

FIGURE 4 Poulaka crops killed by salt water due to rising sea levels



What can be done?

If food crops are destroyed by rising sea levels, **storm surges** and saltwater pollution, the Pacific Islander peoples do not have much scope for importing food due to their remoteness, high transport costs and low earnings of individuals. Combined with loss of seafood stocks, the Islanders will need to move to other islands to find a new home and livelihood. Clearly, this is an outcome that no-one wants to see. The task falls to the global community to instigate change to combat this impending humanitarian and ecological disaster.

The Pacific Islander peoples are strong advocates for the policies of the **Kyoto Protocol** and the subsequent **Paris Agreement** on climate change. Under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC), these agreements have established a range of measures to reduce the impact of greenhouse gas emissions by introducing carbon trading schemes and energy-efficient forms of technology such as wind and solar power. One hundred and eighty-nine countries have **ratified** the Paris Agreement, which came into effect in November 2016. Signatories have agreed to ambitious targets for the reduction of greenhouse gas emissions, with an aim of keeping global temperature rise below 2 °C, and attempting to limit it further still, to just 1.5 °C. All parties are required to report regularly on their progress towards emissions targets. It is hoped that through these measures, the low-lying Pacific Islands can be saved.

The leaders of the Pacific nations have spoken at the United Nations and many international climate change forums to raise awareness of their perilous situation and vulnerability to rising sea levels. They have also approached nations such as Australia and New Zealand to discuss the establishment of a future migration policy if global efforts to stem sea-level rise do not succeed.

storm surge a temporary increase in sea level from storm activity

Kyoto Protocol an internationally agreed set of rules developed by the United Nations aimed at reducing climate change through the stabilisation of greenhouse gas emissions into the atmosphere

Paris Agreement United Nations Framework Convention on Climate Change (UNFCCC) agreement outlining steps to reduce greenhouse gas emissions and tackle global warming

ratify to formally consent to and agree to be bound by a treaty, contract or agreement

DISCUSS

In small groups, consider the following statement.

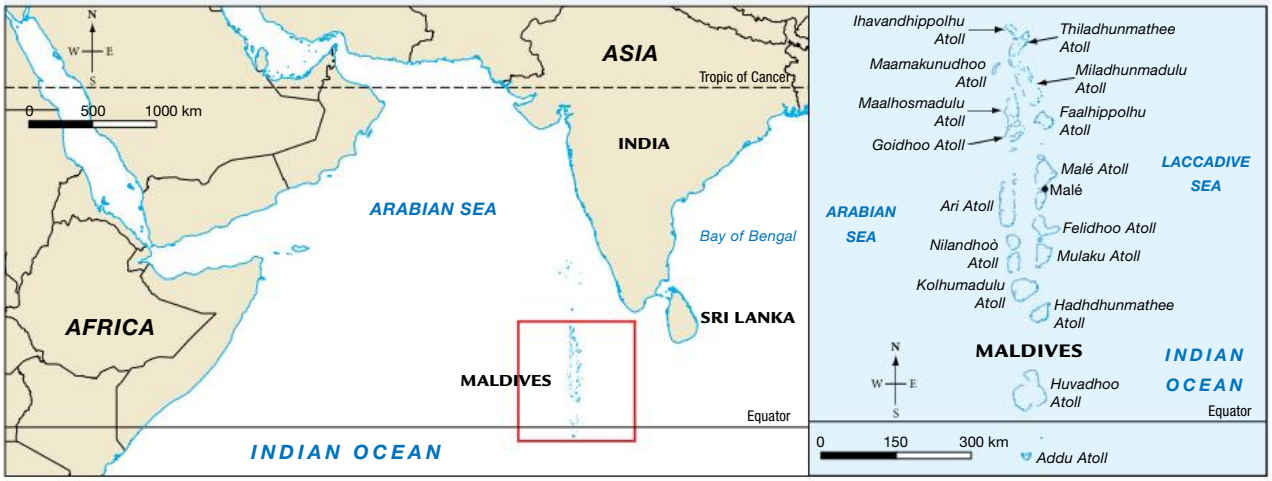
As Pacific neighbours, Australia and New Zealand should fulfil a duty and accept environmental refugees from Pacific islands in danger of flooding from sea-level rise.

General capability: Ethical understanding

13.3.5 Rising sea levels in the Maldives

The Maldive Islands are located in the Indian Ocean, to the south-west of India (see **FIGURE 5**). There are about 1200 coral islands, grouped into 26 atolls. The average elevation across the islands is around 1.5 metres above sea level (the highest point in the island group is just 2.4 metres above sea level). Economically, the nation depends on tourism and the continuing appeal of its beautiful beaches.

FIGURE 5 Location of the Maldive Islands



Source: Map by Spatial Vision.

The Boxing Day tsunami of 2004 showed how vulnerable the Maldives are, when the wave swept across many low-lying islands, causing widespread destruction of their fruit plantations. Eighty-two people died, while at least another 26 were reported missing, presumed dead. The number of deaths could undoubtedly have been much higher if not for the fact that most of the population lives in Malé, which is protected by a huge sea wall (see **FIGURE 6**).

FIGURE 6 Malé, the capital of the Maldives, occupies an entire island of its own.



Only nine islands were reported to have escaped any flooding, while 57 islands faced serious damage to critical infrastructure, 14 islands had to be totally evacuated and six were destroyed. A further 21 resort islands were forced to close because of serious damage. The total damage was estimated to be more than US$400 million, or some 62 per cent of the country's **gross domestic product (GDP)**.

gross domestic product (GDP) the value of all the goods and services produced within a country in a given period, usually discussed in terms of GDP per capita (total GDP divided by the population of the country)

The impact of climate change

The long-term threat to the Maldives, however, as with the Pacific Island nations, is posed by global warming and the associated rise in sea levels. In 2013, the United Nations Intergovernmental Panel on Climate Change (IPCC) predicted that by 2100 sea levels would rise by up to one metre. A 2019 study by leading ice scientists suggested that the rise could actually be as high as two metres. Even using the more conservative estimate, many areas of the Maldives face significant threat. In the worst case, almost the entire nation of the Maldives would be effectively submerged.

What actions can save the islands?

The application of human–environment systems thinking in the form of various schemes is being examined by the Maldivian government, including moving populations from islands more at risk, building barriers against the rising sea, raising the level of some key islands and even building a completely new island. However, these approaches offer only short-term solutions. The long-term sustainable challenge is to deal with the basic problem: global warming itself. It is perhaps understandable that the Maldives was one of the first countries to sign the Kyoto Protocol and subsequent Paris Agreement, which the government ratified on the same day as signing.

FIGURE 7 Sandbags protecting a home on the Maldives island Medu Fushi, damaged by the 2004 tsunami



Unless the international community agrees to an environmental worldview that incorporates changes to make large cuts in emissions, the problems facing the Islanders will worsen. Thousands will be forced to seek refuge in other countries. Without global action, eventually the Islanders will lose their country.

13.3.6 The interconnection of coast and inland waters

Bangladesh's Sundarbans

The country of Bangladesh is a large **alluvial plain** crossed by three rivers: the Ganges, Brahmaputra and Meghna. Each river carries massive volumes of water from its source in the Himalayas, spreads out along the **deltaic plain**, and empties into the world's biggest delta, the Bay of Bengal. This makes Bangladesh's coastline one of the most flood-prone in the world.

Apart from flooding by rivers in the delta, sea-level rises caused by global warming will lead to the expansion of ocean waters and additional inflows from melting Himalayan snow. At current rates, the IPCC predicts rising sea levels will overtake 17 per cent of Bangladesh by 2050, displacing at least 20 million people.

The Sundarbans region, a World Heritage site, is just one area of Bangladesh at risk from increased flooding. The Sundarbans are the largest intact mangrove forests in the world. Mangroves protect against coastal erosion and land loss. They play an important role in flood minimisation because they trap sediment in their extensive root systems. Mangroves also defend against storm surges caused by tropical cyclones or king tides, both common in the Sundarbans.

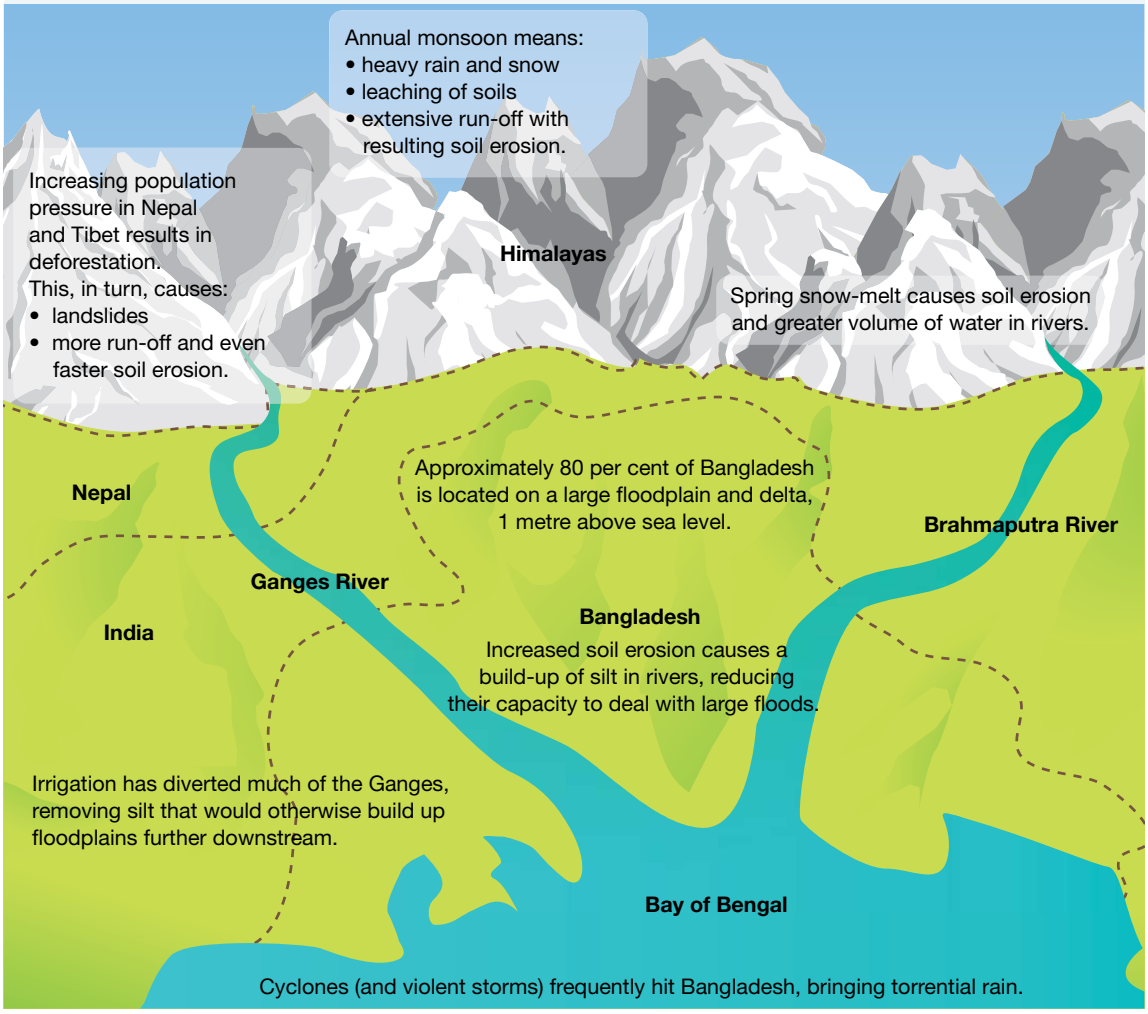
The Sundarbans also provide a breeding ground for birds and fish, as well as being home to the endangered Royal Bengal tiger. By sheltering juvenile fish, the mangrove forest provides a source of protein for millions of people in South Asia. Recently, the Sundarbans have also attracted a growing human population as Bangladeshis flee overcrowding in the capital city, Dhaka, or flooding and poverty in rural areas.

alluvial plain an area where rich sediments are deposited by flooding

deltaic plain flat area where a river(s) empties into a basin

int-3297

FIGURE 8 Flooding in Bangladesh — some causes



Increasing human occupation poses a severe threat to the Sundarbans. Most Bangladeshis rely on wood as a source of energy, and mangroves are being cleared to make charcoal for cooking. Aquaculture industries also have a negative impact. Mangroves are cleared to accommodate huge ponds for fish breeding, which quickly become polluted by antibiotics, waste products and toxic algae. This damage to the Sundarbans destroys Bangladesh's natural defence against flooding.

The impact of flooding

The increase in temperature, which has led to an increased melting of glaciers and snow inland in the Himalayas, will exacerbate the existing problems of flooding in Bangladesh. Climate change also causes shifts in weather patterns. If the monsoon season (from June to October) coincided with an unseasonal snow-melt, flooding would occur on a scale never before seen, especially with the event of tropical cyclones. Land would be lost and people displaced. Many islands fringing the Bay of Bengal are already under water, producing 'climate refugees' — people who have to seek refuge, fleeing their uninhabitable lands.

In addition to rising sea levels and shifting weather patterns, the enhanced greenhouse effect is also predicted to increase the intensity of cyclones and storms. For low-lying countries that are already flood-prone, such storms can be devastating. One of the deadliest cyclones on record hit Bangladesh in 1991, killing almost 140 000 people and making around 10 million homeless. The cyclone made landfall in the south-eastern part of Bangladesh with wind speeds between 240 and 250 km/h. The resulting six-metre storm surge flooded the coastline, contaminating water supplies and destroying farming land and stock.

Bangladesh has regularly experienced severe flooding in recent years. In 1988, 1998 and 2004, flood waters inundated between two-thirds and three-quarters of the country. While the height of the floods was lower in 1999, parts of the country were underwater for over 60 days. In 2017, flooding in some areas of the country lasted from April until August.

Because of these risks, Bangladesh needs to plan and implement management strategies based on an understanding of the reasons behind the changes and consideration of interactions between environmental, economic and social factors operating in the region. The government encourages farming methods that avoid deforestation, and new standards relating to vehicle emissions have been set. A proposed economic solution is ecotourism, as it attracts foreign currency while preserving the natural ecosystems and promoting sustainable development and responsible management of its vital environmental resources.

FIGURE 9 A village on one of Bangladesh's coastal islands was devastated by a cyclone in 1991. Although people in areas such as these are aware of the risk, overcrowding often prevents them from moving to safer regions.



DISCUSS

To what extent do you think economic goals and objectives are important with respect to environmental goals such as societal change and reducing greenhouse gas emissions? What policy direction would you push if you were in a position of influence in government? **General capability: Ethical understanding**

on Resources

Interactivity Bangladesh awash (int-3297)

Google Earth The Sundarbans

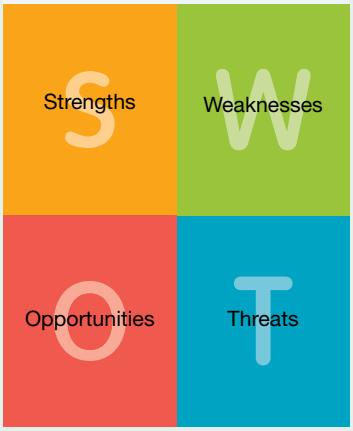
13.3 ACTIVITY

In groups, discuss the following statements concerning the impacts of climate change in the Pacific and Indian oceans using environmental, economic and social criteria. Alternatively, you may wish to use a SWOT analysis to help evaluate each statement.

- Australia and New Zealand should be prepared to resettle the 100 000 people of the islands of Kiribati if sea level rises create a 'climate refugee' problem.
- Increasing the height of the sea wall around the island of Malé will solve the threats of rising sea levels in the Maldives and ensure tourism into the future.

HASS skills: Evaluating

FIGURE 10 SWOT analysis



13.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 7, 8, 9	Questions 5, 6, 10, 11	Questions 4, 8, 12, 13

Check your understanding

1. What are some impacts that people have on coastal areas?
2. Select one of the impacts of rising sea levels on coasts identified in this subtopic and explain why this would be a problem for a selected coastal settlement in Australia.
3. Many islands in the Pacific and Indian oceans are under threat from rising sea levels. Why is this so?
4. What can the governments and Pacific Island peoples do, both in the short term and long term, to solve the problems they will face due to climate change?
5. How is climate change threatening water supplies and affecting food resources?
6. How do mangroves minimise the impact of floods and coastal erosion?
7. What are two reasons for mangroves being cleared in the Sundarbans?
8. What are 'climate refugees'?

Apply your understanding

9. Refer to **FIGURE 8**. Explain how the geography of Bangladesh makes it so vulnerable to the threat posed by climate change.
10. How can ecotourism play a role in preserving Bangladesh's ecosystems?
11. Suggest other parts of the world you think might also be threatened if sea levels were to rise by about 1 metre over the next 100 years. Justify your views.
12. List the factors that are displacing Bangladeshis and forcing them to move to the Sundarbans.
13. Refer to **FIGURE 8**.
    a. Describe how cyclones can contribute to flooding in Bangladesh.
    b. List some short-term and long-term actions that neighbouring nations Tibet, India and Nepal could implement to lessen the impact of flooding in places like Bangladesh.
    c. Divide a table into three columns with the headings 'Food production', 'Transport' and 'Settlement', and list the consequences of flooding for each category.

For sample responses to every question, go to www.jacplus.com.au.

13.4 How do we manage coastal change?

LEARNING INTENTION

By the end of this subtopic you will be able to explain the range of coastal management solutions available to deal with the impacts of erosion and rising sea levels, and analyse two case studies of Australian coastal developments.

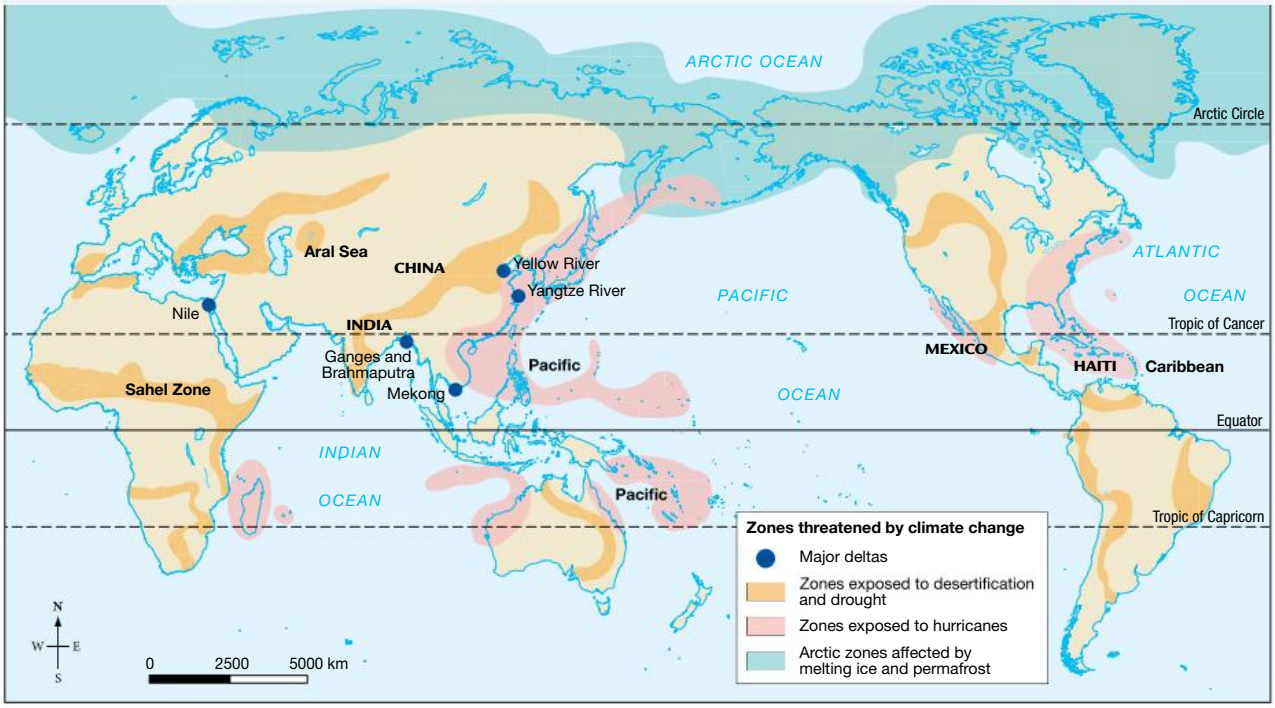
13.4.1 Changing coastlines

Coastal areas are not static or fixed places, and as such they are subject to two main agents of change. These can be defined as natural environmental processes and human-induced processes. In terms of natural environmental processes, where deposition processes dominate, coasts have been growing. However, where erosion processes dominate, coastal land is lost to the sea. Wherever people have imposed their structures, in the form of housing, harbour works and the like on coasts, there is a need to manage or at least moderate the processes of coastal change in a sustainable manner.

In 2016, 41 per cent of the world's population, or some three billion people, lived within 100 kilometres of the coast. Most of the world's megacities are located on the coast. According to predictions made by the *World Ocean Review* in 2017, at least one billion people who live in low-lying coastal areas could experience inundation and/or erosion of their lands into the future. This change to coasts is seen as stemming essentially from climate change which, as a largely human-induced event, is leading to rising seas, associated flooding in major delta regions, and more frequent severe storm events, such as hurricanes (see **FIGURE 1**). A consequence will be an increase in people who will have to relocate due to coastal changes.

int-7962

FIGURE 1 Zones across the world subject to threats associated with climate change



Source: UNEP (United Nations Environment Programme).

13.4.2 Protecting the coast

The protection of the coast through management programs is a costly business that aims to overcome problems associated with land loss, waterlogging and incursions of **groundwater salinity**.

The Netherlands, a country with two-thirds of its land below sea level, has proven that protecting the coastline is possible through a large investment of capital. The most common form of coastal protection in the Netherlands are **dykes** to hold back the sea; however, a recent addition is **floating settlements** that can rise and fall as sea levels change (see **FIGURE 2**).

FIGURE 2 Floating settlements anchored to the embankments along the waterfront at Maasbommel, the Netherlands



13.4.3 Coastal management in Australia

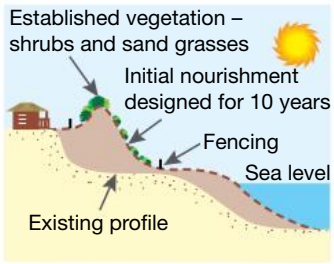
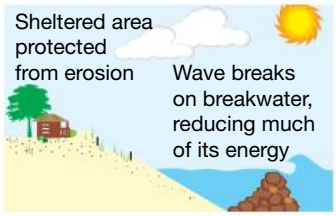
If coastlines are to be protected, a wide range of strategies must be employed to combat changes to the coastline and, in particular, flooding of low-lying areas and increased erosion of beaches and bluffs. The techniques shown in **TABLE 1** are used in Australia.

groundwater salinity presence of salty water that has replaced fresh water in the subsurface layers of soil

dyke an embankment constructed to prevent flooding by the sea or a river

floating settlements anchored buildings that float on water and are able to move up and down with the tides

TABLE 1 Possible management solutions to reduce the impacts of rising sea levels and erosion

Solution	Description	Diagram	Advantages	Disadvantages
Beach nourishment	The artificial placement of sand on a beach, which This is then spread along the beach by natural processes		Uses sand that best matches the natural beach material. There is low environmental impact at the beach.	The sand must come from another beach and may have an environmental impact in that location. Must be carried out on a continuous basis and therefore requires continuous funds.
Groyne	An artificial structure designed to trap sand being moved by longshore drift, therefore, protecting the beach; can be built using timber, concrete, steel pilings and rock		Traps sand and maintains the beach.	Groynes do not stop sand movement that occurs directly offshore. Are a visual eyesore.
Sea wall	A structure placed parallel to the shoreline to separate the land area from the water		Prevents further erosion of the dune area and protects buildings.	The base of the sea wall will be undermined over time. Is a visual eyesore. Will need a sand nourishment program as well. Has a high initial cost. Involves ongoing maintenance and cost.
Offshore breakwater	A structure parallel to the shore and placed in a water depth of about 10 metres		Waves break in the deeper water, reducing their energy at the shore.	Destroys surfing amenity of the coast. Requires large boulders in large quantities. Cost would be extremely high.
Property purchase	The purchase of buildings and removal of structures that are threatened by erosion		Allows easier management of the dune area. Allows natural beach processes to continue. Increases public access to the beach.	Loss of revenue to the local council May means possible social problems with residents who must move. Exposes the back dune area, which will need protection. Cost would be extremely high. Does not solve sand loss.

13.4.4 CASE STUDY: Shifting sands on the Gold Coast

Have you ever wondered where all the sand on a beach comes from and where it goes? Wind, wave and current action is responsible for moving sand on and off a beach and along a coastline. Human-induced environmental changes along the coast can interrupt these natural processes, often creating long-term problems. One such example is the Gold Coast in Queensland where a human-centred — that is, a technical 'we can fix it' — viewpoint was taken.

The sand that ends up on the beach actually comes from inland sources, the weathering and erosion of rock and soils. Sand is then washed into rivers and transported downstream to eventually arrive at the coast. At the mouth of the Tweed River, at the southern end of the Gold Coast, sand would often block the river mouth, making it difficult for boats to pass through. As a result, a pair of **training walls** was constructed (see **FIGURE 3**) 400 metres out to sea, to keep the mouth open.

training walls a pair of rock walls built at a river's mouth to force the water into a deeper and more stable channel. The walls improve navigation and reduce sand blockages.

These, however, effectively interrupted the longshore drift current (see subtopic 13.2), which moves sand along the coast.

FIGURE 3 The Tweed River training walls



Further north from the river mouth, natural wave action, especially during storms, continued to strip sand from the beaches. However, without new sand arriving in the longshore drift current, the beaches eventually eroded. Local residents and tourists had lost their beach (see **FIGURE 4**).

FIGURE 4 The effect of storm waves on Duranbah Beach



The sand destined for the beach was effectively trapped at the southern end of the training wall, where it built out the Letitia Spit by 250 metres (see **FIGURE 5**).

How was the problem solved?

In response, various attempts have been made to restore the Gold Coast beaches. Rock walls and groynes were built to trap sand further up the coast. However, they made the problem worse by interfering further with the longshore drift.

Eventually a sand bypass system was installed (see **FIGURE 5**). It pumped sand from the build-up on the southern end of the training walls and piped it north to the eroded beaches. Each year, 500 000 cubic metres of sand have to be moved. This has been successful in maintaining the beaches, but it is an expensive and ongoing management technique.

FIGURE 5 Sand bypass system



Source: Spatial Vision.

Coastal protection works such as groynes, sea walls and training walls are usually built to protect human-built structures such as buildings and roads against erosion. However, they usually reduce the ability of coastal processes to adjust naturally, often exacerbating the problem and actually accelerating erosion.

13.4.5 CASE STUDY: Sustainable development on the Sapphire Coast

The main pressures on many coastal systems relate to the development of towns and tourist facilities. Careful management can enable growth of urban areas while at the same time protecting the natural coastal features.

The 'Sapphire Coast' in south-east New South Wales is a popular tourist destination because of its array of beautiful beaches, stunning scenery and mild, sunny weather. Merimbula is a coastal resort town in this Sapphire Coast region. Similar to any other popular coastal location, it experiences natural changes as well as the pressures relating to development. **FIGURE 6** clearly shows the settlement areas that have been established close to the ocean and lake in this region.

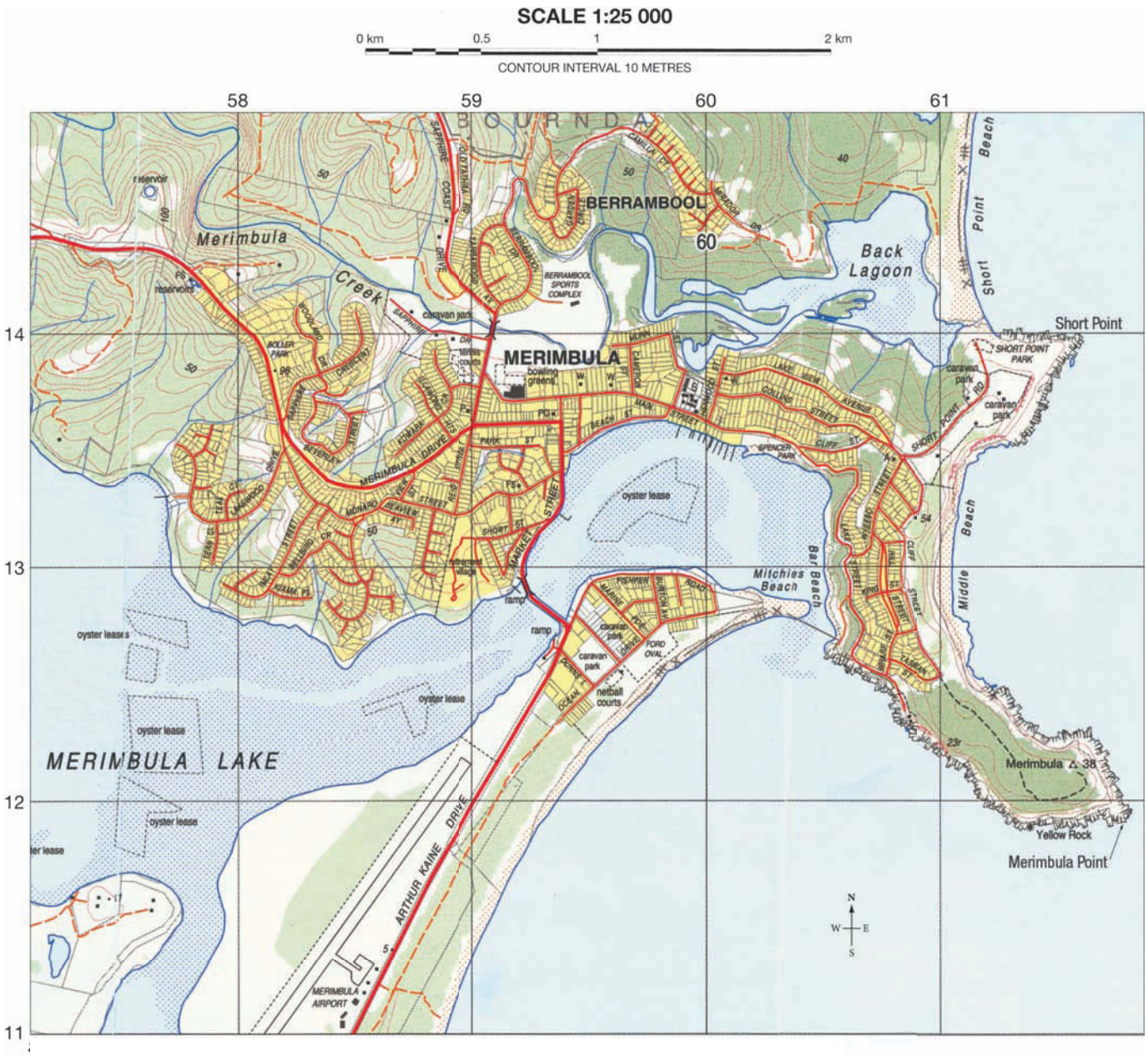
FIGURE 6 Aerial view over Merimbula Lake



The natural landform features along this coastline include a series of headlands separated by bay head beaches. Merimbula Lake has formed from a slow and gradual build-up of a sand barrier, leaving only a narrow channel for salt water to enter and fresh water to exit. The shallow and sheltered waters of the lake provide an ideal environment for oyster farming and recreation. The **FIGURE 7** topographical map shows the narrow entrance to Merimbula Lake. It also shows the various settlement areas and the geographical elements of the region that have influenced this development.

You can learn more about this area by completing the **Merimbula** worksheet and the **Predict changes around Merimbula** interactivity in the Resources tab.

FIGURE 7 Topographic map extract of Merimbula



Key

	Built-up area
	Major road: paved, unpaved
	Secondary road: paved, unpaved
	Minor road: paved, unpaved
	Vehicular track
	Walking track
	Bridge
Werong △ 1215	Survey landmark (with height)
• 846	Spot height
1000	Contours
176r	Cliff, with relative height
	Levee or dyke
	Closed forest: 80–100% crown cover. Open forest: 50–8-% crown cover
	Woodland: 20–50% crown cover
	Perennial lake
	Interdial flat. Sand
	Perennial stream
	Large dam or weir
	Jetty or wharf
	Rockey shoreline
• Lauren	Building, samll. Building, large.
• A • P • E	Ambulance station. Police station.
• FS • S • PO	Fire station. Post office.
	Local government
	County

Source: © LPI - NSW Department of Finance and Services [2013] Panorama Avenue, Bathurst 2795.

Resources

Digital document Topographic map extract of Merimbula, New South Wales (doc-11571)

Interactivities Pumping sand (int-3295)
Predict changes around Merimbula (int-3296)

Google Earth Merimbula

13.4 ACTIVITIES

1. In the US state of North Carolina, it is now illegal to build coastal structures to protect houses close to the shoreline. Structures such as rock walls and groynes may offer protection but disrupt the natural movement of sand along the coast.
   a. Is this approach fair to those whose houses are threatened by storms and sea-level rising? Why?
   b. What would be the arguments for and against the idea of using ratepayer or taxpayer funds to build coastal structures to protect the houses threatened by storms and sea level rising?
   c. Is it equitable for all people who use the coast? Write a page outlining and explaining your views.

   General capability: Ethical understanding
2. Compete the **Merimbula** worksheet in the Resources tab to learn more about the environmental management of this coastal location. **HASS skills: Analysing**

13.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions	Questions	Questions
1, 2, 3, 4, 7, 10	5, 6, 11, 12	8, 9, 13, 14

Check your understanding

1. Refer to **FIGURE 1**. Write a brief description of the particular climate change–related threats faced by various nations and regions of the world.
2. Why does the Netherlands spend money on coastal protection?
3. List the various ways that sand can be moved in a coastal region.
4. What is the purpose of training walls at a river mouth?
5. Study **FIGURE 3**. What effect have these training walls had on preventing a sand build-up in the Tweed River mouth?
6. Examine **FIGURE 5**. Describe the direction of the longshore drift in this region.
7. Refer to **FIGURE 5**. What is the approximate distance that sand has to be pumped from the sand collection jetty to the Kirra outlet?
8. One coastal geographer has stated that to manage the beaches along the Gold Coast, 'ecologically, non-intervention would be a better and more sustainable option'. This is an Earth-centred rather than human-centred attitude.
   a. Do you agree or disagree with this viewpoint?
   b. Suggest how you could manage this stretch of the coast without using engineering methods such as the sand bypass system.
9. Refer to the section 13.4.4 case study. How effective has the management of sand along this section of the Gold Coast been in terms of environmental and economic criteria?

Apply your understanding

10. Explain how a coastal defence system such as a dyke works.
11. What impact could rising sea levels and erosion have on future food security?
12. What might be the impact of rising sea levels and coastal erosion on the tourist industries of the Gold Coast? What strategies of coastal protection mentioned in this topic could help solve the problems, and how might they work?
13. Evaluate the strengths and weaknesses of two of the management strategies shown in **TABLE 1**.
    a. Which strategy would have the least environmental impact?
    b. Which strategy would have the greatest economic impact or be the most costly to maintain?
    c. Which strategies could improve social amenities such as tourism and recreation in coastal areas? Give reasons for your answer.
14. Refer to **FIGURES 3** and **5**. What changes would you expect to see along this section of coast if the training walls on the Tweed River were removed?

For sample responses for every question go to www.jacplus.com.au.

13.5 Thinking Big research project: Ecology action newsletter — reef rescue

Scenario

Located in the Coral Sea, off Australia's north-east coast, the iconic Great Barrier Reef is the world's largest coral reef system. It supports a wide diversity of marine life. It is composed of over 2900 individual reefs and 900 islands and stretches more than 2300 kilometres in length, across an area of approximately 344 400 square kilometres. The reef was selected as a World Heritage Site in 1981 but, in addition to global warming, is currently threatened by increased shipping and its popularity as a tourism site.

You are a member of your school's ecology action group. Each term the group publishes a newsletter highlighting various environmental issues. This month your focus is on the Great Barrier Reef: how can we protect the reef from environmental threats and ensure its health for now and all time?



Task

You will research and create a newsletter focusing on the Great Barrier Reef and the human activity–related challenges it faces. Your newsletter can be in print or digital form and should include the following elements:

- an overview of the environmental characteristics of the reef, including a location map (with BOLTSS) and appropriate images, annotated to provide relevant information
- interesting facts and figures
- details of threats to the reef from shipping and tourism
- details of social, environmental and economic approaches to tackling the identified threats
- an evaluation of the approaches identified, in terms of
  - economic viability (affordability)
  - social justice (fairness for all people)
  - environmental benefit (minimal negative environmental impact and with future sustainability)
- concluding recommendations for action at individual, local, national and international levels in response to the threats, based on your research and evaluation.





Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group so you can work collaboratively. Working in small groups will allow you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish.
- In the **Media centre** you will find an assessment rubric and some weblinks that will provide a useful starting point for your research.
- Investigate the threats to the reef and why sustainability measures are needed. What measures are already in place? What other actions are proposed or may be considered? Consider environmental, social and economic aspects.
- Make notes of your research and remember to record details of your sources so you can create a bibliography. Add your research notes and source details to the relevant topic pages in the Research forum. All members of your project group can view, share and comment on research findings.
- When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Design your newsletter layout. Use headings, annotated images (with captions) and diagrams to break up the content and add interest. Remember to include a location map with full BOLTSS.
- Check the **Task** dot points to ensure that you have completed all elements. Review your completed newsletter, carefully checking spelling and grammar. Complete your bibliography, listing details of all sources used. When you are satisfied with your work, submit your newsletter and your bibliography to your teacher for assessment and feedback.



on Resources

ProjectsPLUS Thinking Big research project: Ecology action newsletter — Reef rescue (pro-0214)

13.6 Review

13.6.1 Key knowledge summary

13.2 Understanding coastal landscapes

- A large percentage of the world's population lives adjacent to the coast, causing major changes to marine and terrestrial-based biophysical environments.
- The coastal zone is where the land meets the sea, and comprises the coastal waters and hinterland.
- Coasts are dynamic systems that are always changing though the process of building up and wearing down by agents such as wind and water.

13.3 Challenges to coastal management

- Rising sea levels due to climatic change and global warming will have dramatic effects on coastal built and natural environments.
- Places close to the coast that are low lying are at the mercy of natural elements such as storms and are vulnerable to rising sea levels that will be the consequence of global warming.
- Some islands will eventually be submerged by rising sea levels, leading to people becoming climate change refugees.
- Delta areas of the South Asia region are home to large populations.
- Settlements and farming lands in areas such as Bangladesh are subject to flooding caused by severe weather events such as cyclones. This flooding will become more likely as sea levels rise and severe weather events increase due to global warming.

13.4 How do we manage coastal change?

- Rises in sea levels associated with global warming will have significant impacts on people who live and work in the coastal zone.
- Governments have responded to coastal erosion and deposition problems through a range of management solutions, such as dredging and building coastal protection structures, including groynes and sea walls.
- Coastal management programs will need to be extended to cope with even higher sea levels due to global warming.
- Beaches along areas such as the New South Wales and Queensland coasts are prone to storm conditions, affecting built environments.
- Storms, with consequent high sea levels, must be viewed as part of the natural cycle of erosion and deposition. These natural events can create ongoing management issues.
- Coastal locations are highly attractive places for human settlement.
- People in coastal areas are developing strategies to manage natural and human-induced changes so that their livelihood can be secured.

13.6.2 Key terms

alluvial plain an area where rich sediments are deposited by flooding

atoll a coral island that encircles a lagoon

coastal dune vegetation succession the process of change in the plant types of a vegetation community over time — moving from pioneering plants in the high-tide zone to fully developed inland area vegetation

deltaic plain flat area where a river(s) empties into a basin

dyke an embankment constructed to prevent flooding by the sea or a river

dynamic equilibrium when the input of a coastal system such as winds and waves moving sediments onshore is equal to the output that moves sediments offshore, the system is said to be in a steady state. It is therefore not unstable and it has a dynamic equilibrium.

ecosystems systems formed by the interactions between the living organisms (plants, animals, humans) and the physical elements of an environment

enhanced greenhouse effect increasing concentrations of greenhouse gases in the Earth's atmosphere, contributing to global warming and climate change

floating settlements anchored buildings that float on water and are able to move up and down with the tides

gross domestic product (GDP) the value of all the goods and services produced within a country in a given period, usually discussed in terms of GDP per capita (total GDP divided by the population of the country)

groundwater salinity presence of salty water that has replaced fresh water in the subsurface layers of soil

hinterland the land behind a coast or shoreline extending a few kilometres inland

Kyoto Protocol an internationally agreed set of rules developed by the United Nations aimed at reducing climate change through the stabilisation of greenhouse gas emissions into the atmosphere

mass wasting the movement of rock and other debris downslope in bulk, due to a destabilising force such as undermining compounded by the pull of gravity

Paris Agreement United Nations Framework Convention on Climate Change (UNFCCC) agreement outlining steps to reduce greenhouse gas emissions and tackle global warming

ratify to formally consent to and agree to be bound by a treaty, contract or agreement

storm surge a temporary increase in sea level from storm activity

training walls a pair of rock walls built at a river's mouth to force the water into a deeper and more stable channel. The walls improve navigation and reduce sand blockages.

13.6.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

Although it may not be obvious, coasts are constantly changing. How do natural and human processes contribute to this?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question outlining your views.

on Resources

eWorkbook
- Customisable worksheets for this topic (ewbk-6202)
- Student Learning Matrix (ewbk-6190)
- Reflection (ewbk-6201)
- Crossword (ewbk-6200)
- Match the definition (ewbk-6199)

Interactivity
- Managing change in coastal environments crossword (int-7672)

13.6 Review exercise

Multiple choice

1. What is a hinterland?
   - A. The coastal waters up to 5 kilometres offshore
   - B. The land behind a shoreline
   - C. Treeless, wide plains that are not affected by coastal changes
   - D. Areas prone to cyclone damage

2. Define the term ‘dynamic equilibrium’.
   - A. When the inputs to a coastal system are equal to the outputs
   - B. When an ecosystem does not suffer negative effects of human interaction
   - C. Implementing traditional coast management techniques
   - D. When the natural environment changes quickly rather than slowly

3. Which of these human interventions will help dunes to form?
   - A. Vegetation removal
   - B. Vegetation planting and protection
   - C. Constructing groynes
   - D. Removing mangroves

4. What kind of waves strip the sand from beaches?
   - A. Constructive
   - B. Constrictive
   - C. Destructive
   - D. Denuding

5. Which natural process creates bays and headlands?
   - A. Fast vegetation growth
   - B. Constructive waves
   - C. Deposition and transportation
   - D. Differential erosion

6. Which of the following is *not* a reason that the sea level rises when the climate warms?
   - A. There is increased evaporation from landforms.
   - B. Glaciers melt, releasing water into the ocean.
   - C. Polar ice caps melt.
   - D. The volume of water increases when it warms.

7. What mitigation strategies might people use to prevent a low-lying island from being inundated by sea water?
   - A. Building sea walls
   - B. Moving to another island
   - C. Building groynes
   - D. Moving further inland

8. Which of the following is *not* a factor that makes Bangladesh flood prone?
   - A. Rivers fed by Himalayan snow melts
   - B. Its warm climate
   - C. That it is in a cyclone-prone area
   - D. Nepalese and Tibetan deforestation

9. What is an advantage of an offshore breakwater?
   - **A.** Waves break in deeper water, reducing erosion of the shore
   - **B.** Better surf breaks
   - **C.** Inexpensive to create
   - **D.** Allows for easier dune management

10. How might rock walls and groynes make beach erosion worse?
   - **A.** They can block river entrances.
   - **B.** They can interfere with longshore drift and accelerate erosion.
   - **C.** They can prevent sand relocation efforts by humans.
   - **D.** They encourage more beach users to visit.

Short answer

11. What changes could sea levels rising bring to a coastal area? Consider both environmental and human changes.
12. Discuss what changes need to be made to the interconnection of natural processes and human activities to reduce the destruction of the Sundarbans.
13. Evaluate the economic and environmental benefits of floating settlements such as those in **FIGURE 2** in subtopic 13.4.
14. How can we balance the needs of people with natural coastal processes? You might like to refer to the opening image and the case studies throughout this topic.
15. With the use of specific examples, discuss the ways in which human-induced changes can challenge the sustainability of our coastlines.
16. Ningaloo Reef faces many of the same challenges as the Great Barrier Reef. Explain how increased tourism might benefit and damage the environmental, economic and social structures of the area.
17. Describe one way that rising sea levels might affect one industry in Australia (e.g. tourism, fishing).
18. Compare and evaluate beach nourishment and sea wall building as coastal management strategies.
19. Explain how rising sea levels might affect groundwater salinity.



RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 13 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

13.1 Overview

Video eLesson
- Washed away (eles-1710)

13.2 Understanding coastal landscapes

eWorkbook
- How are coastal landforms created? (ewbk-6191)
- How do deposition and erosion change coasts? (ewbk-6192)
- A dynamic natural system (ewbk-6193)

Interactivity
- The range of coastal landforms (int-5594)

MyWorldAtlas
- Coastal processes

13.3 Challenges to coastal management

eWorkbook
- Why are low-lying islands disappearing? (ewbk-6195)

Interactivity
- Bangladesh awash (int-3297)

Google Earth
- The Sundarbans

13.4 How do we manage coastal change?

eWorkbook
- Managing coastlines (ewbk-6194)
- Managing coastal change (ewbk-6196)
- Environmental change in the Tweed (ewbk-6197)
- Mind map: our changing coastline (ewbk-6198)

Digital document
- Topographic map extract of Merimbula, New South Wales (doc-11571)

Interactivities
- Pumping sand (int-3295)
- Predict changes around Merimbula (int-3296)

Google Earth
- Merimbula

13.5 Thinking Big research project — Ecology action newsletter — reef rescue

ProjectsPLUS
- Thinking Big research project — Ecology action newsletter — reef rescue (pro-0214)

13.6 Review

eWorkbook
- Reflection (ewbk-6201)
- Crossword (ewbk-6200)
- Match the definition (ewbk-6199)
- Student Learning Matrix (ewbk-6190)

Interactivity
- Managing change in coastal environments crossword (int-7672)

To access these online resources, log on to **www.jacplus.com.au**.

14 Urban change and management

14.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

How far can our urban environments spread before they become unsustainable?

14.1.1 Introduction

Urban environments provide homes, places of work and all the conveniences of modern-day life for their citizens. They are often a magnet for people living in small rural townships, as goods and services abound and social and economic opportunities for a better life are seen as more possible in the big cities.

The complexity of urban environments can be seen in a modern city such as Shanghai, with all its multi-layered buildings, bridges, roadways, electricity, water supplies and services. The need to deal with the huge amounts of waste generated by the population of a city of this size is a concern for its urban planners and managers. To ensure viability into the future, sustainable solutions to the wide range of problems that exist in big cities must be found.

on Resources

- **eWorkbook** Customisable worksheets for this topic (ewbk-6221)
- **Video eLesson** Sprawling cities (eles-1712)

FIGURE 1 Modern cities are complex urban environments.



14.2 Cities' impact on the environment

LEARNING INTENTION

By the end of this subtopic you will be able to describe the four spheres that comprise the Earth's biophysical environment, and explain the ways in which urban environments interconnect with these elements.

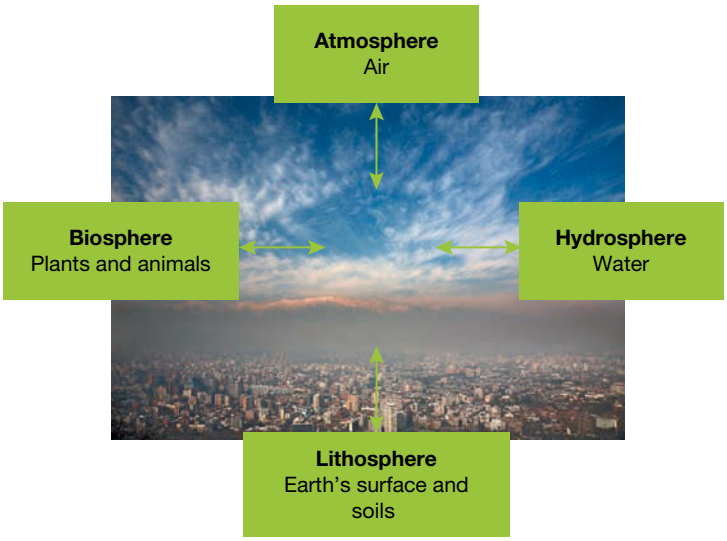
14.2.1 Interconnections between urban and biophysical environments

The earliest forms of urban environments consisted of shelters to protect people from the elements and provide security from the attacks of predators. From these simplest forms, the highly complex modern **urban environment** has developed.

All forms of urban environments are interconnected with the **biophysical environment**. The 'bio' elements are all forms of plant and animal life including people and all their activity and industry. The 'physical' elements are the atmosphere, hydrosphere and lithosphere or Earth's surface.

The biophysical elements impose limits on the development and sustainability of all forms of urban environment. Conversely, the urban environment imposes significant human-induced change on the biophysical world. The understanding of this interconnection is particularly important in a world of increasing human numbers and pressure for resources on the biophysical environment (see **FIGURE 1**).

FIGURE 1 Interaction between the urban environment and the biophysical environment



14.2.2 Effects on the atmosphere

Where sources of potentially dangerous gaseous emissions are high, such as from buildings, transport systems and industry, atmospheric pollution can be a problem. Examples such as hazy conditions, photochemical smogs, light and noise pollution and acid rain are significant problems that need to be addressed. Thus, the development of clean-air policies controlling emissions of gases into the atmosphere is important. Examples of such measures include the introduction of lead-free petrol, banning the burning of household waste and emission-control systems on factory furnaces.

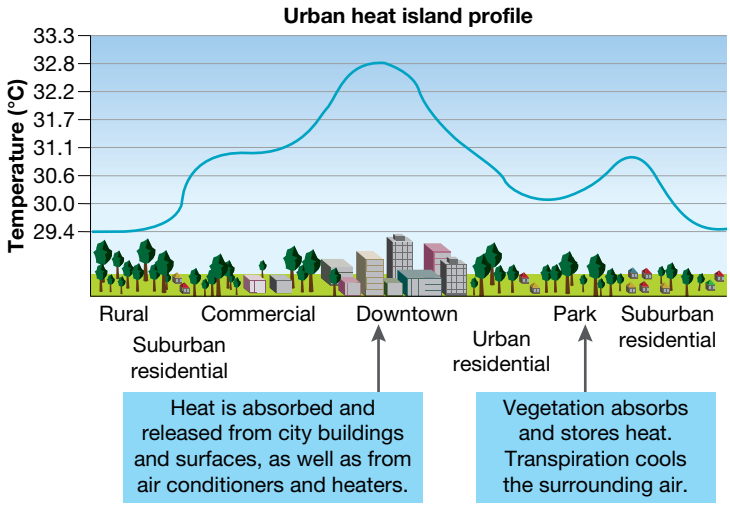
Cities and industries have huge energy demands, and the by-product of this is heat. The 'heat island effect', whereby urban environment structures such as buildings and roads absorb heat from the sun, raises the temperature of the city environment compared to rural surrounds (see **FIGURE 2**).

The production of greenhouse gases such as carbon dioxide and methane by urban environments is recognised as probably the greatest contemporary climate issue. Global warming leading to climate change is largely the result of emissions of these gases into the atmosphere, particularly in large urban centres.

urban environment the human-made or built structures and spaces in which people live, work and recreate on a day-to-day basis

biophysical environment all elements or features of the natural or physical and the human or urban environment, including the interaction of these elements

FIGURE 2 The 'heat island effect' of cities



14.2.3 Effects on the hydrosphere

As the urban environment is closely dependent on the hydrosphere, it is not surprising that **water security** and **water rights** are important management objectives for a sustainable future. One of the most important aims for urban planners is to ensure the supply of clean water and to manage the waste water from cities.

In general, all urban centres are trying to find increasing supplies of water for domestic and industrial consumption from rivers, groundwater and, more recently, desalinisation sources.

FIGURE 3 Like those of many rivers in the world, the banks and channel of the Swan River have been heavily modified by people.



Infrastructure in the form of dams, pipelines, and artesian waters at the local level and major water management schemes such as the Snowy Mountains Scheme in Australia are ways that water is gathered. Water pollution caused by urban environments is also important as polluted waters are a risk to all life forms in any environment. Considerations for biomes and ecosystems of rivers, wetlands and swamps in terms of protecting habitats and maintaining biodiversity is also a major management aim.

water security the reliable availability of acceptable quality water to sustain a population

water rights refers to the right to use water from a water source such as a river, stream, pond or groundwater source

14.2.4 Effects on the lithosphere

The 'tar and cement' structures that are our cities often cover vast areas of land (the built-up areas of greater Perth, for instance, cover more than 6400 square kilometres). The associated problems include the disposal of the enormous amount of waste that cities produce, and the impacts on agriculture, plants and animal life in adjacent habitats and ecosystems.

Urban environment surfaces, such as footpaths, roads and carparks, generate two to six times more run-off than a natural surface. Rain that falls on roads and carparks can be contaminated with petroleum residues and other pollutants, which can then find their way into waterways.

FIGURE 4 Dubai International Airport's Terminal 3 is the largest airport terminal in the world; its carpark offers space for 100 000 cars. Consider the run-off generated by this surface.



Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Place and liveability > **Polluted cities**
- Investigate additional topics > Urbanisation > **Mexico City**

on Resources

Interactivity Urban impacts on the environment (int-3301)

14.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 6	Questions 4, 7, 8	Questions 5, 9, 10

Check your understanding

1. What is the 'bio' part of the biophysical environment?
2. Give reasons why urban environments can have such a major impact on the Earth's atmosphere.
3. Why do most of the large urban centres of the world have high-rise buildings?
4. What is meant by the 'heat island effect'?
5. Why are water supplies a problem for large cities?

Apply your understanding

6. How might rising sea levels, predicted to increase as a result of global warming, affect the place and space of a city such as New York?
7. How will the supply of fresh water affect the development of cities in the future?

8. Consider how the development of extensive public transport systems affects the environment. How can such systems lead to a more sustainable urban environment?
9. Contrast the sustainability of car use with public transport in terms of positive and negative effects on the environment.
10. Suggest ways that the biodiversity of plant species might be increased in an urban area.

For sample responses for every question, go to www.jacplus.com.au.

14.3 The development of urban environments

LEARNING INTENTION

By the end of this subtopic you will be able to:

- describe how cities have developed over time
- identify where the world's biggest cities and the regions with a high proportion of urban dwellers are
- explain some of the impacts of urban growth.

14.3.1 Expansion of cities

The earliest cities emerged five to six thousand years ago in Mesopotamia (present-day Iraq), Egypt, India and China. These cities became centres for merchants, traders, government officials and craftspeople, and were dependent on agriculture and domesticated animals from surrounding rural areas.

FIGURE 1 The region between the Euphrates and Tigris Rivers in Mesopotamia is often called the 'cradle of civilisation'; it is here that the first urban centres developed.

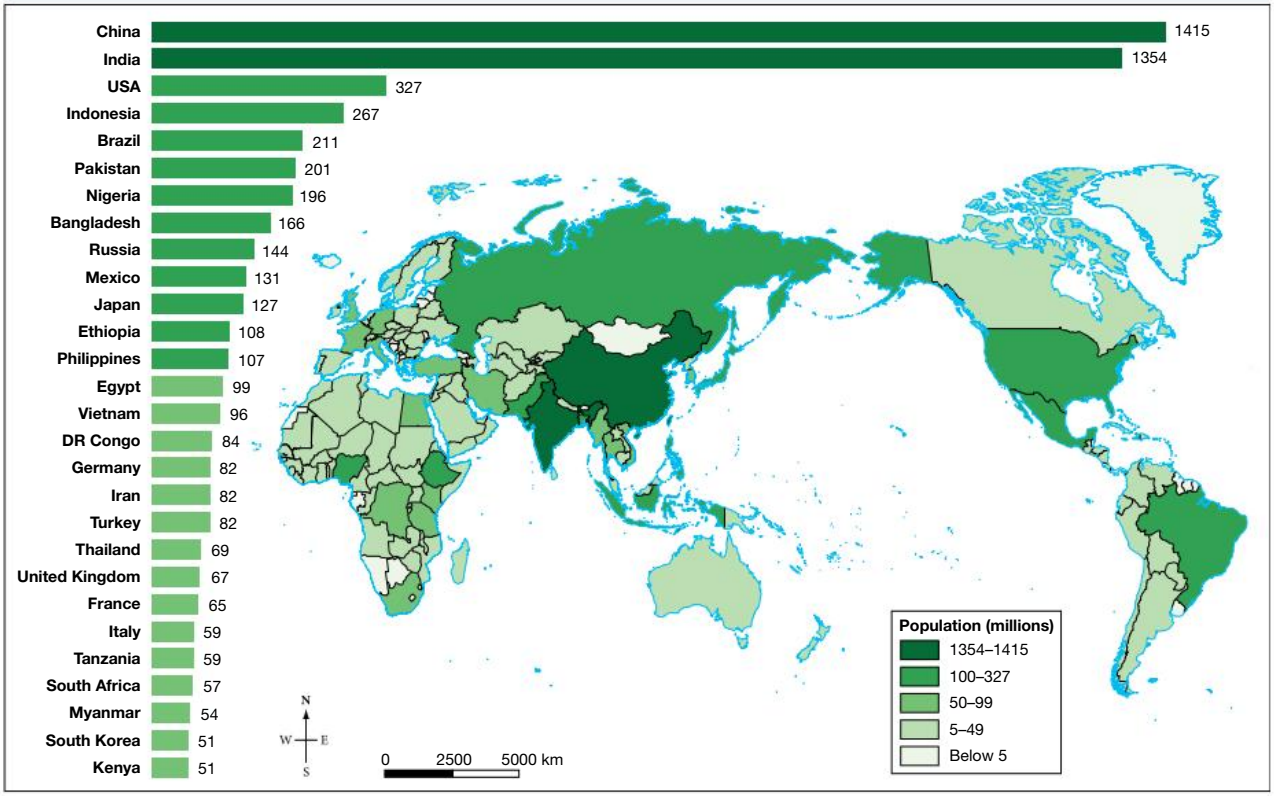


Before 1800, over 90 per cent of the world's population lived in rural agriculture-based societies. With the **Industrial Revolution**, people began to move from rural areas to find employment in the factories of the rapidly expanding industrialised cities. In 1850, only two cities in the world — London and Paris — had a population above one million. By 1900 there were 12, by 1950 there were 83 and by 1990 there were 286. In 2018, more than 500 cities had populations of a million or more people; over half the global population now lives in urban areas.

Industrial Revolution the period from the mid 1700s into the 1800s that saw major technological changes in agriculture, manufacturing, mining and transportation, with far-reaching social and economic impacts

int-7966

FIGURE 2 Distribution of the world's population, 2018



Source: United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision, Medium Variant.

Megacities

The term '**megacity**' commonly refers to urban settlements of 10 million inhabitants or more. Currently, about 530 million people live in 33 megacities across the world. By 2030, the world is projected to have 43 megacities that will be home to more than 750 million people.

Of the 20 largest megacities, only six are located in highly developed industrialised countries: Tokyo–Yokohama, Seoul–Incheon, New York, Osaka–Kobe–Kyoto, Moscow and Los Angeles. Three-quarters of the world's megacities are in developing countries; they include gigantic **conurbations** such as Jakarta, Manila and Karachi (see **FIGURES 3** and **4**).

Asia has by far the greatest proportion of the world's large urban area population. Regions such as Oceania and Africa are less urbanised (see **FIGURES 3**, **4** and **5**). For example, in Papua New Guinea (Oceania) and Burundi (East Africa) only 10 per cent of the population is urbanised, whereas in Singapore this figure is 100 per cent.

megacity a settlement with 10 million or more inhabitants

conurbations an urban area formed when two or more towns or cities (e.g. Tokyo and Yokohama) spread into and merge with each other

developing nation a country whose economy is not well developed or diversified, although it may be showing growth in key areas such as agriculture, industries, tourism or telecommunications

urban sprawl the spreading of urban developments into areas on the city boundary

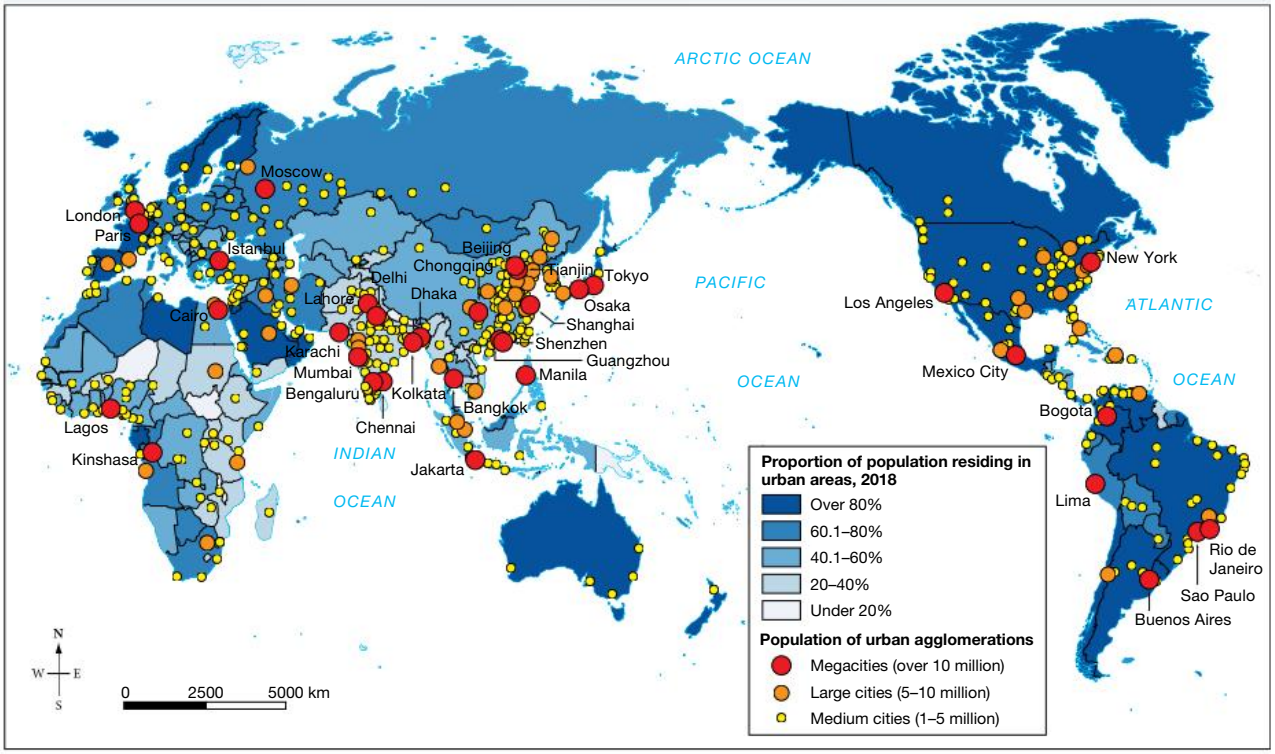
infrastructure the basic physical and organisational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society

14.3.2 Impacts of the growth of urban environments

The United Nations predicts that by the year 2050, 70 per cent of the population in developed nations and 40 per cent in **developing nation** will live in large urban complexes. Rapid growth in city populations has led to problems such as **urban sprawl**, traffic congestion and air and water pollution, with significant impacts on the natural environment. Social problems such as unemployment; inadequate housing, **infrastructure**, water, sewerage and electricity supplies; pollution; and the spread of slums and crime are further problems. In addition, with prospects of climate change through global warming, many of the world's coastal cities are

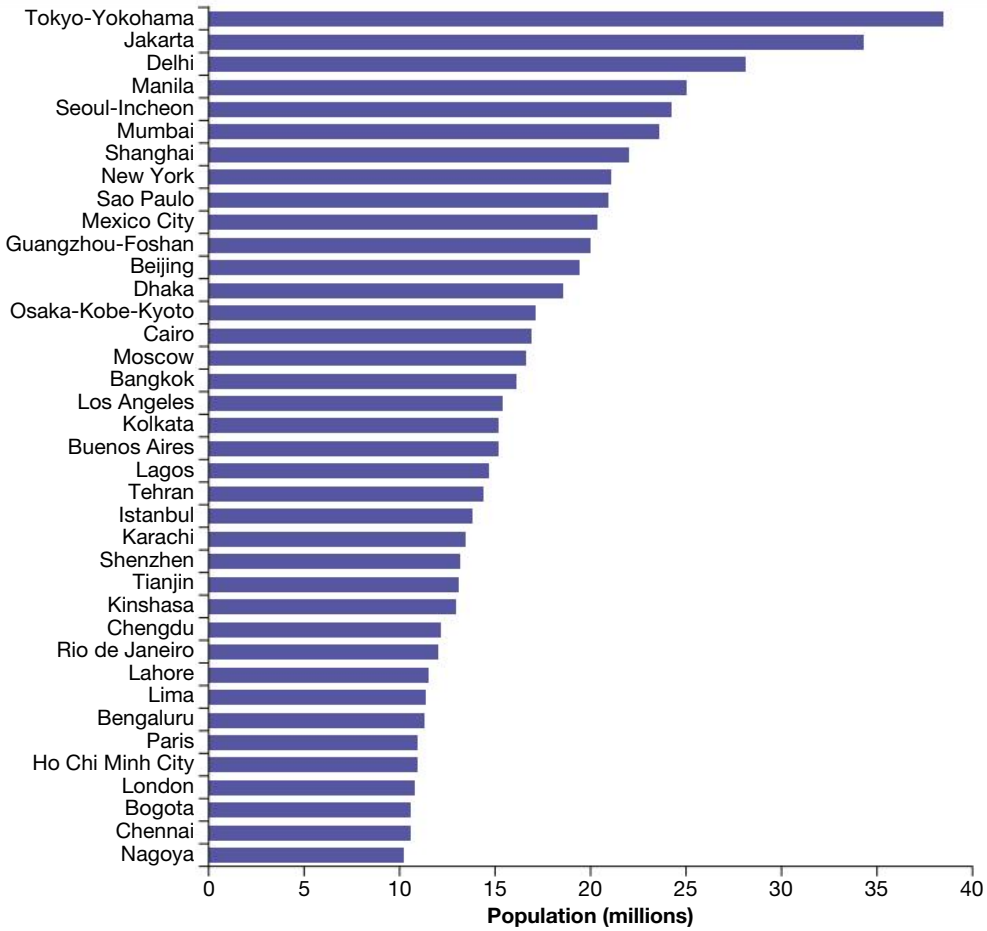
int-7967

FIGURE 3 Percentage of urban population and urban agglomerations, 2018



Source: United Nations Department of Economic and Social Affairs; Worldatlas.com.

FIGURE 4 Urban areas with more than 10 million population, 2019



under threat from rising sea levels. The application of **human–environment systems thinking** will be the key to evaluating and solving these economic and social issues.

The United Nations estimates that a staggering 90 per cent of the worlds' population growth is taking place in the cities of the developing nation. For many people in these countries, pressures such as extreme poverty, famine and civil unrest often 'push' them away from rural areas towards cities, to which they are 'pulled' by the promise of jobs, shelter and protection.

human–environment systems thinking using thinking skills such as analysis and evaluation to understand the interaction of the human and biophysical or natural parts of the Earth's environment

FIGURE 5 Proportion of global built-up urban area population, by region, 2019

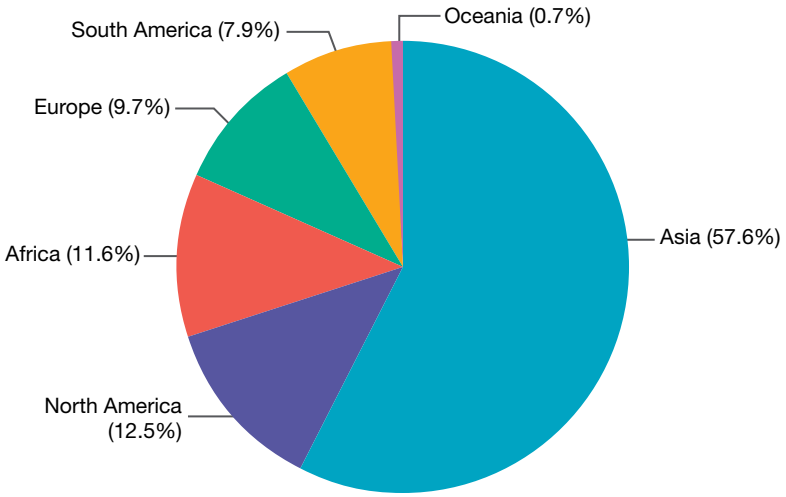


FIGURE 6 Contrasts in urban development in the capital of the Philippines, Manila



Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Urbanisation > **World urbanisation**
- Investigate additional topics > Urbanisation > **Urbanisation in Australia**

14.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 6	Questions 3, 7, 8	Questions 5, 9, 10

Check your understanding

1. When and where did the first cities develop?
2. Why did cities experience rapid growth and development after the Industrial Revolution?
3. What factors are driving the process of urbanisation in the world?
4. In which regions of the world is urbanisation occurring most quickly? Why?
5. What are some of the major economic and social issues facing rapidly developing cities in the world?

Apply your understanding

6. Refer to **FIGURE 2**. What are the world's two most populous nations?
7. Study **FIGURE 3**. What proportion of the Australian population lives in urban areas? Explain why this is so, despite the fact that Australia has no megacities.
8. What impact do you think global warming and rising sea levels will have on coastal cities around the world?
9. What are some other urban problems, besides those mentioned in this subtopic, that arise as cities develop?
10. What do you think are some of the advantages of living (a) in a large city, (b) in a small town and (c) on a farm? Which would you prefer? Why?

For sample responses for every question, go to www.jacplus.com.au.

14.4 Case studies in urban growth — Perth and Mumbai

LEARNING INTENTION

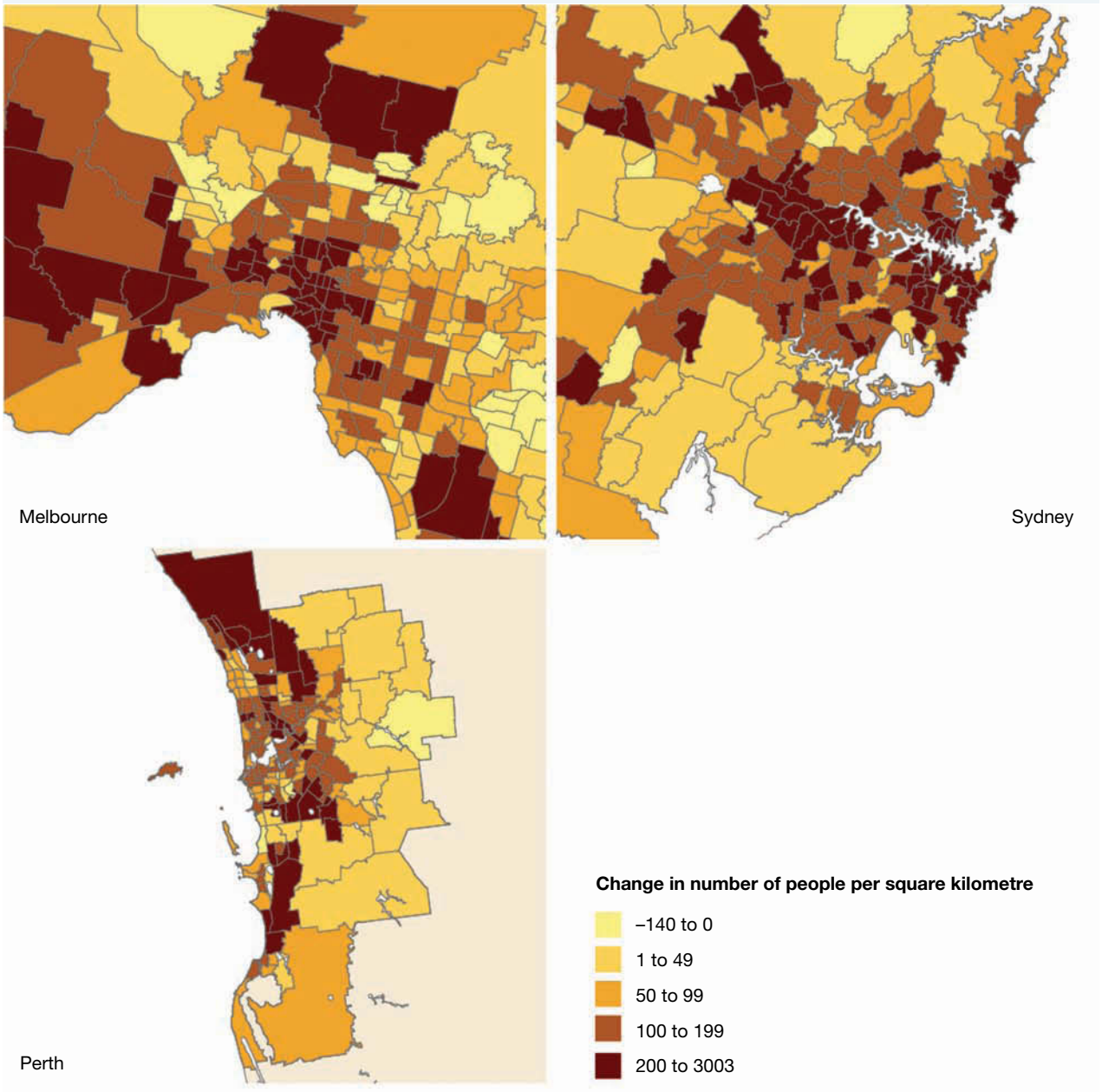
By the end of this subtopic you will be able to explain the issues associated with urban growth using two case studies: one in Australia (a developed country), the other in India (a rapidly developing country).

14.4.1 CASE STUDY: Ever-sprawling Perth

Across the world, cities are expanding at a rapid rate, putting pressure on the built environment and the infrastructure that supports it, as well as the natural environments that are increasingly diminished. With metropolitan populations growing, cities around the world need to accommodate more people while reducing their urban sprawl.

The Perth Metropolitan Area, or Greater Perth, was the fastest growing capital city in Australia between 2011 and 2015, with an 11.2 per cent growth rate; Melbourne and Sydney recorded much lower growth rates for the same period of 8.6 per cent and 6.8 per cent, respectively. However, while Melbourne and Sydney saw the majority of the growth in the urban centre, Perth experienced most growth in the outer suburbs, resulting in ever increasing urban sprawl (see **FIGURE 1**).

FIGURE 1 Growth rates of Melbourne, Sydney and Perth, 2011–15



Source: © Commonwealth of Australia. Australia State of the Environment 2016. Retrieved from https://soe.environment.gov.au/theme/built-environment/topic/2016/increased-urban-footprint [online resource].

Housing choice can also be attributed to Perth's urban sprawl, with 77 per cent of dwellings being a separate house compared to 56.9 per cent in Sydney and 67.8 per cent in Melbourne. The result of this growth is increasing pressure on infrastructure and loss of biodiversity to surrounding natural environments.

Impacts of urban sprawl

The **rural–urban fringe** is typically the urban zone that is undergoing the most rapid change. Former farmland, market gardens and orchards are often sold off and new housing and industrial estates are built. These are usually low-density, planned estates sometimes built around a theme or geographical feature such as a built lake or wetland. Urban expansion into the rural–urban fringe has environmental, economic and social impacts.

rural–urban fringe the transition zone where rural (country) and urban (city) areas meet

Pressure on infrastructure

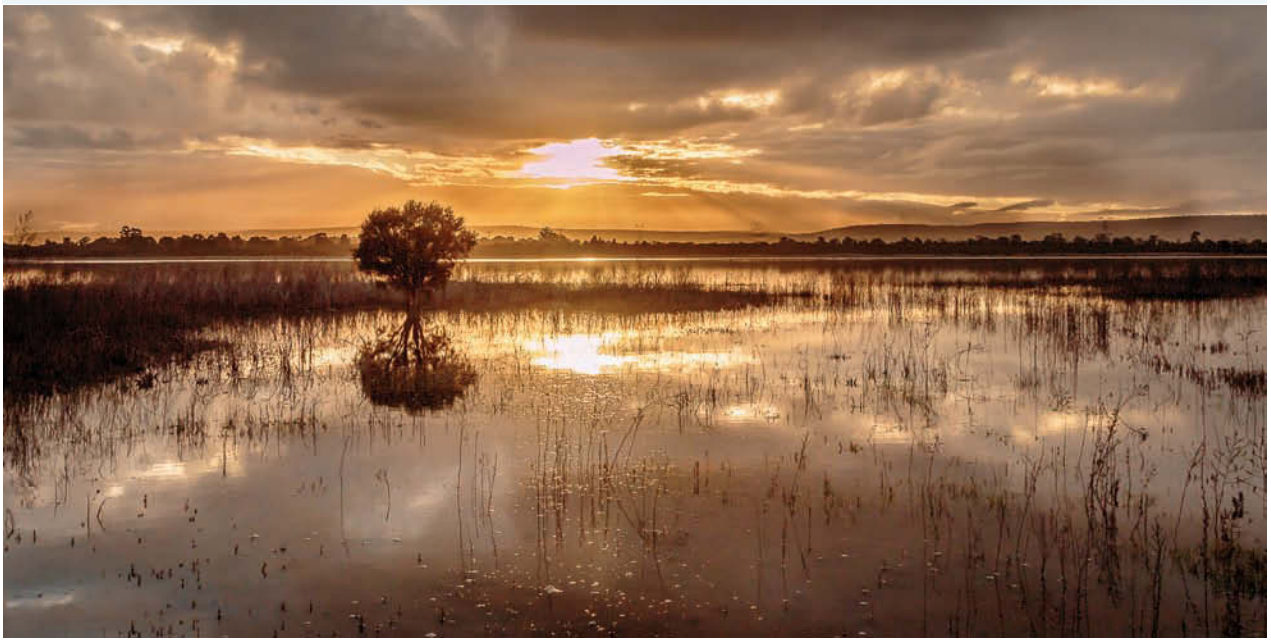
A major problem of urban sprawl is the cost to provide infrastructure (for example, roads and other transport systems and services such as water, gas and electricity) to new areas on the rural–urban fringe. All new suburbs require essential services, such as shops and medical centres, to be built — which also comes at a cost.

Given the elongated nature of Greater Perth, the rate of car use here is one of the highest in the world, with more than 80 per cent of people travelling to work by car. With increasing traffic congestion, creating increased commute times and costing an estimated $2.1 billion annually, road infrastructure is under significant pressure.

Loss of biodiversity

The expansion of urban areas can significantly alter the natural environment. Clearing of vegetation can reduce habitat and biodiversity. Natural drainage and topography can be altered, with streams redirected or even converted to pipes. Today there is a growing awareness of the need to preserve environments as they provide important functions for wildlife and people. Perth is located in the south-west Australian ecoregion and the wetlands support an extensive range of plants and animals (see **FIGURE 2**). However, significant urban development in Perth has seen the wetlands continue to disappear to make way for houses and industrial areas and only 10 per cent of these wetlands survives. Many endemic species will be at risk if the wetlands continue to be altered.

FIGURE 2 Forrestdale Lake, Perth



Moving into the future

With Greater Perth already stretching 150 kilometres from Two Rocks in the north to Bouvard in the south, more needs to be done to curb urban sprawl while also providing housing for 3.5 million people that are predicted to live there by 2050. The 'Perth and Peel @ 3.5 million' plan has been developed by the Western Australia Government to sustainably manage Perth's urban growth using **urban infilling** and by increasing the population density. The project aims to increase density and infilling around METRONET transport hubs, which will allow people to be better connected to the CBD while also taking pressure of the road infrastructure.

Increasing density in established suburbs

To increase the density of housing in older suburbs, one idea is to establish activity centres. These consist of higher density housing in specific locations, where people shop, work, meet, relax and live in the local environment. They are centred around existing infrastructure, transport networks, population shopping centres, employment

urban infilling the division of larger house sites into multiple sites for new homes

opportunities and community facilities. New housing tends to be medium-rise apartments (three to five storeys) built along main transport routes. East Green, a new residential area located in Greenwood, 17 kilometres from the Perth CBD, is an example of increasing density in an established suburb (see **FIGURE 3**). The community, which will be built on a demolished primary school site, will have a variety of houses and apartments suitable for higher density living and will maximise the use of existing infrastructure.

FIGURE 3 Photo of Frasers Property Australia and Department of Communities East Green development



Urban infilling

Urban infilling is the process of using the existing space in the CBD, either green space or manufacturing spaces that are no longer used, to create high-density living. Infill development within urban areas will contribute significantly to housing diversity and choice, providing opportunities for affordable living and a connected community. The Riverside redevelopment on the banks of the Swan River, next to the CBD, is an example of urban infilling (see **FIGURE 4**). The redevelopment will have around 4000 new apartments and townhouses to accommodate around 7000 people and will become a sports, recreation and entertainment precinct.

FIGURE 4 Riverside redevelopment location



14.4.2 CASE STUDY: The growth of Mumbai

Located in the western Indian state of Maharashtra, Mumbai is the most populous city in India and the ninth most populous city in the world, with a population of over 20 million in 2019. In 2009, Mumbai was named an **alpha world city**. Although the richest city in India, with the highest **gross domestic product (GDP)** of any city in south, west or central Asia, it also has much sub-standard housing and many of its residents live in squalor.

The large numbers of people and rapid population growth have contributed to serious social, economic and environmental problems for Mumbai. Mumbai's business opportunities, and its potential to offer a higher standard of living, attract migrants from all over India seeking employment and a better way of life. In turn, this has made the city a melting pot of many communities and cultures. In 2019, the population density was estimated to be around 20 000 persons per square kilometre, and the living space just 8 square metres per person.

Despite government attempts to discourage the influx of people, the city's population grew by more than 4 per cent between 2001 and 2011, and by a staggering 61.8 per cent between 2011 and 2019 (see **TABLE 1**). The number of migrants to Mumbai from outside Maharashtra during the ten-year period from 2001 to 2011 was over one million, which amounted to 54.8 per cent of the net addition to the population of Mumbai.

TABLE 1 Population growth in Mumbai

Census	Population	% change
1971	5 970 575	—
1981	8 243 405	38.1
1991	9 925 891	20.4
2001	11 914 398	20.0
2011	12 478 447	4.7
2019*	20 185 064	61.8

Source: *2019 data: Mumbai Metropolitan Region Development Authority. All other data is based on Government of India Census, conducted every ten years.

Many newcomers end up in abject poverty, often living in slums or sleeping in the streets. By 2017, an estimated 62 per cent of the city's inhabitants lived in **slum** conditions. Some areas of Mumbai city have population densities of around 46 000 per square kilometre — among the highest in the world.

alpha world city a city generally considered to be an important part in the global economic system

gross domestic product (GDP) the value of all goods and services produced within a country in a given period, usually discussed in terms of GDP per capita (total GDP divided by the population of the country)

slum rundown area of a city with substandard housing

Challenges

Mumbai suffers from the same major urbanisation problems that are seen in many fast-growing cities in developing countries: widespread poverty and unemployment, urban sprawl, traffic congestion, inadequate sanitation, poor public health, poor civic and educational standards, and pollution. These pose serious threats to the quality of life in the city for a large section of the population. Automobile exhausts and industrial emissions, for example, contribute to serious air pollution, which is reflected in a high incidence of chronic respiratory problems. With available land at a premium, Mumbai residents often reside in cramped, relatively expensive housing, usually far from workplaces and therefore commute long distances on crowded public transport or clogged roadways (see **FIGURE 5**). Although many live in close proximity to bus or train stations, suburban residents spend a significant amount of time travelling southwards to the main commercial district.

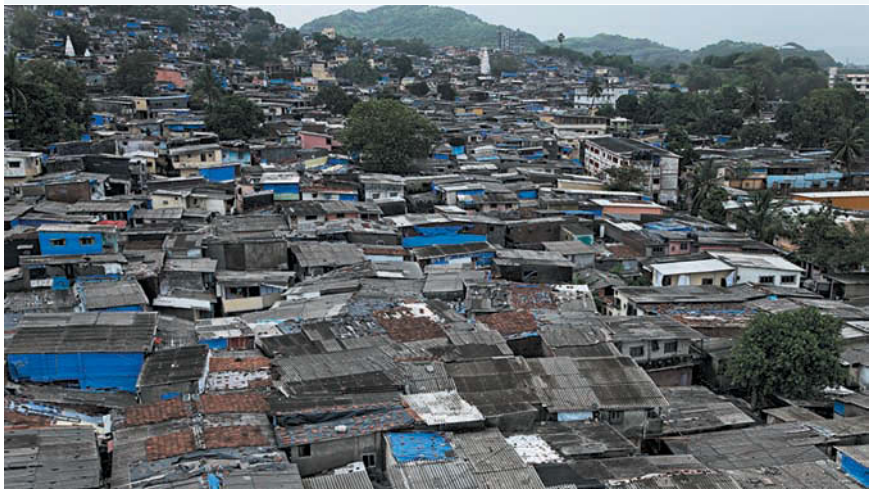
FIGURE 5 Mumbai train rush hour



The Dharavi slum

Dharavi, Asia's second-largest slum, is located in central Mumbai. Stretching across 220 hectares of land, it is home to more than one million people (see **FIGURE 6**). In Dharavi, it is estimated that there is only one toilet for every 200 people. This results in floods of human excrement during the monsoon season. Much of the water becomes contaminated because of this, and death rates tend to be significantly higher in Mumbai's slums than in upper- and middle-class areas.

FIGURE 6 Dharavi



Dharavi's recycling entrepreneurs

Hidden amid Dharavi's labyrinth of ramshackle huts and squalid open sewers are an estimated 20 000 single-room factories, employing around a quarter of a million people and turning over a staggering US$1 billion each year through recycling and other trades such as the production of pottery, textiles and leather goods.

In developed countries, communities recycle because there is the understanding that it contributes to sustaining the planet's resources. However, for some of the poorest people in the developing world, recycling often isn't a choice, but rather a necessity of life.

In India, it is estimated that anywhere between 1.5 million and 4 million people make their living by recycling waste. At least 300 000 of these live and work in Mumbai. These people are known as 'ragpickers' and are made up of India's poorest and most marginalised groups (see **FIGURE 7**). The ragpickers wade through piles of unwanted goods to salvage easily recyclable materials such as glass, metal and plastic, which are then sold to scrap dealers who process the waste and sell it on either to be recycled or to be used directly by the industry.

Due to the lack of formal systems of waste collection, it falls to Mumbai's ragpickers to provide this basic service for fellow citizens. Without them, solid waste and domestic garbage would not even be collected, let alone sorted or recycled. Despite many of the social and ethical controversies surrounding the recycling industry in India, Dharavi is seen as the 'ecological heart of Mumbai', recycling up to 85 per cent of all waste material produced by the city, an excellent example of human–environment systems thinking in action.

FIGURE 7 Ragpickers



An uncertain future

There are plans to demolish and redevelop Dharavi, as Mumbai is working on a facelift in order to become a world city. This redevelopment would transform the slum into a series of high-rise housing facilities, and each of Dharavi's 57 000 registered families would get 21 square metres of living space.

However, many Dharavi residents do not support this plan, as they are content with their current lifestyle. Most residents of the slum do not mind squatting near Mahim Creek, and prefer not to have their own flush toilets. Most are working and making a living, and many have lived their entire lives in Dharavi and do not want to trade their culture for a redeveloped life.

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Changing nations > **Urbanisation in Australia**

on Resources

Interactivity Changes on the rural–urban fringe (int-3302)

14.4 ACTIVITIES

1. Working with a partner or in small groups, undertake a fieldwork investigation of your local area in terms of:
   - the types of dwellings
   - transport facilities and issues
   - shopping and other community services available
   - amount of open spaces and parkland, and associated recreation facilities
   - how 'liveable' it is. (Consult your local council or conduct a survey of local residents).

   Document your findings in a report, including maps, photographs and data (e.g. tables, pie charts), and list any references.
   HASS skills: Questioning and researching, Analysing
   Geography concept: Place
2. Search for and watch some of the YouTube videos about Dharavi. Create a one-page infographic detailing life in the slum. Consider questions such as:
   - How many people live there and what are living conditions like?
   - What work is done here?
   - What are the risks to health and what could be done to improve the situation?

   HASS skills: Questioning and researching, Communicating and reflecting
   Geography concept: Place
3. Find out more about the natural and human influences on the development of cities. Examples for research could include Canberra, Australia (a planned city); Cape Town, South Africa (a port city); Rotenburg, Germany (a walled city); Geneva, Switzerland (where a river meets a lake); Johannesburg, South Africa (near a mining site); Chicago, United States (where north–south and east–west railway routes cross); Jerusalem, Israel (an ancient religious city); Bath, England (located at the site of a natural supply of mineral waters).
   HASS skills: Questioning and researching
   Geography concept: Space

14.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 7	Questions 2, 5, 6, 8	Questions 4, 9

Check your understanding

1. What are the two main ways that additional housing can be established in an expanding city?
2. Study **FIGURE 1**. Describe the areas of Sydney, Melbourne and Perth that experience the most growth. Explain why these patterns occur differently across the three cities.
3. Explain how urban sprawl has affected the environment in Perth.
4. Suggest how urban planners can reduce some of the environmental, social and economic impacts of expansion into the rural–urban fringe.
5. Outline the various challenges that Mumbai faces.

Apply your understanding

6. Construct a table to compare the social, environmental and economic impacts of urban sprawl with those of urban infilling and increased high-density living.
7. Refer to the Riverside development in Perth and predict some challenges that can come from developing land next to a river.
8. What would be the social, environmental and economic benefits of ragpickers?
9. List the advantages and disadvantages of replacing slums with high-rise low-income housing.

For sample responses for every question, go to www.jacplus.com.au.

14.5 Factors in urban decline

LEARNING INTENTION

By the end of the subtopic you will be able to explain the environmental and human factors that can lead to the decline of urban environments.

14.5.1 Environmental factors

Over time, all forms of urban environments will deteriorate with age and require renovation or renewal. Extreme atmospheric events such as cyclones, hurricanes and tornadoes, which exhibit strong winds and flooding rains, can have devastating short-term impacts on urban environments. Longer term events such as **desertification** and climate change can also have negative impacts.

Movements of the Earth such as those due to earthquakes and volcanic eruptions can also destroy urban environments. One well-documented example is the eruption of Mt Vesuvius in Italy in 79 CE, which completely buried the cities of Pompeii and Herculaneum under volcanic ash (see **FIGURE 1**).

Tsunamis are also a significant hazard that can lead to the destruction of settlements. On 22 December 2018, for example, the coastline regions of Banten and Lampung in Indonesia were devastated by a 3-metre tsunami triggered by an underwater landslide following the volcanic eruption of Anak Krakatau.

desertification the transformation of land once suitable for agriculture into desert by processes such as climate change or human practices such as deforestation and overgrazing

Hundreds of lives were lost and many villages were destroyed. Residents were forced to relocate until restoration works could be completed. Similarly, as a result of a massive earthquake and resultant tsunami in Japan in 2011, towns such as Otsuchi underwent significant change. Thousands of people simply left the region — the lack of employment opportunities and the risk associated with living in a disaster-prone region combining to drive people to move elsewhere.

FIGURE 1 Ruins of the city of Pompeii with Mt Vesuvius in the background



14.5.2 Human factors

Human factors, which include changes in the social, economic and political elements of a region, can also be a cause of the decline of cities and their urban environment. The destructive effects of war on the social fabric and economy of a nation, which have significant impacts on urban environments, are one example.

Angkor, the capital of the Khmer Empire in Cambodia, and thought to be the largest city in the world at the time, was abandoned in the fifteenth century due to a combination of wars and a series of droughts. The destruction of its economy, which was based on management of water and rice production, meant the city was no longer viable. The elaborate Khmer temples constructed in the twelfth century (see **FIGURE 2**) have now become popular tourist attractions; more than two million people visit these sites each year.

FIGURE 2 Main temple complex, Angkor Wat, Cambodia



In modern times, there are many examples of towns and cities with extensive urban environments that have declined. Some reasons for change include depletion of mineral supplies and mining operations, changes in demand for industrial production and manufactured goods, and **economic downturn**. An example of an urban project that failed due a downturn in the Turkish economy is that of Burg Al Babas. The project started in 2014 but went into bankruptcy in 2018; the chateau-style houses remained unoccupied in 2019 (see **FIGURE 3**).

economic downturn a recession or downturn in economic activity that includes increased unemployment and decreased consumer spending

Other examples of urban environments that have declined due to human-induced factors can be seen in **FIGURE 4**.

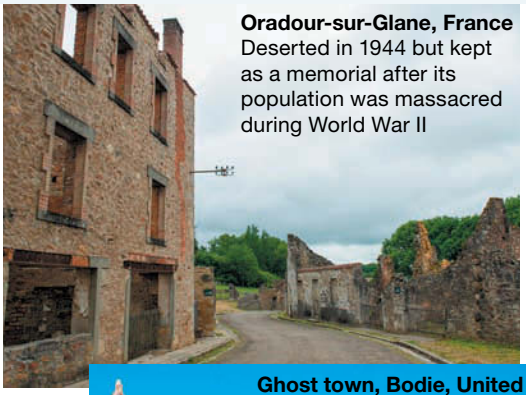
FIGURE 3 Burj Al Babas, Turkey, is a ghost town due to a downturn in the economy.



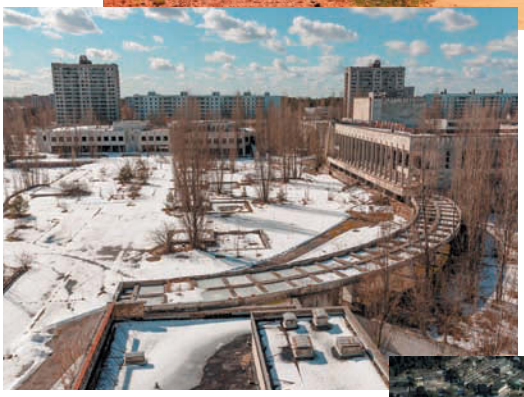
FIGURE 4 Cities abandoned due to changing human and physical factors



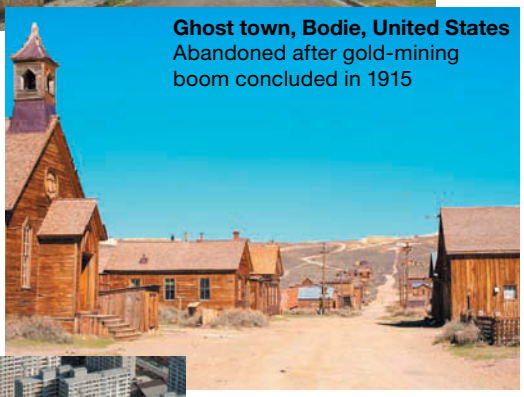
Wittenoom, Australia
Abandoned in 2006 after asbestos in the area caused major human health issues



Oradour-sur-Glane, France
Deserted in 1944 but kept as a memorial after its population was massacred during World War II



Pripyat near Chernobyl, Ukraine
Abandoned in 1986 after nuclear accident and radiation contamination



Ghost town, Bodie, United States
Abandoned after gold-mining boom concluded in 1915



Kowloon (shanty town), Hong Kong
Abandoned and then demolished by government order in 1993 to 'clean up the city, reduce squalor and crime'

Note: This photograph was taken prior to the demolition of Kowloon.

14.5.3 CASE STUDY: Venice, a sinking city

Urban centres that are built on low-lying coastal plains, where features such as **river deltas**, wetlands, lagoons, sand dunes, bars and barriers are found, are susceptible to the environmental impacts of the sea.

Storms and high tides, when combined, can lead to destructive surges that cause erosion and damage to cities. The prospect of rising sea levels as a result of global warming-induced ice cap melting will require specialised management techniques such as the construction of coastal defence works to protect property and life.

Venice, Italy, is a city built on mud islands in a coastal **lagoon** at the head of the Adriatic Sea (see **FIGURES 5** and **6**). Although Venice has a population of only around 270 000, its **historical architecture**, life on the canals and cultural events such as Carnevale attract around 20 million tourists per year. Not surprisingly, the Venetians are keen to protect their heritage and manage the impacts of erosion and rising sea levels into the future.

FIGURE 5 Venice and surrounding areas



Source: © OpenStreetMap contributors.

FIGURE 6 Aerial view of Venice showing the built area in the lagoons and the canals



river deltas a landform composed of deposited sediments at the mouth of a river where it flows into the sea

lagoon a shallow body of water separated from the sea by a sand barrier or coral reef

historical architecture urban environment that has significant value due to its unique form and history of development

Why is Venice sinking?

When Venice was established almost 2000 years ago, the sea level was 2 metres lower than current levels and buildings seemed secure from the impacts of the sea. Over time the sea level has risen and in more recent

times this rate of increase has accelerated due to global warming. Also affecting the stability of buildings was the removal of fresh water from artesian wells near Venice in the 1950s. This practice, which fortunately has stopped, led to building subsidence.

Floods or *aqua alta*

Venetians refer to floods as *aqua alta* or 'high water'. Flooding events occur each year, usually between autumn and spring, and their intensity varies. In October 2018, high sea waters with a depth of 1.56 metres above average sea levels submerged nearly two-thirds of the city. A combination of high tides and winds forced waters over the canal banks and into buildings and public areas (see **FIGURE 7**). These types of flooding events make life difficult for locals and tourists as buildings and public areas are flooded and transport is restricted, with some boats unable to fit under bridges. The actual number of tourists is another significant problem for Venice — in the busy season, tourist numbers can reach 60 000 per day. Management plans and limits to tourist numbers are now under consideration.

FIGURE 7 Flooding in Venice



Reducing the impact of floods

Completed in 2018, the MOSE (MOdulo Sperimentale Elettromeccanico) or Experimental Electromechanical Module Project aims to reduce the impact of floods on Venice. It consists of rows of mobile gates that are able to isolate the lagoon and canals from high tides above 110 centimetres (to a maximum of three metres). The project has been criticised by some who say that flushing of the canals would be reduced and the huge cost of the project cannot be justified as it may only be effective for a few years if sea levels continue to rise.

14.5 ACTIVITIES

1. Use the internet to find out about the decline of the cities of Gary and Detroit in the United States, and make a list of reasons why these cities have declined and how they might be reinvigorated.
   HASS skills: Questioning and researching
   Geography concepts: Place, Space
2. Use the internet to research and learn more about the MOSE project in Venice. Create a labelled diagram to show how it will work. **HASS skills: Questioning and researching, Communicating and reflecting**
3. Select a capital city in Australia and find out more about the impact of rising sea levels on suburbs close to the coast. How might the social and economic impacts of rising sea levels be managed?
   HASS skills: Questioning and researching
   Geography concept: Space

14.5 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 4, 5, 7	Questions 3, 6, 8, 9	Questions 2, 10, 11

Check your understanding

1. What environmental hazards can lead to destruction or damage to urban environments?
2. Why was the town of Pripyat near Chernobyl in the Ukraine abandoned? What reasons can you put forward to explain why cities decline over time?
3. Why was water essential to the survival and decline of the city of Angkor?
4. Where is Venice located?
5. What aspects of its landscape make the city of Venice vulnerable to flooding?
6. How would you employ human–environment systems thinking to solve the flooding of Venice? (***Hint:*** Make a list of environmental impacts and human management responses.)

Apply your understanding

7. What impact might a rise in the sea level have on a city such as Venice?
8. If ore bodies are depleted in the mining town of Broken Hill, how might the town *sustain* its existence into the future?
9. Is there a future for ghost towns? Explain your view.
10. Outline the MOSE Project in Venice and explain how it is expected to work in holding back the sea.
11. Evaluate the MOSE Project in terms of its:
    a. environmental impact
    b. social impact (i.e. its value in preserving a unique city with a long history).

For sample responses for every question, go to www.jacplus.com.au.

14.6 Future challenges for sustainable urban environments

LEARNING INTENTION

By the end of this subtopic you will be able to:
- describe the projected urban growth of the future
- explain the challenges that this growth presents
- recommend sustainable approaches to development that aim to tackle these challenges.

14.6.1 The influence of technology

Throughout human history cities have changed as new forms of technology have developed. For instance, high-rise buildings such as skyscrapers could not exist without the modern cement-and-steel methods of construction and development of high-speed lifts. What will be the nature of cities as technology progresses, and how can the social, economic and environmental elements of cities develop and be managed in a fair and sustainable manner?

14.6.2 Managing urbanisation

The United Nations (UN) Sustainable Development Goals (SDGs) have been developed as a set of ambitious aims to achieving an improved and sustainable future for everyone on the planet. The SDGs inform bodies that have an interest in urban development, including UN-Habitat, ComHabitat (Commonwealth Habitat), the Cities Alliance and the World Bank. These agencies aim to address the urban challenges of the twenty-first century with a focus on social and economic management criteria. The SDGs are shown in **FIGURE 1**.

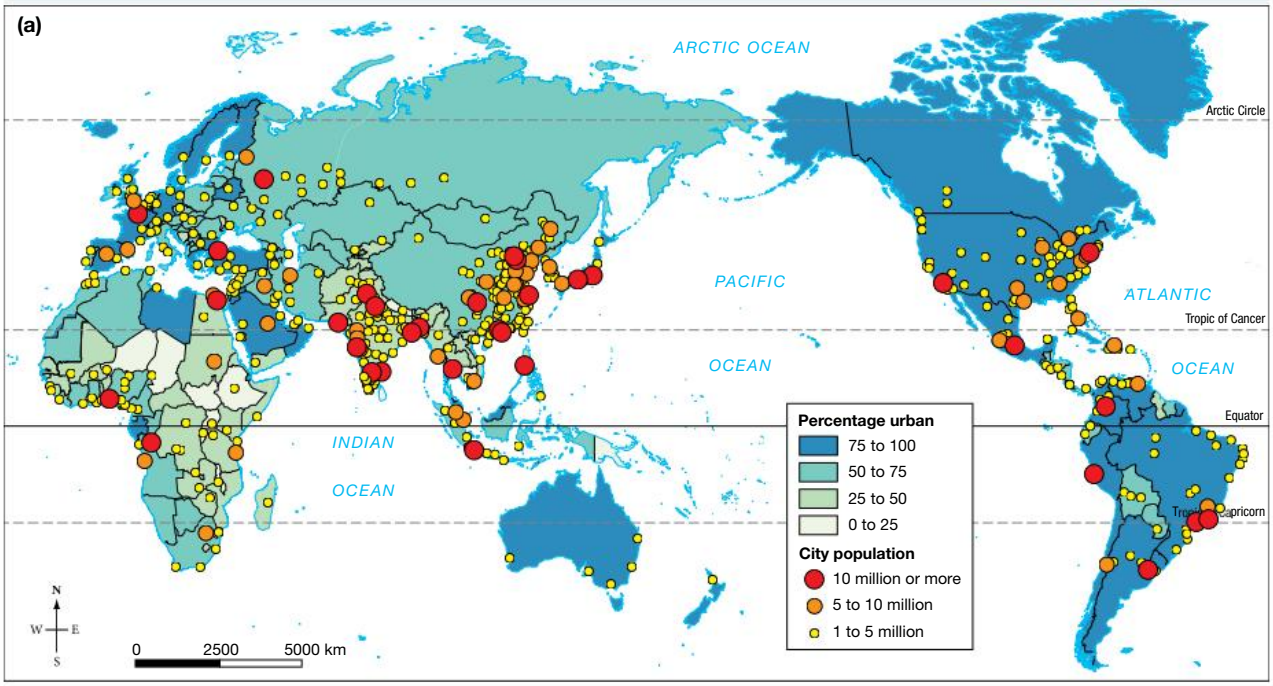
FIGURE 1 The 17 Sustainable Development Goals



It has been estimated by UN studies that the global urban population, which is currently around 55 per cent (4.2 billion), will increase to about 5.1 billion in 2030, meaning that over 60 per cent of the world's total population will be living in cities. This increase means that another billion people will need new housing, basic urban infrastructure and services. To achieve this, the equivalent of seven new megacities will need to be created annually (see **FIGURE 2**).

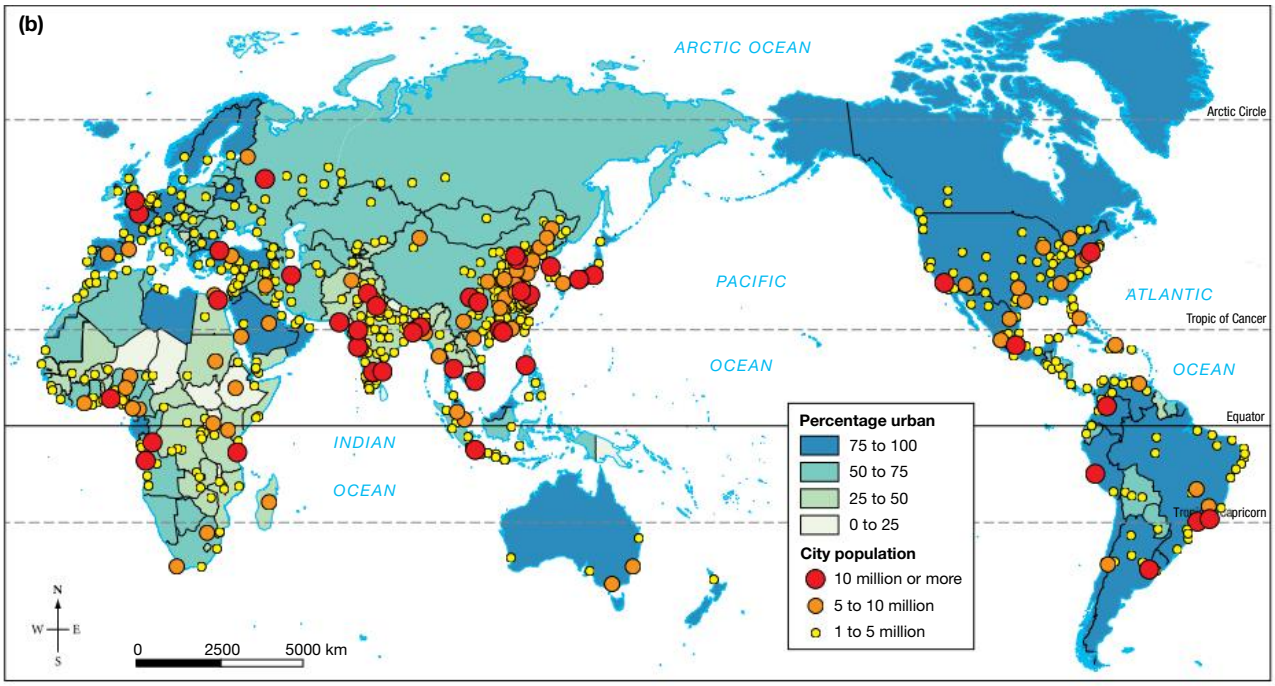
int-7670

FIGURE 2 Urban population (a) 2018 and (b) projected for 2030



Source: United Nations, Department of Economic and Social Affairs, Population Division 2018. World Urbanization Prospects: The 2018 Revision.

int-7971



Source: United Nations, Department of Economic and Social Affairs, Population Division 2018. World Urbanization Prospects: The 2018 Revision.

14.6.3 What are the challenges for cities?

Many cities in the world face environmental, social and economic challenges. Issues such as extensive areas of slum housing and a general lack of infrastructure to support what may be called a socially and economically just lifestyle undermine the sustainability of these environments. Particularly in the poorest or least developed countries, there are significant environmental management issues associated with large cities. Some of these are detailed in **TABLE 1**. Note that there are issues even in cities that could be called wealthy or most developed.

TABLE 1 Urban challenges

Level	Challenges to be addressed to ensure a sustainable urban environment
Least developed countries	• Poverty and inequality • Rapid and chaotic development of slum housing • Increasing demand for housing, urban infrastructure, services and employment • Education and employment needs of the majority population of young people • Shortage of skills in the urban environment sector
Transition countries	• Slow (or even negative) population growth and ageing • Shrinking cities and deteriorating buildings and infrastructure • Urban sprawl and preservation of inner-city heritage buildings • Growing demand for housing and facilities by an emerging wealthy class • Severe environmental pollution from old industries • Rapid growth of vehicle ownership • Financing of local authorities to meet additional responsibilities
Developed countries	• Recent mortgage and housing markets crises • Unemployment and impoverishment due to changing availability of jobs • Large energy use of cities caused by car dependence, huge waste production and urban sprawl • Slow population growth, ageing and shrinking of some cities

14.6.4 How can we plan for the future?

By promoting sustainable urban environments at all levels of scale (local, regional, national and global), problems can be overcome.

Some management strategies that will foster socially, economically and environmentally sustainable urban environments include:

- building energy-efficient houses using energy sources that reduce the **ecological footprint** of cities
- reducing waste by recycling and reusing materials
- improving public transport systems to reduce reliance on cars
- redeveloping to include **medium-density housing** to reduce urban sprawl
- exchanging ideas between governments about planning and building policies and best and successful practice in design.

ecological footprint a measure of human demand on the Earth's natural systems in general and ecosystems in particular; the amount of productive land required by each person in the world for food, water, transport, housing, waste management and other purposes

medium-density housing a form of residential development such as detached, semi-attached and multi-unit housing that can range from about 25 to 80 dwellings per hectare

FIGURE 3 Vertical gardens can be used to add green spaces to medium- and high-density housing developments.



Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Urbanisation > **Brisbane: an eco-city**

on Resources

Interactivity Where am I? (int-3303)

14.6 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 6	Questions 4, 9, 10	Questions 5, 7, 8

Check your understanding

1. Globally, how many people will need new housing in 2030 based on current predictions of urbanisation?
2. Refer to **FIGURE 1**. What are the SDGs and why were they developed?
3. Refer to **FIGURE 1**. Which of the SDGs do you think relate to the issue of sustainable urbanisation? Explain your view.
4. From **TABLE 1**, identify the urban challenges that relate to life in Australia.
5. List three management strategies for sustaining urban environments and explain the contribution that each of these would make.

Apply your understanding

6. How would migration help solve the problems of ageing populations in developed Western cities?
7. Using **TABLE 1**, explain why the urban challenges are different for least developed, transition and developed countries.
8. It has been said that if all nations had the same ecological footprint as the developed countries (e.g. the United States, Australia and most European nations), we would need four new worlds the size of planet Earth to accommodate the growth in resource consumption. In what ways can we achieve energy, food and water security with an aim of ***sustainability*** into the future?
9. Which of the SDGs will directly improve social conditions in urban environments? Give reasons for your answer.
10. Which of the SDGs will directly improve environmental conditions in urban environments? Give reasons for your answer.

For sample responses for every question, go to www.jacplus.com.au.

14.7 Thinking Big research project — Slum improvement proposal

Scenario

It is widely known that the slums of megacities create significant issues which have an impact on human wellbeing. Hence, slums have been identified by the SDGs as needing sustainable solutions to improve the social, economic and environmental futures of their inhabitants.

You have been employed by the local council in one of the world's megacities to carry out a study identifying issues associated with life in the city's slums, and to develop a plan for improving living conditions for slum residents.



Task

With reference to at least three of the 17 SDGs, develop social, economic and environmental plans for sustainable change to your chosen megacity slum.

You should incorporate your research findings in a proposal to the council of your selected megacity, outlining identified issues and recommended management strategies to improve the livelihood of the people who live in the slum.

Your proposal can be presented in written report form or alternatively as a PowerPoint presentation, with comprehensive text information, annotated images, diagrams and maps.



Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group so you can work collaboratively. Working in small groups will allow you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- In the **Media centre** you will find an assessment rubric and some weblinks that will provide a useful starting point for your research.
- Conduct research into living conditions in your chosen slum.
- Create or locate a map (including BOLTSS) showing the location of the slum.
- Create a summary table outlining the social, economic and environmental issues that are matters of concern.
- Provide relevant data in table or graph form.
- Provide annotated images where appropriate to illustrate areas of concern.
- Research the SDGs and identify the three (minimum) goals that you will focus on in tackling these concerns. Add the details of these SDGs to your table, providing a brief description of what each SDG aims to achieve, and which aspects of the goal will be addressed by your proposal.
- Devise sustainable social, economic and environmental actions to address your identified issues. If possible, include diagrams and/or photographs of strategies currently being employed in different places that might be used or adapted to your selected megacity and its slums.
- Evaluate which of your suggested strategies would be most effective based on:
  - economic viability (affordability)
  - social justice (fairness for all people)
  - environmental benefit (minimal negative environmental impact and with future sustainability).

- Make concluding recommendations based on your research and evaluation of options.
- Ensure that you have completed all elements of the task and, when satisfied, submit your proposal to your teacher for assessment.



on Resources

ProjectsPLUS Thinking Big research project — Slum improvement proposal (pro-0216)

14.8 Review

14.8.1 Key knowledge summary

14.2 Cities' impact on the environment

- Urbanisation has led to significant changes to the natural environment, including changes to the atmosphere, hydrosphere and lithosphere.

14.3 The development of urban environments

- Large urban complexes are a recent phenomenon in the world's history.
- The modern trend is for people to move to urban complexes seeking improvement in lifestyle, but this means having to cope with socioeconomic and environmental challenges in the urban environment, such as congestion, crime, pollution and social isolation.
- Megacities, while offering opportunities for work and access to multiple services, can have issues such as slums and poor waste management.
- Dealing with the impacts of cities on air and water quality is a major issue.
- Urban sprawl in large urban complexes is a major problem for city planners.

14.4 Case studies in urban growth — Perth and Mumbai

- Urban infilling and increasing density are two methods of creating more living space in existing urban areas.
- Expansion into the rural–urban fringe leads to urban sprawl, which has economic and environmental impacts.
- Rapid urban growth in Mumbai has created challenges relating to human wellbeing, urban sprawl, traffic congestion and infrastructure needs.

14.5 Factors in urban decline

- Natural and human-induced changes can lead to processes that build up and lead to the decline of urban complexes.
- Events such as natural and human-induced disasters have large impacts on urban complexes.
- The depletion of resources can lead to urban decline.
- Low-lying coastal cities can be subject to the destructive forces of storms, and this can affect tourism if the city is a popular holiday destination.
- Rising sea levels caused by global warming are an additional problem requiring new directions in management and urban planning.

14.6 Future challenges for sustainable urban environments

- Urban populations are predicted to continue to grow, with megacities being a magnet for rural dwellers.
- Careful management of urban complexes is required so that they may be sustained and offer a good quality of life for their inhabitants.
- The management of sustainable cities must draw inspiration from the Sustainable Development Goals established by the United Nations.

14.8.2 Key terms

alpha world city a city generally considered to be an important part in the global economic system

biophysical environment all elements or features of the natural or physical and the human or urban environment, including the interaction of these elements

conurbations an urban area formed when two or more towns or cities (e.g. Tokyo and Yokohama) spread into and merge with each other

desertification the transformation of land once suitable for agriculture into desert by processes such as climate change or human practices such as deforestation and overgrazing

developing nation a country whose economy is not well developed or diversified, although it may be showing growth in key areas such as agriculture, industries, tourism or telecommunications

economic downturn a recession or downturn in economic activity that includes increased unemployment and decreased consumer spending

ecological footprint a measure of human demand on the Earth's natural systems in general and ecosystems in particular; the amount of productive land required by each person in the world for food, water, transport, housing, waste management and other purposes

gross domestic product (GDP) the value of all goods and services produced within a country in a given period, usually discussed in terms of GDP per capita (total GDP divided by the population of the country)

historical architecture urban environment that has significant value due to its unique form and history of development

human–environment systems thinking using thinking skills such as analysis and evaluation to understand the interaction of the human and biophysical or natural parts of the Earth's environment

Industrial Revolution the period from the mid 1700s into the 1800s that saw major technological changes in agriculture, manufacturing, mining and transportation, with far-reaching social and economic impacts

infrastructure the basic physical and organisational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society

lagoon a shallow body of water separated from the sea by a sand barrier or coral reef

medium-density housing a form of residential development such as detached, semi-attached and multi-unit housing that can range from about 25 to 80 dwellings per hectare

megacity a settlement with 10 million or more inhabitants

river deltas a landform composed of deposited sediments at the mouth of a river where it flows into the sea

rural–urban fringe the transition zone where rural (country) and urban (city) areas meet

slum rundown area of a city with substandard housing

urban environment the human-made or built structures and spaces in which people live, work and recreate on a day-to-day basis

urban infilling the division of larger house sites into multiple sites for new homes

urban renewal redevelopment of old urban areas including the modernisation of household interiors

urban sprawl the spreading of urban developments into areas on the city boundary

water rights refers to the right to use water from a water source such as a river, stream, pond or groundwater source

water security the reliable availability of acceptable quality water to sustain a population

14.8.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

How far can our urban environments spread before they become unsustainable?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

Resources

eWorkbook	Customisable worksheets for this topic (ewbk-6221) Reflection (ewbk-6220) Crossword (ewbk-6219) Student Learning Matrix (ewbk-6212)
Interactivity	Sustaining urban environments crossword (int-7674)

14.8 Review exercise

Multiple choice

1. The biophysical environment consists of which four elements?
   - **A.** Atmosphere, hydrosphere, lithosphere, biosphere
   - **B.** Earth, wind, fire, water
   - **C.** Atmosphere, aquasphere, lithosphere, biosphere
   - **D.** Atmosphere, hydrosphere, lithosphere, earthsphere

2. How many inhabitants does a city need to be classified as a megacity?
   - **A.** At least 20 million
   - **B.** At least 10 million
   - **C.** At least 5 million
   - **D.** At least 12 million

3. Which region has the highest proportion of global built-up urban area population?
   - **A.** North America
   - **B.** Asia
   - **C.** Europe
   - **D.** Africa

4. Which was Australia's fastest growing capital city between 2011 and 2015?
   - **A.** Melbourne
   - **B.** Sydney
   - **C.** Gold coast
   - **D.** Perth

5. What practice does 'urban infilling' refer to?
   - **A.** The infilling of former waste sites into parklands
   - **B.** The infilling of former industrial areas into small sites for new homes
   - **C.** The division of larger house sites into multiple sites for new homes
   - **D.** The division of larger house sites into new schools

6. Which organisation is responsible for the Sustainable Development Goals?
   - **A.** United Nations
   - **B.** UNICEF
   - **C.** World Bank
   - **D.** World Trade Organization

7. By promoting sustainable urban environments at all levels of scale, problems can be overcome. Which options describe the levels of scale?
   - **A.** Large scale and local scale
   - **B.** Local, regional, national and global
   - **C.** National and global
   - **D.** Local and regional

8. Strategies for sustainable urban environment include which options?
   - **A.** Building energy-efficient houses
   - **B.** Increasing waste by expanding landfill
   - **C.** Improving public transport systems to reduce reliance on cars
   - **D.** Redeveloping to include medium-density housing to reduce urban sprawl

Refer to* TABLE 1 *to answer questions 9 and 10.

TABLE 1 Population of the 10 largest cities, 1950 to 2025

Rank	1950 population	2015 population	2025 population
1	New York (12.3)	Tokyo (37.8)	Tokyo (35.2)
2	London (8.7)	Jakarta (30.5)	Mumbai (26.4)
3	Tokyo (6.9)	Delhi (24.9)	Delhi (22.5)
4	Paris (5.4)	Manila (24.0)	Dhaka (22.0)
5	Moscow (5.4)	Seoul (23.4)	Sao Paulo (21.4)
6	Shanghai (5.3)	Shanghai (23.4)	Mexico City (21.0)
7	Essen (5.3)	Karachi (22.1)	New York (20.6)
8	Buenos Aires (5.0)	Beijing (21.0)	Kolkata (20.6)
9	Chicago (4.9)	New York (20.6)	Shanghai (19.4)
10	Kolkata (4.4)	Guangzhou (20.6)	Karachi (19.1)

Source: United Nations (1950 & 2025); Demographia (2015).
Note: All population figures are in millions.

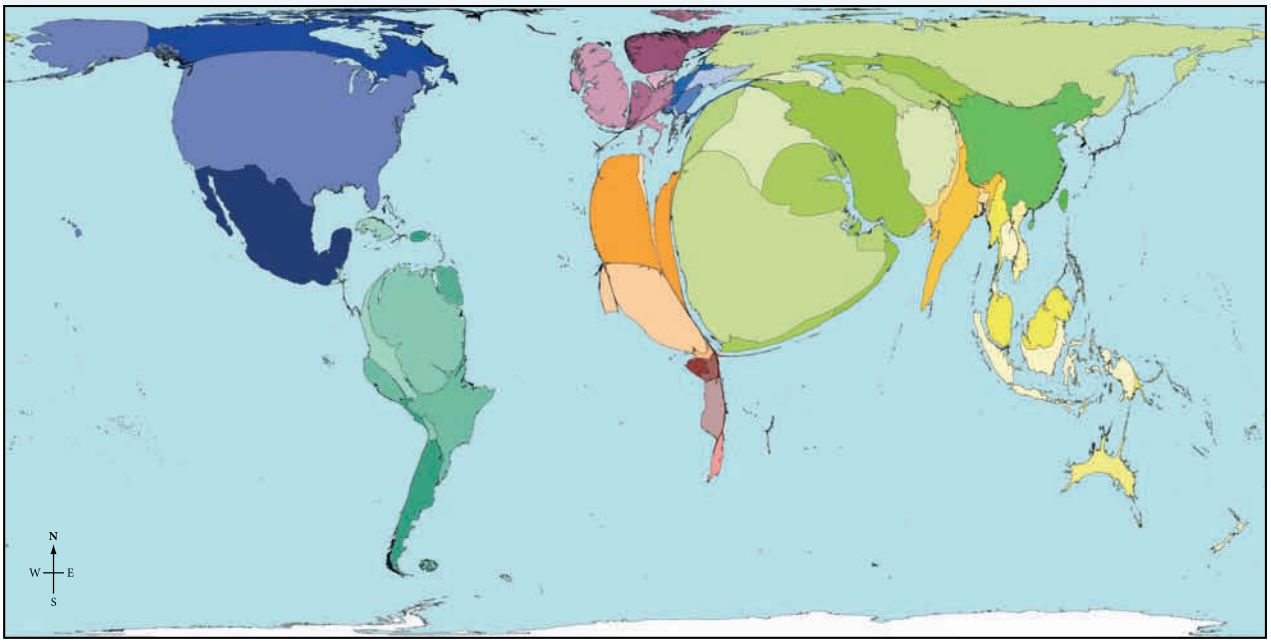
9. Which city has the same population in the 2015 and 2025 figures?
   - **A.** Tokyo
   - **B.** Delhi
   - **C.** Shanghai
   - **D.** New York

10. Which city, not seen in either the 1950 or 2015 figures, is expected to jump to within the top three highest populations in 2025?
   - **A.** Mumbai
   - **B.** New York
   - **C.** Tokyo
   - **D.** Dhaka

Short answer

11. It is hoped that modern technology will transform energy use in urban complexes to more environmentally friendly and sustainable formats.
   - **a.** Study **FIGURE 1** and make summary comments on the use of energy in various high and low energy use nations of the world.
   - **b.** What aspects of urban environments and their infrastructure can be used to account for more sustainable energy use in various nations?
   - **c.** What different types of energy use could make consumption more environmentally friendly and sustainable?

FIGURE 1 World energy use cartogram. The size of a country is proportional to the percentage of world energy usage.



Source: www.worldmapper.org

12. Desalinisation plants have been built in a number of Australia's main cities to solve water resource problems.
    a. Investigate how a desalinisation plants operates.
    b. How may desalinisation plants solve the problem of water supply to capital cities?
13. Most Australians would perceive slums negatively. Refer to the case study of Dharavi, India, in subtopic 14.4. How does each of the following support a more positive perception of slums?
    - The role of ragpickers
    - Recycling
14. 'Let it sink. Venice is not worth saving.' Write an argument that supports and then an argument that would challenge this viewpoint.



RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 14 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

14.1 Overview

Video eLesson
- Sprawling cities (eles-1712)

14.2 Cities' impact on the environment

Interactivity
- Urban impacts on the environment (int-3301)

MyWorld Atlas
- Polluted cities
- Mexico City

14.3 The development of urban environments

eWorkbook
- The growth of urban areas (ewbk-6213)

MyWorld Atlas
- World urbanisation
- Urbanisation in Australia

14.4 Case studies in urban growth — Perth and Mumbai

eWorkbook
- Ragpickers in India (ewbk-6216)

Interactivity
- Changes on the rural–urban fringe (int-3302)

MyWorld Atlas
- Urbanisation in Australia

14.5 Factors in urban decline

eWorkbook
- Urban decline (ewbk-6215)
- Sustaining urban areas in Venice (ewbk-6217)

14.6 Future challenges for sustainable urban environments

eWorkbook
- How do cities change the environment? (ewbk-6214)
- A house for the future (ewbk-6218))

Interactivity
- Where am I? (int-3303)

MyWorld Atlas
- Brisbane: an eco-city

14.7 Thinking Big research project — Slum improvement proposal

ProjectsPLUS
- Thinking Big research project — Slum improvement proposal (pro-0216)

14.8 Review

eWorkbook
- Reflection (ewbk-6220)
- Crossword (ewbk-6219)
- Student Learning Matrix (ewbk-6212)

Interactivity
- Sustaining urban environments crossword (int-7674)

To access these online resources, log on to **www.jacplus.com.au**

15 Inland water change and management

online only

15.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

Humans would find life very hard without healthy inland water sources. Are we being careful with how we use and change them?

15.1.1 Introduction

Water makes life on Earth possible — rivers are like blood running through the veins of a body. Our inland waters are important sources of water for both environments and people.

Over time we have dammed, diverted and drained our water sources, and this has brought about significant environmental change. Careful stewardship of our water resources will help ensure a sustainable future.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6251)

Video eLesson Drained away (eles-1709)

FIGURE 1 Water is vital for our lives and the environment.



15.2 Wet and wonderful — inland water

LEARNING INTENTION

By the end of this subtopic you will be able to:

- describe the different types of water bodies that make up inland water
- explain their importance
- identify the threats to them that human activities pose.

15.2.1 What is inland water?

Have you ever stopped to think that the water flowing down a river or rippling across a lake is our life-support system? The rivers, lakes and **wetlands** that make up our inland water then supply our domestic, agricultural, industrial and recreational water use. They also provide important habitats for a wide range of aquatic and terrestrial life.

Inland water systems cover a wide range of landforms and environments, such as lakes, rivers, floodplains and wetlands. The water systems may be **perennial** or **ephemeral**, standing (like lakes) or flowing (like rivers — see **FIGURE 1**). There are interconnections between surface water and **groundwater**, and between inland and coastal waters. Inland water is an important link in the water cycle, as water evaporates from its surface into the atmosphere. In return, rainfall can be stored in rivers and lakes, or soak through the soil layers to become groundwater.

wetland an area covered by water permanently, seasonally or ephemerally. They include fresh, salt and brackish waters such as rivers, lakes, rice paddies and areas of marine water, the depth of which at low tide does not exceed 6 metres.

perennial describes a stream or river that flows permanently

ephemeral describes a stream or river that flows only occasionally, usually after heavy rain

groundwater water held underground within water-bearing rocks or aquifers

FIGURE 1 The Parana River floodplain in northern Argentina shows a variety of different types of inland water.



15.2.2 Why is inland water important?

Inland water provides both the environment and people with fresh water, food and habitats. It provides environmental services; for example, it can filter pollutants, store floodwater and even reduce the impacts of climate change. The economic value of these services cannot easily be measured. Their importance, however, can be taken for granted and not appreciated until the services are lost or degraded.

15.2.3 What are the threats to inland water?

Inland water is extremely vulnerable to change. It has been estimated that in the last century, the United States, Europe and Australia have lost over 50 per cent of their inland water (excluding lakes and rivers). Those systems remaining are often shrunken and polluted. This loss is largely a result of human-induced environmental changes. **TABLE 1** illustrates some of the reasons for changes to inland water systems, and their possible impacts on the environment and people. As water is such a valuable resource, much of our inland waterways have been dammed, diverted or drained to meet the needs of people.

TABLE 1 Threats to inland water

Cause of change to inland water systems	Environmental functions threatened	Impacts of change
• Increasing population and increasing demand for water across space	• Most services (e.g. fresh water, food and biodiversity) • Regulatory features such as recharging groundwater and filtering pollutants	• Increased withdrawal of water for human and agricultural use • Large-scale draining of wetlands to create farmland
• Construction of infrastructure including dams, weirs and levee banks, diverting water to other drainage basins	• Services supporting the quality and quantity of water • Biodiversity, habitat, river flow and river landforms	• Changes to the amount and timing of river flow; transport of sediment may be blocked, dams may restrict fish movements
• Changing land use (e.g. draining of wetlands, urban development on floodplains)	• Holding back floodwaters and filtering pollutants • Habitats and biodiversity	• Alters run-off and infiltration patterns • Increased risk of erosion and flood
• Excessive water removal for irrigation	• Reduced water quantity and quality • Less water available for groundwater supply	• Reduced water and food security • Loss of habitat and biodiversity in water bodies
• Discharge of pollutants into water or onto land	• Change in water quality, habitat • Pollution of groundwater	• Decline in water quality for domestic and agricultural use • Change in ecology of water systems

FIGURE 2 Wetlands are an example of inland water systems that are vulnerable to human-induced damage.



15.2 ACTIVITY

Make a simplified sketch of **FIGURE 1** and clearly label an example of each of the following features: main channel, tributary, anabranch, meander, oxbow lake (or billabong), floodplain. A dictionary may help you define the terms.

HASS skills: Communicating and reflecting

15.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 6	Questions 3, 4, 7, 8	Questions 5, 9, 10

Check your understanding

1. Match the following terms with their correct definition in the table below: main channel, tributary, anabranch, meander, oxbow lake (or billabong), floodplain.

Term	Definition
	A smaller stream that flows into a larger stream
	A bend in the river
	An area of relatively flat, fertile land on either side of a river
	A main river
	A cut-off meander bend
	Where a river branches off and joins back into itself

2. Make a list of as many inland water storage features as you can think of, and classify them according to whether they are surface or underground, natural or human-made. (Note that some can be both natural and human-made.)
3. Explain how groundwater is part of the water cycle.
4. What is the difference between a perennial and an ephemeral river?
5. Suggest two reasons why a wetland, such as that shown in **FIGURE 2**, might be drained.

Apply your understanding

6. Refer to **TABLE 1**. Indicate whether each of the following statements is true or false.
   a. Large-scale draining of wetlands will not affect groundwater.
   b. The spread of settlement over a floodplain will alter the amount of water available to replenish groundwater.
   c. Habitat destruction can occur with both draining of wetlands and construction of dams.
   d. Water that is diverted from one drainage basin to another is lost to the water cycle.
7. Suggest two short-term and two long-term examples of human-induced changes that could have an impact on the wetland in **FIGURE 2**.
8. The Parana River is 4880 kilometres long, making it the second longest river in South America. The river flows south from the south-east central plateau of Brazil to Argentina. **FIGURE 1** is a small section of this river. What evidence is there to suggest that this river frequently floods?
9. Refer to **FIGURE 1**. The brown shading visible in the water and on the land represents the river's muddy sediment. This is material such as sand and silt carried and deposited by a river.
   a. Where has this sediment come from?
   b. How does the sediment get onto the floodplain?
   c. If the river is dammed upstream, what changes are likely to happen to the sediment carried and to the floodplain?
10. Refer to **FIGURE 1**. Imagine that the Parana River flooded and the floodwaters have now subsided. Would the floodplain look the same as it does in this image? Explain your answer.

For sample responses to every question, go to www.jacplus.com.au.

15.3 Damming rivers — the pros and cons

LEARNING INTENTION

By the end of this subtopic you will be able to describe the benefits and drawbacks of large-scale dams around the world.

15.3.1 Why dam rivers?

Are dams marvellous feats of modern engineering or environmental nightmares? Without them, we would not have a dependable supply of water or electricity, nor would we feel relatively safe from floods. For many decades, dams have been seen as symbols of a country's progress and economic development. But increasingly, the social, economic and environmental costs are emerging.

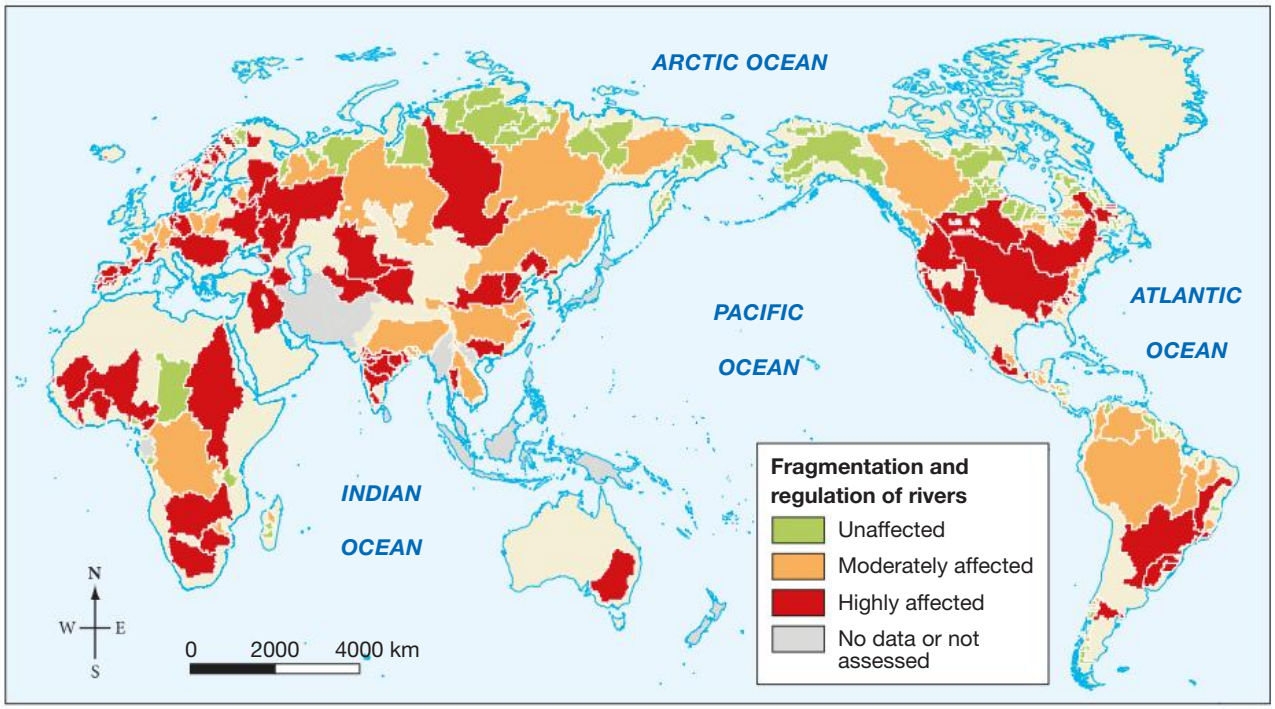
A reliable water supply has always been critical for human survival and settlement. The global demand for water increased by 600 per cent in the last century — more than twice the rate of population growth. If this rate continues, global water demand will exceed supply by 2030. Water is also unevenly distributed across the globe; some places suffer from regular droughts, while others experience massive floods. As a result, people have learned to store, release and transfer water to meet their water, energy and transport needs. This could be in the form of a small-scale farm dam or a large-scale multi-purpose project such as the Snowy River Scheme. Constructing dams is one of the most important contributors to environmental change in river basins. Globally, over 60 per cent of the world's major rivers are controlled by dams.

FIGURE 1 shows the degree of **river fragmentation**, or interruption, in the world's major drainage basins. River fragmentation is an indicator of the degree to which rivers have been modified by humans. Highly affected rivers have less than 25 per cent of their main channel remaining without dams, and/or the annual flow pattern has changed substantially. Unaffected rivers may have dams only on tributaries but not the main channel, and their discharge has changed by less than 2 per cent. Today, 48 per cent of the world's river volume is moderately to severely affected by dams.

river fragmentation the interruption of a river's natural flow by dams, withdrawals or transfers

int-7956

FIGURE 1 Degree of river fragmentation in the world's major drainage basins



Source: Made with Natural Earth. University of New Hampshire UNH/Global Runoff Data Centre GRDC, www.grdc.sr.unh.edu/. Map by Spatial Vision.

Dams, **reservoirs** and **weirs** have been constructed to improve human wellbeing by providing reliable water sources for agricultural, domestic and industrial use. Dams can also provide flood protection and generate electricity.

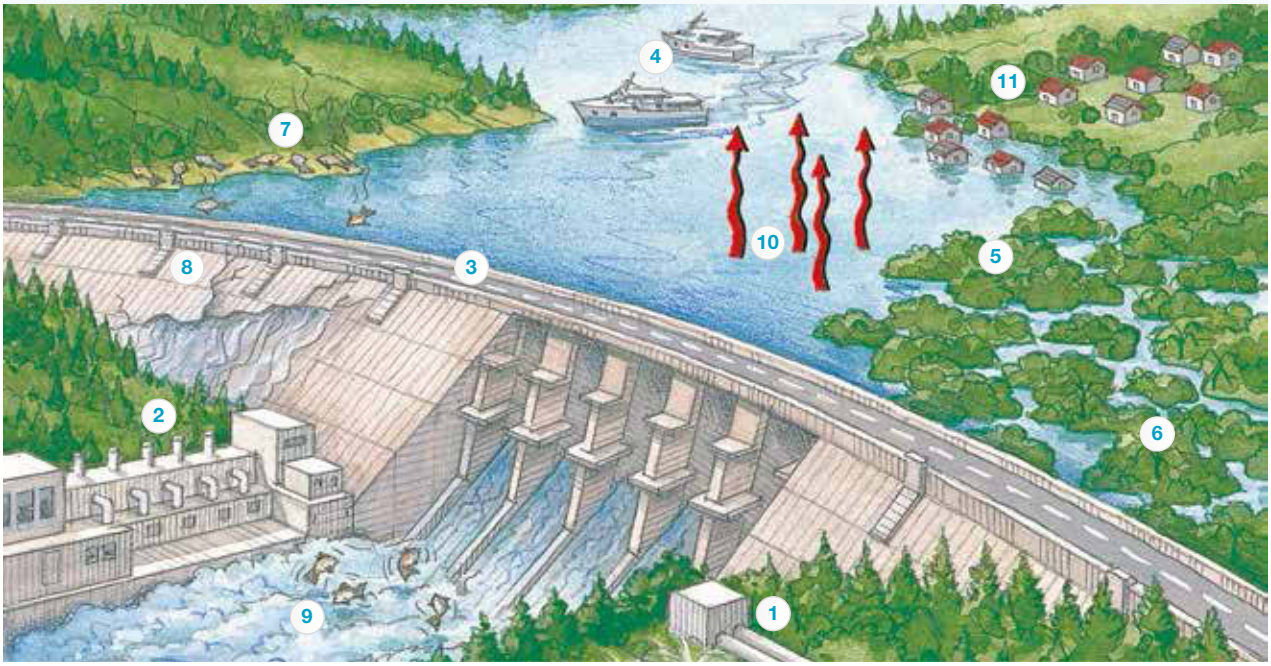
However, while there are many benefits, large-scale or mega dams bring significant changes to the environment and surrounding communities, both positive and negative, as shown in **FIGURE 2**.

reservoir large natural or artificial lake used to store water, created behind a barrier or dam wall

weir wall or dam built across a river channel to raise the level of water behind. This can then be used for gravity-fed irrigation.

int-5592

FIGURE 2 The advantages and disadvantages of large-scale dams



Positive changes

1. A regular water supply allows for irrigation farming. Only 20 per cent of the world's arable land is irrigated, but it produces over 40 per cent of crop output.
2. Released water can generate hydro-electricity, which accounts for 16 per cent of the world's total electricity and 71 per cent of all renewable energy.
3. Dams can hold back water to reduce flooding and even out seasonal changes in river low.
4. Income can be generated from tourism, recreation and the sale of electricity, water and agricultural products.

Negative changes

1. Large areas of fertile land upstream become flooded or inundated as water backs up behind the dam wall. Alluvium or silt is deposited in the calm water that previously would have enriched floodplains.
2. Initially, flooded vegetation rots and releases greenhouse gases.
3. The release of cold water from dams creates thermal pollution. Originally the Colorado River had a seasonal fluctuation in temperature of 27 °C. Today, temperatures average 8 °C all year. The water is too cold for native fish reproduction, but is ideal for some introduced species.
4. Some dams are constructed in tectonically unstable areas, which are prone to earthquakes.
5. Dams block the natural migration of fish upstream. Since 1970, the world's freshwater fish population has declined by 80 per cent.
6. Over 7 per cent of the world's fresh water is lost through evaporation from water storages.
7. A conservative estimate has stated that dams have negatively affected 472 million people worldwide. Tens of millions have been relocated from dam sites while other communities both upstream downstream have lost their livelihoods or had their land flooded.

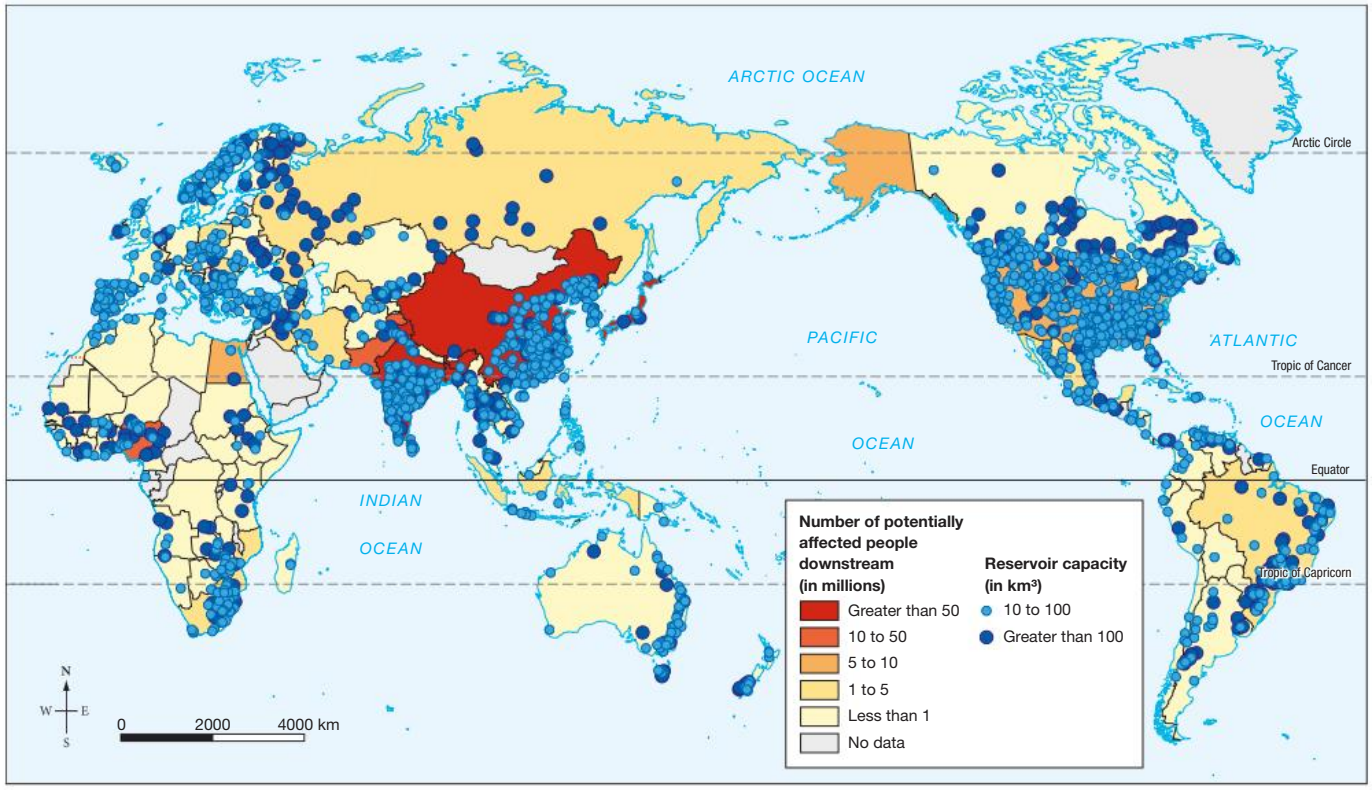
15.3.2 Why should a river flow?

Traditionally, water flowing out to sea was seen as a waste. If it could be stored, then it could be used. Little thought was given to the health of the river and the importance of keeping water in a stream. Governments around the world have favoured damming rivers to make use of water resources. But is this the only solution to our growing water needs?

Mega dams have been linked to economic development and improvement in living standards. Only in recent times have people questioned the real cost of these schemes — environmentally, economically and socially. **FIGURE 3** shows the number of downstream communities in each country that have the potential to be affected by the construction of mega dams.

int-5599

FIGURE 3 Distribution of downstream communities affected by large dams



Source: Lehner et al.: High resolution mapping of the world's reservoirs and dams for sustainable river flow management. Frontiers in Ecology and the Environment. GWSP Digital Water Atlas (2008). Map 81: GRanD Database (V1.0). Available online at http://atlas.gwsp.org.

There is also the concern that multi-purpose dams have conflicting aims. To generate hydro-electricity you need to release a large volume of stored water. To provide **flood mitigation** you need to keep water levels low. To use water for irrigation you need a large store. So, what do you do?

More than one billion people worldwide lack access to a decent water supply, yet it has been estimated that only 1 per cent of current water use could supply 40 litres of water per person per day, if the water was properly managed. The problem is not so much the quantity or distribution of water resources but the mismanagement of it. During the twentieth century, over $2 trillion was spent on constructing more than 50 000 dams. The emphasis now is to switch from *controlling* river flow to *adapting to* river flow. In other words, shifting from a human-centred to an Earth-centred approach. This means building small-scale projects that promote social and environmental sustainability (see subtopic 15.4). In many regions of the world, there are ongoing community protests against the need for mega dams in preference to smaller schemes that benefit local people directly.

flood mitigation managing the effects of floods rather than trying to prevent them altogether

15.3.3 People versus power?

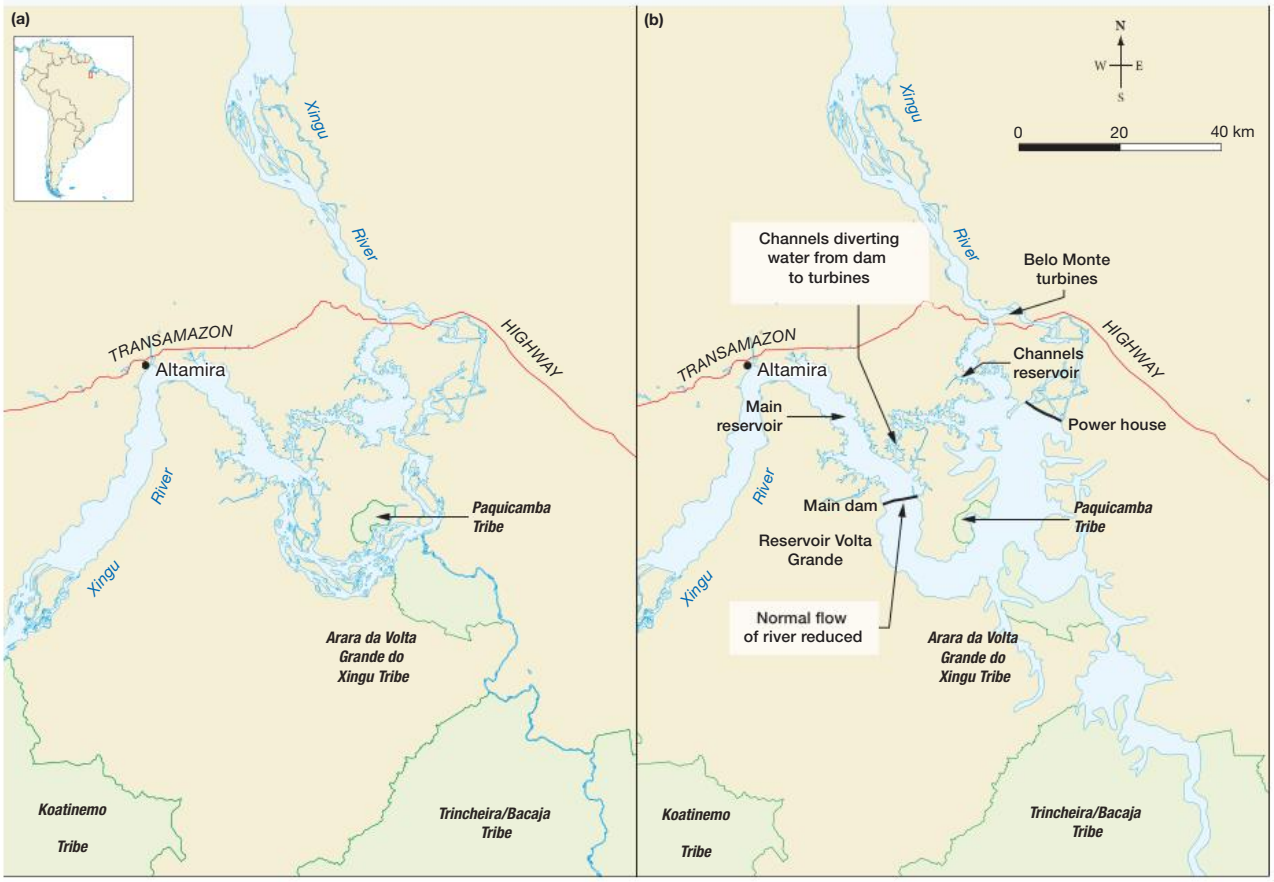
Across the globe, there has been a growing movement of community and environmental groups challenging the construction of mega dams in terms of location, sustainability and the potential social, economic and environmental impacts. Organisations such as International Rivers work with local groups to help restore justice to dam-affected communities, find better alternatives and promote the restoration of rivers through better dam management.

15.3.4 CASE STUDY: Belo Monte Dam, Brazil

For over 20 years, there has been an ongoing protest over the construction of the Belo Monte Dam in Brazil. The original design called for five huge dams on the Xingu River, but after large-scale local and international protests by indigenous groups and environmentalists, the scheme was scaled back to one large dam — the world's third largest (see **FIGURE 4**).

int-7958

FIGURE 4 (a) Location of the Belo Monte Dam (b) The related environmental changes



Source: Spatial Vision.

Belo Monte was designed to divert more than 80 per cent of the flow of the Xingu River, drying out over 100 kilometres of river, known as the Big Bend (see **FIGURE 5**). As a result, over 516 square kilometres of rainforest was flooded, and between 20 000 and 40 000 indigenous peoples were displaced from their homelands.

FIGURE 5 First stages of the construction of the Belo Monte Dam



Construction was delayed and battles fought in court over the legality of the **environmental impact assessment**, which was done after work had already started on the project. For the people of the area, diverting water from the river channel meant a reduction in fish populations. Additionally, because there were few roads in the region, river trading was essential, but has now been reduced. The loss of rainforest, lowering of watertables and drying out of soils are further predicted impacts. Traditional livelihoods and cultures based on small-scale fishing, floodplain farming and forest management have been threatened.

While the government has claimed the dam will provide **green energy**, the amount of greenhouse gases released from drowned and rotting vegetation behind the dam wall will contribute to global warming for some years. River flow in the region is seasonal, so hydro-electricity can be generated at peak flow for only a few months of the year. During the dry months, only 1000 MW of a potential 11 000 MW will be generated. There is a distinct possibility that another dam will need to be built upstream to supply a more even and continual flow of water for power generation.

Downstream, the small town of Altamira (shown in **FIGURE 4**) rapidly expanded during the three-year construction period, when 60 000 labourers flooded in looking for construction work. Land prices skyrocketed, the cost of living rose and crime rates soared to create the most dangerous town in the country. Once construction was halted, workers left as jobs disappeared.

In early 2016 the project was suspended and the owners, Norte Energia were fined A$317 000 for failing to provide promised protection for local communities. A two-year 'emergency program' established in 2011 was designed to compensate people for the schools and clinics that were promised but not supplied. Each village was allocated 30 000 reais (around $8100) per month for two years. After centuries of living a subsistence life, local peoples were introduced to the modern world. Fishing and hunting was replaced with supermarket fast food, alcohol and sweets. Motorbikes and outboard motors replaced canoes, and the role of the Elders was pushed aside by younger people who could speak Portuguese with the construction workers. Traditional social activities were replaced by televisions, and plastic and other garbage accumulated as no-one knew what to do with it.

environmental impact assessment a tool used to identify the environmental, social and economic impacts, both positive and negative, of a project prior to decision making and construction

green energy sustainable or alternative energy (e.g. wind, solar and tidal)

FIGURE 6 Protesters at the dam site cut a channel through earthworks to restore flow in the Xingu River. The wording translates as 'Stop Belo Monte'.



For nearly three decades the Jurana tribe have fought the dam construction and much of their traditional lifestyle activities have been replaced by meetings with government and company officials, environmental activists and journalists. Attitudes towards the local communities have changed. As one dam employee disparagingly noted, 'In the old days you just gave the Indians a mirror and they were happy. Now they want iPads and four-wheel drives'.

Scientists are now questioning whether large-scale **infrastructure** projects can balance economic benefits with environmental and social costs. With the increasing threat of climate change and recent drought, which has reduced flow along the Xingu River, the Belo Monte dam may never meet its promised economic or energy-producing goals.

In 2018, the Brazilian government announced that they would cease constructing mega dams in the Amazon. Brazil has the potential to generate 50 gigawatts of energy by 2050 if they built all the dams under design, but 77 per cent of these would to some extent affect indigenous land or federally protected areas. It appears that the ongoing resistance of indigenous peoples and environmentalists, combined with other political and economic influences have led to a hard-won change in policy.

infrastructure the basic physical and organisational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society

DISCUSS

Does a large company such as Norte Energia have responsibilities and obligations to the people displaced by such a large-scale scheme? Before deciding, carefully consider the consequences of the company being deemed responsible or not responsible. **General capability: Ethical understanding**

Resources

eWorkbook Controversial dams (doc-6239)

Interactivity Dam it (int-3292)

15.3 ACTIVITIES

1. Complete the **Controversial dams** worksheet to explore this topic further.
   HASS skills: Questioning and researching
2. Research one other controversial dam site around the world and compare it with the Belo Monte dam in terms of (a) size, (b) purpose and (c) impacts.
   HASS skills: Questioning and researching
   Geography concept: Interconnection

15.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 3, 6, 7	Questions 1, 2, 8, 9	Questions 4, 5, 10, 11

Check your understanding

1. What human activities are responsible for changing or fragmenting rivers?
2. Using **FIGURE 1**, describe the location of places with rivers that are largely unaffected by river fragmentation.
3. Traditionally, why has water flowing out to sea been considered a waste? Is this a human-centred or Earth-centred viewpoint?
4. What is the primary aim of an environmental impact assessment?
5. Refer to **FIGURE 4** to describe the environmental changes brought to the Xingu River by the dam.

Apply your understanding

6. Using information from **FIGURE 2** and the text in this subtopic, construct a table with the following headings to classify the impacts of dam building.

Positive effects for people	Negative effects for people
Positive effects for the environment	**Negative effects for the environment**

7. Refer to **FIGURE 3**.
   a. Which countries in the world have the greatest number of people affected by large dams? Suggest a reason for this.
   b. Where are the world's largest (over 100 km^3) dams?
   c. Would people and environments upstream of large dams be affected by the dams? Explain.
8. Suggest reasons why large-scale dam projects have been seen as indicators of development and progress.
9. Suggest what makes a place suitable for a large dam. Consider landforms, climate, soil and rock type.
10. Is there a sustainable future for mega dam projects such as the Belo Monte Dam? Justify your answer.
11. 'The positive impacts of large dam-building projects on people outweigh the negative impacts on the environment.' Do you agree or disagree with this statement? Give reasons for your point of view.

For sample responses to every question, go to www.jacplus.com.au.

15.4 Alternatives to damming

LEARNING INTENTION

By the end of this subtopic you will be able to describe the benefits and drawbacks of large-scale dams around the world.

15.4.1 How can water be saved?

Traditionally, managing water has been focused on exploiting resources rather than conserving them. However, there are viable alternatives to dams that are often cheaper and have fewer social and environmental impacts. The focus has to be, first, on reducing demand for water and, second, on using existing water more efficiently.

Agriculture

Globally, more than 70 per cent of fresh water is used for agriculture. In many expanding economies — for example, India — farming uses more than 85 per cent of available water. Often governments subsidise and encourage farmers to grow water-thirsty crops, such as cotton, in semi-arid regions. Irrigation is often very inefficient, with over half of the water applied not actually reaching the plants. High rates of evaporation and leaking infrastructure waste water. Poorly designed and managed irrigation schemes can become unsustainable if they develop waterlogging and salinity problems, but there is often little financial incentive to improve efficiency. For example, a country may have industrial and domestic water users paying up to $3 per cubic metre, while agricultural users pay only $0.10. Such low costs do little to encourage change.

We could save vast amounts of water by improving irrigation methods, switching to less water-consuming crops and taking poor quality land out of production. Pakistan, for example, has one of the most wasteful water systems in the world. With the same quantity of water and an efficient system, Israel produces 70 per cent more food. Globally, if the amount of water consumed by irrigation was reduced by 10 per cent, water available for domestic use could double.

Urban use

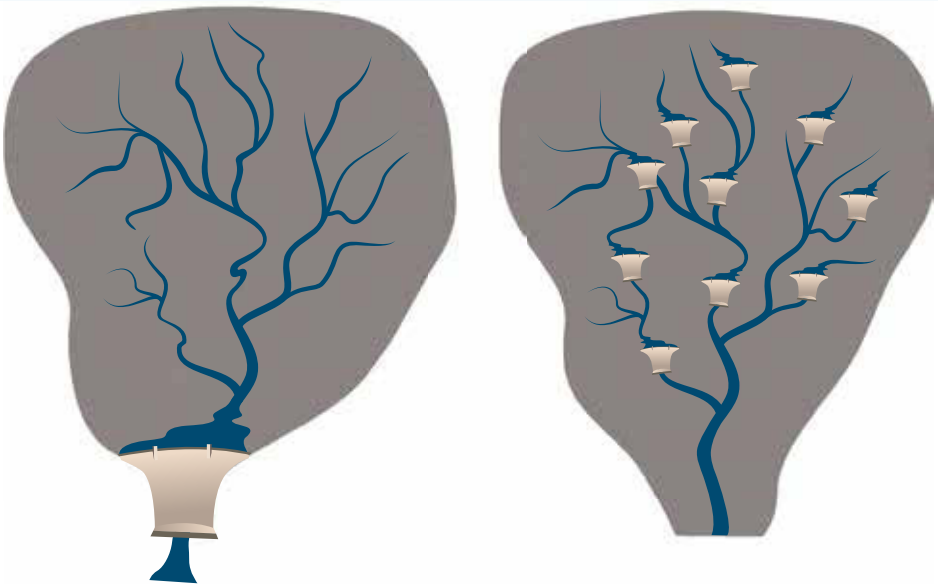
Researchers state that 30 per cent of all clean drinking water is said to be lost through leaking pipes. For example, the United States loses eight trillion litres of water each year through deteriorating infrastructure. Countries could make savings by:

- reducing leaking pipes and improving water delivery infrastructure
- encouraging the use of water- and energy-efficient appliances and fixtures
- changing the pricing of water to a ‘the more you use, the more you pay’ system
- offering incentives to industry to reduce water waste and recycle
- harvesting rainwater, collecting rainwater off roofs, recycling domestic wastewater and other efficiency schemes. For example, 40 per cent of Singapore’s water needs are met using treated wastewater.

Small-scale solutions

Currently, researchers estimate it will cost US$114 billion per year to meet the United Nations’ goal of achieving universal access to clean water and adequate sanitation; hence, the growing awareness of investing in small-scale technologies. Rather than one large expensive dam, smaller projects that benefit local communities can be more desirable (see **FIGURE 1**). These are often constructed and maintained by people who benefit directly from control over their own resources, at a minimal cost.

FIGURE 1 Research in India has shown that 10 micro dams with one-hectare catchments will store more water than one dam of 10 hectares.



15.4.2 How can we reduce the need for dams?

As many countries are actually running out of suitable places to locate large dams, we need to find alternatives. **Rainwater harvesting** schemes, as illustrated in **FIGURE 2**, can be used for storing water. **Micro hydro-dams** (see **FIGURE 3**) can be used for generating electricity. Both of these schemes are easier and cheaper to build than large dams, and have lower environmental impacts.

rainwater harvesting t he accumulation and storage of rainwater for reuse before it soaks into underground aquifers

micro hydro-dams d amst hat produce hydro-electric power on a scale serving a small community (less than 10 MW). They usually require minimal construction and have very little environmental impact.

FIGURE 2 Two methods for water harvesting: (a) rainwater tank, (b) groundwater recharging

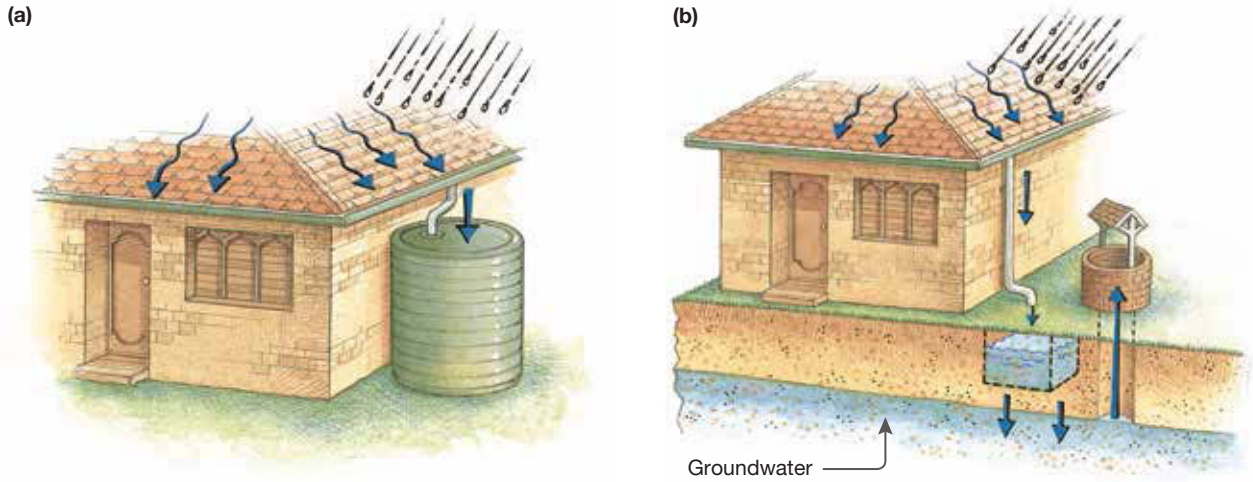
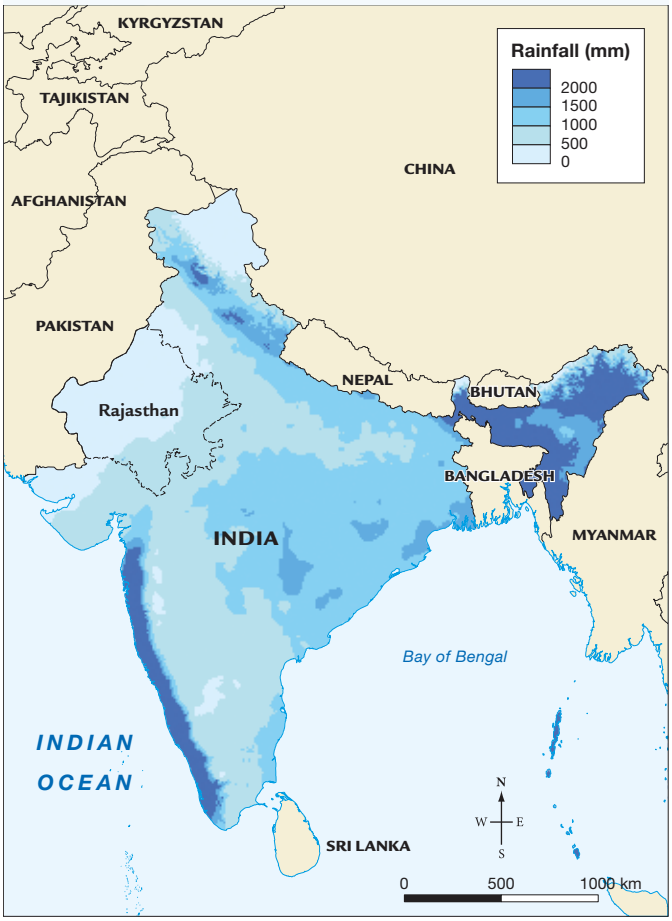


FIGURE 3 Water collected from a stream uphill rushes down the pipe and drives a small turbine in the hut to generate electricity for a local community in the Philippines.



15.4.3 CASE STUDY: Traditional water harvesting in India

FIGURE 4 Distribution of rainfall in India. The state of Rajasthan is outlined.



Source: World Climate, www.worldclim.org. Made with Natural Earth. Map by Spatial Vision.

The state of Rajasthan is located in the arid north-west of India (see **FIGURE 4**). The region has only 1 per cent of the country's surface water and a total **fertility rate** of 2.4, compared to the national average of 2.2 (and to Australia's 1.74). Rajasthan adds more than one million people to its population every year; by comparison, Western Australia added 29 300 people to its population between 2018 and 2019. The largest state in India faces both water scarcity and frequent droughts. Continual pumping of groundwater has seen underground water supplies dropping.

Traditionally forests, grasslands and animals were considered property to be shared by all, local communities managed them carefully with a strict set of rules. Resources were used sustainably to ensure regeneration of plants and trees to enable farming to continue each year. However, by the mid twentieth century, government initiatives had taken control of local resources and promoted excessive mining and logging in the area. Large-scale deforestation resulted in severe land degradation, which increased the frequency of flash floods and droughts. There was little motivation for villages to maintain traditional water systems, or *johads*, and so there was a gradual decline in people's economic and social wellbeing.

fertility rate the average number of children born per woman

In 1985, aid agency Tarun Bharat Sangh (TBS) set about trying to re-establish traditional water management practices. The basic principle is to capture, hold and store rainfall whenever it occurs, to then be used during dry periods. TBS focused its attention on constructing and repairing some 10 000 johads in over 1000 villages. Johads are often small, dirt embankments that collect rainwater and allow it to soak into the soil and recharge groundwater **aquifers** (see **FIGURE 5**).

Another johad design features small concrete dams across gullies that would seasonally flood, trapping the water and allowing it to infiltrate. Water, stored in aquifers, can later be withdrawn when needed via wells. The benefits have been remarkable, with the estimated average cost around only US$2, or 100 rupees, per person. This is compared to over 10 000 rupees per head for water from the Narmada River Dam Project.

FIGURE 5 A johad or traditional small water harvesting dam in India



What have been the benefits?

Environmental benefits

- Groundwater has risen from depths ranging 10–120 metres up to 3–13 metres below the surface.
- Five rivers that flowed only after the monsoon season now flow all year (fed by **base flow**).
- Revegetation and agroforestry schemes have increased forest cover from 7 to 40 per cent, which helps improve the soil's ability to hold water and reduce evaporation and erosion.
- The area under single cropping (one crop grown per year) has increased from 11 to 70 per cent and the area under double cropping (two crops per year) has increased from 3 to 50 per cent.
- The water is shared among the villagers, and farmers are not allowed to use it to grow water-thirsty crops.

Social benefits

- More than 700 000 people across Rajasthan have benefited from improved access to water for household and farming use.
- There has been a revival of traditional cultural practices in constructing and maintaining johads.
- The role of the village council (Gram Sabha) is promoted for encouraging community participation and social justice.
- With a more reliable water supply, communities have become more economically viable.

aquifers layers of porous rock that can hold large quantities of water in the pore spaces

base flow water entering a stream from groundwater seepage, usually through the banks and bed of the stream

15.4 ACTIVITIES

1. Complete the **Water harvesting** worksheet to learn more about traditional water harvesting schemes.
   HASS skills: Analysing, Evaluating
2. Investigate the different methods of irrigating crops, such as flood, furrow and drip irrigation.
   a. What are the advantages and disadvantages of each in terms of water use and waste?
   b. Which irrigation method would:
      i. be the most economically viable
      ii. have the most environmental benefit?

   HASS skills: Analysing, Evaluating
   Geography concept: Environment

15.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 6, 8	Questions 2, 4, 7	Questions 5, 9, 10

Check your understanding

1. Explain how water can be wasted through poor farming methods.
2. List two advantages and two disadvantages of micro hydro-dams (refer to **FIGURE 3**).
3. Refer to **FIGURE 4**. Describe the distribution of rainfall in Rajasthan.
4. Suggest one environmental, one social and one political factor that has contributed to the decline in water availability in Rajasthan.
5. What have been the benefits of revegetation schemes around the villages restoring johads?

Apply your understanding

6. The two goals of sustainable water management are to reduce the demand for water, and to use existing water more efficiently. Propose two methods that your family could use to meet these goals.
7. Study the information in **FIGURE 4**. Explain why Rajasthan has water issues. Use data in your answer.
8. Some places in India can receive up to 2500 mm of rainfall per year, but this can all fall in 100 hours. Suggest possible consequences of this for local communities.
9. Have small-scale water management schemes in Rajasthan been successful? Why or why not?
10. Do you think the johad method of water harvesting could be used in other places around the world? Give reasons for your answer.

For sample responses to every question, go to www.jacplus.com.au.

15.5 Using our groundwater reserves

LEARNING INTENTION

By the end of this subtopic you will be able to:

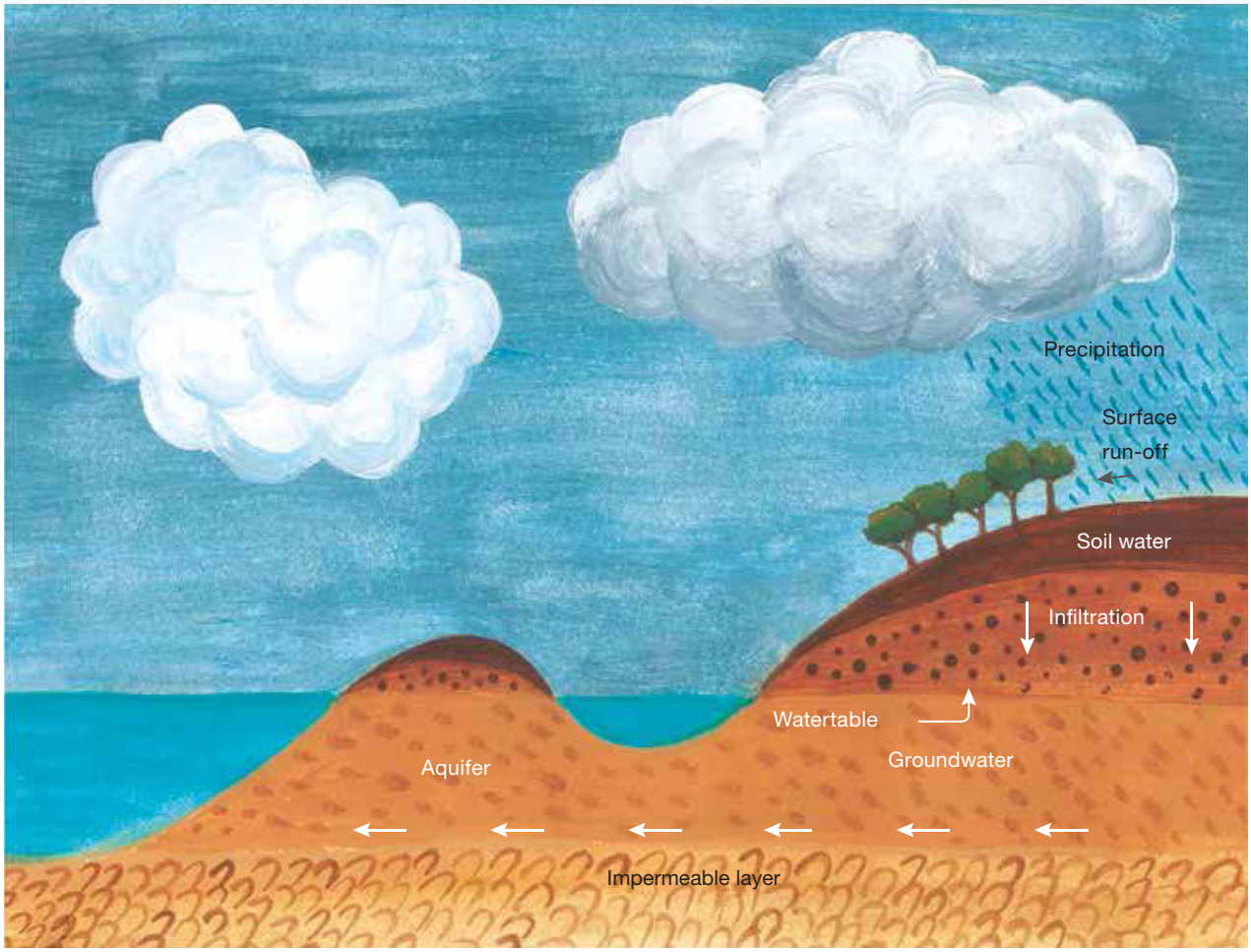
- explain what groundwater is and evaluate its importance
- discuss the issue of groundwater depletion in China
- identify how it is being tackled.

15.5.1 What is groundwater?

Of all the fresh water in the world not locked up in ice sheets and glaciers, less than 1 per cent is available for us to use — and most of that is groundwater. More than two billion people use groundwater, making it the single most used natural resource in the world. It is also the most reliable of all water sources. Fresh water stored deep underground is essential for life on Earth.

Groundwater is one of the invisible parts of the water cycle, as it lies beneath our feet. Rainfall that does not run off the surface or fill rivers, lakes and oceans will gradually seep into the ground. **FIGURE 1** shows where groundwater is stored in porous rock layers called aquifers. Water is able to move through these aquifers and can be stored for thousands of years. Unlike most other natural resources, groundwater is found everywhere throughout the world.

FIGURE 1 Diagram showing how groundwater is naturally replenished



15.5.2 What are the advantages of using groundwater?

Since the mid twentieth century, advances in drilling and pumping technology have provided people with an alternative to surface water for meeting increasing water demands. Groundwater has many advantages.

- It can be cleaner than surface water.
- It is less subject to seasonal variation and there is less waste through evaporation.
- It requires less and cheaper infrastructure for pumping as opposed to dam construction.
- It has enabled large-scale irrigated farming to take place.
- In arid and semi-arid places, groundwater has become a more reliable water supply, which has led to improved water and food security.

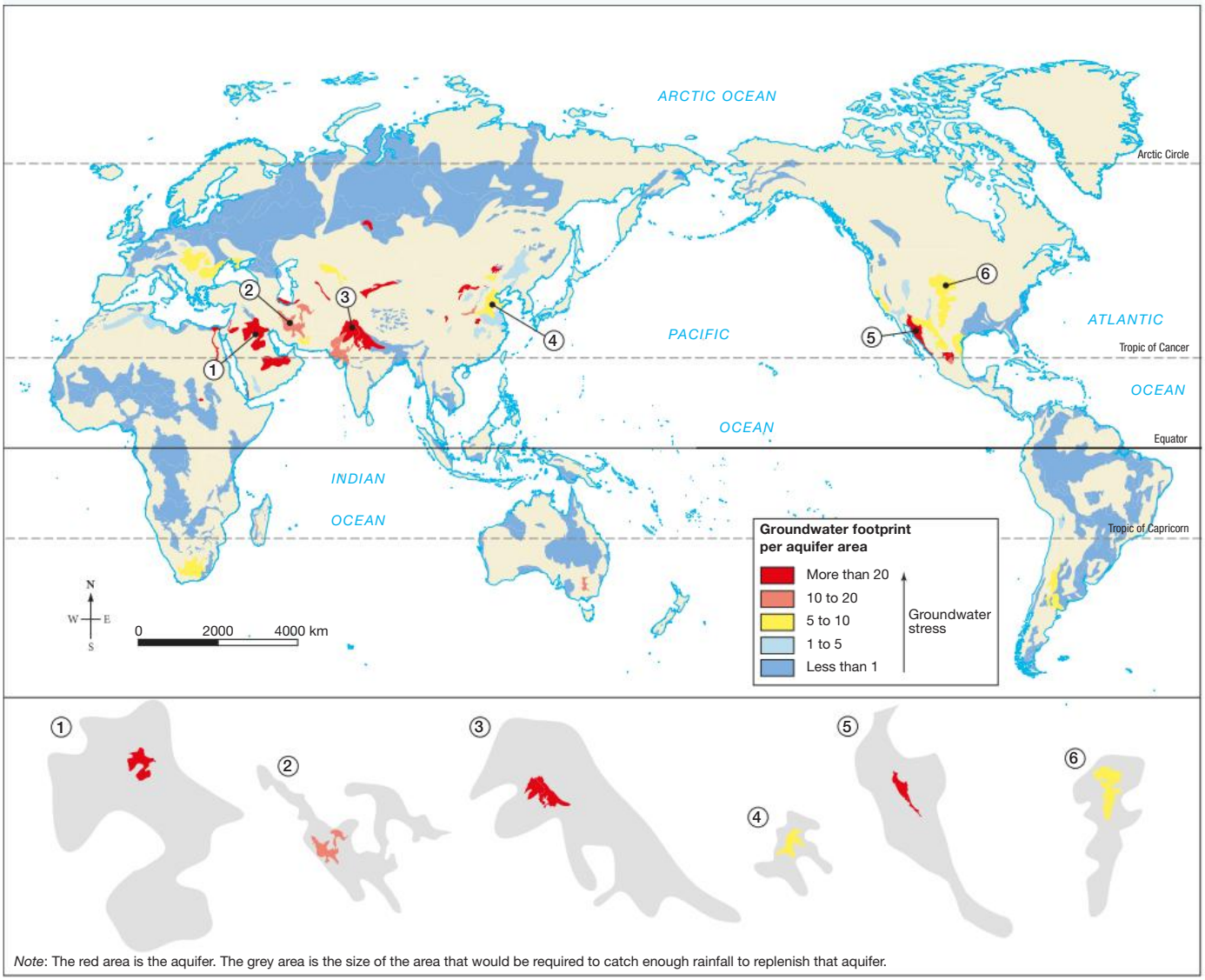
If groundwater is removed unsustainably, that is, at a rate that is greater than is being replenished naturally by rainfall, run-off or underground flow, then **watertables** drop and it becomes harder and more expensive to pump. In areas of low rainfall there is very little **recharge** of groundwater so it may take thousands of years to replace. Over-extraction of groundwater can result in wells running dry, less water seeping into rivers and even land **subsidence** or sinking. **FIGURE 2** identifies those places in the world most at risk of groundwater depletion. Many of these are important food bowls for the world.

watertable upper level of groundwater; the level below which the earth is saturated with water

recharge the process by which groundwater is replenished by the slow movement of water down through soil and rock layers

subsidence the gradual sinking of landforms to a lower level as a result of earth movements, mining operations or over-withdrawal of water

FIGURE 2 The world's use of groundwater



Note: The red area is the aquifer. The grey area is the size of the area that would be required to catch enough rainfall to replenish that aquifer.

Source: BGR & UNESCO 2008: Groundwater Resources of the World 1:25 000 000. Hannover, Paris. Map by Spatial Vision.

15.5.3 Can we improve our use of groundwater?

In the past, we had limited knowledge of the interconnection between groundwater and surface water. As agriculture is the biggest user of groundwater, any improved efficiencies in water use can reduce the demand to pump more water. Improved irrigation methods and the reuse of treated effluent water are all methods that could reduce our unsustainable use of groundwater. Many countries share aquifers, so pumping in one place can affect water supplies in another. There is a need for more international cooperation and management of the aquifer as a single shared resource.

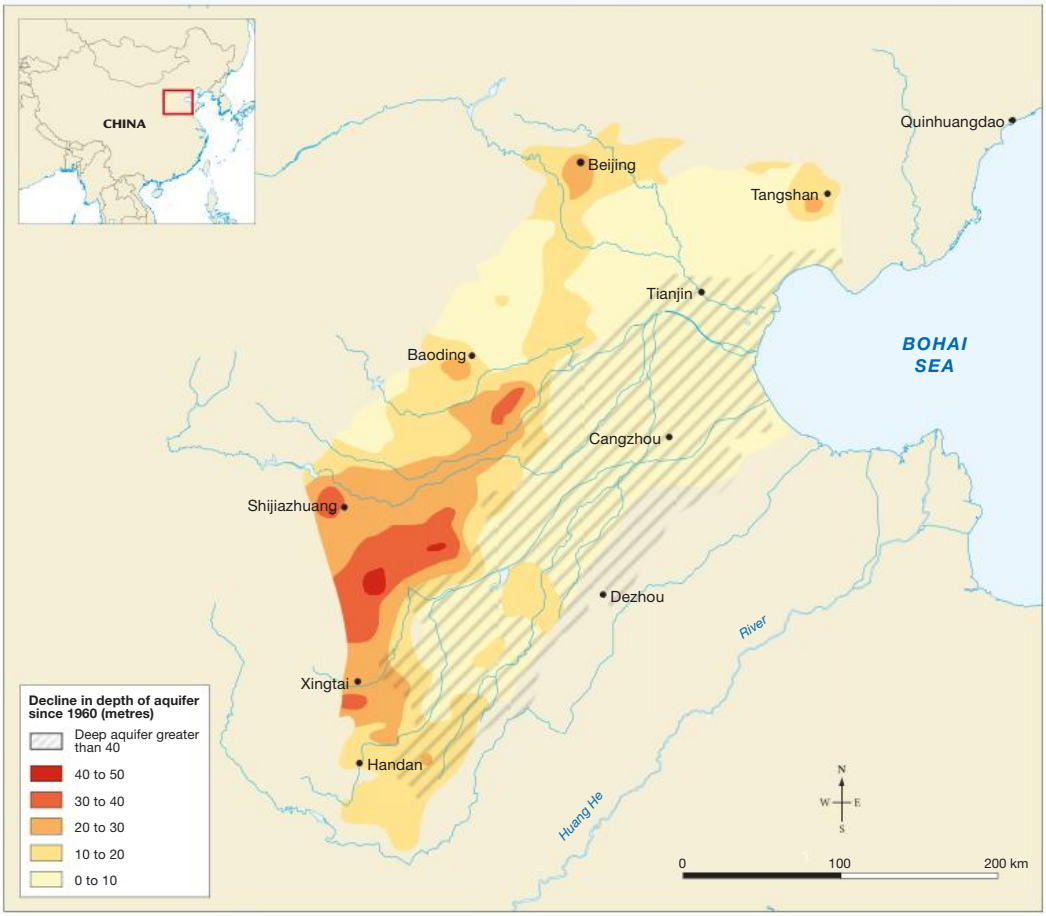
15.5.4 CASE STUDY: Why is China drying up?

What is happening to groundwater in China?

What do you do if you don't have access to a reliable water source? You do what hundreds of millions of people do around the world every day. You dig for it. Beneath our feet lie vast quantities of fresh water that may have taken thousands of years to slowly work its way deep into rock layers. Since ancient times, people have used groundwater to provide for their water needs.

Rapid growth in both population and irrigated agriculture, combined with increasing demand for water, has seen the increased pumping of groundwater in northern China. As a consequence, the watertable around Beijing has been dropping by 5 metres per year. Groundwater supplies more than 70 per cent of the water needs for over 100 million people living on the North China Plain (see **FIGURE 3**).

FIGURE 3 Decline in the aquifer under the North China Plain



Source: UNEP Global Environmental Alert Service GEAS. Map by Spatial Vision.

The northern regions of China receive only 20 per cent of the country's rainfall. The southern regions, home to about half the population, receive the other 80 per cent. Eleven provinces in the north have less than 100 cubic metres of water per person per year, which officially classifies these places as being 'water stressed'. Eight other provinces in the north have less than 500 cubic metres of water per person per year. To date, management of water resources has been poor and unsustainable. The emphasis has always been on meeting an increasing demand for water using large-scale engineering 'fixes', rather than looking at ways of using water more efficiently, slowing down demand by increasing the cost, reducing irrigation wastage and improving the catchment areas to recharge the aquifers.

After extensive flooding in the 1960s, the government set about building dams and canals to reduce flood impacts and provide water to rapidly growing cities. Farmers were encouraged to increase grain production by drawing on groundwater to irrigate a second crop each year. As cities continued to expand, they too began to pump unsustainable amounts of groundwater for domestic and industrial use. Scientists now also believe that climate change has reduced rainfall in the region, which will only make the situation worse.

The South–North Water Transfer Project

In 2002, an ambitious 50-year project was started to effectively 're-plumb' the country: the South–North Water Transfer Project. At an estimated cost of US$62 billion, over 44.8 billion cubic metres of water per year will be

diverted north from the Yangtze River via three canals into the Huang He River Basin in the north of the country (see **FIGURE 4**). Before the transfer project development, the Yangtze River, on average, released 960 billion cubic litres of fresh water into the sea each year. Construction of the central and eastern sections has been completed, but the western route is still being planned. The completed central section now supplies 73 per cent of the Beijing's tap water, to provide for its population of 21.5 million people. The water transfer has reduced the exploitation of groundwater by 800 million cubic metres. As the extra surface water filters into the ground, the watertable has started to rise, with levels increasing by around half a metre.

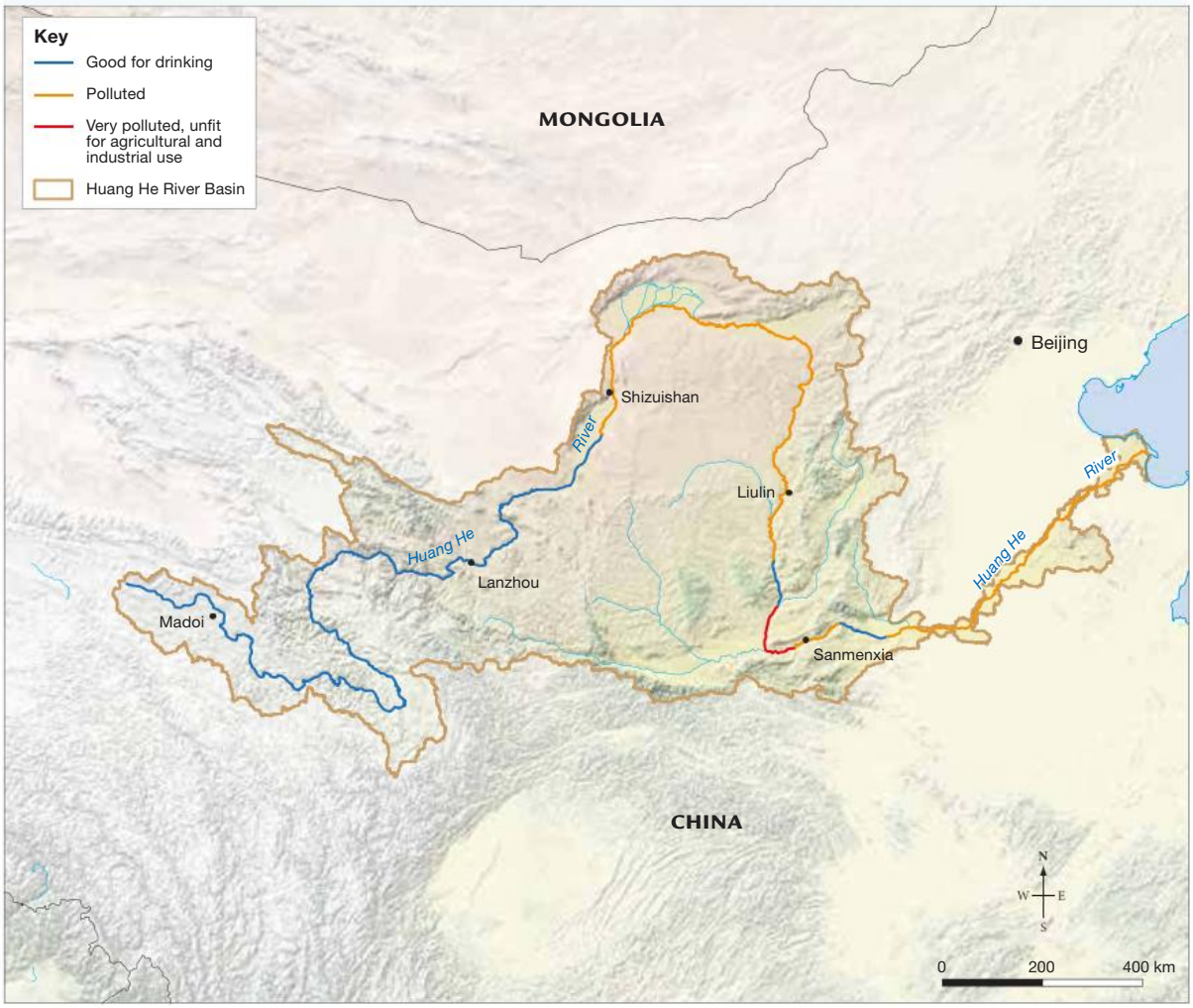
FIGURE 4 South–North Water Transfer Project for transfer of water from the Yangzte River in the south to the Huang He River in the north



Source: BBC News, http://news.bbc.co.uk/2/hi/8545321.stm.

The project's water will largely go to expanding industries and cities such as Beijing and Tianjin. Little of the water will be directed towards food production. Irrespective of the cost and relocation of hundreds of thousands of people, the biggest ongoing concerns of the scheme will be about water quality. The Huang He River collects over 4.29 billion tonnes of waste and sewage each year (see **FIGURE 5**), and over 40 per cent of China's total waste water is dumped in the Yangtze River (see **FIGURE 6**). These figures are likely to increase as more and more industry moves close to new water sources. With less water to flow downstream, there will be less water available to dilute the polluted water. This will affect river environments and it is possible that the water reaching the north will be too contaminated for human or even agricultural use.

FIGURE 5 Levels of pollution along the Huang He River



Source: Map by Spatial Vision.

FIGURE 6 Polluted water flows into the Yangtze River.



The government has pushed hard to maintain water quality for the Danjiangkou Reservoir and its canal system (see **FIGURE 4**), spending over $3 billion on wastewater management and soil and water conservation systems. The most controversial strategy has been to ban two high-polluting industries from practising in the catchment: cage aquaculture (fish farming) and turmeric (a yellow spice) processing. While this may reduce polluted run-off it will also affect the livelihoods of hundreds of thousands of people who work in these industries.

The South–North Water Transfer Project is by far the most ambitious water transfer project in the world, in all taking 50 years and potentially well over the initial US$62 billion estimated cost to construct a network of pipes, canals and tunnels that would stretch in a straight line from Melbourne to Fiji. Is it sustainable? Beijing consumes more than 3.6 billion cubic metres of water each year, supplied partially by its own traditional surface and groundwater sources and, increasingly, by the transfer scheme. Predictions are that its needs will soon outstrip the new scheme's capacity to supply. Scientists are already questioning the 'big scheme' approach rather than the use of water recycling, desalination and harvesting more rainwater as more environmentally friendly and sustainable methods of supplying water.

on Resources

Interactivity That sinking feeling (int-3293)

15.5 ACTIVITIES

1. Using an atlas, find a map of world food production and compare this with any three places from **FIGURE 2** in section 15.5.2. Conduct research to determine:
   a. what types of food are produced in those regions of the world where watertables are severely depleted
   b. what the future implications are for sustainable food production in these regions.

   HASS skills: Questioning and researching
   Geography concept: Scale
2. Complete the **Water transfer** worksheet to learn more about the South–North Water Transfer Project.

   HASS skills: Questioning and researching

15.5 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 6, 7	Questions 2, 3, 8, 9	Questions 4, 5, 10

Check your understanding

1. What are the advantages and disadvantages of using groundwater for domestic and agricultural purposes?
2. Refer to **FIGURE 1**.
   a. What is the difference between groundwater and the watertable?
   b. Describe how water can move vertically and horizontally through the ground.
   c. What is the interconnection between atmospheric, surface and groundwater?
3. Refer to **FIGURE 2**. Describe the location of places in the world that have the highest groundwater stress. (You may wish to refer to your atlas.)
4. Looking at **FIGURE 2**, compare the scale of the selected aquifers with the scale of the area needed to recharge them.
5. Using **FIGURE 3**, describe the location of the North China Plain. Use distance, direction and place names in your answer.

Apply your understanding

6. Refer to **FIGURE 4**. Suggest a reason why northern China uses groundwater to supply over 70 per cent of its water needs.
7. Suggest possible sources for the pollution you can see entering the river in **FIGURE 6**.
8. Is the South–North Water Transfer Project a realistic solution for China's water issues? Is a human-centred rather than Earth-centred viewpoint the best option for water management in northern China? Write a paragraph outlining your views.
9. There is often talk about transferring water from the wetter regions of northern Australia to the water-hungry regions further south. What would you need to know before planning a project similar to the one in China? Thinking geographically, write a list of ten questions to consider before designing such a project.
10. Who owns groundwater? How can we manage the resource sustainably? Write a paragraph expressing your viewpoint.

For sample responses to every question, go to www.jacplus.com.au.

15.6 The impacts of drainage and diversion

LEARNING INTENTION

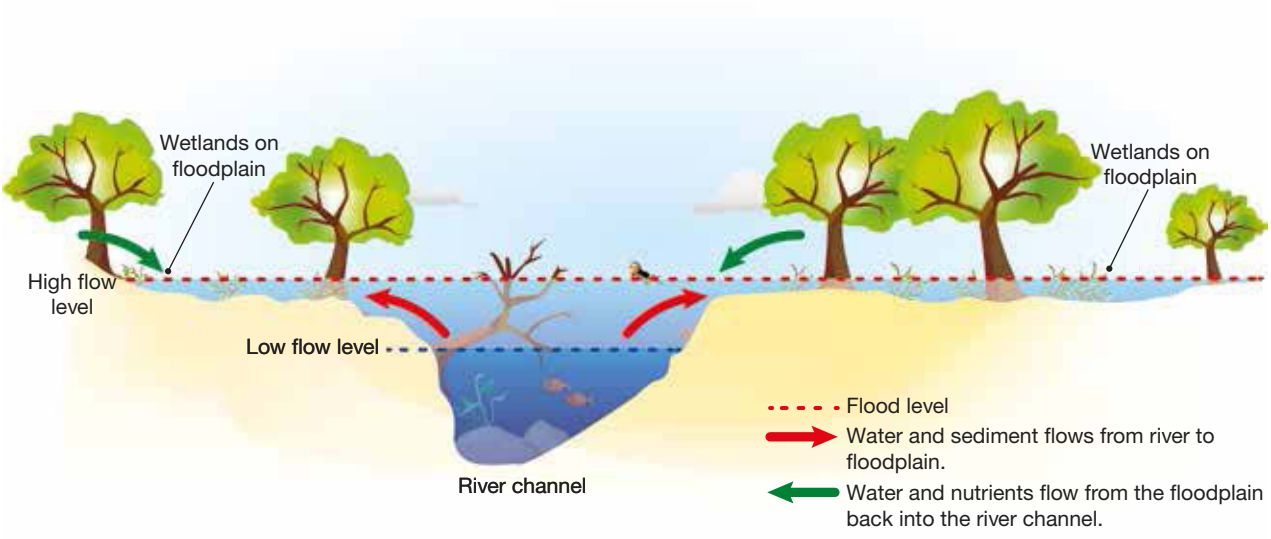
By the end of this subtopic you will be able to:

- describe the importance of wetlands
- explain the environmental changes brought about by draining and diverting water
- work with a topographic map (of Wentworth, NSW)
- analyse a case study (of Lake Urmia in Iran).

15.6.1 What are wetlands?

Often referred to as the area where 'earth and water meet', wetlands are one of the most important and valuable biomes in the world. As discussed in subtopic 15.2, wetlands are areas that are covered by water permanently, seasonally or ephemerally and can include fresh, salty and brackish waters. They include such things as ponds, bogs, swamps, marshes, rice paddies and coastal lagoons. Wetlands are intricately connected to other elements in the landscape, especially rivers and floodplains as water, nutrients and sediments move between them (see **FIGURE 1**).

FIGURE 1 Interconnections between the river and wetlands on the floodplain



The importance of wetlands

Wetlands perform many important functions. They purify water; for example, much of Melbourne's sewage water is filtered through a series of lagoons and wetlands at the Western Treatment Plant in Werribee, producing high-quality recycled water. Wetlands located along river floodplains reduce the impact and speed of floods by holding vast quantities of flood water and then slowly releasing it back into the river system. Water in wetlands also infiltrates the soil, recharging groundwater reserves. In addition, wetlands provide habitat and breeding grounds for 40 per cent of the world's species, such as aquatic fish, insects, reptiles and birds. Globally, more than one billion people rely on wetlands for a living, for their water and food supply, and for tourism and recreation (see **FIGURE 2**).

FIGURE 2 A wetland in Queensland. What features in this image are typical of a wetland?



15.6.2 What are the threats to wetlands?

The degradation and loss of wetlands and the species that inhabit them, have been more rapid than for any other ecosystem; in fact, they are disappearing three times faster than forests. It has been estimated that between 1970 and 2015, the world lost 35 per cent of its wetlands. Competition from other land uses and increasing populations have contributed to the decline.

- Agricultural expansion is the largest contributor to wetland loss and degradation globally. Farming often requires the draining of wetlands to create more land, reducing biodiversity. In addition, the water run-off from agriculture is often polluted with fertilisers and pesticides and increased pumping from aquifers depletes groundwater resources.
- Dams alter seasonal floods and block supply of sediment and nutrients onto the floodplain and deltas. Often, damming means little water and sediment reaches the mouths and deltas of large rivers.
- Loss of wetlands affects populations and the migratory patterns of birds and fish. The introduction of invasive species results in changed ecosystems and loss of biodiversity. For example, 70 per cent of amphibian species are affected by habitat loss.

- Clearing for urban growth, industry, roads and other land uses replaces wetlands with hard **impervious** surfaces, which reduces infiltration and leads to polluted run-off and increased impacts of flooding.
- While wetlands can naturally filter many pollutants, excessive amounts of fertilisers and sewage causes algal blooms and **eutrophication**, depriving aquatic plants and animals of light and oxygen.
- Climate change is expected to increase the rate of wetland degradation and loss.

Wetlands, like all other water resources are prone to over-exploitation and need to be managed carefully to ensure sustainable use.

15.6.3 Why is water diverted?

Because populations and water sources are distributed unevenly, we often need to transfer or divert large amounts of water. This means piping or pumping water from one drainage basin to another; for example, in Australia, water from the Snowy River is diverted into the Murray and Murrumbidgee rivers. Diverting water can alleviate water shortages and allows for the development of irrigation and the production of hydro-electricity. Diversions, however, are not always the most sustainable use of water resources.

Many of the world's greatest lakes are shrinking, and large rivers such as the Colorado, Rio Grande, Indus, Ganges, Nile and Murray discharge very little water into the sea for months and even years at a time. Up to one-third of the world's major rivers and lakes are drying up, and the groundwater wells for three billion people are being affected. The overuse and diversion of water is largely to blame.

impervious a rock layer that does not allow water to move through it due to a lack of cracks and fissures

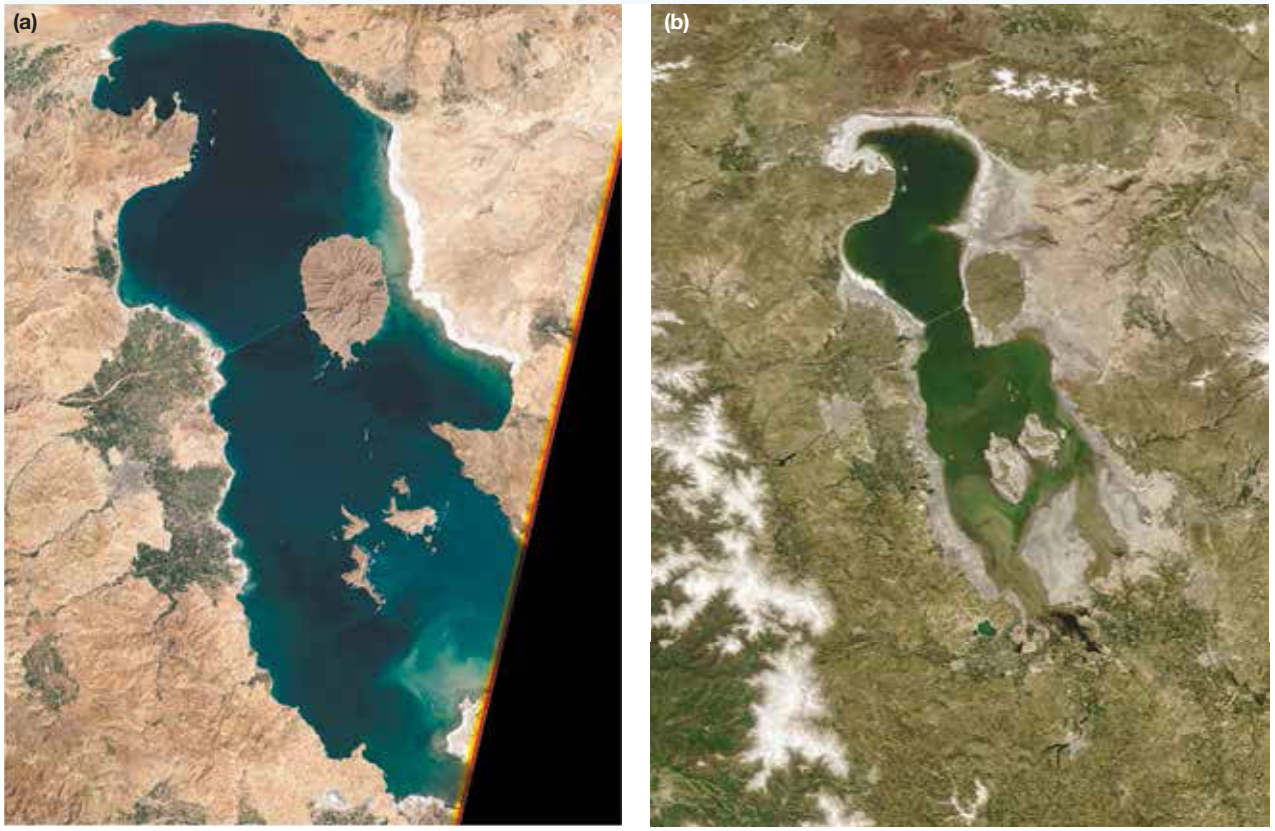
eutrophication a process where water bodies receive excess nutrients that stimulate excessive plant growth

15.6.4 CASE STUDY: A dying lake in Iran

The largest lake in the Middle East and one of the largest salt lakes in the world is drying up. Since the 1970s, Lake Urmia in northern Iran has shrunk by nearly 90 per cent. In 1998, the lake's volume was 30 billion cubic metres; by 2016, this had reduced to 2 billion cubic metres, exposing extensive areas of salt flats (see **FIGURE 3**).

int-7960

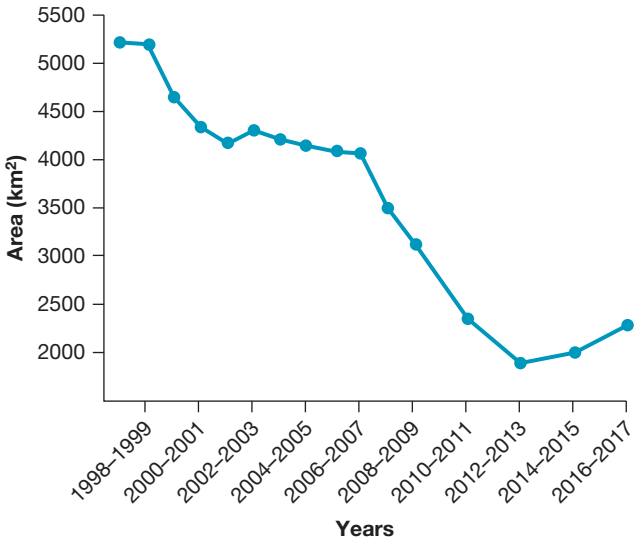
FIGURE 3 Lake Urmia (a) in 1998 and (b) in 2016



The lake was declared a Wetland of International Importance by the Ramsar Convention in 1971, and a UNESCO Biosphere Reserve in 1976. The lake and its surrounding wetlands serve as a seasonal habitat and feeding ground for migratory birds that feed on the lake's shrimp. This shrimp is the only thing, other than plankton, that can live in the salty water.

Lake Urmia is a **terminal lake**; the rivers that flow into the lake (some permanent and some ephemeral) bring naturally occurring salts. Because of the arid climate, high evaporation causes salt crystals to build up around the shoreline. **FIGURE 4** shows the rapid decline in the surface area of Lake Urmia from 2006 to 2013 and a slight increase from 2013 to 2017.

FIGURE 4 Surface area of Lake Urmia



Why did the lake dry up?

A combination of environmental, economic and social factors has been blamed for the large-scale changes in Lake Urmia. Prolonged drought and the illegal withdrawal of water by farmers who do not pay or who take more than their allocation are minor contributors to the problem.

Researchers have found that 60 per cent of the decline can be attributed to climate changes (increased frequency of drought and higher temperatures) and 40 per cent of the decline relates to water diversions and the increased demand for water in the region as the population has risen and the area under agriculture has tripled. The result is a form of 'socioeconomic drought' — a human-induced drought caused when the demand for water is greater than the available supply.

Impacts of this drought include:

- increased salinity of the shallow lake due to high evaporation (rates of between 600 mm and 1000 mm per year) and reduced freshwater flowing in via rivers (salt levels have increased from 160 g/L to 330 g/L)
- collapse of the lake's ecosystem and food chain (salt levels over 320 g/L are fatal to the shrimp that form the basis of its food chain)
- loss of habitat as surrounding wetlands dry up, which then reduces tourism to view wetland wildlife
- over 400 km^2 of exposed lakebed around its shores is nothing but salty deserts, unable to support native vegetation or food crops

FIGURE 5 Distribution of dams, existing and under construction, in the lake's catchment area. This level of diversions is unsustainable.

int-7961



Source: United Nations Environment Programme. Vector Map Level 0 Digital Chart of the World.

terminal lake a lake where the water does not drain into a river or sea. Water can leave only through evaporation, which can increase salt levels in arid regions. Also known as an endorheic lake.

- salt storms occuring, as wind blows salt and dust from the exposed, dry lakebed; the storms damage crops and are also a potential health hazard
- less water available to produce food crops.

The lake is divided in two by a causeway and bridge constructed to improve access across the lake (the bridge can be seen in **FIGURE 3b**). However, there is concern that the nearly 1.5 kilometre-long bridge does not allow sufficient mixing of water between the north and south sections of the lake. The bridge, completed in 2008, is already rusting as a result of the highly saline water.

The current situation

Lake Urmia and its surrounds form an important region supporting a growing population of six million and its associated agricultural industries. Essentially, more water is required to flow into the lake to increase the water level, dilute the salt and maintain an ecological balance.

In 2017, the government pledged an annual budget of US$460 million to help restore the lake and its surrounding wetlands. However, only about US$5 million has actually been available. Other programs in place include:

- a water transfer scheme moving water from the Little Zab basin through tunnels and channels
- engineering works to help clear sediment clogging many of the rivers that feed into the lake
- releasing water from dams to flow into the lake
- constructing 13 treatment plants in the region to treat wastewater from urban areas and deliver it to the lake
- a development plan launched in 2017 to reduce consumption of potable water by 30 per cent by 2021 and to use desalinated water to meet 30 per cent of the water demands in South Iran
- trials of planting vegetation to reduce wind speed and salt storms
- helping farmers by promoting water-saving techniques and planting less water-thirsty crops, such as olives and saffron, instead of water-intensive sugar beet, as 85 per cent of the water in the region is used for agriculture.

In 2018–19 there were heavy rains that caused flooding in the area. The rains were said to be the heaviest in 50 years and the water depth increased by 62 centimetres from the year before. But further progress is needed to ensure the health of the lake and the community it supports and is limited by a lack of funding. In addition, the lake can only support 300 000 hectares of farmland while currently farming uses 680 000 hectares.

on Resources

eWorkbook Wetland mapwork (doc-31791)

Interactivity Wetland wonderlands (int-3294)

15.6 ACTIVITY

Conduct some online research and investigate the decline of either Lake Chad in Africa, Owens Lake in the United States or the Aral Sea on the Kazakhstan–Uzbekistan border. Use the following as a research guide for elements to include in your investigative report:

- location
- original size and appearance of the lake/sea
- original uses of the lake/sea and surrounding area
- causes and rate of decline
- changes that have taken place
- impacts on people and the environment
- possible solutions.

Include annotated images, maps and data where possible.

HASS skills: Questioning and researching, Communicating and reflecting
Geography concept: Change

15.6 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 4, 7, 8	Questions 2, 5, 6, 9	Questions 3, 10

Check your understanding

1. What are wetlands?
2. In what ways are wetlands important?
3. Outline three major threats to wetlands.
4. Why is it sometimes necessary to divert water?
5. Lake Urmia is a terminal lake. What does this mean?

Apply your understanding

6. Explain eutrophication, its causes and the impact it has on wetland biomes.
7. Discuss the advantages and disadvantages of diverting water from one drainage basin to another.
8. Examine **FIGURES 3a** and **b**. Compare the appearance of Lake Urmia in 1998 and 2016.
9. Refer to **FIGURE 4**. Describe, with the use of data, the changes in the surface area of Lake Urmia.
10. Do you think there is a future for Lake Urmia? How successful will the restoration project be? Explain your view using data to support your claims.

For sample responses to every question, go to www.jacplus.com.au.

15.7 Putting water back — managing the Murray–Darling

LEARNING INTENTION

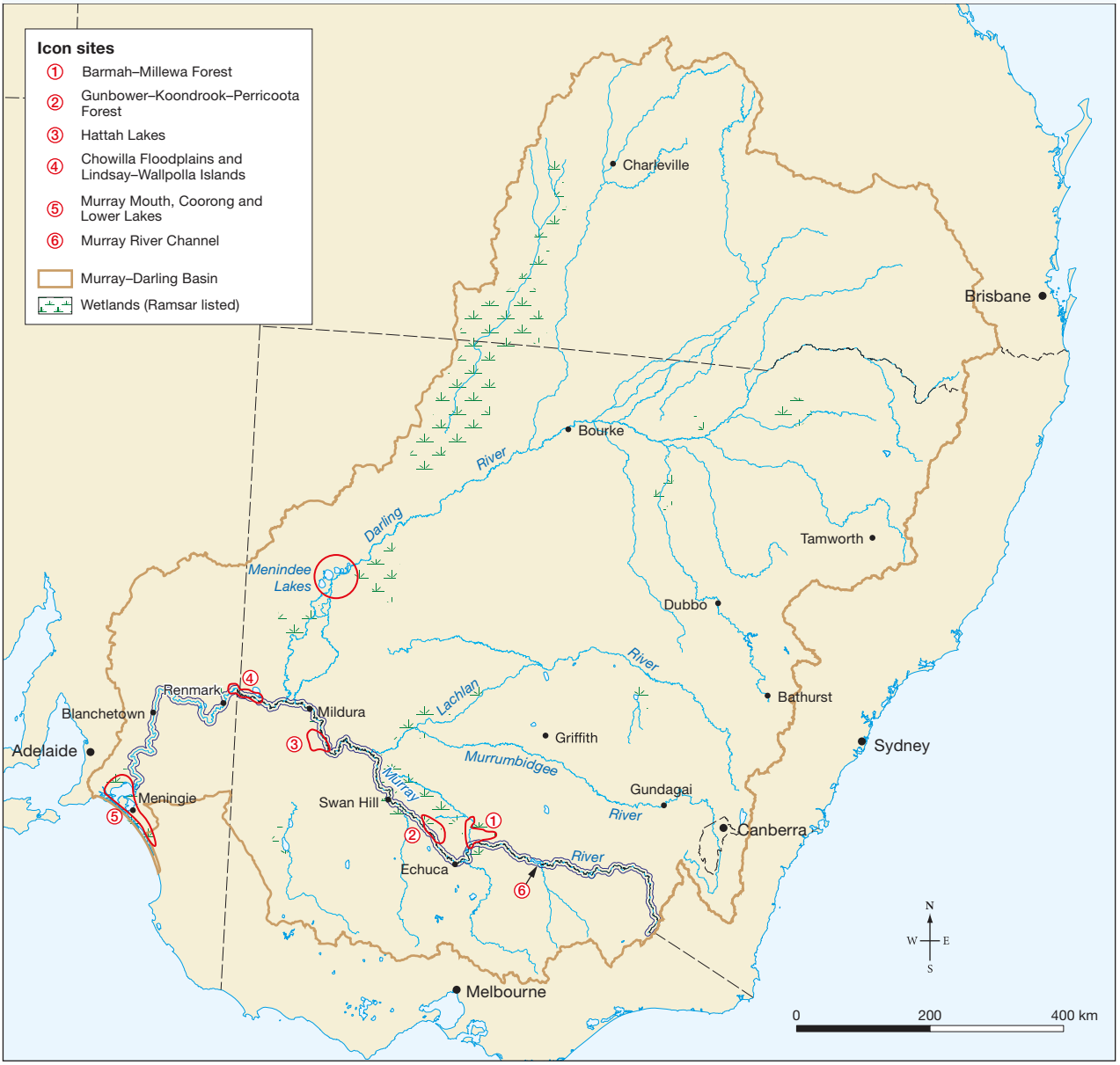
By the end of this subtopic you will be able to explain how the water resources of the Murray–Darling Basin are managed to cater for agricultural, domestic, industrial, recreational and environmental needs, and evaluate strategies to improve the Basin's health.

15.7.1 Where has the water gone?

The rivers, lakes and wetlands of the Murray–Darling Basin (see **FIGURE 1**) make it Australia's most important inland water body. Decades of continually diverting water from its rivers and prolonged periods of drought have brought significant changes to the rivers, surrounding floodplains and surrounding wetlands. The amount of water taken out of the river system has increased five-fold over the past century. In addition, 90 per cent of floodplain wetlands in the Murray–Darling Basin have been lost because of human-induced changes to **river regimes**. The floodplains of the Murray River are now flooded once every 10 to 12 years compared to three to four years out of every five a century ago. Reduced flow has also meant that the mouth of the river blocks regularly, preventing the flushing out of pollutants and affecting the Lower Lakes wetlands.

river regime the pattern of seasonal variation in the volume of a river

FIGURE 1 Key features of the Murray–Darling Basin



Source: © Commonwealth of Australia Geoscience Australia 2013. Murray Darling Basin Commission. Map by Spatial Vision.

15.7.2 Declining river health

One of the difficulties in managing the water resources of the Murray–Darling Basin has been the fact that there are four states and one territory that all use and manage the water in their own way. In the twentieth century, the management of the river switched focus from using the river for transport to expanding agriculture. This period saw a rapid rise in the amount of water withdrawn and a decline in the health of river ecosystems. Consequently, 20 out of 23 catchments within the basin have 'poor' to 'very poor' ecosystem health. Contributing factors include:

- extensive clearing of native vegetation in the catchments
- introduction of exotic weeds and animals
- run-off of pollutants
- draining of wetlands.

In the twenty-first century we are now working towards a more sustainable approach to managing water, with a greater emphasis on balancing the competing needs of the community and river environments. In essence, it means improving the health of the rivers and wetlands and keeping more water in the system.

15.7.3 Attempts to restore the balance

There have been a number of government initiatives put in place over the years to reduce the amount of water being harvested from the river.

- *The Living Murray Program*, whereby, in an effort to try to improve the health of rivers, the Murray–Darling Basin Authority (MDBA) concentrates on maintaining the health of six **icon sites** (see **FIGURE 1**) by providing them with additional water from **environmental flows**. Water 'savings' have to be made elsewhere through improvements in water storage, distribution and irrigation methods. **FIGURE 2** shows the effects of an environmental flow on a stressed wetland.
- *The Basin Plan*, passed into law in 2012, allows the federal government, rather than four states and one territory to be responsible for the overall management of the Murray–Darling Basin. The Plan's aim is to 'increase the amount of water for the environment of the Murray–Darling Basin and ensure sufficient water for all users'. Thus, the Basin Plan aims to balance out social, economic and environmental demands on the water resources across the entire basin. Central to this aim is the need to provide sufficient water for the health of the river first, and then allocate water for other uses. The following were to be implemented to achieve this aim:
  - limits to the amount of water that could be withdrawn from the river system each year — 10 873 GL, compared with 13 623 GL extracted in 2009 (1 gigalitre equals 1000 Olympic-sized swimming pools)
  - a reduction (of between 27 and 45 per cent) in the amount of water allocated to different regions
  - a limit of 3334 GL of groundwater to be withdrawn each year
  - the establishment of an environmental watering plan to restore and protect the river and wetlands.
- Water is being saved through buying back farmer's water entitlements and through improved storage, distribution and irrigation methods. Long term, the goal is to allow sufficient movement of water to keep the mouth of the river open 90 per cent of the time.

icon sites six sites located in the Murray–Darling Basin that are earmarked for environmental flows. They were chosen for their environmental, cultural and international significance.

environmental flows the quantity, quality and timing of water flows required to sustain freshwater ecosystems

FIGURE 2 Wanganella Swamp (Deniliquin, NSW): (a) before, (b) during and (c) after an environmental flow



15.7.4 How is the Basin Plan working?

The Basin Plan was formalised in 2012 but it took until 2017 for all state and federal governments to agree to the terms of how environmental water will be returned to the river system. An additional 450 GL (plus the original 2750 GL stated in the Plan) is to be returned, providing it does not have a negative socioeconomic impact on river communities. It may take up to a decade for people to see large-scale environmental changes from the improved flow. It is extremely difficult for water managers to balance the need for natural river flows while also protecting farmers' water needs and preventing large floods.

Menindee Lakes fish kill

The summer of 2019 saw more than 1 million fish killed by extremely poor water quality in the Menindee Lakes storage system (see **FIGURE 3**). Water levels in the lakes were extremely low and the system had stopped flowing. On average 4000 GL flows into the Barwon–Darling river system and then into the lakes where it can be released to flow downstream into South Australia. The lakes are very shallow and 20 to 30 per cent of the water evaporates each year. Management tries to avoid this by releasing water in a 'use it or lose it' manner.

FIGURE 3 Fish killed at the Menindee Lakes



High temperatures and calm warm water provided ideal conditions for the growth of blue-green algae, which smothered the water surface turning it green. A cold front moved across the region, dropping water temperatures, which served to kill off the algal bloom. The rapid growth of bacteria that feeds off dead algae used all the oxygen in the water, causing the fish to suffocate. Essentially insufficient water was available in the system to provide environmental flow.

Calculating how much water can be diverted from the river system is usually based on 'full rivers'; little planning is done to manage flow in times of drought. Current water licenses are also based on the height of a river. If one person leaves water in the river, the next person downstream can take more.

In 2018, in the wake of ongoing concerns about the management of the basin, a Royal Commission was held to investigate the operations and effectiveness of the Murray–Darling Basin Plan. The Commission report, released in January 2019, contained 111 findings and 44 recommendations to overhaul the Plan, including adjusting the balance between irrigation and environmental flows, to give more water back to the environment. The nearly 750-page report highlighted the complexities and challenges of balancing environmental, social and economic needs in relation to a water source on which millions of people depend.

15.7 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 5, 7	Questions 2, 3, 6, 9	Questions 4, 8, 10

Check your understanding

1. What are the factors that have contributed to the poor health of the Murray–Darling Basin?
2. Describe how the management of water resources has changed over time.
3. Refer to **FIGURE 1**.
   a. What are icon sites and why are they important?
   b. Where are they located?
4. Why is there a need for environmental flows in the Murray–Darling Basin?
5. Compare the three photographs in **FIGURE 2**. Describe the changes in the appearance of the wetland before, during and after an environmental flow.

Apply your understanding

6. Suggest why both the amount and timing of environmental flows is important for a healthy river.
7. What would be one advantage and one disadvantage of the federal government taking control of the management of the Murray–Darling Basin over the individual states?
8. What steps could an irrigation farmer take to adapt to a reduced allocation and more sustainable use of water?
9. Explain how both natural events and human activities contributed to the Menindee Lakes fish kill.
10. Suggest one way that water managers could try to prevent a fish kill occurring again.

For sample responses to every question, go to www.jacplus.com.au.

15.8 Thinking Big research project — Menindee Lakes murder news report

15.8.1 Scenario

During the summer of 2018–19, massive fish kills occurred in the Menindee Lakes in western New South Wales. More than a million native fish died; community outrage ensued.

A 'fish kill' event involves the death of a large number of fish or other aquatic animals (such as crabs or prawns) over a short period of time and often within a defined area.

Such events can occur due to a wide range of factors including:

- natural spawning and migration events
- diseases, including susceptibility to disease due to stress or poor water quality
- low dissolved oxygen, which can be caused by decay of algal blooms, decay of other organic matter, coral spawning, or poor mixing of a water body
- sudden change in water quality, such as salinity, pH, turbidity, dissolved solids or temperature
- contaminants such as hydrogen sulfide, carbon dioxide, ammonia, methane and others, including metals
- physical irritants, such as suspended sediment, algal cells and bacteria that interfere with fish gills
- algal toxins, which are produced by some species under certain conditions.

The Menindee Lakes act as a storage facility for water in the Darling River, part of the extensive Murray–Darling Basin, so the amount of water in the lakes at any one time is actually controlled. There is considerable

controversy and blame-laying over the management of the water in the Darling River, especially between upstream users (particularly those irrigating large cotton farms) and the downstream users of water, which include the city of Broken Hill and farmers and towns all the way to the mouth of the Murray–Darling River in South Australia.

As a reporter for a national news service, you have been sent to the small town of Menindee to investigate the fish kills. What caused this horrifying event and what can be done to stop it happening again? It's your job to uncover the truth!



15.8.2 Task

You will research the Menindee Lakes fish kills and the surrounding controversy to write a front-page investigative report for your news service (print or online edition).

Your front-page report should include:

- a mast head (title of paper), a catchy main headline, several sub-headlines and the author's (your) name
- a location map of the Menindee Lakes in the Murray–Darling Basin (including clear labelling for the lakes, the Darling and the Murray rivers)
- a description of the history and background of the Menindee Lakes
- an explanation of the role of the Menindee Lakes as a water storage facility
- reasons for the 2018—19 fish kills (there are several factors to consider, including environmental and political management)
- environmental, social and economic impacts of the fish kills
- possible improvements in water management that could reduce the occurrence of future fish kills
- one or two images with captions
- viewpoints and quotes from hypothetical interviews with three relevant people (scientists, local townspeople, irrigators, local tourist operators, mayor, fishers, environmentalists) clearly expressing their opinions (***Note:*** This is an important part of the task, which requires you to think about the factors contributing to the fish-kill event and the possible impacts, then to 'put yourself in the shoes' of the three people you will 'interview' to be able to express a realistic viewpoint.)
- a concluding statement
- a bibliography.

15.8.3 Process



- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and, if you wish to, set up your project group so you can work collaboratively. You can complete your news article individually or work with a partner to swap ideas and share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish.
- In the **Media centre** you will find an assessment rubric and some helpful weblinks that will provide a starting point for your research. Make notes of your research and remember to record details of your sources so you can create a bibliography.
- Add your research notes and source details to the relevant topic pages in the Research forum. You can view, share and comment on research findings with your partner.
- Decide on the characters you will 'interview' and formulate their opinions for your quotes.
- Research to find suitable images (include captions) and a location map (with full BOLTSS).
- When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Design or search the internet for a suitable template for a newspaper front page and select an appropriate mast head, main headline and sub-headlines.
- Write the article for the newspaper using sub-headlines to break up your content and to ensure that you cover all tasks. Make sure that data is included.
- Review your finished newspaper front page, carefully checking spelling and grammar. Complete your bibliography, listing details of all sources used.
- Ensure that you have completed all elements of the task and, when satisfied, 'deliver' your paper and your bibliography to your teacher for assessment and feedback.



on Resources

ProjectsPLUS Thinking Big research project — Menindee Lakes murder news report (pro-0213)

15.9 Review

15.9.1 Key knowledge summary

15.2 Wet and wonderful — inland water

- Inland water covers a range of different landforms and environments.
- Water that is stored in rivers, lakes and groundwater provides a wide range of environmental services.
- Changes as a result of human activities can alter the environmental functions of inland water bodies.

15.3 Damming rivers — the pros and cons

- Dams provide many benefits to societies from supplying water and electricity to preventing floods and providing irrigation water.
- At the same time, dams create river fragmentation, displace communities and change river flows.
- Large-scale mega dams have always been associated with economic development and progress.
- Mega dams have had significant environmental and social impacts.
- Globally, there are questions about the economic, social and environmental worth of mega dams.
- Local and environmental groups have challenged the construction of a mega dam, the Belo Monte, in Brazil.
- Partly as a result of the controversy, costs and corruption involved in the dam's construction, the Brazilian government will cease to build mega dams.

15.4 Alternatives to damming

- More attention is now being paid to small-scale, community-based water management schemes.
- Rainwater harvesting schemes and micro hydro-dams are two alternatives.
- Use of traditional small water harvesting dams (*johads*) in India are providing significant benefits – both environmental and social.

15.5 Using our groundwater reserves

- Groundwater is an important section of the watertable used by more than 2 billion people across the world.
- There are many benefits to the use of groundwater, particularly for water and food security.
- It can take up to several thousands of years to replenish groundwater if overused.
- Water availability is unevenly distributed in China with much more water available in the south than the north.
- In China's north, unsustainable use of water is lowering groundwater reserves.
- A large-scale transfer of water from the south to the north of China has been constructed.
- There are many social, economic and environmental impacts from such a scheme.

15.6 The impacts of drainage and diversion

- Wetlands are a very important biome.
- Wetlands are constantly under threat from a range of human activities.
- The overuse and diversion of water is causing over one-third of the world's major surface water supplies to dry up.
- Lake Urmia in Iran is an example of where over-extraction of water led to the decline in the health and size of the lake.
- It is possible to restore Lake Urmia given enough funds and more sustainable farming practices.

15.7 Putting water back — managing the Murray–Darling

- Environmental changes have developed from the overuse of water resources in the Murray–Darling Basin.
- Several government plans have been put in place to provide environmental flows to improve the health of the river, but there are ongoing issues in balancing environmental, economic and social needs.
- Drought and water mismanagement contributed to a major fish kill in the Menindee Lakes.

15.9.2 Key terms

aquifers layers of rock porous that can hold large quantities of water in the pore spaces
base flow water entering a stream from groundwater seepage, usually through the banks and bed of the stream
environmental flows the quantity, quality and timing of water flows required to sustain freshwater ecosystems
environmental impact assessment a tool used to identify the environmental, social and economic impacts, both positive and negative, of a project prior to decision making and construction
ephemeral describes a stream or river that flows only occasionally, usually after heavy rain
eutrophication a process where water bodies receive excess nutrients that stimulate excessive plant growth
fertility rate the average number of children born per woman
flood mitigation managing the effects of floods rather than trying to prevent them altogether
green energy sustainable or alternative energy (e.g. wind, solar and tidal)
groundwater water held underground within water-bearing rocks or aquifers
icon sites six sites located in the Murray–Darling Basin that are earmarked for environmental flows. They were chosen for their environmental, cultural and international significance.
impervious a rock layer that does not allow water to move through it due to a lack of cracks and fissures
infrastructure the basic physical and organisational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society
micro hydro-dams dams that produce hydro-electric power on a scale serving a small community (less than 10 MW). They usually require minimal construction and have very little environmental impact.
perennial describes a stream or river that flows permanently
rainwater harvesting the accumulation and storage of rainwater for reuse before it soaks into underground aquifers
recharge the process by which groundwater is replenished by the slow movement of water down through soil and rock layers
reservoir large natural or artificial lake used to store water, created behind a barrier or dam wall
river fragmentation the interruption of a river's natural flow by dams, withdrawals or transfers
river regime the pattern of seasonal variation in the volume of a river
subsidence the gradual sinking of landforms to a lower level as a result of earth movements, mining operations or over-withdrawal of water
terminal lake a lake where the water does not drain into a river or sea. Water can leave only through evaporation, which can increase salt levels in arid regions. Also known as an endorheic lake.
watertable upper level of groundwater; the level below which the earth is saturated with water
weir wall or dam built across a river channel to raise the level of water behind. This can then be used for gravity-fed irrigation.
wetland an area covered by water permanently, seasonally or ephemerally. They include fresh, salt and brackish waters such as rivers, lakes, rice paddies and areas of marine water, the depth of which at low tide does not exceed 6 metres.

15.9.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

Humans would find life very hard without healthy inland water sources. Are we being careful with how we use and change them?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

on Resources

eWorkbooks Reflection (ewbk-6250)
Crossword (ewbk-6249)
Student Learning Matrix (ewbk-6236)
Interactivity Inland water — dammed, diverted and drained crossword (int-7671)

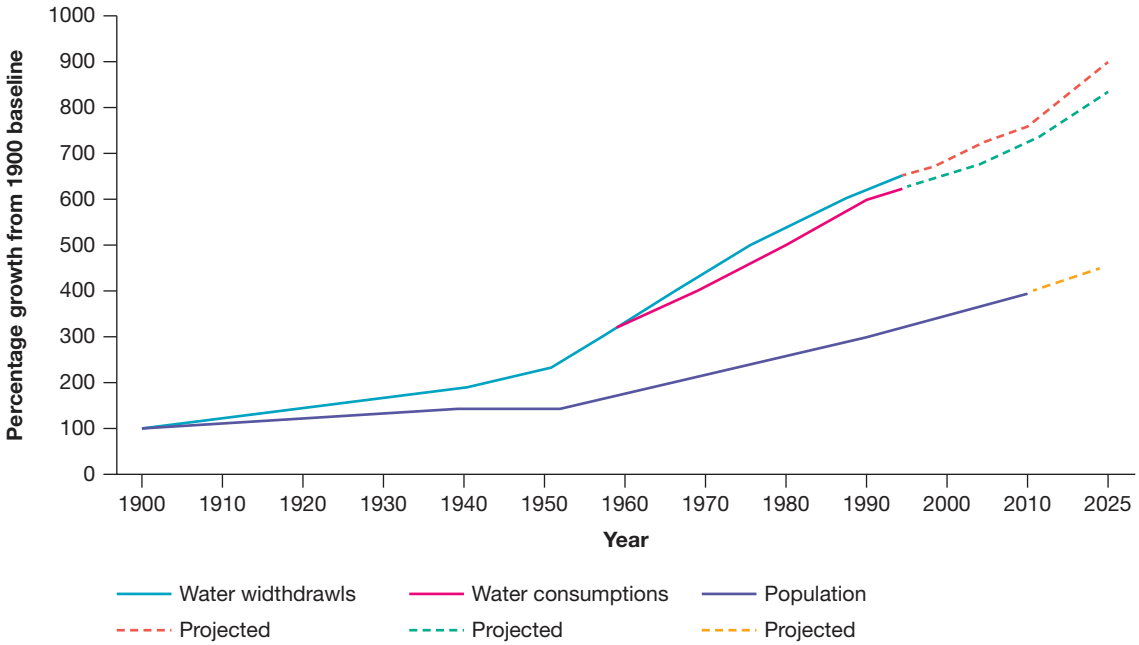
15.9 Review exercise

Multiple choice

1. What is a wetland?
   - **A.** Any water that is not salty
   - **B.** An area covered by water permanently, seasonally or ephemerally, including fresh, salt and brackish waters
   - **C.** An area covered by water permanently, seasonally or ephemerally, but only fresh waters
   - **D.** A tributary flowing from a lake to the ocean

Refer to the graph in* FIGURE 1 *to answer questions 2 and 3.

FIGURE 1 A comparison of the rate of population growth, water consumption and water withdrawals



2. How has the growth in water consumption compared to the growth in world population over time?
   - **A.** Water consumption has increased at a greater rate than population.
   - **B.** Water consumption has increased at a lesser rate than population.
   - **C.** The rate of growth has been the same in both areas.
   - **D.** None of the above

3. Which of the three features shown on the graph shows the greatest rate of increase?
   - **A.** Water consumption
   - **B.** Population
   - **C.** Water withdrawals
   - **D.** None of the above

4. Reservoirs around the world trap more than 2.3 gigatons (1 billion metric tons) of sediment each year. This sediment would normally be washed downstream, some to be deposited on floodplains, some to build up river deltas and the rest washed into the sea.
   Where does the sediment trapped in reservoirs come from?
   - **A.** From soil, sand and other material that is washed off/eroded from land surfaces upstream of the dam
   - **B.** Stirred up from the bottom of the reservoir
   - **C.** Illegally dumped
   - **D.** Created when water evaporates

5. Which *four* locations would sediment normally end up without dams?
   - **A.** On floodplains
   - **B.** On the sea bed
   - **C.** Deposited to form beaches along the coastline
   - **D.** In the mountains
   - **E.** Deposited at the mouth of the river to form deltas and bars

6. What are *two* methods of water harvesting?
   - **A.** Rainwater tank and groundwater recharging
   - **B.** Digging a well
   - **C.** Using a bore
   - **D.** Piping water from urban areas

7. Study the **FIGURE 3** in section 15.6.4.
   Which *four* are changes that have occurred between 1998 and 2016?
   - **A.** Environmental flows have flushed the lake system.
   - **B.** Salt deposits have increased
   - **C.** The lake has shrunk.
   - **D.** Islands in the lake are now surrounded by land.
   - **E.** The lake has expanded in size.
   - **F.** The depth of the lake has decreased.
   - **G.** The lake has deepened.

8. Why do we divert water from rivers and other inland water sources?
   - **A.** For domestic purposes only
   - **B.** For domestic and agricultural purposes only
   - **C.** For industrial purposes only
   - **D.** For domestic, industrial and agricultural purposes
   - **E.** For agricultural purposes only

9. Which *three* options are negative impacts of controlling the flow of rivers on floodplain wetlands?
   - **A.** Flooding would be unlikely to occur.
   - **B.** The reproduction cycle in plants and birds is interrupted.
   - **C.** The river red gums will not drop their seeds.
   - **D.** Only insects will be affected so it doesn't really matter.

10. What are *three* reasons that wetlands are important to migratory birds?
    - **A.** They allow birds of different species to mix.
    - **B.** They provide food, water and shelter for migratory birds.
    - **C.** Breeding pairs from different habitats can mate.
    - **D.** They are important nesting sites.
    - **E.** Many bird species travel flight paths that link one wetland to another.

Short answer

11. The Three Gorges Dam in China is the world's biggest dam complex, but it has been built at great social, economic and environmental cost.
    - **a.** Study **FIGURES 2** and **3**. List as many points as you can think of to describe the changes dam construction has brought to the natural environment.
    - **b.** Refer to **FIGURE 4**. Why is there a need to relocate so many people when constructing a dam? Which province had the most number of people relocated? How many?
    - **c.** Study the information in **FIGURES 2**, **3** and **4**. Construct a table to highlight the benefits and drawbacks of the dam project.

FIGURE 2 Changes to the natural landscape due to the Three Gorges Dam

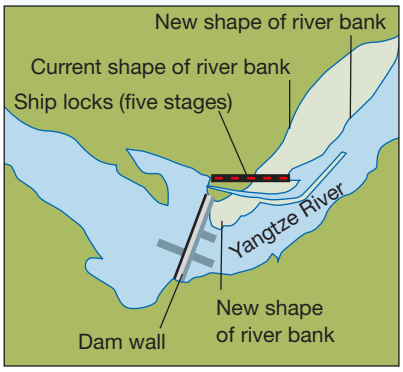


FIGURE 3 Features and benefits of the Three Gorges Dam

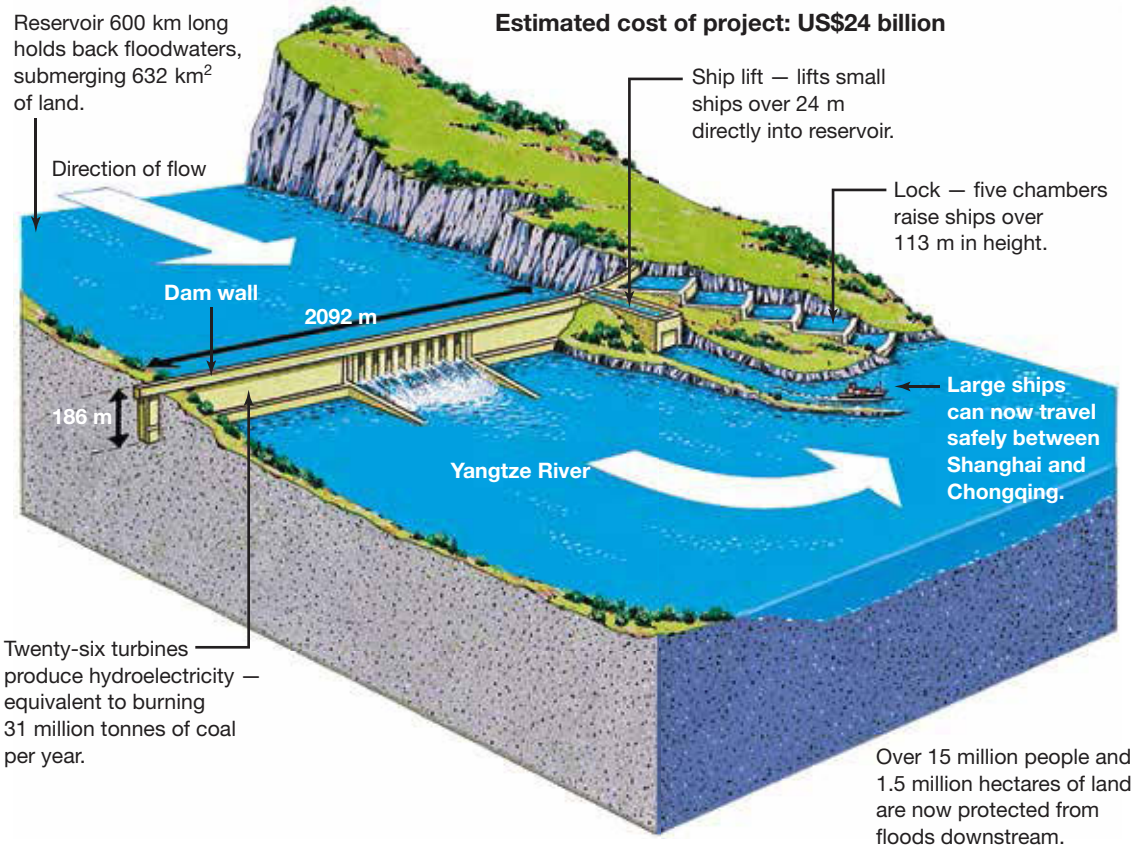
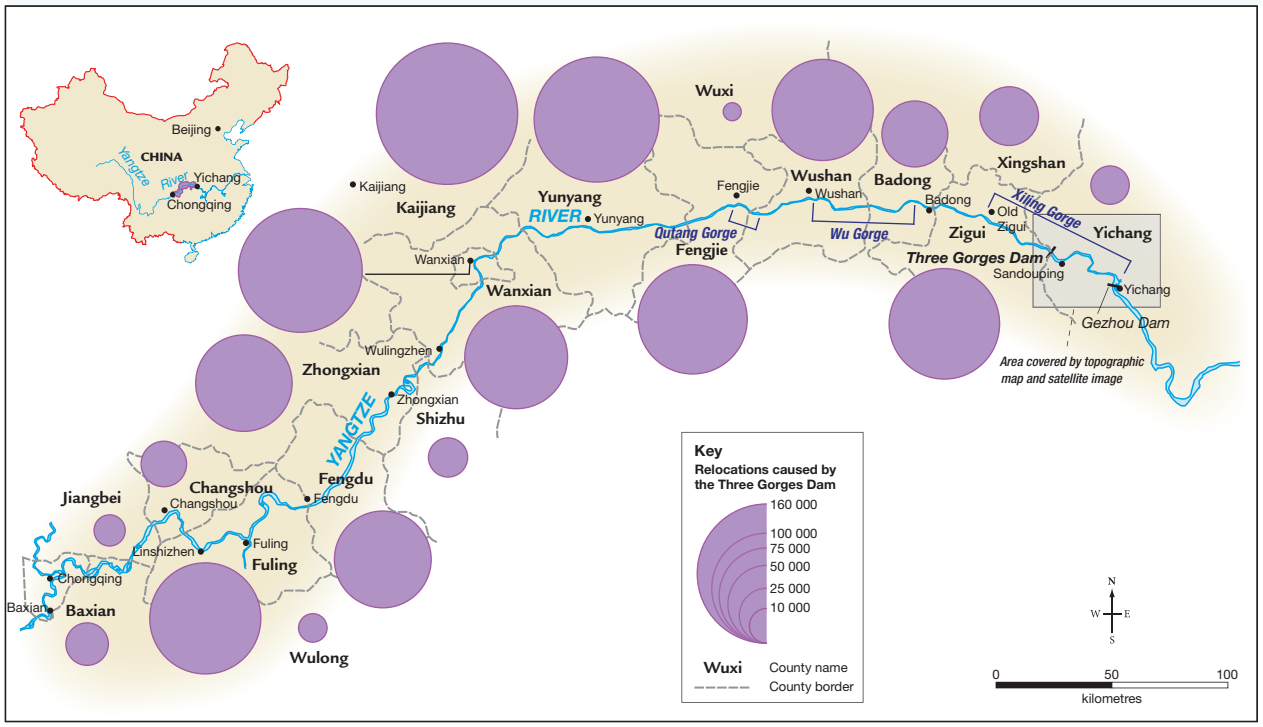


FIGURE 4 Number of people relocated by the Three Gorges Dam



Source: MAPgraphics Pty Ltd, Brisbane

12. Are large dams now a thing of the past? Could large-scale dam projects, such as the Three Gorges Dam, be initiated in Australia? Give reasons for your answer.
13. The construction of the Belo Monte Dam in Brazil displaced thousands of indigenous people. A local federal prosecutor brought Norte Energia (the company building the dam) to court on charges of 'ethnocide against the indigenous people'. (Ethnocide is the deliberate and systematic destruction of the culture of an ethnic group.)
    a. Suggest an argument to support this case and then a counter-argument to represent an opposing viewpoint.
    b. Which viewpoint do you support? Give reasons.

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 15 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

15.1 Overview

Video eLesson
- Drained away (eles-1709)

15.2 Wet and wonderful — inland water

eWorkbook
- Threats to inland water (ewbk-6237)

15.3 Damming rivers — the pros and cons

eWorkbooks
- Controversial dams (ewbk-6239)
- Are dams worth it? (ewbk-6238)
- Is fighting worth a dam? (ewbk-6241)

Interactivities
- Degree of river fragmentation in the world's major drainage basins (int-7956)
- The advantages and disadvantages of large-scale dams (int-5592)
- Distribution of downstream communities affected by large dams (int-5599)
- Location of the Belo Monte Dam and the related environmental changes (int-7958)
- Dam it (int-3292)

15.4 Alternatives to damming

eWorkbook
- Water harvesting (ewbk-6242)

15.5 Using our groundwater reserves

eWorkbook
- Water transfer (ewbk-6244)
- Saving every drop (ewbk-6240)
- What is groundwater? (ewbk-6243)
- Why is China drying up?(ewbk-6245)

Interactivities
- That sinking feeling (int-3293)

15.6 The impacts of drainage and diversion

eWorkbook
- Wetland mapwork (ewbk-1531
- Using more than we have (ewbk-6246))

Interactivities
- Lake Urmia in 1998 and 2016 (int-7960)
- Distribution of dams, existing and under construction, in Lake Urmia's catchment area (int-7961)
- Wetland wonderlands (int-3294)

15.8 Thinking Big research project — Menindee Lakes murder news report

eWorkbooks
- Saving the Murray–Darling (ewbk-6247)
- Upstream, downstream (ewbk-6248)

ProjectsPLUS
- Thinking Big research project — Menindee Lakes murder news report (pro-0213)

15.9 Review

eWorkbooks
- Reflection (ewbk-6250)
- Crossword (ewbk-6249)
- Student Learning Matrix (ewbk-6236)

Interactivity
- Inland water — dammed, diverted and drained crossword (int-7671)

To access these online resources, log on to **www.jacplus.com.au**.

16 Marine environments change and management

online only

16.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

Exactly how much plastic ends up in oceans and waterways, and why should we care if it does?

16.1.1 Introduction

Imagine you are on a beach. You are looking out to sea at the endless, constantly moving mass of water that stretches to the horizon. Why does it move, how does it move, what lies beneath?

Life on Earth would not be possible without our oceans. Humans are interconnected with the oceans, which provide or regulate our water, oxygen, weather, food, minerals and resources. Oceans also provide a surface for transport and trade and a habitat for 80 per cent of all life on Earth. Our oceans are under threat; as we use them to extrac resources and dump waste, we destroy them. This image shows just a tiny fraction of the many thousands of tonnes of marine debris floating at sea. The health of our oceans is at risk. In this topic, we look at this problem in more detail.

on Resources

- **eWorkbook** Customisable worksheets for this topic (ewbk-6269)
- **Video eLesson** Thrown overboard (eles-1711)

FIGURE 1 So much rubbish and marine debris can be found floating in the world's oceans.



16.2 Motion in the ocean

LEARNING INTENTION

By the end of this subtopic you will be able to describe the world's ocean currents and their importance in regulating the planet's temperatures, and explain how they are responsible for the movement of heat, air, nutrients, wildlife and debris.

16.2.1 What are ocean currents?

Why doesn't water at the equator get hotter and hotter, and water at the poles get colder and colder? The answer is ocean currents. Currents are movements of water from one region to another, often over long distances and time periods. Currents effectively interconnect the world's oceans and seas. They are critically important for 'stirring' the waters and transporting heat, oxygen, carbon dioxide, salts, nutrients, sediments and marine creatures.

In January 1992, a ship sailing from Hong Kong to the United States lost a shipping crate containing 28 000 plastic bath toys at sea during a storm. The toys drifted off in the currents, the first ones eventually reaching the Alaskan coast in November of that year. Nearly 30 years later, many are still floating! Tracking these toys has enabled scientists to improve their understanding of ocean currents.

Knowledge of currents is vital for navigation, shipping, search and rescue, and the dispersal of pollutants. The direction that currents take is influenced by a number of factors, including the Earth's rotation, the shape of the sea floor, water temperature, salinity levels and the wind.

16.2.2 Different types of ocean currents

Surface currents

The action of winds blowing over the surface of the water sets up the movement of water in the top 400 metres of the ocean, creating surface currents. These currents flow in a regular pattern, but they can vary in depth, width and speed. Caused by the rotation of the Earth, the **Coriolis force** deflects currents into large circular patterns called gyres, which flow clockwise in the northern hemisphere and anticlockwise in the southern hemisphere (see **FIGURE 1**). Surface currents make up about 10 per cent of water movements in the ocean; deep water currents powered by **thermohaline** circulation make up the other 90 per cent.

Deep water currents

The Global Ocean Conveyor Belt (also known as the Great Ocean Conveyor Belt) is the largest of the thermohaline-driven ocean currents (see **FIGURE 1**). Warm water, which holds less salt and is less dense than cold water, travels from the equator near the surface into higher latitudes. There it loses some of its heat to the atmosphere. The current mixes with colder Arctic waters and this cold salty water becomes more dense and sinks, flowing as a deep ocean current. This creates a continual looping current that moves at a rate of 100 millimetres per second and may take up to 1000 years to complete one loop. The quantity of water moved in the Global Ocean Conveyor Belt is more than 16 times the water volume of all the world's rivers.

Coriolis force force that results from the Earth's rotation. Moving bodies, such as wind and ocean currents, are deflected to the left in the southern hemisphere and to the right in the northern hemisphere.

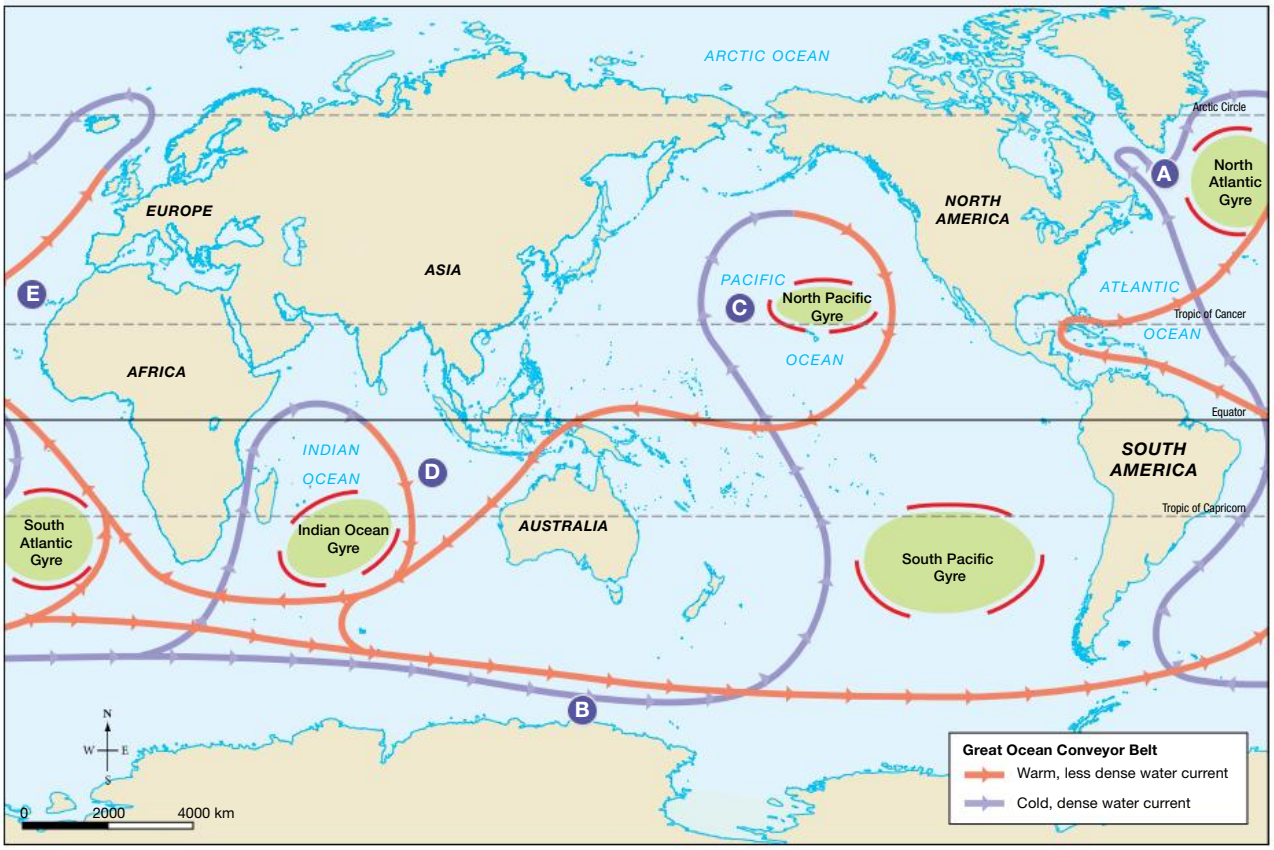
thermohaline relating to the combined influence of temperature and salinity

Upwellings and downwellings

The movement of cold-water currents from the deep sea to the surface is called an upwelling. This is shown in **FIGURE 2a**. Regions where these occur are very productive fishing grounds as the upwellings bring nutrients from the seabed, which provide food for plankton, which are often the start of marine food chains. Over 50 per cent of the world's fish are caught in these areas.

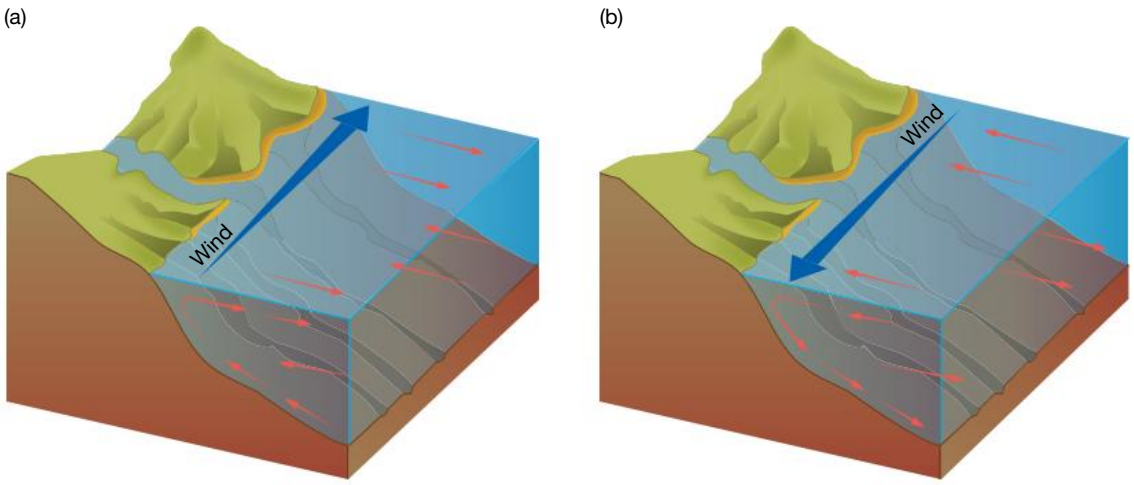
Downwellings, shown in **FIGURE 2b**, occur when currents sink, taking oxygen and carbon dioxide from the atmosphere with them. These currents essentially 'stir up' the water and help distribute heat, gases and nutrients.

FIGURE 1 The Global Ocean Conveyor Belt and the five main ocean gyres



Source: Map by Spatial Vision.

FIGURE 2 (a) Upwelling and (b) downwelling



Resources

Interactivity Motion in the ocean (int-3298)

16.2 ACTIVITY

Research the interconnection between El Niño events and the Humboldt current (cold upwelling) on the west coast of South America. Summarise your findings.

HASS skills: Questioning and researching
Geography concept: Interconnection

16.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 4, 6	Questions 2, 7, 8	Questions 5, 9, 10

Check your understanding

1. Why do ocean currents form? What is the driving force behind surface and thermohaline currents?
2. Why are upwellings and downwellings important for marine environments?
3. Refer to **FIGURE 1**. Describe the location of the five main ocean gyres.
4. What factors influence the direction that ocean currents take?
5. Looking at **FIGURE 1**, how does the Global Ocean Conveyor Belt interconnect the world's oceans?

Apply your understanding

6. Why do you think ocean currents are described as 'conveyor belts'?
7. Suggest what changes might happen to the Global Ocean Conveyor Belt if there was a significant melting of the polar ice caps.
8. Why doesn't water at the equator keep getting hotter and water at the poles keep getting colder? Use your knowledge of currents to write an explanation for a younger student.
9. Refer to **FIGURE 1**. Describe the route taken by the Global Ocean Conveyor Belt. At each of the locations marked A–E, name the ocean, the direction the current is taking, the continent it is passing, and its thermohaline features (warm, cold, higher salt content, lower salt content).
10. Outline the different processes involved in upwellings and downwellings.

For sample responses to every question, go to www.jacplus.com.au.

16.3 Travelling trash — marine pollution and debris

LEARNING INTENTION

By the end of this subtopic you will be able to describe ocean pollution, especially marine debris, and identify its sources, distribution and environmental impacts.

16.3.1 What is marine pollution?

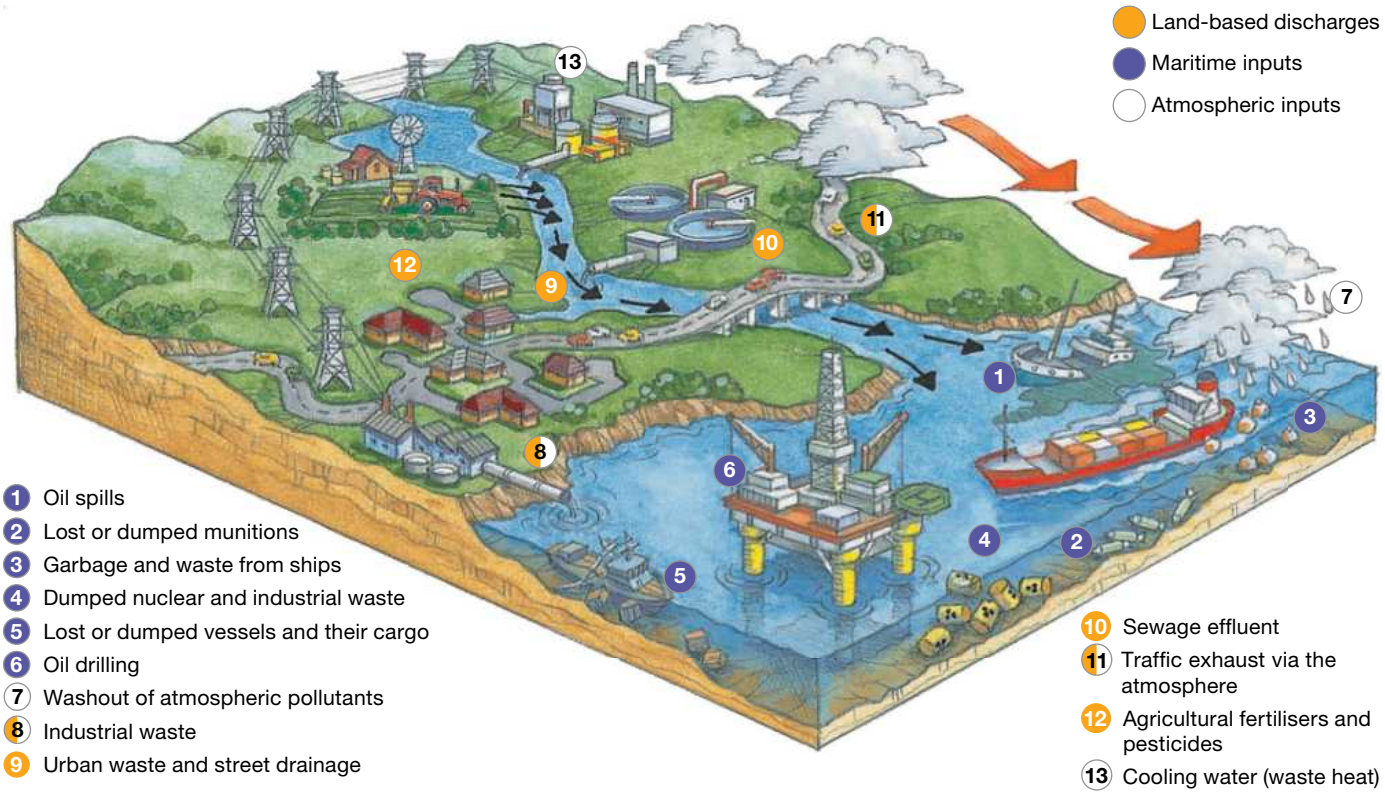
Accidentally or deliberately, the oceans receive millions of tonnes of human-made pollutants each year, which are collected in currents and swirled around the oceans.

Marine pollution is any harmful substance or product that enters the ocean. Most are human pollutants including fertilisers, chemicals, sewage, plastics and other solids, including more than 500 shipping containers per year.

Close to 80 per cent of marine pollutants start off on land and are either washed or deposited into rivers, from where they make their way to the coast. Even industrial air pollution can be returned to the Earth's surface via rainfall (see **FIGURE 1**).

int-5596

FIGURE 1 The sources of marine pollution

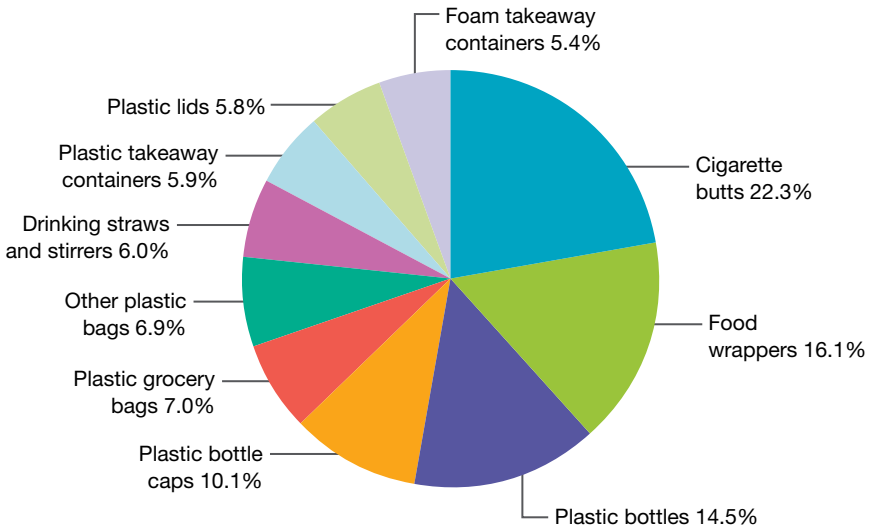


16.3.2 What is marine debris?

What happens to that empty drink can or plastic bag that misses the bin? There's a good chance it might wash down the gutter, into the drain and out to sea, never to be seen again. The world's largest rubbish dump is not on land, it is in the ocean.

Marine debris, the most prolific form of marine pollution, is litter and other solid material that washes or is dumped into the oceans, much of which is plastic (see **FIGURE 2**). The special features of plastic that make it such a useful product — it is light, cheap to produce and disposable — also make it a major problem for the ocean.

FIGURE 2 Top ten marine debris items



Plastics have revolutionised almost every aspect of society; over 320 million tonnes (nearly the weight of the entire human population) are produced each year. On a global scale, less than one-fifth of all plastic is recycled. In Australia in 2018, only 12 per cent was recycled; the rest was either shipped overseas or ended up in landfill. Much is unaccounted for, lost in the environment and eventually washed out to sea, often ending up in the gut or wrapped around the neck of marine creatures, or even buried in Arctic ice.

FIGURE 3 Most marine debris starts off on land. Much of the litter in this creek in the Philippines will end up in the sea.



Researchers estimate that 8 million tonnes of plastic end up in the oceans each year — imagine a garbage truck dumping a load of plastic in the ocean every minute of every day of every year. Some 60 per cent of plastic is less dense than sea water. When washed or dumped into the ocean, the buoyant material is easily moved by wind and surface currents, degraded into smaller and smaller pieces, or finally losing buoyancy and sinking. Surface currents and wind can also move debris back on to the coast, where it can become buried in sand or swept out to sea again. A survey of Australia's coastline found that plastics made up 74 per cent of marine litter.

Unlike most other litter, plastics generally are not biodegradable. The technological features of plastic mean that when it is exposed to constant wind, waves, salt and sunlight, it breaks down into tiny fragments known as microplastics (20–50 microns in diameter, thinner than a human hair), which can float or sink to the seabed. Samples taken from selected sites in the Mediterranean Sea and the Atlantic and Indian Oceans have shown microplastics as deep as 3000 metres and in concentrations 1000 times higher than those found floating on the surface. Microplastics make up 85 per cent of plastic wastes along shorelines.

As well as microplastics we also have microbeads and microfibres. Microbeads are tiny solid plastic fragments, less than 5 mm in diameter, intentionally added to exfoliate and cleanse in rinse-off personal care products such as toothpaste, body wash and cleansers. The beads, as many as 100 000 per shower, flow straight down the bathroom drain and into the sewer. Wastewater treatment plants cannot filter such fine particles and so they ultimately end up out at sea. They are easily ingested by even the smallest sea creatures and are passed up through the food chain. Microbeads are not biodegradable and are impossible to remove from the marine environment.

Synthetic textiles pose a similar problem. When clothes made of microfibres such as lycra, acrylic, polarfleece or nylon are washed, between 600 000 and 17.7 million microfibres per wash are shed and end up in wastewater.

16.3.3 What are ghost nets?

Ghost nets are lost or discarded fishing nets and fishing gear that can drift in the oceans for many years, trapping marine life and sea birds. It is estimated that one tonne of ghost fishing gear is accidently lost or deliberately dumped into the ocean every minute. Nets may be lost because of bad weather, sea conditions, vandalism, or as a result of irresponsible or illegal fishing operations. Discarded fishing gear alone makes up approximately 46 per cent of the plastics found in the Great Pacific Garbage Patch (see section 16.3.4) and is responsible for a large death rate among marine creatures.

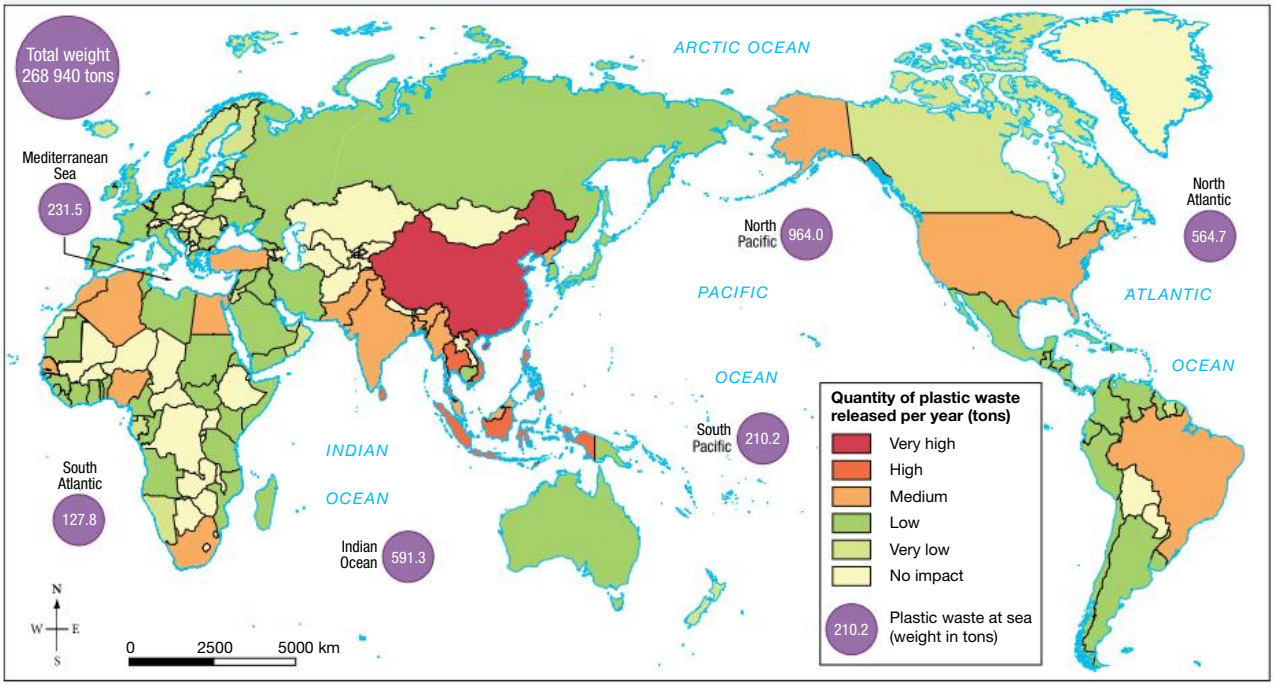
16.3.4 Where do we find the most marine debris?

Marine debris can be found in all oceans and along coastlines, from heavily populated regions such as the Caribbean Sea to the isolated Pitcairn Islands territory in the South Pacific. Here on the tiny uninhabited Henderson Island, more than 3000 kilometres from any major population centre, plastic debris has accumulated at a rate of 671 items per square kilometre of beach.

In 2018, the five countries that produced the most marine plastic were located in Asia (see **FIGURE 4**). Research has also found that 90 per cent of all marine plastic pollution originates from just ten river systems, eight of which are located in Asia (see **FIGURE 5**). These rivers all support high populations in their catchment areas and do not necessarily have the infrastructure to collect, recycle and dispose of plastic waste before it enters the sea.

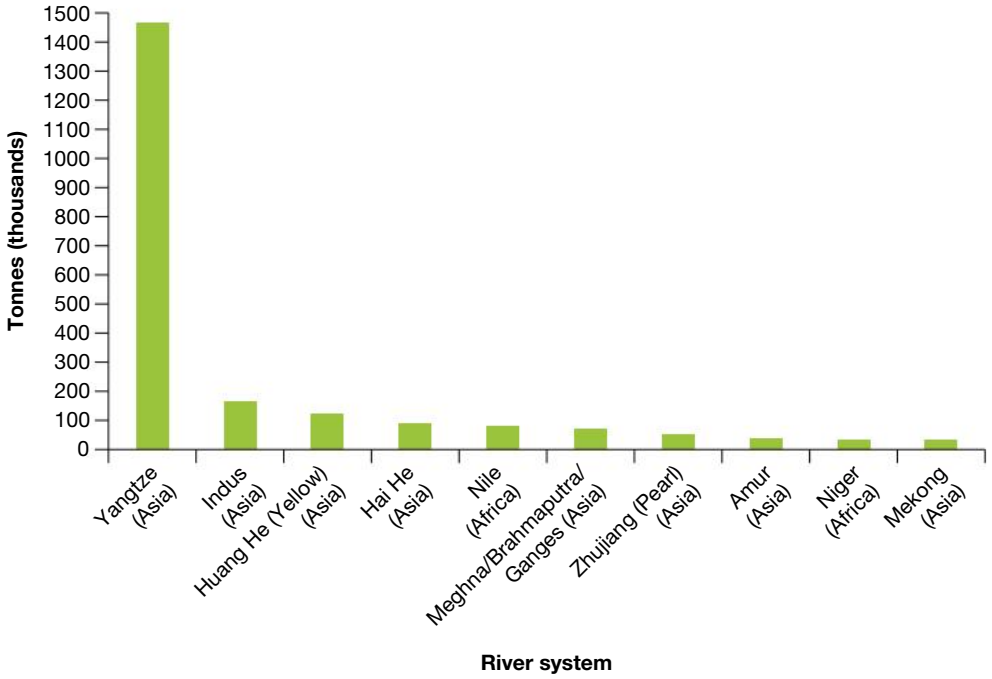
int-7963

FIGURE 4 Quantity of plastic released into the ocean for selected countries



Source: Ministry of Environment & World Economic Forum; Statista.

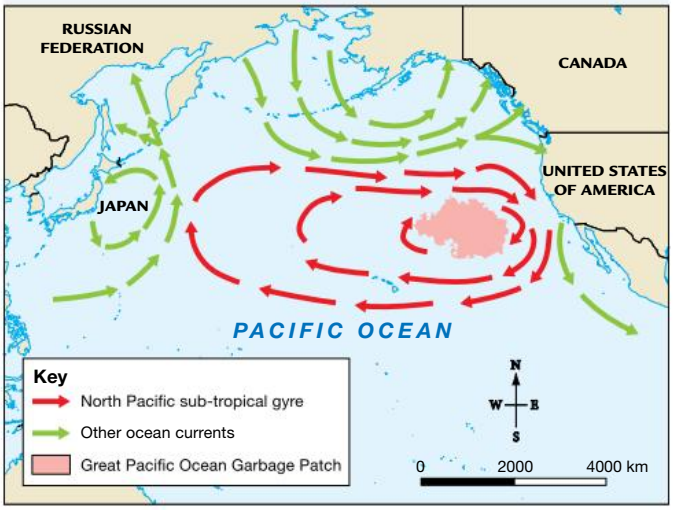
FIGURE 5 River systems producing the most plastic marine litter



The Great Pacific Garbage Patch

A swirling mass of plastic waste, microplastics and other rubbish has been growing in the middle of the North Pacific Ocean, thousands of kilometres from the nearest coastline. Why is it there and how did it get there? Discarded waste from the east coast of Asia and west coast of the United States gets swept up in the North Pacific gyre. Within the marine environment, the slow-moving currents and winds push material into the calmer centre of the gyre, where it accumulates. It can take a year for material to reach the centre of the gyre from Japan and five years from the United States. The accumulation of debris has earned this region the name the 'Great Pacific Garbage Patch' (see **FIGURE 6**). It is the largest of the five offshore plastic accumulation zones in the world's oceans, all corresponding with the major gyres. Very little garbage is visible on the surface; rather, it is a thick soupy mass of minute pieces of plastic, with an average depth of 10 metres. The extent of the patch in 2018 was around 1.6 million square kilometres. This is an area almost three times the size of France. Suspended within the patch are an estimated 1.8 trillion plastic pieces — around 250 pieces for every person on Earth!

FIGURE 6 Location of the Great Pacific Garbage Patch



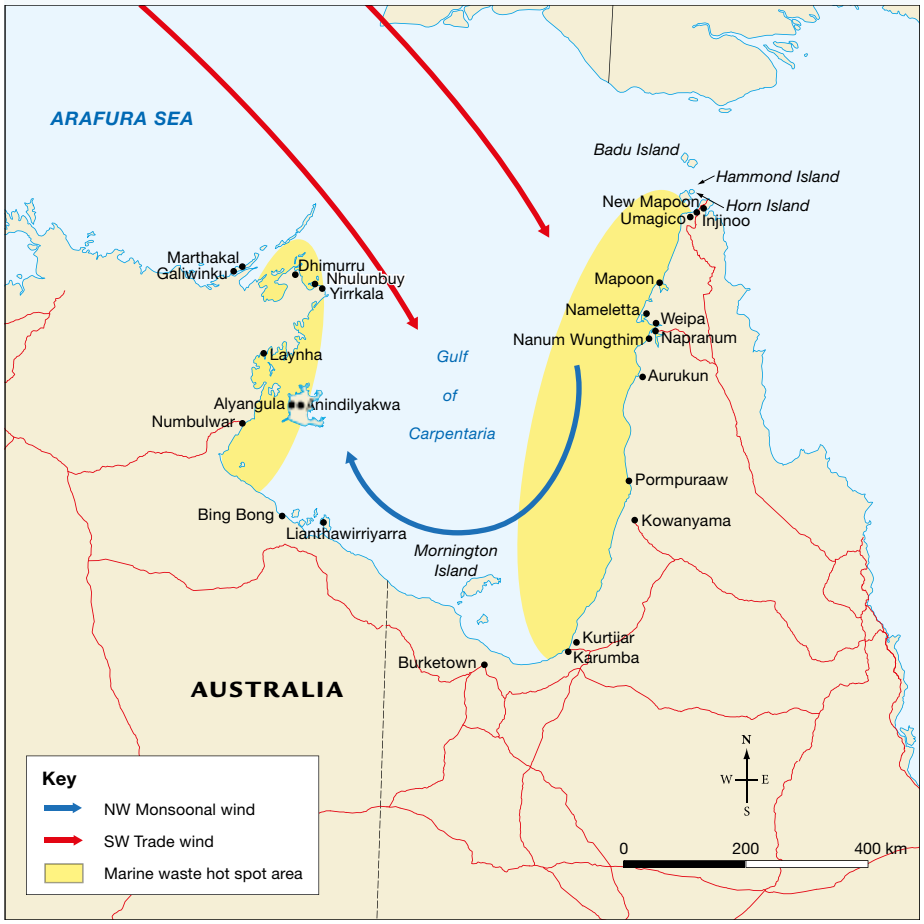
Source: The Ocean Cleanup.

16.3.5 Where are ghost nets a problem around Australia?

Marine debris occurs around all coastlines, including Australia. It is a major problem in northern Australia, particularly in the Gulf of Carpentaria. Here densities of nets can reach up to three tonnes per kilometre per year, among the highest densities in the world. The coastlines in this region are pristine environments and

support six of the world's seven marine turtles. Turtles make up 96 per cent of marine creatures captured in the nets. Over 90 per cent of the debris that collects is derived from the fishing industry, most of it originating from South-East Asia, with the remaining 4 per cent coming from Australia. Most of the nets come from the Arafura Sea, an important fishing ground, especially for the Indonesian fishing industry. More than 62 per cent of the nets are trawling nets — the Arafura Sea being the only region of Indonesian waters where trawling is not banned. Industrial-scale fishing has doubled in this region since 2009. Under the influence of the south-east trade winds and north-west monsoon winds (see **FIGURE 7**), a circular gyre pattern develops, which allows the build-up of ghost nets to develop, similar to the Great Pacific Garbage Patch.

FIGURE 7 Distribution of ghost net hot spots around northern Australia



Source: © Commonwealth of Australia Geoscience Australia 2013. Ghost Nets Australia, www.ghostnets.com.au/index.html.

Further to Australia's north, the Danajon Banks in the Philippines is an extensive reef system habitat that supports a rich marine life. In recent years, overfishing has depleted fish stocks driving fishers to set more fishing nets to increase their chances of a haul. Discarded fishing nets accumulate on beaches, coral reefs and mangrove swamps or drift in large rafts, trapping marine life.

16.3.6 Impacts of marine debris

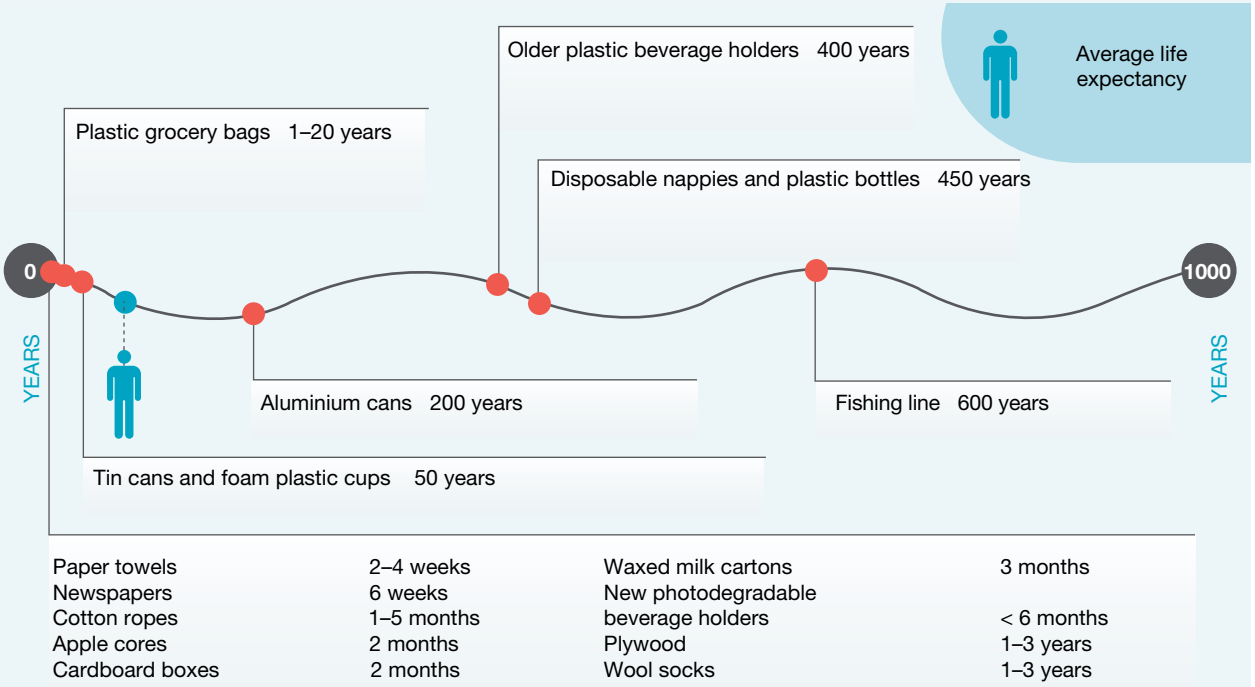
Environmental impacts

FIGURE 8 gives estimates of the length of time some marine debris takes to decompose. Most plastics undergo photodegradation, which happens more slowly in water than on land because of the cooler temperatures and reduced exposure to the sun. As the plastics break down into smaller particles, they 'thicken' the water and can release toxins. If the particles are less than 5 millimetres in diameter, sea creatures can consume them, in turn,

these creatures are eaten by bigger creatures and so on up the food chain. Marine animals such as mussels, which filter seawater, take up the microplastics, which can release toxins into their tissues. Small floating pieces of debris are often mistaken for food and are scooped up by seabirds and fed to their chicks (see **FIGURE 9**).

Plastic pollution is believed to affect at least 800 marine species, with estimates of up to 100 000 marine mammal deaths, including whales, dolphins, porpoises, seals and sea lions, and one million seabird deaths each year. Deaths are mostly caused by eating plastic (see **FIGURE 10**), starvation, suffocation, infection or drowning due to becoming tangled.

FIGURE 8 Time periods for the decomposition of marine litter



Note: Estimated individual item timelines depend on product composition and environmental conditions.

Source: South Carolina Sea Grant Consortium, South Carolina Department of Health and Environmental Control (DFHC) — Ocean and Coastal Resource Management, Centers for Ocean Sciences Education Excellence (COSEE) — Southeast and NOAA 2008.

FIGURE 9 Foreign objects found in the stomach of a seabird. How many different items can you identify?



FIGURE 10 Mistaken for jellyfish floating in the ocean, discarded plastic bags are eaten by hundreds of marine species.



Twelve out of 25 of the most important species of fish for human consumption have been discovered to have consumed microplastics. These tend to lodge in the gut rather than being found in the muscle tissue that humans consume.

Small marine creatures, such as barnacles, which normally spend their lives attached to rock, coral or coconut shells, can 'hitch a ride' on marine debris. The arrival of pest species in new locations can seriously affect ecosystems as they compete with native species for food or habitat.

Impacts on people

While the fishing industry contributes to marine debris, the industry itself is also affected by the litter. A survey in northern Scotland found that 92 per cent of fishers had continual problems with marine debris in their nets, snagging nets on rubbish, and that they avoided some fishing grounds because of their high litter concentrations.

Because of the action of currents, garbage discarded in one country can end up on the beaches of another country thousands of kilometres away. Thus the impacts of marine litter on people are mostly found in coastal regions. Impacts include the rising cost of clearing debris from beaches, loss of tourism revenue, and debris interfering with boating and aquaculture.

DISCUSS

The most effective ways of reducing marine pollution have to start on land. What are our obligations and duties as global citizens to reduce waste and pollution? **General capability: Ethical understanding**

Resources

Interactivity Garbage patch (int-3299)

16.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 5, 6, 7, 9	Questions 2, 3, 4, 10, 11	Questions 8, 12, 13, 14

Check your understanding

1. What are the two biggest contributors to marine pollution across the world's ocean space?
2. Refer to **FIGURE 1**.
   a. Give an example of a pollutant from each of the following sources of marine pollution: (i) atmospheric-based, (ii) land-based, (iii) marine-based.
   b. Which of the three sources makes up the largest component of marine pollution?
3. Refer to **FIGURE 5**. Which river carries the greatest amount of plastic waste, and where is it located?
4. Refer to **FIGURE 2**. How would these items compare to a survey of marine litter conducted 50 years ago? What do you think has changed the most?
5. Refer to **FIGURE 4**. Describe the distribution of those countries that produce medium to high (orange–red) quantities of plastic marine waste.
6. Why are ghost nets a problem in northern Australia?
7. Why are fishing nets an environmental problem?
8. Refer to **FIGURE 7**. On which side of the Gulf would you expect ghost nets to build up:
   a. during the north-west monsoon season
   b. during the south-east trade wind season?

Apply your understanding

9. Explain how a plastic bag discarded after a picnic in Los Angeles can end up in the middle of the Pacific Ocean.
10. Refer to **FIGURE 8**. Compare the decomposition changes for natural materials and man-made materials as seen in this timeline. What does this indicate to the packaging industry and consumers?
11. Is our use of plastic a sustainable practice? Justify your answer.
12. What are the environmental, economic and technological factors that have created the Great Pacific Garbage Patch?
13. What are the environmental changes that rubbish brings to oceans?

For sample responses to every question, go to www.jacplus.com.au.

16.4 Cleaning up our mess

LEARNING INTENTION

By the end of this subtopic you will be able to identify the various ways organisations and community groups are trying to tackle the issue of marine pollution at a range of levels.

16.4.1 Think global …

The way we consume and discard our resources has created one of the biggest environmental challenges in the world. Our throw-away society has literally thrown all our waste into the oceans! Doug Woodring, a co-founder of ocean clean-up charity Project Kaisei, says, 'The water in our oceans is like blood for our planet. If we continue to fill it with toxic materials such as plastic, it will be to the detriment of life on Earth'.

Marine debris might start as a local issue but it can contribute to a global problem as debris may travel great distances from its original source, crossing both geographic and political boundaries. We will only significantly reduce marine debris if we control its land-based sources. Communities and governments need to develop effective waste reduction schemes if we want to manage our oceans sustainably. It has been suggested that if no action is taken, pieces of plastic in the ocean will outnumber fish by 2050! Every year, people around the world use 500 billion disposable plastic bags — around 65 for every person on Earth. On average, a person uses a plastic bag for just 12 minutes, but it may then take many, many years for it to decompose (if ever). The scale of the waste issue is huge.

FIGURE 1 What message is this advertisement sending?



Can't we just scoop it up?

Scooping up marine debris is not as easy as it sounds. Firstly, debris such as that found in the Great Pacific Garbage Patch is constantly moving in response to shifts in winds and currents. Secondly, much of the garbage is in the form of minute particles that become microplastics, suspended beneath the ocean's surface. One organisation, Ocean Cleanup, have developed a device that can be towed by ships into the Patch. The device floats in a large U-shape with an impermeable screen draped beneath large floating arms. The debris can be caught up in the screen, while marine life can swim beneath. Winds and waves propel the device forward at a faster rate than the current-driven debris, allowing for it to be collected. The debris can then be brought back to land for processing, recycling or resale. The project is in its early days, with one ocean trial having

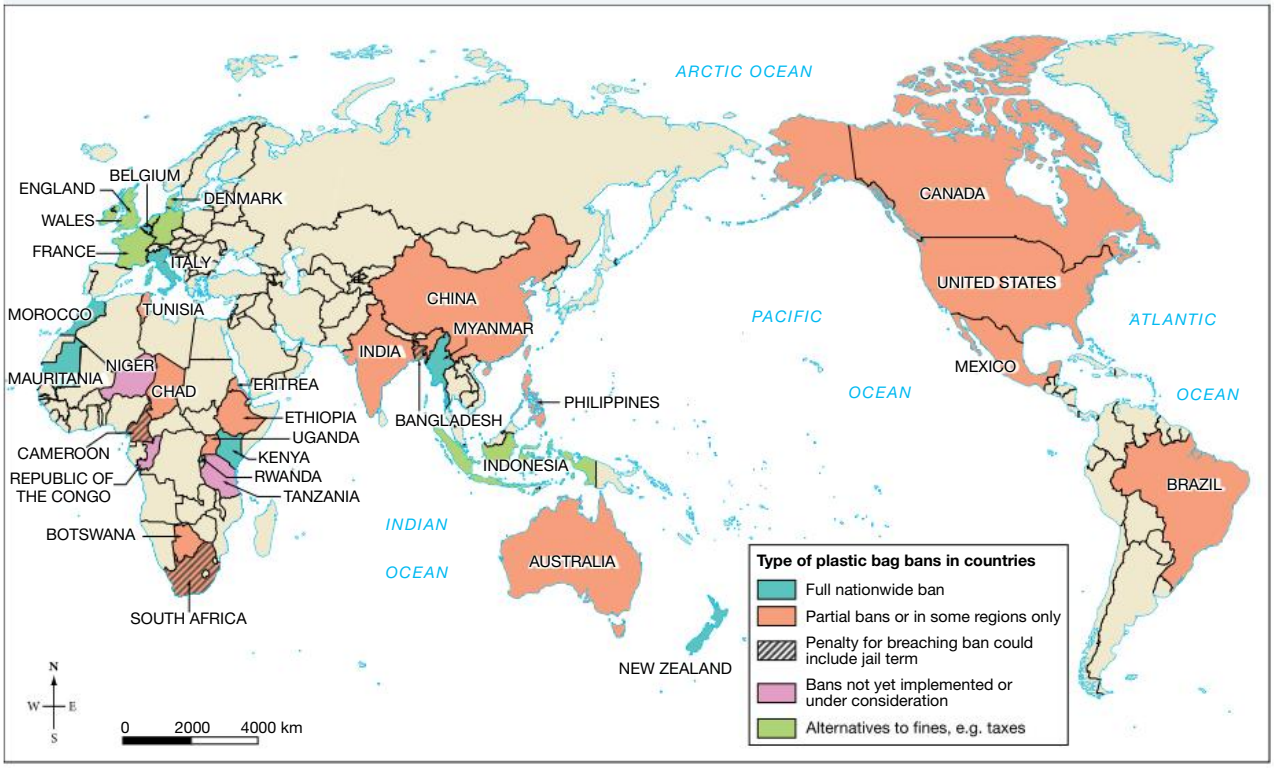
been completed. Lessons learned from the trial will be incorporated in the system's design, with hopes for improved performance to reach their aim of reducing the amount of larger plastic items in the garbage patch by 50 per cent within five years.

What can be done at the national and international scale?

In 2017, 173 countries signed a United Nations resolution to eliminate plastic pollution in the sea, although this has yet to become a legally binding treaty. As seen in **FIGURE 2**, at least 32 countries have already placed bans on single-use plastic bags. When Ireland first introduced a plastic bag levy back in 2002, bag usage dropped by 90 per cent. Kenya has gone to extremes, with fines of US$40 000 for anyone producing, selling, or even just carrying a plastic bag. This has been successful in terms of creating a cleaner environment, but manufacturers and retailers are struggling to adapt and find affordable and environmentally suitable alternatives.

int-7964

FIGURE 2 Plastic bag bans around the world



Source: UNEP; Greenpeace; National governments.

Several countries, such as Britain, Canada, the United States and the Netherlands, have now banned the use of microbeads in many products, particularly body scrubs and toothpaste. Other products such as sunscreens and lipsticks have not been included in the ban.

In 2017, the UN Environment launched the Clean Seas campaign, with the aim of eliminating the major sources of marine litter by 2022. The focus is single-use plastics and microplastics. The campaign urges governments to introduce policies to reduce plastic waste, encourages companies to reduce plastic packaging and asks citizens to change their consumption and waste practices.

International agreements such as the International Convention for the Prevention of Pollution from Ships (known as MARPOL) forbid ships to dispose of plastic into the sea, and they are not allowed to dispose of food waste within 12 nautical miles of land. Although such regulations are an important step in tackling the issue of marine pollution, they are extremely difficult to police and have no impact on the amount of waste entering the ocean from land-based sources. It is worth noting that in 2019, the world's largest cruise line company, Carnival, was fined A$28 million for knowingly discharging plastic and food waste in the Bahamas and grey water in Alaska's Glacier Bay National Park. The company may be further penalised by being banned from entering ports in the United States.

What can communities and organisations do?

Numerous organisations are dedicated to improving our marine environment. These include:

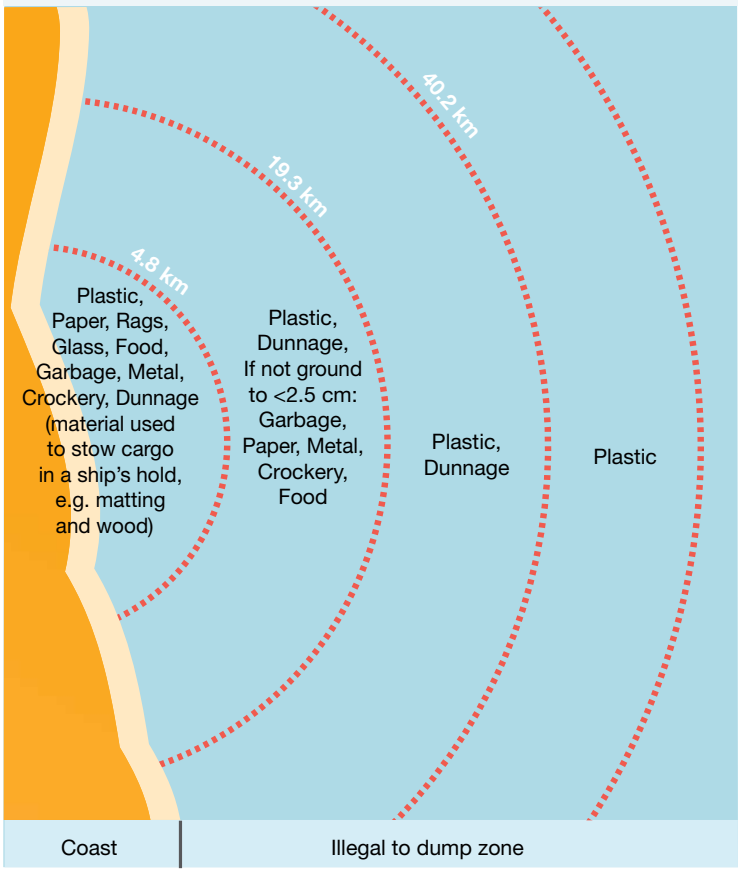
- *Clean Up the World*. Established in 1993, this group works with communities to foster environmental stewardship, through activities such as urban recycling projects, waste recovery, tree planting and habitat restoration projects, education programs, rubbish removal and clean up, and care of marine environment events.
- *Friends of the Earth (FOTE).* As part of their efforts to promote a better and healthier environment by 2030, FOTE promote a 'Plastic Free Friday', where followers join efforts to avoid the use of plastic products for one whole day each week.

FIGURE 3 Thousands of volunteers all around the world participate in Cleanup days in an effort to reduce marine pollution.



- *the Flipflopi expedition*. The founders of this organisation set out to construct a sailing boat ('The Flipflopi') from ten tonnes of collected marine debris (including many thousands of rubber thongs!). They launched the boat in September 2018, with a 500-kilometre trip along the East African coast from Kenya to Tanzania, aiming to show the potential of reused plastic and to raise awareness of plastic marine pollution in a unique way.
- *Greenpeace.* A global organisation that promotes environmental issues, one of Greenpeace's largest campaigns against plastics is a global petition to encourage government action against single-use plastic.
- *International Coastal Cleanup*. Since the late 1980s, volunteers from around the world have participated in Cleanup events — cleaning up and collecting data on debris found along coastlines, lake shores and river banks, to help prevent litter from entering the oceans and to build awareness of the problem of marine pollution. Their 2018 report highlighted the results of global cleanup events held in 2017: across more than 100 countries, 9 285 600 kilograms of waste (a total of 20 824 689 individual items) were collected. The data collected over the years has contributed to new littering laws (see **FIGURE 4** for an example).

FIGURE 4 Marine pollution restrictions in the United States



What can manufacturers do?

In recent years, manufacturers have become much more environmentally aware, with new biodegradable packaging materials and improved recycling methods developed. Several of the large beauty and personal toiletry companies have voluntarily removed plastic microbeads from their products, replacing them with natural, biodegradable 'beads' made from products such as jojoba, coffee, salt and oats.

FIGURE 5 By 2025 all McDonald's packaging will be recyclable or reusable.



Examples of individual progress include:

- McDonald's and Swiss food manufacturer Nestlé have pledged to make all their plastic packaging 100 per cent recyclable or reusable by 2025.
- In 2018, furniture maker IKEA pledged to phase out single-use plastic products from its stores and restaurants by 2020 and is aiming to use only renewable and/or recycled materials in their plastic products by 2030.
- Car manufacturer Volvo has pledged that, from 2025, one-quarter of the plastic used in new cars will come from recycled plastic sources.
- Coca-Cola has created a 'World Without Waste' campaign to address its own contribution to much of the increase in global litter. Coca-Cola has stated that, by 2030, it will recycle a used bottle or can for every new one sold. It has also pledged to increase the amount of recycled content in plastic bottles from 13 to 50 per cent by 2030.

16.4.2 … act local!

What can fishers do?

Numerous schemes are being trialled around the world to combat the problem of fishing debris.

- A 'Fishing for Litter' scheme set up in Scotland where fishers and port authorities have collaborated to collect all litter caught in nets. Instead of throwing this litter overboard, the debris is collected and brought back to port for managing. Between 2005 and 2015, Scottish fishers collected more than 900 tonnes of marine litter.
- Recreational fishers in the United States can recycle fishing lines back to the manufacturer via collection points. Since the scheme started in 1990, it has prevented more than 15 million kilometres of fishing line potentially entangling wildlife.
- A Seabin at Perth's Coogee beach was created to capture rubbish floating in the ocean. The bin is emptied everyday and collects rubbish from the water, incuding little plastics, lots of polystyrene beads, cigarette butts.

What can *you* do?

The Surfrider Foundation in Australia and the United States is responsible for the 'Rise Above Plastics' campaign. The aim of the campaign is to get people to think about how they can make a difference and prevent marine debris. They suggest ten ways to reduce your personal plastic footprint. There are also many innovative ways to recycle plastic products that can be found on YouTube, such as converting plastic bags to rope or handbags.

Ten ways to reduce your personal plastic footprint






1. Choose to reuse when it comes to shopping bags and bottled water. Use cloth bags and metal or glass reusable bottles if possible.
2. Refuse single-serving packaging, excess packaging, straws and other 'disposable' plastics. Carry reusable utensils in your bag, backpack or car.
3. Reduce everyday plastics such as sandwich bags and juice cartons by replacing them with a reusable lunch bag or box that includes a thermos.
4. Bring a reusable cup with you to the café, restaurant or juice bar. This is a great way to reduce the use of lids, plastic cups and/or plastic-lined cups.
5. Go digital! No need for plastic CDs, DVDs and jewel cases when you can buy your music and videos online.
6. Seek alternatives to the plastic items you use.
7. Recycle. If you must use plastic, try to choose #1 (PETE) or #2 (HDPE), which are the most commonly recycled plastics. Avoid plastic bags and polystyrene foam as both typically have very low recycling rates.
8. Volunteer at a beach clean-up. Surfrider Foundation Chapters hold clean-ups monthly or more frequently.
9. Support plastic bag bans, polystyrene foam bans and bottle recycling bills.
10. Spread the word. Talk to your family and friends about why it is important to 'rise above plastics'!

16.4.3 Cleaning up the ghost nets

In the Philippines, 'Networks', an initiative supported by the London Zoological Society, is working with local fishers to harvest discarded nets. Former fishers dive for nets, and then on shore they are compressed into tight cubes and shipped to Slovenia, in Europe, where the nets are turned into nylon yarn and then shipped to the United States to be woven into carpets. Instead of being dumped, the nets have value and can be sold. Jobs are created and an environmental threat is averted.

In Australia, the ghost nets issue is being tackled by GhostNets Australia, an alliance that supports rangers from 40 clan groups in remote coastal places of Western Australia, Queensland and the Northern Territory, funded by the federal government. Since it was established in 2004, over 14 000 ghost nets have been captured by locally trained rangers (see **FIGURE 6**).

FIGURE 6 Captured trawler nets being collected by rangers



Often, helicopters are used to spot the ghost nets washed ashore, which are then checked for trapped wildlife. Live turtles are tagged and data recorded before they are returned to the sea. Nets are dragged up above the high tide line to be identified, collected and disposed of later. The project works on a '6R' principle:

1. **R**emove ghost nets from waters and coastline of the Gulf of Carpentaria.
2. **R**ecord the number, size, type and location of nets.
3. **R**escue animals trapped in nets.
4. **R**eport the activities that the community has done to increase awareness.
5. **R**educe the number of nets in the Gulf by working together.
6. **R**esearch factors that influence the distribution, movement and impact of ghost nets.

This program is part of a Caring for our Country initiative in the region, which promotes stewardship of Indigenous customary lands and seas.

What can be done with the debris?

Traditionally, fishing nets were made of more eco-friendly materials, such as flax or hemp, but now they are usually made of nylon, which makes them stronger, cheaper and more buoyant. However, this means they take a very long time to break down. Nets can also range in size from 30 cm to 6 km long! There are three options for disposing of the waste: burning, placing in landfill, or recycling. Each, however, has disadvantages, and all methods require the difficult task of collecting the waste.

Disadvantages of burning fishing nets include:

- burning plastic is illegal in most countries
- after burning, the residue is a huge, heavy, immovable mass of melted plastic, which is a visual eyesore
- health risks associated with burning plastic.

Disadvantages of disposing of fishing nets in landfill include:

- expense of transporting the waste over large distances to a landfill site
- often waste is burned in tips, and these tips are close to settlements.

Disadvantages of recycling or reusing fishing nets include:

- remoteness of and distances to recycling plants (South Australia and Taiwan have plants big enough to cope with fishing nets)
- expense of transporting the waste over large distances
- the need for large machinery to chop plastic into manageable pieces
- the need to find a local use for the recycled waste material.

GhostNets Australia's solution

While only a partial solution to the large quantity of nets accumulating, GhostNets Australia promotes the reuse of nets by providing local artists with netting material. The artists use traditional weaving techniques to create artworks (see **FIGURE 7**). This type of cottage industry brings economic and social benefits as well as raising awareness of the problem of marine debris.

FIGURE 7 Woven basket made of recycled fishing nets



16.4 ACTIVITIES

1. If you have access to a beach, walk along the high tide line and see if you can collect and identify different forms of marine litter. Collate and record your findings. What were the most common forms of litter you identified? Where have they come from?
   HASS skills: Analysing
   Geography concept: Sustainability
2. How can you reduce your school's plastic footprint? Brainstorm ideas as a class and then develop one idea in detail. How can you promote your idea? You may like to create a slogan and poster, address a school group or assembly or write a proposal to the school administration.
   HASS skills: Communicating and reflecting
   Geography concept: Sustainability
3. Undertake a plastic bottle survey at home. Check your kitchen, laundry and bathroom and count the number of plastic bottles, jars and other containers you find (only count containers). Collate your results, in graph form, with other students in your class and then write a summary of your findings.
   HASS skills: Evaluating
   Geography concept: Sustainability
4. Research information on the different types of fishing nets used: gill, purse, seine and trawl nets.
   a. Construct a table to list the advantages and disadvantages of each from a fishing and an environmental perspective.
   b. Which net design might prove to be the most damaging to the environment if lost or discarded?
   HASS skills: Evaluating

16.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 7	Questions 4, 6, 9, 10	Questions 5, 8, 11

Check your understanding

1. What items is it illegal to dump within a 4.8-kilometre zone of the US coast (see **FIGURE 4)**?
2. Identify five ways that you can reduce your plastic footprint.
3. What are two important initiatives that have been undertaken at the national or international level to reduce marine pollution?
4. Why is an understanding of local wind patterns useful to GhostNets rangers?
5. Why is transporting ghost nets to South Australia for recycling not a viable option?
6. Evaluate the environmental, economic and social aspects of the GhostNets program.

Apply your understanding

7. Is the saying, 'Think global, act local' applicable to marine pollution? Justify your answer.
8. How successful would an international agreement where all countries decide to reduce land-based marine pollution be? What would be the advantages and disadvantages?
9. Construct a table, similar to the one below, to evaluate each of the proposals to help reduce ocean debris.

Response	Economic criteria (e.g. cost)	Social criteria (e.g. time and effort required)	Environmental criteria (e.g. effectiveness)
Individual actions			
Manufacturers			
International community			

10. What conclusions can you draw from the table you created in question 9?
11. Suggest ways in which you could encourage others to reduce their plastic footprint.

For sample responses to every question, go to www.jacplus.com.au.

16.5 Oil and water — a toxic mix

LEARNING INTENTION

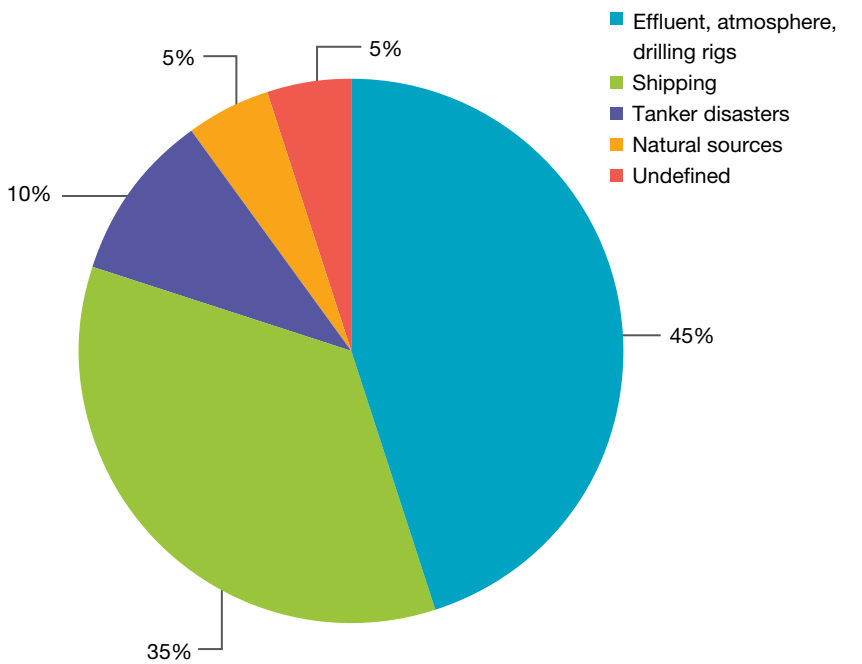
By the end of this subtopic you will be able to identify the sources of marine oil, and describe its impacts on the marine and coastal environments using the case study of the BP Deepwater Horizon oil spill in the Gulf of Mexico.

16.5.1 Sources of marine pollution

You have probably seen images of birds covered in sticky oil, usually as a result of the most dramatic type of marine pollution: oil spills and shipping accidents. The impact of oil on ocean and coastal ecosystems is often localised over a relatively small area, but may last for many years.

Almost all of the Earth's supply of oil and natural gas is found in deep underground reservoirs. Reservoirs can be under a landmass, under the seabed and under continental shelves. Extracting oil from the seabed accounts for nearly 30 per cent of the world's production. Offshore drilling takes place on huge floating platforms, in waters up to 2 kilometres deep and as far as 300 kilometres from the coast. More than 50 per cent of countries around the world drill for offshore oil and gas.

FIGURE 1 Main sources of marine oil pollution

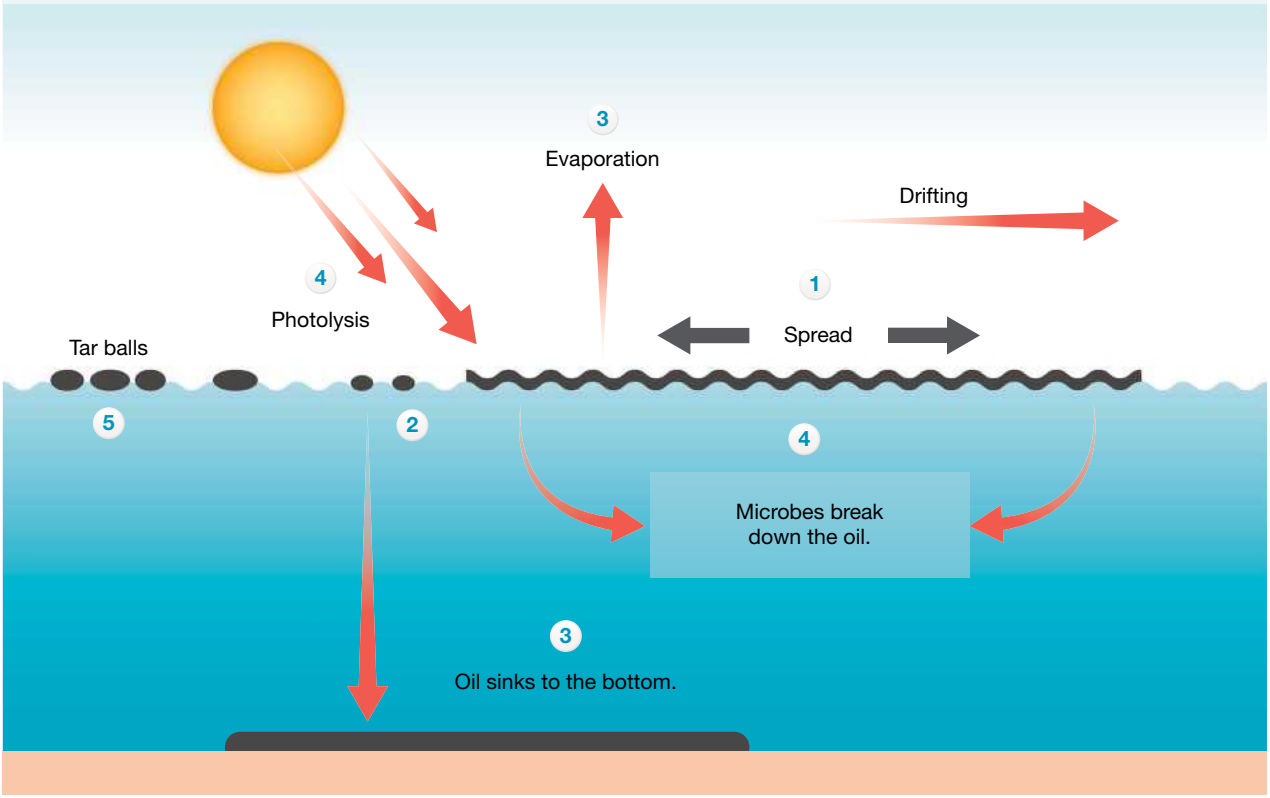


The most obvious and visible kinds of marine oil spills usually involve tanker accidents, or leaks from offshore oil rigs. However, oils enter the ocean from a variety of sources, with both natural and land-based sources accounting for a much larger proportion than disasters (see **FIGURE 1**). There has been a decrease in the number of tanker accidents in recent years, mostly due to improved ship design and greater safety methods. However, with more ships and supertankers being built, the potential risk of an accident is still high.

16.5.2 What happens to oil in the ocean?

Each oil spill is different and there are various physical, chemical and biological factors that will influence the behaviour of spilt oil. The type of oil, temperature of the water, wave and current action, and the nutrient content of the water are all critical influences. The stages in the breakdown of oil can be seen in **FIGURE 2**.

FIGURE 2 What happens to oil in the ocean?



1. When oil is released into the ocean it immediately forms large slicks that float on the surface. It can take only 10 minutes for one ton of oil to disperse over a radius of 50 m and be 10 mm thick.
2. After a few hours, weathering by wind and waves breaks down the slick into narrow bands, or windrows, that float parallel to the wind. The oil may be less than 1 mm thick but can now cover 12 km^2. After the slick thins down it breaks up into fragments and fine droplets that can be transported over larger distances.
3. Some of the oil evaporates or sinks.
4. Some of the oil can be chemically broken down by sunlight or bacteria (photolysis).
5. Finally the oil solidifies into tar balls (clumps), which are more resistant to bacterial decomposition.

16.5.3 Impact of oil on the environment

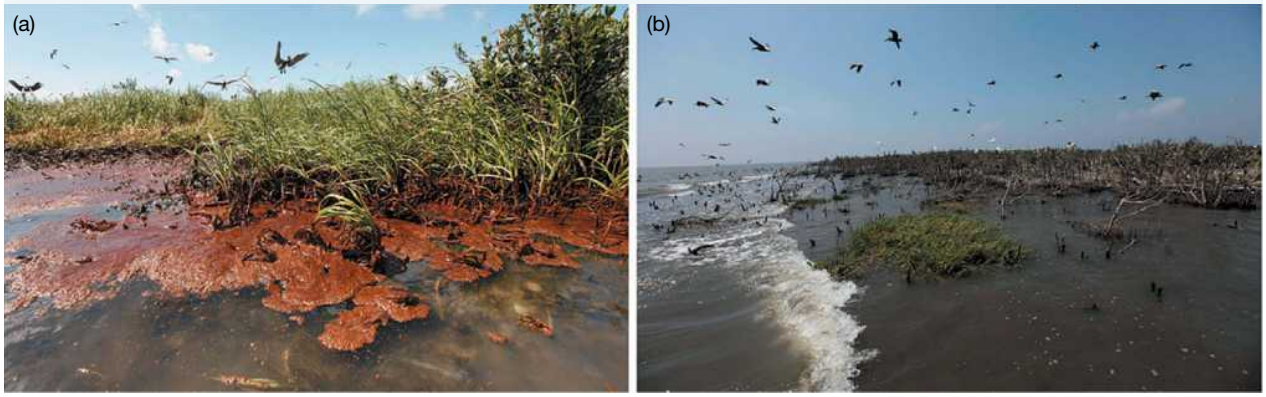
Oil spills can result in both short- and long-term environmental change, with some damage lasting for decades. A spill in open waters is usually less destructive than a spill near coastal waters, where most fish and bird breeding takes place. Oil pollution is less visible in the open ocean, especially once it disappears from the surface, but it is still capable of being moved via ocean currents.

Coastlines

The geography of the coastline can influence the degree of impacts from an oil spill. Impacts are less on exposed coasts due to strong wave action. A long, sheltered, sandy coastline is vulnerable as the oil can soak

into the sand, which is extremely difficult to clean. Mangroves, salt marshes and extensive sandbanks are also sensitive as the oil soaks into the fine sediments and can be taken up by plants. This affects wildlife that live in this habitat, and the loss of vegetation increases the risk of coastal erosion, as shown in **FIGURE 3**. Coral reefs are possibly the most vulnerable to oil spills, and they are extremely slow to recover.

FIGURE 3 (a) Oil damage to wetland habitat (b) The same area of wetlands one year after the oil spill



Wildlife

Any oil on the surface of the sea will kill birds that swim and dive for their food there. Feathers covered in oil rob birds of waterproofing and insulation. Ingesting the oil can poison them. Oil spills also damage coastal nesting and breeding grounds. Oil can block the blow holes of marine mammals such as whales, dolphins and seals, making breathing difficult. If oil coats a seal's fur, it will become vulnerable to hypothermia. Animals' food supply is also poisoned by floating oil. Fish, especially shellfish, suffer immediate effects of an oil accident. Reduced reproduction, birth defects and other abnormalities develop in the next generation of wildlife exposed to oil spills, creating a longer term impact.

16.5.4 Cleaning up oil spills

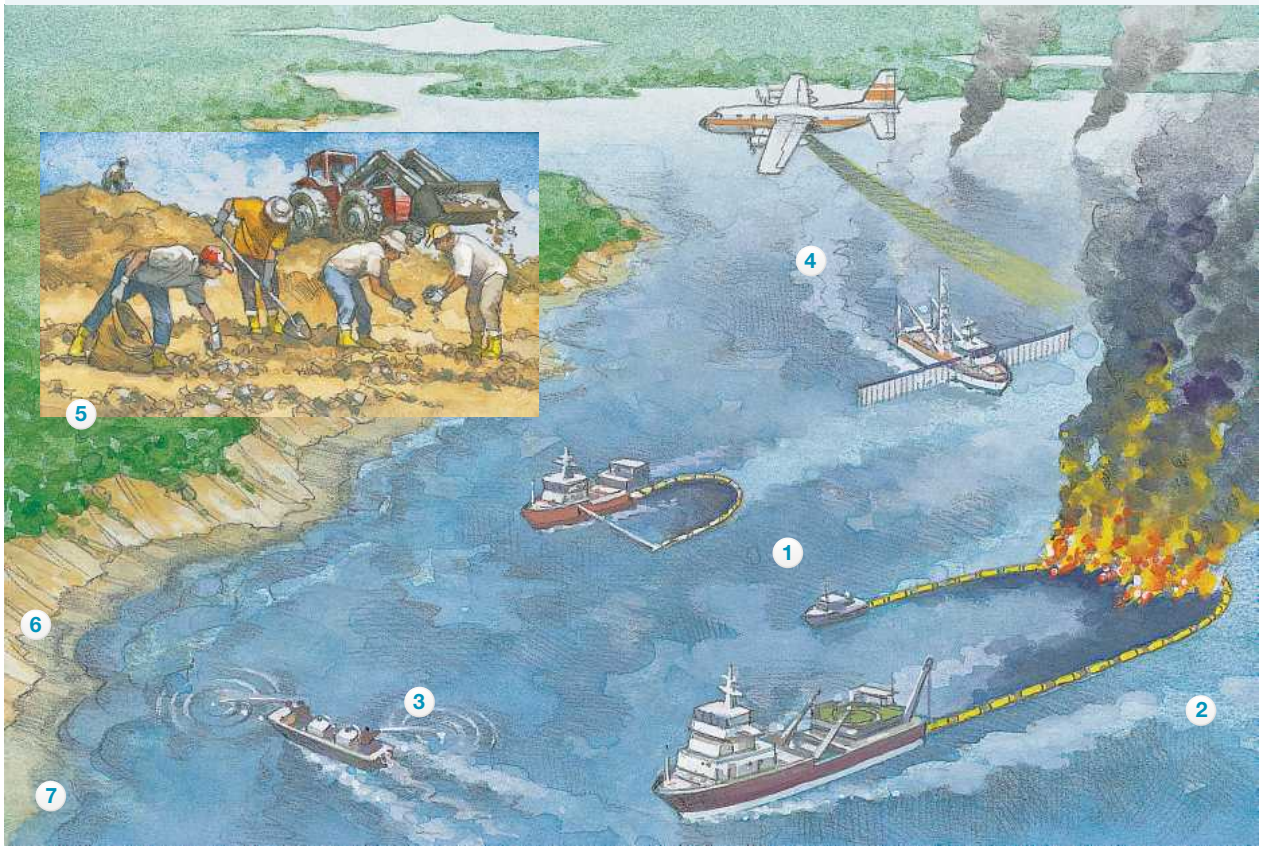
Prevention

The most important way to deal with oil spills is to prevent them from happening in the first place. The UN MARPOL treaty was established in 1983 to deal with the growing problem of marine pollution. Individual countries have also established new rules and regulations. For example, since 2015 all tankers operating in United States waters must be double hulled, so that if the outer hull is damaged, the inner hull can still hold the fuel. The oil industry must also now have detailed response plans for cleaning up any spills.

Remediation

When a spill does occur, the clean-up will generally involve a combination of approaches. Methods will depend on factors such as location, weather and the type of spill. It is extremely difficult to contain and clean up any oil spill, and many early methods often caused more environmental damage than the oil itself. For instance, consider the impact of a high-pressure hose on a fragile ecosystem, or the spraying of toxic chemicals to absorb the oil. A range of remediation methods are used to clean up oil spills (see **FIGURE 4**).

FIGURE 4 Different methods of cleaning up oil spills



1. Boats with **booms** attached skim oil off the water's surface.
2. Oil collected by booms is then burned off the surface of the water.
3. **Bioremediation** techniques use microorganisms and fertilisers to break the oil down into less harmful compounds.
4. Boats and planes spray chemical dispersants, similar to detergents, on the oil to break it down into droplets.
5. Manual/mechanical methods: People with rakes and spades as well as heavy equipment physically remove oil from along beaches.
6. Natural processes: Often the impact of cleaning up is greater than the oil damage itself in fragile environments. Over time, naturally occurring microorganisms, sunlight and wave action will slowly break the oil down.
7. Absorbent material such as hay, wood shavings and even human hair (collected from hairdressers and stuffed into nylon casings) can be used to help mop up oil (see **FIGURE 5**).

FIGURE 5 Recycled human hair turned into oil-absorbent logs for soaking up oil spills



booms floating devices to trap and contain oil

bioremediation the use of biological agents, such as bacteria, to remove or neutralise pollutants

16.5.5 CASE STUDY: The Gulf of Mexico oil spill

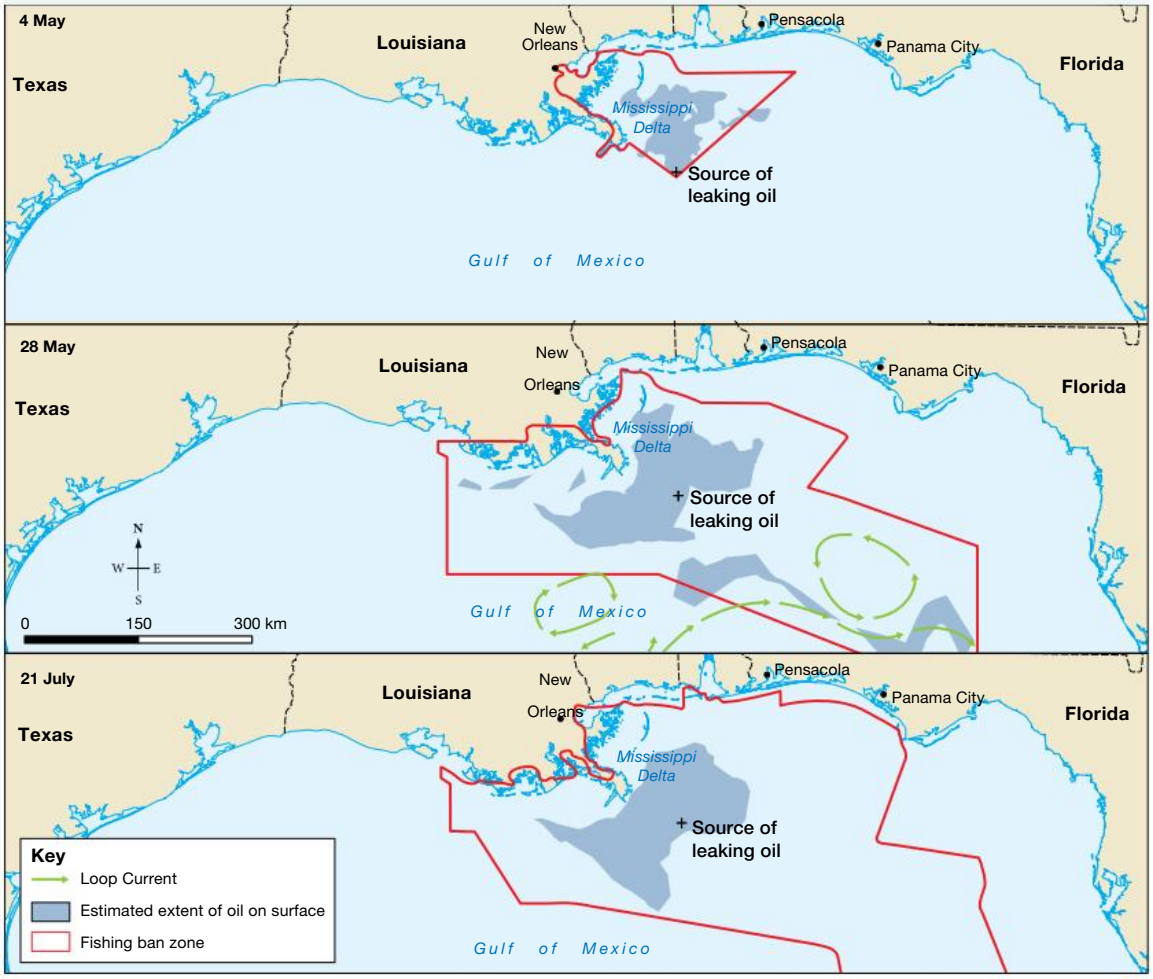
The Gulf of Mexico is rich in natural resources and, in particular, oil. More than 4000 active offshore oil well platforms are distributed along the northern region, attached to thousands of pipelines delivering oil and gas to the mainland. Ninety per cent of North America's offshore drilling takes place here. In 2010, it was the site of the world's second biggest oil spill.

FIGURE 6 The Deepwater Horizon oil rig on fire



On 20 April 2010, an explosion on the Deepwater Horizon drilling platform, located 74 kilometres off the Gulf coast, caused the rig to burn and sink, killing 11 workers (see **FIGURE 6**). As a result, oil began leaking into the Gulf from ruptures in the drilling pipe, more than 2000 metres below the surface, creating the largest spill in US history. Over the course of 87 days, an estimated 4.9 billion barrels of oil were released into the sea (see **FIGURE 7**). Over 35 per cent, or 2650 kilometres, of the Gulf coast was fouled.

FIGURE 7 Mapping the extent of the Gulf oil spill: (a) 4 May, (b) 28 May and (c) 21 July



Source: Conservation Biology Institute, Publication Date: 7/5/2010. Map by Spatial Vision.

The role of ocean currents

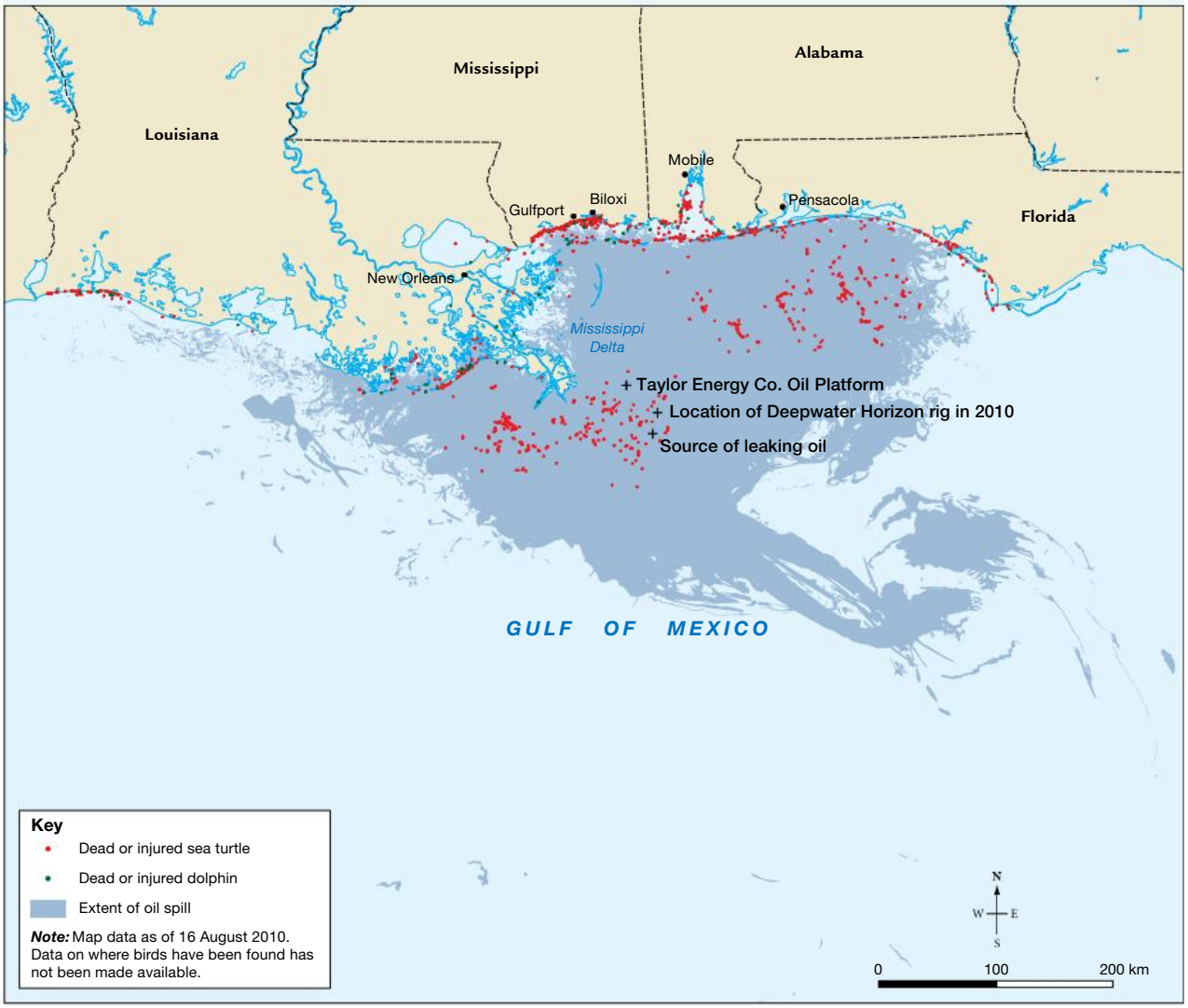
There was a risk of the oil being caught up in the Gulf Loop Current, which then had the potential to feed oil into the Gulf Stream Current, a powerful ocean conveyor belt that carries warm water north along the east coast of the United States, moving at a rate of approximately 80–160 km/hour. Had this happened, the extensive wetlands of the Florida Keys and important tourist beaches would have been badly affected. The Loop Current is constantly shifting, and fortunately, during the period of the spill, it actually shifted out of the danger area.

What was the damage?

Scientists were able to track and map the oil spill on a daily basis. The distribution of oil changed regularly, largely due to weather and tide conditions and the efforts of clean-up teams. The fact that the oil was leaking in deep water certainly reduced some of the impact, as did the relatively calm weather during this time. For the first month, the oil stayed mostly at sea, but by June, the oil had reached the Louisiana wetlands to the north-west and the Florida coastline to the north-east. Early records of dead or injured turtles and dolphins can be seen in **FIGURE 8** and **TABLE 1**.

int-7965

FIGURE 8 The effect of the Gulf oil spill on the marine ecosystem, 17 May to 15 August 2010



Source: Conservation Biology Institute, Publication Date: 7/5/2010. Map by Spatial Vision.***a***

TABLE 1 The effect of the Gulf oil spill on sea turtles, dolphins and birds as of 2 November 2010

	Found alive	Found dead	Total found
Sea turtles			
Visibly oiled	456	18	474
Not visibly oiled	79	319	398
Dolphins			
Visibly oiled	2	4	6
Not visibly oiled	7	92	99
Birds			
Visibly oiled	2079	2263	4342
Not visibly oiled	0	3827	3827

Source: © National Oceanic and Atmospheric Administration, www.noaa.gov.

After the accident, the number of dolphin deaths rose from an average of 63 deaths per year to a high of 335 in 2011. Deaths then averaged 200 per year until 2015 and have continued to decline. The long-term impacts on dolphin populations is still unknown.

Animal death counts would have been higher if not for the efforts of rescue teams who collected 25 000 turtle eggs and relocated them to Florida's Atlantic coast. In the same time period, inland flooding of farmland provided alternative wetlands for migratory birds that normally would have inhabited the coastal wetlands. Most of the 1600 kilometres of coastline have now been cleaned up.

Impacts on people

To minimise the risk to humans of eating contaminated seafood, more than 150 000 km^2 of federal waters were closed to fishing. The Gulf fishing industry was estimated to have lost $247 million from the fishing ground closures. The fishing industry is open again and is carefully monitored. Research in 2018 noted that oil contamination in fish has been declining over time but the diversity of fish species was lowest in those areas of the gulf with the greatest number of oil rigs.

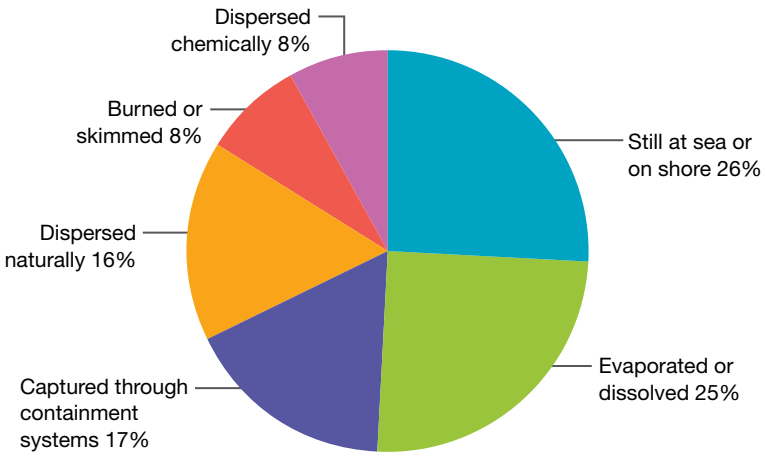
The initial loss to the tourism industry in 2013 was US$22.7 million, but the industry quickly picked up and in 2017 the coastal areas of Alabama were earning US$4.4 billion in tourist dollars. Since the spill, BP has paid out more than $20 billion in damages claims to state governments, individuals and businesses, in addition to providing funding for restoration projects.

How was the Gulf cleaned up?

FIGURE 9 shows the results of the clean-up following the Gulf oil spill, 103 days after the accident. Favourable weather conditions at the time enabled authorities to put some defensive measures in place, including more than 4000 kilometres of booms, to protect coastal land.

In all, an estimated 6.4 million litres of dispersants were used on the spill. Scientists believe that nearly 50 per cent

FIGURE 9 The clean-up of the Gulf of Mexico oil spill



of the oil spilled and nearly 100 per cent of the methane gas released has stayed deep in the ocean. As much as 3200 square kilometres of ocean floor is thought to be polluted.

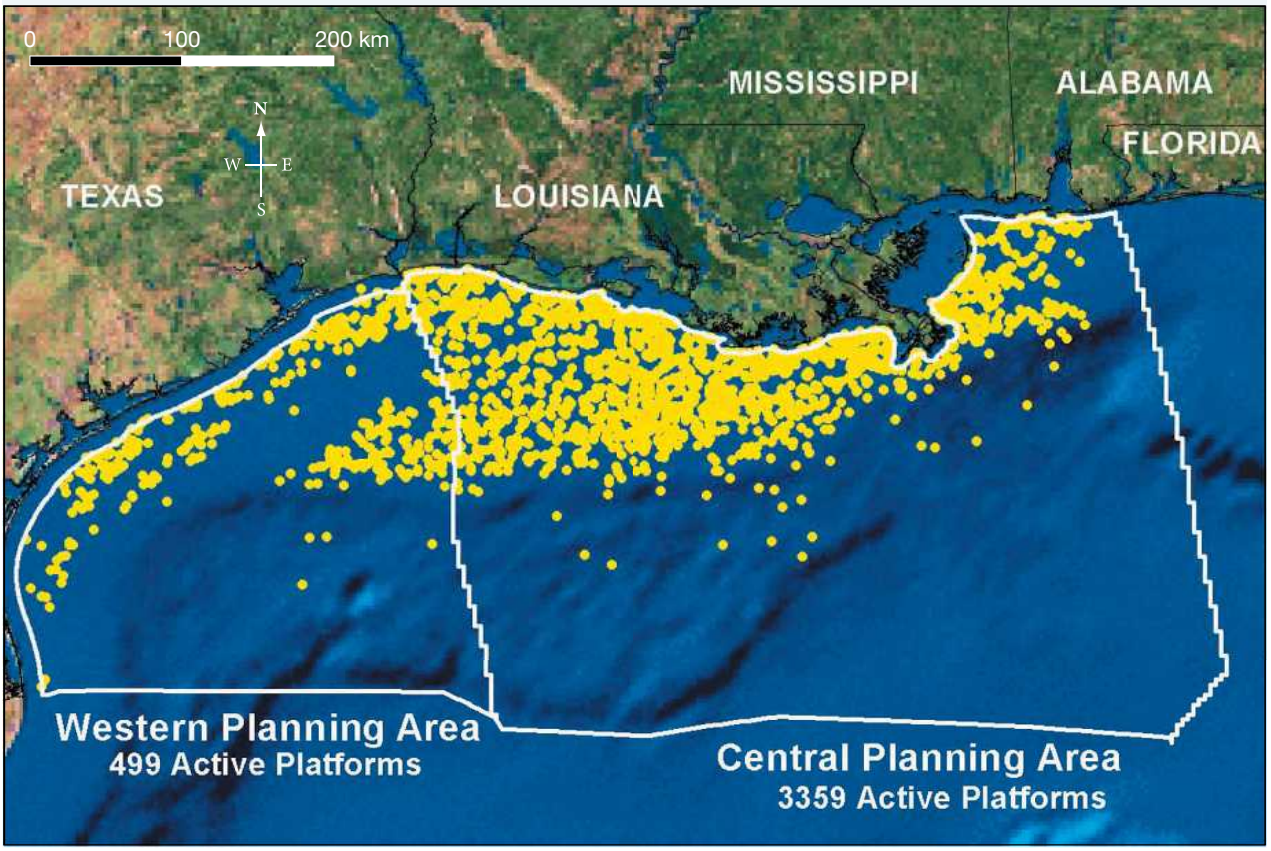
A disaster unfolding

Another potential disaster is unfolding in the Gulf of Mexico. In 2004, Hurricane Ivan swept through the region and created an underwater avalanche that buckled and sank an oil rig owned by Taylor Energy, located 19 kilometres off the coast of Louisiana (seen in **FIGURE 8**.) A mixture of steel and leaking oil was buried in 45 metres of mud on the seabed. Since then it has been leaking up to 700 barrels of oil per day, a rate that will surpass the volume lost in the Deepwater Horizon spill, also making it the longest oil spill in US history. To date there has not been any evaluation of the environmental consequences. More than US$200 million has been spent on the clean-up but only one-third of the wells have been capped or plugged. The task is near impossible with many of the leaking wells buried in thick mud. Drilling runs the risk of striking a pipe or well, creating a catastrophe. The only other alternative is to build some sort of structure to contain the oil on the surface.

An ongoing threat

Because of the high number and distribution of oil wells in the Gulf of Mexico (see **FIGURE 10**), the threat of future accidents remains. In fact, there are more than 4000 oil platforms and nearly 80 000 kilometres of active and inactive pipelines carrying oil across the seabed to the shore. The frequency of storms and hurricanes in the Gulf region is high; in the four years from 2004 to 2008, 150 oil rigs were battered or destroyed by extreme weather events. Today, the energy companies employ more sophisticated weather forecasting techniques and implement safety programs, closures and evacuation of personnel well in advance of approaching hurricanes.

FIGURE 10 Distribution of oil wells in the northern Gulf of Mexico



Source: National Oceanic and Atmospheric Administration, Office of Ocean Exploration and Research, U.S. Department of Commerce. Adapted by Spatial Vision.

In Florida, it has been estimated that the annual value of tourism and fishing along the state's eastern Gulf coast is three times higher, and considerably more sustainable, than the value of any oil or gas that might be found there.

However, oil continues to be a very important fuel and raw material for many products ranging from asphalt to chemicals, synthetic materials and plastics. The Gulf of Mexico supplies the United States with 17 per cent of its total US crude oil and 5 per cent of its gas. Consequently, oil resources will continue to be explored and developed. Very careful planning and management will be needed to prevent the environmental changes that an oil rig disaster can bring.

DISCUSS

'Oil is an essential part of our modern life. It is worth the risks to the environment to ensure ongoing supply of this important resource.' Discuss your views on this statement in small groups.

General capability: Critical and creative thinking

on Resources

Interactivity Oil slick (int-3300)

Google Earth Gulf of Mexico

16.5 ACTIVITIES

1. Complete the **Oil spill** worksheet to investigate this topic further.

   HASS skills: Communicating and reflecting
2. Research the potential impact of oil spills on the Great Barrier Reef. How does the Great Barrier Reef Marine Park Authority manage the park sustainably to prevent oil spills?

   HASS skills: Questioning and researching
   Geography concept: Sustainability
3. One of the biggest environmental disasters from a marine oil spill was the spill by the *Exxon Valdez* ship off the Alaskan coast in 1989. Research the disaster and then create a newspaper front page account of the accident. Include a location map, cause of the accident, examples of the impacts and methods used to clean it up. Annotated photographs could be used for illustration. What are the similarities and differences between the *Exxon Valdez* and Gulf oil spills?

   HASS skills: Communicating and reflecting, Analysing
   Geography concept: Environment

16.5 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 5, 7, 8, 10	Questions 3, 6, 11, 12, 13	Questions 4, 9, 14, 15

Check your understanding

1. What percentage of the world's oil comes from the seabed?
2. Examine **FIGURE 2**. Why is it important that oil spills are treated as quickly as possible?
3. Examine **FIGURES 3a** and **b** describe the changes that you can see in the two environments.
4. Suggest one environmental, one economic and one technological factor that can contribute to marine oil pollution.
5. List the ways in which oil creates environmental change in the ocean.
6. Compare some of the advantages and disadvantages of drilling for oil in the ocean compared to drilling for oil on land.
7. List three things that helped reduce the environmental changes of the Gulf of Mexico oil spill.
8. What weather conditions could have worsened the Gulf disaster?
9. Why is there is no single solution to cleaning up oil spills?

Apply your understanding

10. Examine **FIGURE 2**. Select the conditions from those listed below that would be most likely to encourage the rapid breakdown of an oil spill. Justify each of your choices.
    - Cold ocean water/warm ocean water
    - Calm seas/choppy seas
    - Ready supply of bacteria/limited supply of bacteria
    - High level of oxygen in the water/low level of oxygen in the water
    - High number of bacteria-eating organisms/low number of bacteria-eating organisms
11. Construct a table to suggest the possible advantages and disadvantages of the seven methods of remediation shown in **FIGURE 4**. Consider the influence of the following factors: weather conditions, timing, location of treatment area (at sea or on coast), size of area to be treated, environmental impacts, practicality, economic viability and social justice.
12. Study the maps in **FIGURE 7**. Why was there a need for a fishing ban in the region?
13. Study **FIGURE 8**. What was the furthest distance from the oil source that dead or injured marine creatures were found?
14. Study **FIGURE 9**, which shows data about the status of the Gulf oil spill clean-up, 103 days after the incident.
    a. What percentage of the oil spill had been treated at this time?
    b. What percentage of the oil had dispersed naturally or evaporated?
    c. Why do you think only a small percentage was chemically dispersed?
15. Imagine that you spill a whole bottle of cooking oil on your kitchen floor. Describe three different remediation methods that you could use to clean up the spill. Select from booms, skimmers, bioremediation, manual/mechanical, dispersants and absorbers. Would one method be more effective than another? Give reasons.

For sample responses to every question, go to www.jacplus.com.au.

16.6 Thinking Big research project — 'Plastic not-so-fantastic' media campaign

16.6.1 Scenario

It has been estimated that by the year 2050 there will be more plastic than fish in the world's oceans. In less than a century, the wonderfully versatile product that is plastic has become an integral part of our daily lives — from the plastic toothbrush to the components in a car. However, its versatility and widespread use have created an enormous environmental problem.

The sheer volume of discarded plastic and inappropriate methods of disposal have meant that each year eight million tonnes end up swirling around the world's oceans, threatening marine life and polluting the water and coastlines, and affecting industries such as fisheries and tourism. Microplastics, microfibres and microbeads, so small they are nearly invisible, also wash through drains and rivers entering the oceans. There are currently enough discarded single-use plastic bags to circle the globe 4200 times!

While many countries have stringent rules on plastic waste and efficient disposal and recycling methods, there are still two billion people globally who don't have access to such systems but who still purchase, use and discard plastic items daily.

As a film producer, you have been asked to produce a 2–3-minute media advertisement to raise public awareness about the issue of plastic waste in our oceans. The advertisement will be shown on prime-time television and across social media platforms.



16.6.2 Task

Following the guidelines provided in the **Process** section, conduct some background research and then, with your project group, create an informative and visually exciting advertisement that will *provoke thought and promote action by the audience*. The advertisement should include:

- several images that identify the problem of plastic pollution in the ocean
- several images and/or diagrams or maps that explain how plastics are moved via wind/rivers/waves and ocean currents
- a map to show either the pattern of ocean currents, or the distribution of plastic patches, or the countries most responsible for plastic ocean pollution
- an explanation/description of the map(s), diagrams, and so on — using data where possible
- images that highlight some of the impacts of ocean plastic pollution
- images that can show how people in their everyday life can help reduce the problem of plastic pollution
- a voiceover explaining the issue (as well as a hard copy of the script)
- background music (optional)
- closing credits acknowledging members of the production team and their responsibilities/roles, as well as sources of data, images, and so on.

Note: If filming the advertising campaign is not possible, this can be done as a PowerPoint presentation instead.



16.6.3 Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group so you can work collaboratively. Working in small groups of 3 or 4 will allow you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.

- Discuss and allocate the various required tasks among members of your group. Responsibility for researching the different sections should be shared so that all students help in finding the information. Different group members could be responsible for sourcing images, scriptwriting, preparing the voiceover, editing, and background music.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish.
- In the **Media centre** you will find an assessment rubric and some helpful weblinks that will provide a starting point for your research and some ideas for your advertisement.
- Make notes of your research and remember to record details of your sources so you can create a bibliography to include in the credits at the end of your advertisement. Add your research notes and source details to the relevant topic pages in the Research forum. You can view, share and comment on research findings with your group members.
- When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Once you have compiled all the elements for your advertisement, conduct your filming (or create your PowerPoint). Check that it meets the aim of educating the viewer and that it flows smoothly within a timeframe of 2–3 minutes.
- Ensure that you have completed all elements of the task and, when you are satisfied, present your commercial to the class and to your teacher for assessment.



Resources

ProjectsPLUS Thinking Big research project — 'Plastic not-so-fantastic' media campaign (pro-0215)

16.7 Review

16.7.1 Key knowledge summary

16.2 Motion in the ocean

- Ocean currents are responsible for the movement and interconnection of water around the world's seas and oceans.
- Understanding the causes and movement of currents is important for shipping and tracking the movement of nutrients, water temperature and pollutants.
- There are several major currents that influence our oceans both on the surface and in deep water.

16.3 Travelling trash — marine pollution and debris

- Marine pollution is any harmful product or substance that enters the ocean; most are human pollutants and 80 per cent start off on land.
- Debris is largely solid material that ends up in the sea, the most common material being plastic.
- Marine debris is easily moved around the oceans via currents, and tends to accumulate in large ocean gyres in the centre of the main oceans, or it is washed ashore to litter coastlines.
- Countries in Asia are the largest supplier of marine debris, and much of this comes from just eight river systems.
- Plastics do not biodegrade and only slowly break down into minute particles where they can stay suspended or sink, some plastics taking hundreds of years to slowly break down.
- The marine ecosystem is badly affected by marine debris.
- Ghost nets are a form of marine pollution that create vast rafts of fishing debris entrapping marine creatures.
- The Gulf of Carpentaria, while isolated from large urban areas is a major collection region for ghost nets.

16.4 Cleaning up our mess

- To reduce the amount of marine debris in the world we need to reduce land-based sources.
- This can be done by changing people's mindset and behaviour, supporting clean-up organisations and for governments to legislate changes, such as banning single-use plastics. The industrial and retail sectors also need to reduce their waste and promote recycling and alternative products.
- Indigenous groups living in the areas where ghost nets are a problem have taken on the responsibility of collecting and dealing with ghost net debris.

16.5 Oil and water — a toxic mix

- Thirty per cent of the world's oil is extracted from beneath the seabed.
- What happens to oil that is spilt in the ocean, usually after a tanker or oil rig accident, is dependent on a number of environmental factors such as temperature, wave and current patterns and time.
- An oil spill can have a wide range of impacts on wildlife, marine life and coastlines.
- There are several different techniques used to counter marine oil spills; how they are used is dependent on factors such as wind and wave activity.
- One of the world's biggest oil spills occurred in the Gulf of Mexico in 2010, creating extensive environmental damage.
- The Deepwater Horizon spill has been largely cleaned up however another spill is occurring in the region.

16.7.2 Key terms

bioremediation the use of biological agents, such as bacteria, to remove or neutralise pollutants

booms floating devices to trap and contain oil

Coriolis force force that results from the Earth's rotation. Moving bodies, such as wind and ocean currents, are deflected to the left in the southern hemisphere and to the right in the northern hemisphere.

thermohaline relating to the combined influence of temperature and salinity

16.7.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

Exactly how much plastic ends up in oceans and waterways, and why should we care if it does?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

on Resources

eWorkbook Customised worksheets for this topic (ewbk-6269)
Reflection (ewbk-6268)
Crossword (ewbk-6267)
Student Learning Matrix (ewbk-6260)

Interactivity Marine environments crossword (int-7673)

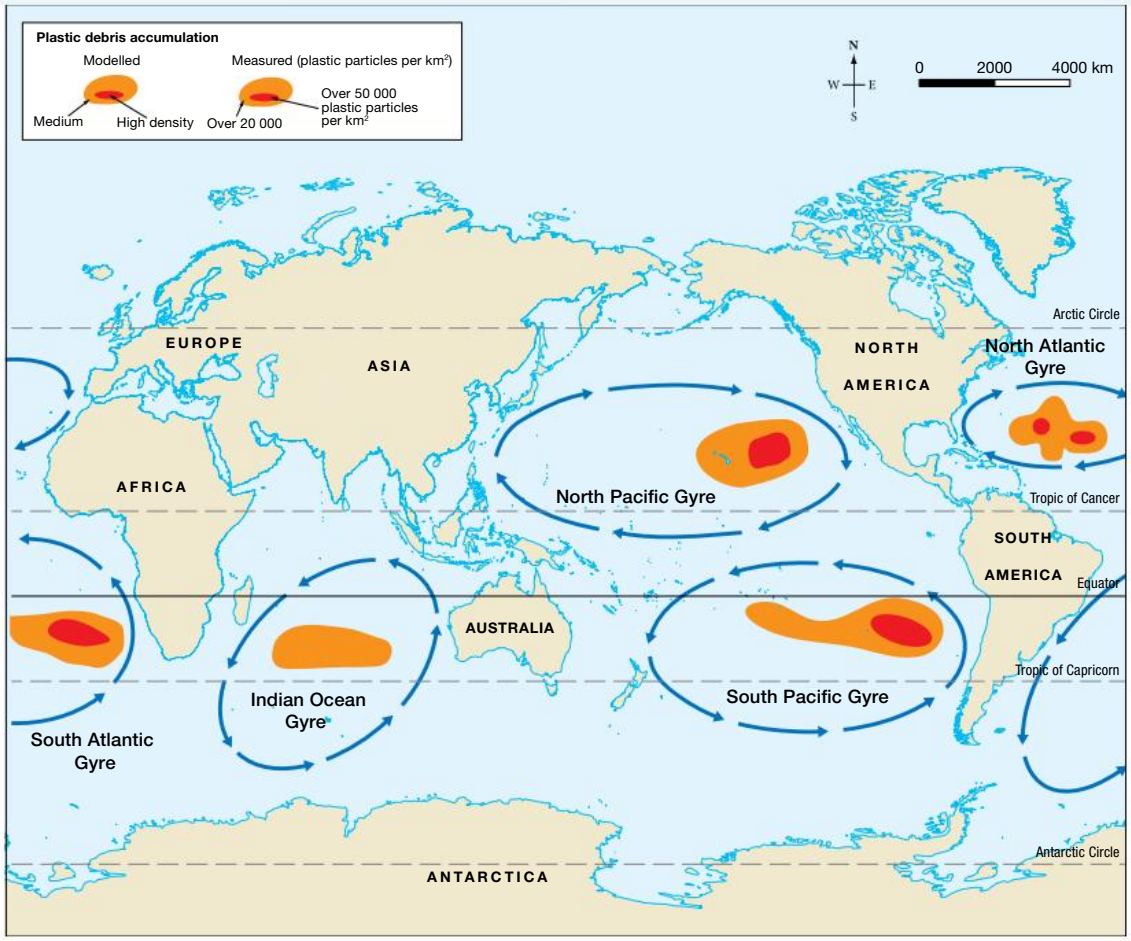
16.7 Review exercise

Multiple choice

1. What are ocean currents caused by?
   - **A.** The uneven heating of the world's oceans
   - **B.** The even heating of the world's oceans
   - **C.** The movement of shipping channels
   - **D.** The force of the wind
2. Which is *not* afunction of an ocean current?
   - **A.** Distributing water
   - **B.** Heat
   - **C.** Nutrients
   - **D.** Making waves

Refer to FIGURE 1 to answer questions 3 and 4.

FIGURE 1 Plastic debris accumulation in the world's oceans



Source: GRID-Arendal. Map by Spatial Vision.

3. Which ocean gyres have the highest concentrations of plastic debris?
   - **A.** North Atlantic and Indian Ocean
   - **B.** South Pacific, North Pacific and South Atlantic
   - **C.** North Pacific and North Atlantic
   - **D.** South Pacific, Indian Ocean and North Atlantic

4. Which ocean gyre has the largest area of plastic debris?
   - **A.** North Atlantic
   - **B.** North Pacific
   - **C.** South Pacific
   - **D.** Indian Ocean

5. What features of plastic make it a problem in the ocean?
   - **A.** It is widely used, light, floats easily, is not biodegradable and can easily be eaten by sea creatures.
   - **B.** It sinks to the bottom and pollutes the sea floor.
   - **C.** It is heavy and can knock sea animals over.

6. Which *three* options are ways plastic can enter the food chain?
   - **A.** It breaks down into micro-fragments.
   - **B.** Sea creatures mistake the micro-fragments for food.
   - **C.** Smaller animals eat larger animals and transfer the plastic.
   - **D.** Larger animals eat smaller animals, transferring the chemicals from plastic up the food chain.

7. What is one advantage of dealing with issues of marine debris at an international level?
   - **A.** It creates global cooperation and could reduce the amount of and impacts of marine litter across all oceans.
   - **B.** It is difficult to police and enforce.
   - **C.** It requires a great deal of international cooperation.
   - **D.** The problem would be greatly reduced if all citizens took more care with their waste.

8. Choose the best *two* options to describe ghost nets.
   - **A.** White coloured nets that are hard to see in the ocean
   - **B.** Lost or discarded fishing nets and fishing gear that can drift in the oceans for many years
   - **C.** Blue coloured nets that are hard to see in the ocean
   - **D.** Discarded fishing equipment adrift in the ocean

9. Which sort of marine litter has the longest decomposition period?
   - **A.** Paper towel
   - **B.** Fishing line
   - **C.** Plastic bag
   - **D.** Wool socks

10. What is the effect of oil in an ocean influenced by?
   - **A.** The type of oil
   - **B.** Temperature of the oil
   - **C.** Wave size
   - **D.** The fish count in the water

Short answer

11. The horrendous tsunami on the north-east coast of Japan in March 2011 generated up to 5 million tons of debris that was dragged out to sea by the retreating waves. About 70 per cent of this sunk, and the remaining 1.5 million tons is still floating there. It is predicted that 95 per cent of any material that has not sunk will probably end up in the Great Pacific Garbage Patch. Scientists, using their knowledge of ocean currents, have been able to model the likely movement of the debris. Use the **Japanese tsunami debris tracker** weblink in the Resources tab to view this movement.
    A few larger pieces of debris, a fishing ship and large pieces of broken wharf have already landed on the west coast of the United States. The debris is cleaned with high pressure hoses to destroy any marine hitchhikers that could be invasive pests.
    - **a.** Identify, using the **Japanese tsunami debris tracker** weblink in the Resources tab, the main current(s) that would have moved the debris to this location.
    - **b.** If the prevailing winds shift to the north-west, what places in the Pacific might be affected by the debris? (You might like to refer to a map of the area in your atlas.)
    - **c.** Is it possible for some of the tsunami debris to wash up on the Australian coast? Use your understanding of ocean currents to explain.
12. What are the benefits and drawbacks of the using the type of modelling in question 1 to model real-life conditions?
13. In light of your study on oil spills and the Gulf disaster, is offshore oil drilling an environmentally sustainable practice?
14. 'It is the activities of man on land that are largely responsible for the trashing of our oceans.' Do you agree or disagree with this statement? Write a detailed response summarising your viewpoint and supported with evidence from this topic.
15. The most effective ways of reducing marine pollution have to start on land. What are our obligations and duties as global citizens to reduce waste and pollution?

16. **a.** With a partner, use the criteria of workability (how practical or feasible something is) to evaluate the effectiveness of the following methods used to combat marine oil spills:
    - remediation
    - bioremediation
    - prevention.

    b. Suggest and apply two other criteria to evaluate these methods. For example:
    - the time it takes
    - economic viability
    - degree of difficulty
    - environmental impacts.

Note: This may require further research.

You can view the possible current location of the debris using the **Japanese tsunami debris location** weblink in the Resources tab.

on Resources

Weblinks Japanese tsunami debris tracker
Japanese tsunami debris location

RESOURCE SUMMARY

This is a summary of the digital resources you will find online for topic 16 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

16.1 Overview

Video eLesson
- Thrown overboard (eles-1711)

16.2 Motion in the ocean

eWorkbook
- Natural processes that affect oceans (ewbk-6261)

Interactivity
- Motion in the ocean (int-3298)

16.3 Travelling trash — marine pollution and debris

Interactivities
- The sources of marine pollution (int-5596)
- Garbage patch (int-3299)

16.4 Cleaning up our mess

eWorkbook
- Cleaning up oil in the ocean (ewbk-6263)
- Managing marine pollution (ewbk-6264)
- Managing ghost nets (ewbk-6265)

16.5 Oil and water — a toxic mix

eWorkbook
- Oil spill (doc-31789)

Interactivities
- The effect of the Gulf oil spill on the marine ecosystem, 17 May to 15 August 2010 (int-7965)
- Oil slick (int-3300)

Google Earth
- Gulf of Mexico

16.6 Thinking Big research project — 'Plastic not-so-fantastic' media campaign

ProjectsPLUS
- Thinking Big research project — 'Plastic not-so-fantastic' media campaign (pro-0215)

16.7 Review

eWorkbook
- Reflection (ewbk-6268)
- Crossword (ewbk-6267)
- Student Learning Matrix (ewbk-6260)

Interactivity
- Marine environments crossword (int-7673)

Weblinks
- Japanese tsunami debris tracker
- Japanese tsunami debris location

To access these online resources, log on to **www.jacplus.com.au**.

17 Measuring and improving wellbeing

17.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

Everyone wants a good life, but what does that mean for different people? Can wellbeing actually be measured and how can we improve it if it's not measuring up?

17.1.1 Introduction

We all want a better life for ourselves, our families and our children, no matter where we live. We care about the wellbeing and progress of our communities, our country and our world. But how can we measure these things? What does wellbeing really mean, and what do we count when we measure progress? How do we know if we are succeeding in our efforts to create a better life for everyone?

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6283)

Video eLesson The good life? (eles-1713)

FIGURE 1 Wellbeing is more than being physically healthy; wellbeing includes health, happiness, prosperity and welfare.



17.2 Understanding and measuring wellbeing

LEARNING INTENTION

By the end of this subtopic you will be able to describe the tools, known as indicators, that allow us to gauge what makes a good life and measure wellbeing, and explain the ways of describing levels of development and how we define poverty.

17.2.1 A good life

A county's progress can no longer be accurately measured by income. The concept of **wellbeing** offers us a new perspective on what matters in our lives.

Wellbeing is the experience of having what you need for life to be good. But how do we measure a good life? We can use a variety of **quantitative indicators** and **qualitative indicators** to help us (see **FIGURE 1**). **Indicators** are important and useful tools for monitoring and evaluating progress, or lack of it.

FIGURE 1 Examples of quantitative and qualitative wellbeing data

Quantitative indicators	Qualitative indicators
• Gross national income (GNI)	• Happy planet index
• Gross domestic product (GDP)	• Freedom of speech
• Literacy and numeracy rates	• Safety
• Human Development Index (HDI)	• Sustainability
• Life expectancy	

Traditionally, **development** has been viewed as changing one's environment in order to enhance economic gain. Today, the concept of development is not only concerned with economic growth, but includes other aspects such as providing for people's basic needs, equity and social justice, sustainability, freedom and safety. We have built on this traditional concept for measuring progress by considering wellbeing, which emphasises what is positive and desirable rather than what is lacking. The most successful development programs address all areas of wellbeing, rather than simply focusing on economic, health or education statistics. There is a growing awareness that human beings and their happiness cannot simply be reduced to a number or percentage. We can measure development in a variety of ways, but the most common method remains to use economic indicators that measure economic progress using data such as **gross domestic product (GDP)**.

Using indicators

A wellbeing-centred approach to development takes into account a variety of quantitative and qualitative indicators. Quantitative indicators, based on numerical values, are commonly used because it is easy to compare changes over time and between places. Qualitative indicators, which measure quality of life, are harder to quantify and compare as the data collection can be subjective and time consuming. Indicators can be classified into a range of broad categories (see **FIGURE 2**). Economic indicators measure aspects of the economy and allow us to analyse its performance. Social indicators include demographic, social and health measures. Environmental indicators assess resources that provide us with the means for social and economic development, and gauge the health of the environment in which we live. Political indicators look at how effective governments are in helping to improve people's **standard of living** by ensuring access to essential

wellbeing a good or satisfactory condition of existence; a state characterised by health, happiness, prosperity and welfare

quantitative indicators objective indices that are easily measured and can be stated numerically, such as annual income or the number of doctors in a country

qualitative indicators subjective measures that cannot easily be calculated or measured; e.g. indices that measure a particular aspect of quality of life or that describe living conditions, such as freedom or security

indicator a value that informs us of a condition or progress. It can be defined as something that helps us to understand where we are, where we are going and how far we are from the goal.

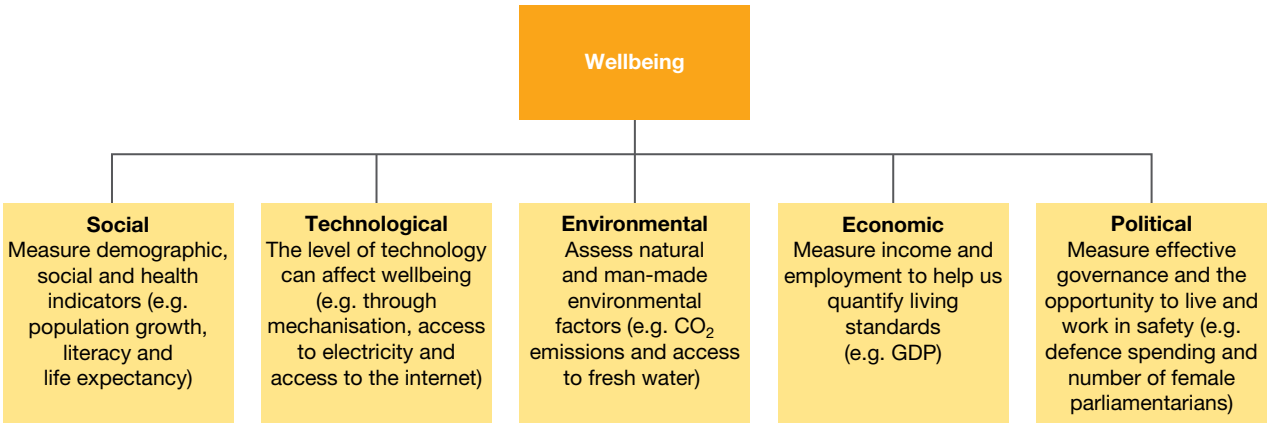
development defined as 'to lead long and healthy lives, to be knowledgeable, to have access to the resources needed for a decent standard of living and to be able to participate in the life of the community' by the United Nations

gross domestic product (GDP) the value of all goods and services produced within a country in a given period, usually discussed in terms of GDP per capita (total GDP divided by the population of the country)

standard of living a level of material comfort in terms of goods and services available. This is often measured on a continuum; for example, a 'high' or 'excellent' standard of living compared to a 'low' or 'poor' standard of living.

services. Wellbeing can also be influenced by technological indicators in fields such as transport, industry, agriculture, mining and communications.

FIGURE 2 Categories of wellbeing indicators



Geographers use data from various indicators to identify the spatial distribution patterns and explain why these patterns exist. Data may be used to look at the spatial distribution of wellbeing at a local, national or global scale.

17.2.2 Describing development

DEVELOPED OR DEVELOPING?

One of the most common ways of talking about the level of development in various places is to label them as 'developed' or 'developing' (previously often referred to as 'undeveloped'). These terms assume that development is a linear process of growth, so each country can be placed on a continuum of development. Countries that are developing are still working towards achieving a higher level of living standard or economic growth, implying that the country could ultimately become 'developed'.

NORTH OR SOUTH?

In 1980, the Chancellor of West Germany, Willy Brandt, chaired a study into the inequality of living conditions across the world. The imaginary Brandt Line divided the rich and poor countries, roughly following the line of the equator. The developed North included the United States, Canada, Europe, the USSR, Australia and Japan. The undeveloped South represented the rest of Asia, Central and South America, and all of Africa. Once again, these terms have become obsolete as countries have developed differently and ignored these imaginary boundaries.

FIRST WORLD OR THIRD WORLD?

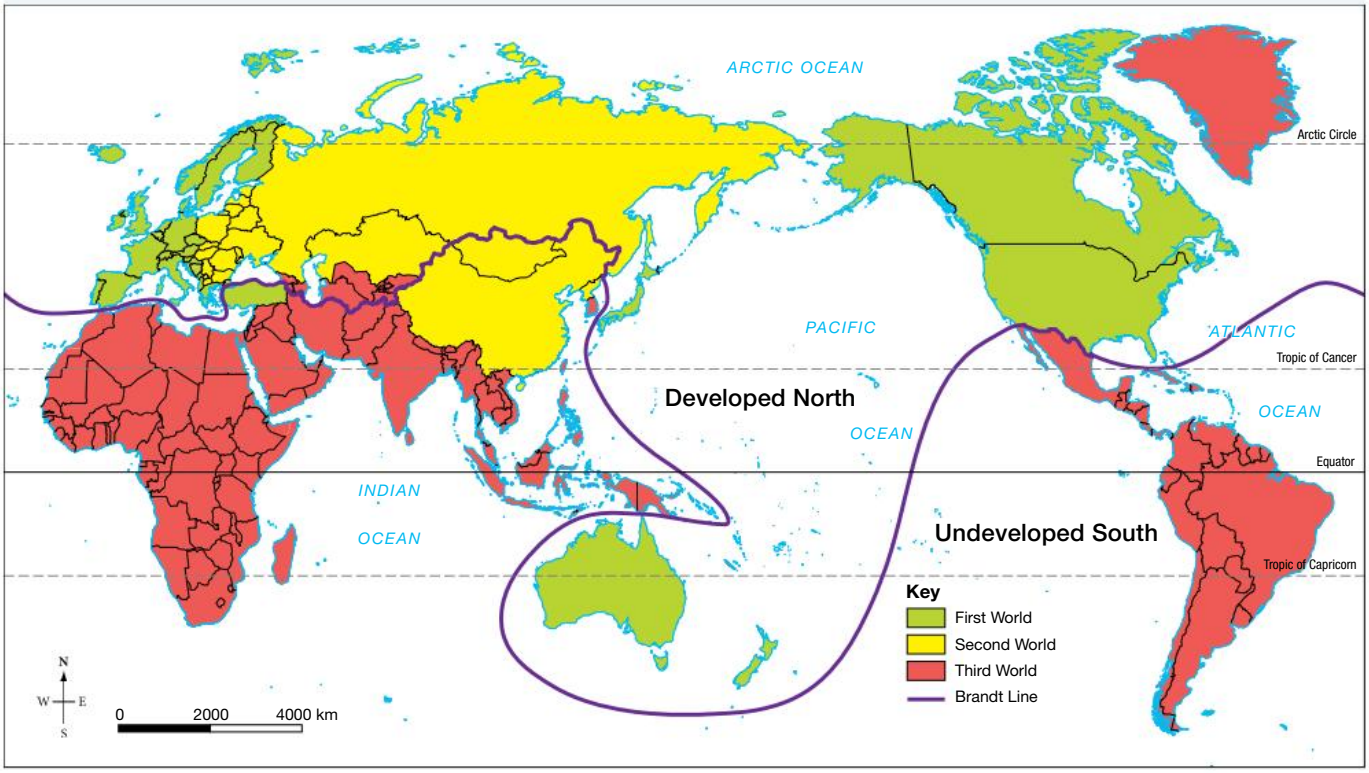
The terminology First, Second and Third Worlds was a product of the Cold War. The Western, industrialised nations and their former colonies (North America, western Europe, Japan and Australasia) were the First World. The Soviet Union and its allies of the Communist bloc (the former USSR, eastern Europe and China) were the Second World.

The Third World referred to all of the other countries. However, over time this term became more commonly used to describe the category of poorer countries that generally had lower standards of living.

The Second World ceased to exist when the Soviet Union collapsed in 1991.

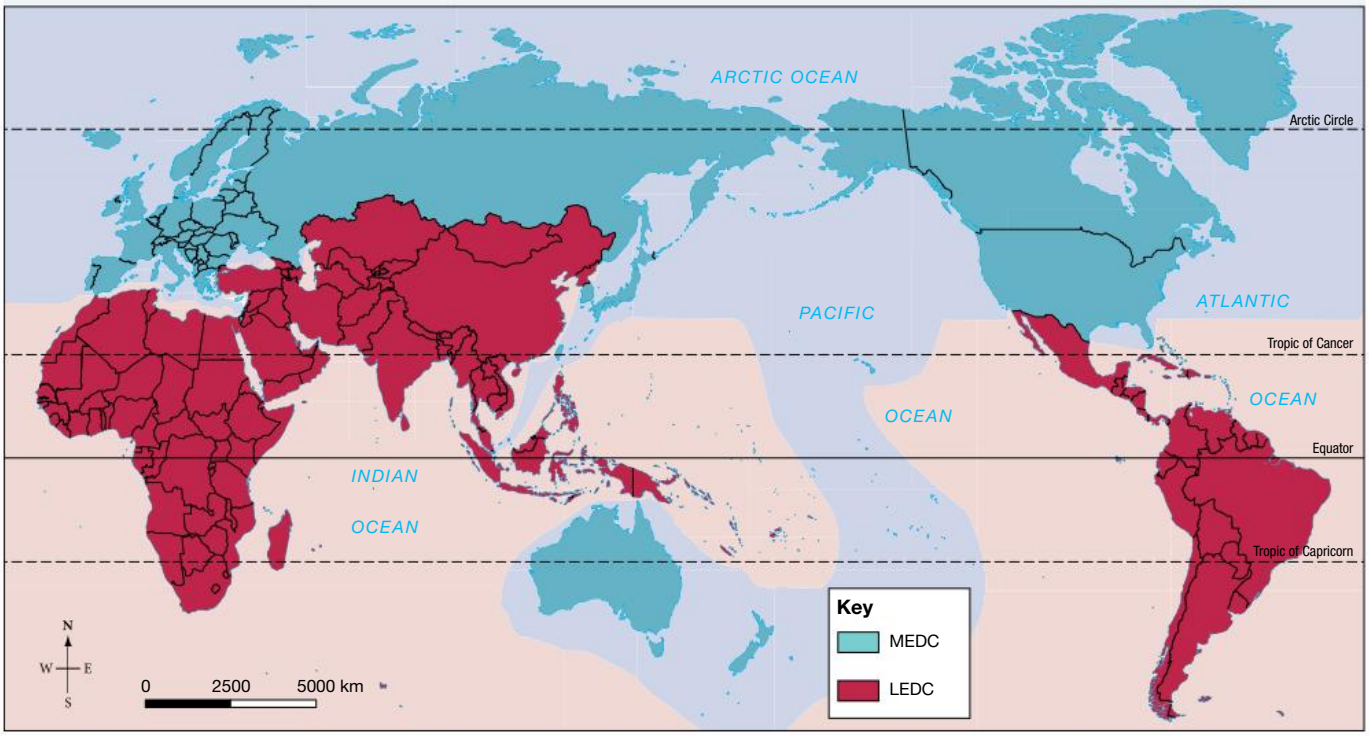
Whichever method of measuring development or wellbeing we choose, it is important to understand the terms that have been used, the values that underpin it, and what perspective (often Western) we take. With an overwhelming amount of data available to us, the world is often divided simplistically into extremes such as 'rich' or 'poor'. Is this the best way? The annotated classifications in **FIGURE 3** have been used in the past century, but they are very general and as such have been questioned by geographers for their accuracy (and sometimes offensiveness).

FIGURE 3 World map showing various definitions of development



Source: United Nations Development Report.

FIGURE 4 World map showing MEDCs and LEDCs



Source: CantGeoBlog.

Today, we use terminology such as 'more economically developed country' (MEDC) and 'less economically developed country' (LEDC) to describe levels of development — in the economic, social, environmental and political spheres. A newly **industrialised**

industrialised having developed a wide range of industries or having highly developed industries

country (NIC) is one that is modernising and changing quickly, undergoing rapid economic growth. Emerging economies (EEs) are places also experiencing rapid economic growth, but these are somewhat volatile in that there are significant political, monetary or social challenges.

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate Australian Curriculum topics > Year 10: Geographies of human wellbeing > **Wellbeing in Western Sydney**
- Investigate Australian Curriculum topics > Year 10: Geographies of human wellbeing > **Wellbeing in Sudan**

17.2 ACTIVITY

Select one of the indicator categories: social, economic or environmental. In pairs or small groups, brainstorm the various indicators that you think might be used to measure the category. Create a short list of at least five before checking the World Statistics section of your atlas to see which indicators are commonly used.

Geography concept: Environment

17.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 5, 7	Questions 2, 4, 6	Questions 3, 8, 9

Check your understanding

1. Identify two examples of places that would have been classified as 'developed North' and two that would have been classified as 'undeveloped South'.
2. What do you think about Australia being labelled a part of the 'developed North'? Explain.
3. Although indicators measure different aspects of quality of life, they are also interconnected. For example, if a country goes through an economic recession, other indicators will be affected. Explain with examples (a flow chart may be useful to step out your thinking).
4. Complete **TABLE 1** to compare the differences between MEDCs and LEDCs (try to include your own explanations where possible).

TABLE 1 Comparison of MEDCs and LEDCs

	MEDC	LEDC
Birth rate		High — many children die so the birth rate increases to counteract fatalities
Death rate	Low — good medical care available	
Life expectancy	High — good medical care and quality of life	
Infant mortality rate		High — poor medical care and nutrition
Literacy rate	High — access to schooling, often free	
Housing type		Poor — often no access to fresh water, no sanitation, infrequent or no electricity

Apply your understanding

5. Refer to **FIGURE 1**.
   a. Using the figure as a guide, create a table to classify each of the following as either a quantitative or qualitative indicator.
      - Motor vehicle ownership rates
      - Unemployment
      - Forest area
      - Incidence of obesity
      - Freedom of speech
      - Proportion of seats held by women in national parliaments
      - Electric power consumption
      - Quality of teaching at your school
      - How safe you feel walking in the city at night
      - How much you trust your neighbours
      - Access to public transport

   b. Which indicators were difficult to classify, and why do you think this is the case?
6. Look back over the indicators in question 5. Indicators can also suggest further information about a country's progress, rate of change or development. Could these indicators be clues to the factors affecting the development of a country? If so, what else do they tell you?
7. Does your pet dog or cat have a good life? What indicators would you use to measure this? Write a selection of five quantitative and five qualitative indicators to help determine the wellbeing of your pet.
8. The concept of wellbeing is relative to who you are and the place where you live. Consider the following statements. Does the term 'wellbeing' have any relevance to these people? Does wellbeing hold any relevance for people in the direst poverty? Write a paragraph to explain your view.
   Person A: 'We live in constant fear, starvation; there is a lack of government. Personal safety is crucial, so wellbeing is not there yet. Things are very difficult as people are living in despair.'
   Person B: 'Before, we always talked of improving living standards, which mostly meant material needs. Now we talk of the importance of relationships among people and between people and the environment.'
   Person C: 'The land looks after us. We have plenty to eat, but things are changing. There are no fish now, not like when my father was a boy.'
9. How do you compare? As a teenager in Australia, you might think you have it tough. But, when we look at the indicators, is that really the case? Decide whether you are better off or worse off for each indicator in **TABLE 2** by evaluating the data. What reasons could account for these differences?

TABLE 2 Australia versus the world — a selection of quantitative indicators, 2017

Life expectancy (years)	Australia	83	Sierra Leone (Africa)	52
Mobile phones (subscriptions per 100 people)	Australia	131	Eritrea (Africa)	6
Adolescent fertility rate (births per 1000 women 15–19 years of age)	Australia	12.9	Denmark (Europe)	4
Proportion of seats held by women in national parliament (%)	Australia	32.7	Rwanda (Africa)	56
Gross National Income per capita (US$)	Australia	43 560	Qatar (West Asia)	116 818
Literacy rate (% of youth aged 15–24)	Australia	99	Mozambique (Africa)	Males 80 Females 57

For sample responses for every question, go to www.jacplus.com.au.

17.3 Wealth and wellbeing

LEARNING INTENTION

By the end of this subtopic you will be able to explain some of the different ways of discussing and measuring wellbeing.

17.3.1 The multiple component index

A wellbeing approach to development takes into account a variety of quantitative and qualitative indicators. Some of these are a little more difficult to measure, such as the idea of happiness. Before you read on, make a list of 10 indicators that you think would give an accurate measure of a teenager's happiness in their country of residence.

A single indicator gives us only a narrow picture of the development of a country. A country may have a very high GDP but, if we dig a little deeper and look at each individual's share in that country's income or their **life expectancy**, we may not find what we expected. Inequalities may be revealed.

GLOBAL WEALTH

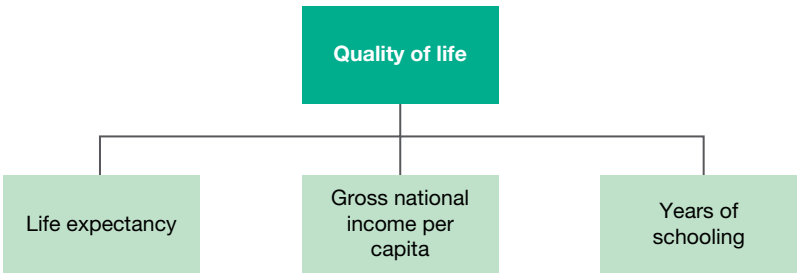
The richest one per cent of adults worldwide owned 47 per cent of global assets in the year 2018, and the richest 10 per cent of adults accounted for 85 per cent of the world total. In contrast, the bottom half of the world adult population owned less than one per cent of global wealth.

Wealth is heavily concentrated in North America, western Europe and high-income Asia–Pacific countries (excluding China). People in these countries collectively hold 78 per cent of total world wealth.

Source: Credit Suisse Wealth Report, 2018.

A combination of many indicators will create a more accurate picture of the level of wellbeing in a particular place. Much like using our five senses to try a new cuisine, a combination of indicators will give us better insight into a country's wellbeing. The **Human Development Index** (HDI) is one such index. It was developed in 1990 and measures wellbeing according to three key indicators (see **FIGURE 1**).

FIGURE 1 The HDI measures quality of life according to three key factors.



17.3.2 Other measures of wellbeing

Over thousands of years, different societies have measured progress in different ways. A GDP-led development model focuses solely on boundless economic growth on a planet with limited resources — and this is not a balanced equation. The HDI has become one of the most common ways to measure wellbeing, but it has also attracted criticism for its narrow approach. These measures do not recognise some of the greatest environmental, social and humanitarian challenges of the twenty-first century, such as pollution or stress levels.

life expectancy the number of years a person can expect to live, based on the average living conditions within a country

Human Development Index (HDI) measures the standard of living and wellbeing by measuring life expectancy, education and income

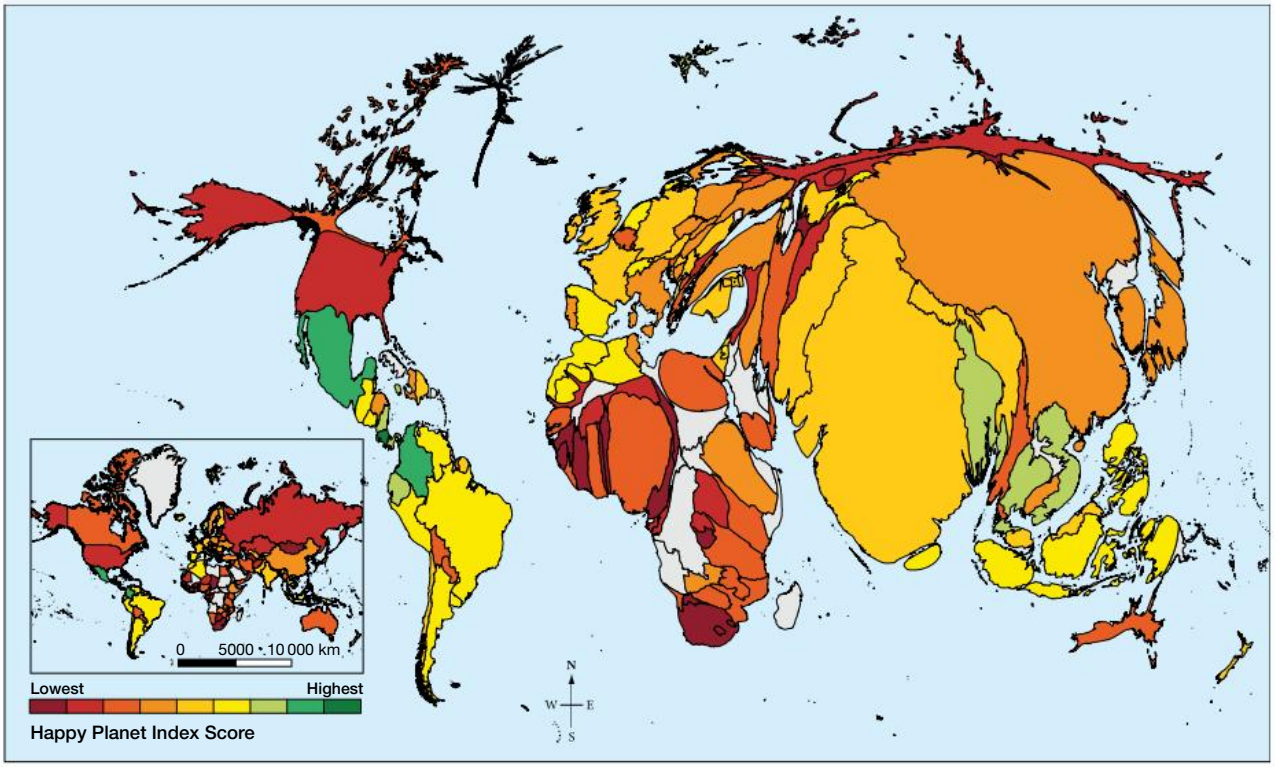
Measuring twenty-first century wellbeing

The new Happy Planet Index (HPI) results map the extent to which 151 countries across the globe produce long, happy and sustainable lives for the people that live in

them. The coloured shading in the **FIGURE 2** cartogram represents each country's HPI score, while the relative sizes and shapes of countries are determined by their population size (see 10.10 SkillBuilder — Interpreting a cartogram).

int-7973

FIGURE 2 Cartogram showing relative global populations and Happy Planet Index scores, 2016



Source: http://happyplanetindex.org.

Each of the three component measures — life expectancy, **experienced wellbeing** and **ecological footprint** — is given a traffic-light score based on thresholds for good (green), middling (amber) and bad (red) performance. These scores are combined to an expanded six-colour traffic light for the overall HPI score. To achieve bright green (the best of the six colours), a country would have to perform well on all three individual components.

$$\text{Happy Planet Index} = \frac{\text{experienced wellbeing} \times \text{life expectancy}}{\text{ecological footprint}}$$

Gross National Happiness

In 2011, the Prime Minister of Bhutan (Central Asia) demonstrated his country's commitment to its wellbeing by developing the world's first measure of national happiness, and he encouraged world nations to do the same. Former UN Secretary-General Ban Ki-moon supported this innovation: 'Gross national product (GNP) … fails to take into account the social and environmental costs of so-called progress … Social, economic and environmental wellbeing are indivisible. Together they define gross global happiness.'

experienced wellbeing an individual's subjective perception of personal wellbeing

ecological footprint a measure of human demand on the Earth's natural systems in general and ecosystems in particular; the amount of productive land required by each person for food, water, transport, housing, waste management and other purposes

Australia's assessment of wellbeing

The Australian National Development Index (ANDI), which was approved in 2015, incorporates 12 indicators measuring elements of progress including health, education, justice and Aboriginal and Torres Strait Islander peoples' wellbeing. Measures such as this demonstrate a new direction in articulating wellbeing, recognising that happiness is not directly proportional to our bank balance or how long we expect to live. This new measure of wellbeing will reflect what is

important to Australians to feel happy as individuals, as well as the happiness of our communities. It will allow Australians to measure the future we want.

Resources

Weblink HPI

17.3 ACTIVITIES

1. Use the **HPI** weblink in the Resources tab to learn more about the HPI and explore the results. List three results that surprised you, and why. Compare your list with a partner. What similarities or differences did you find? **HASS skills: Analysing**
2. A number of countries have already adopted a national measure of wellbeing. Either individually or in pairs, research the history of one of the following indices, identify the indicators used to measure it and evaluate its success.
   - Gross National Happiness (Bhutan)
   - Key National Indicator System (United States)
   - Canadian Index of Wellbeing (Canada)

   HASS skills: Analysing

17.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 4, 6	Questions 2, 3, 9	Questions 5, 7, 8, 10

Check your understanding

1. Define the wellbeing approach and show how it is a multiple component index.
2. Explain why a multiple component index is significant.
3. Provide a detailed explanation of each of the indicators used to calculate the HDI. Is the HDI the best indicator of a country's development? Give reasons for your answer.
4. Without referring to **FIGURE 2**, name three places you would expect to appear high on the Happy Planet Index and three you would expect to appear low. Now, check your predictions on the map. Were you correct?
5. The measurement of happiness has become important in the twenty-first century. Why do you think this is?

Apply your understanding

6. What does the Credit Suisse Wealth Report of 2018 say about the inequality of wealth across the world?
7. Using the Happy Planet Index and **FIGURE 2**, explain what wellbeing conditions you might find in:
   a. South Africa
   b. France
   c. the United States.
8. Suggest why a range of indices is being developed in the twenty-first century to measure wellbeing.
9. Suggest two indicators that might be used in the ANDI.
10. Comment on the distribution of the happiest and unhappiest countries across the world according to the data in **FIGURE 2**. What do you think would make a country unhappy?

For sample responses for every question, go to www.jacplus.com.au.

17.4 Life expectancy and wellbeing

LEARNING INTENTION

By the end of this subtopic you will be able to:

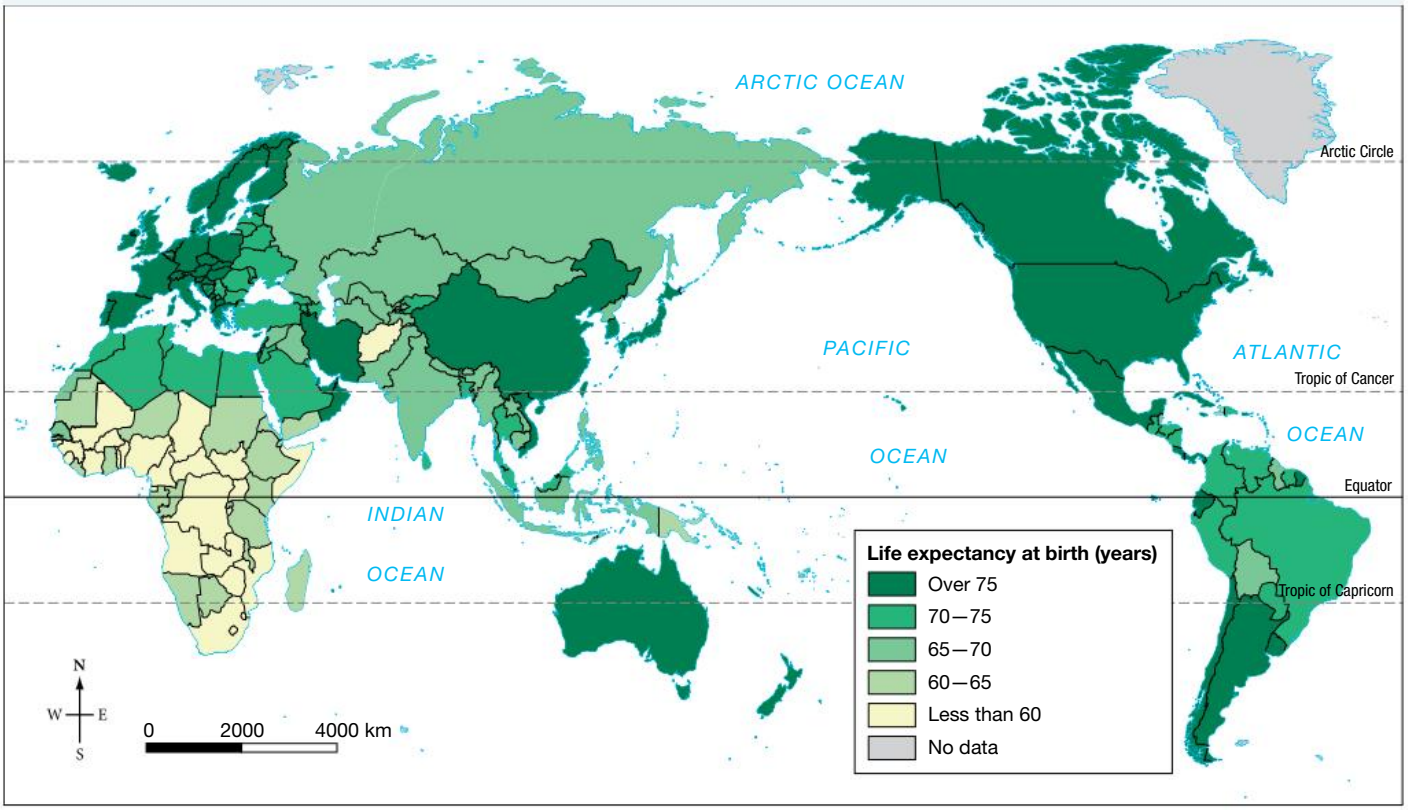
- explain the reasons for variations in life expectancy across the world
- make connections between life expectancy and child mortality
- explain the interconnection between life expectancy and wellbeing
- define key terms such as 'fertility rate', 'natural increase', 'replacement rate' and 'child mortality'.

17.4.1 Life expectancy

How long we can expect to live when we are born is referred to as our life expectancy and is calculated according to the conditions in a particular country in that year. Life expectancy is one of the major indicators of wellbeing. Globally, on average, people are expected to live longer than at any previous time in history. Sayings such as '60 is the new 50' reflect our changing expectations in Australia as to how long we expect to lead active lives. However, with the variation in living conditions around the world, the answer to the question 'how long can we expect to live?' also varies considerably.

Worldwide, a child born in 2019 can expect to live, on average, 72 years. If this child is born in Japan, they can expect to live 84 years, while one born in the African country of Somalia can expect to live only 56 years. **FIGURE 1** shows variations in life expectancy worldwide.

FIGURE 1 Global life expectancy



Source: © United Nations Publications.

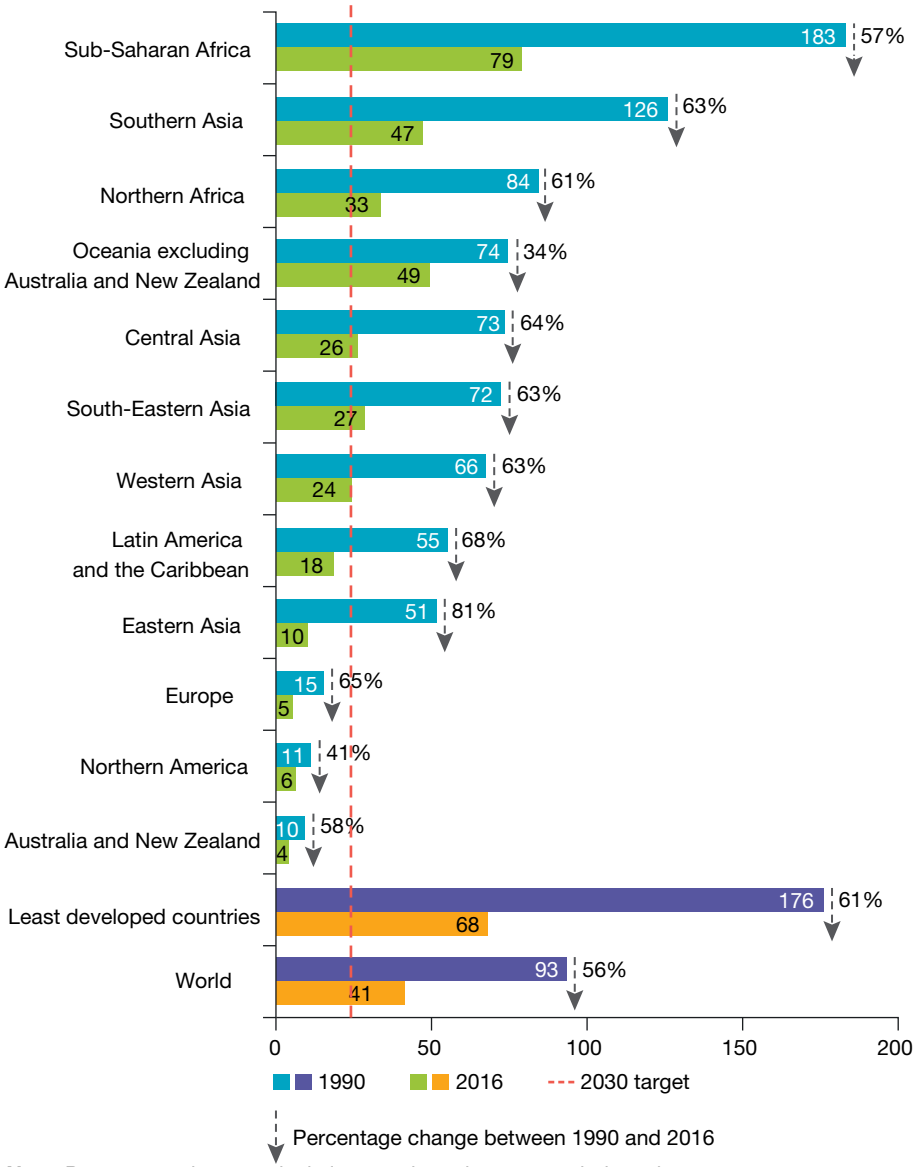
Life expectancy around the world started to increase in the mid 1700s due to improvements in farming techniques, working conditions, nutrition, medicine and hygiene. There is a clear interconnection between wealth and life expectancy: wealthier people in all countries can expect to live longer than poorer people. In general, women outlive men. A higher income enables people to have better access to education, food, clean water and health care.

However, improvements that have led to increased life expectancy have not been uniform across the world. Regions where life expectancy continues to be low have a higher prevalence of infectious diseases. For example, 72 per cent of people worldwide living with HIV and AIDS are in sub-Saharan Africa, and the number of deaths in this region from AIDS is the highest in the world. In 2017, 25 per cent of new infections were in South Africa and Nigeria, with the latter also recording the highest rate of new infections among children under 14.

17.4.2 Child mortality

Life expectancy is closely interconnected with child mortality: countries with high death rates for children under five years of age have low life expectancy. The highest rates are recorded in countries in sub-Saharan Africa; in Somalia, for example, 127 deaths per 1000 were recorded in 2018, while 100 were recorded in Nigeria and 122 in the Central African Republic. Afghanistan, with 68 recorded deaths per 1000, has the highest child mortality rate outside of this region. These rates are well above the United Nations Sustainable Development Goal 3 target of 25 deaths per 1000 by 2030 (see **FIGURE 2**). Young children are particularly vulnerable to infectious diseases due to their lower levels of immunity. Major causes of death include pneumonia, diarrhoea, measles and malnutrition. In wealthier households, child deaths are lower as these

FIGURE 2 Under-five mortality rate (deaths per 1000 live births) and percentage change, 1990–2016



Note: Percentage change calculations are based on unrounded numbers.

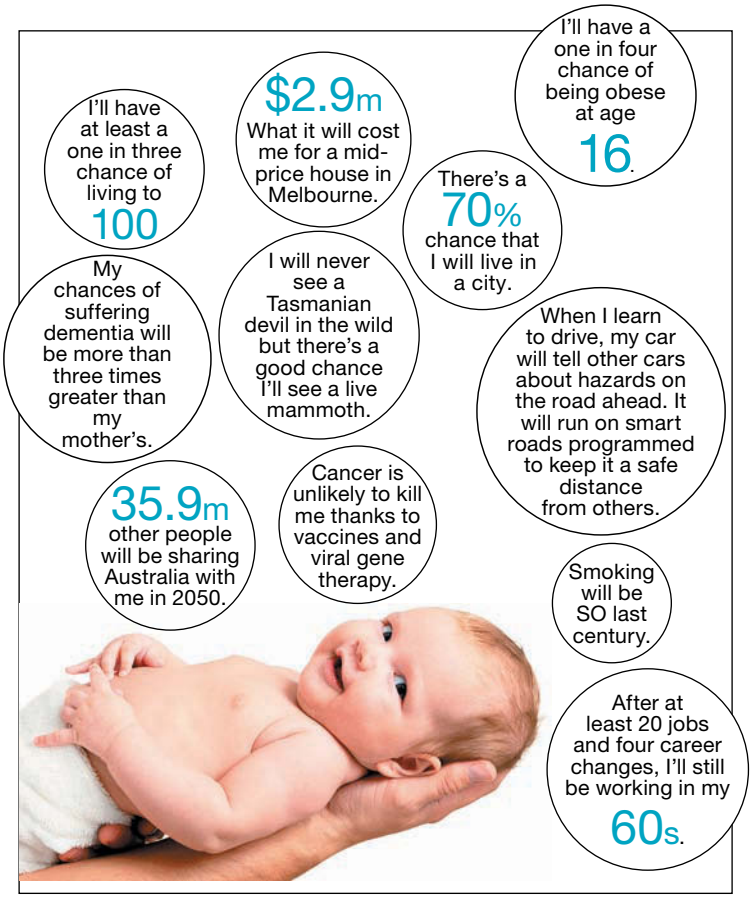
children are more likely to have better nutrition and to be immunised, and parents are more likely to be educated and aware of how to prevent disease.

Under the United Nations' Millennium Development Goals program, which operated from 1990 to 2015, child mortality was reduced considerably. The number of deaths of children under the age of five declined from 12.7 million in 1990 to 6 million in 2015 — the equivalent of nearly 17 000 fewer children dying each day. The greatest success occurred in northern Africa and eastern Asia.

Substantial improvements have been made in the area of preventable childhood diseases. For example, before the introduction of a measles vaccine in 1963, major epidemics occurred every two to three years, resulting in 2.6 million deaths each year. In 2017, 85 per cent of the world's children received the measles vaccine before their first birthday, 13 per cent more than in 2000. The World Health Organization reports an 80 per cent drop in measles-related childhood deaths, thus preventing 21.1 million deaths. Despite this reduction, in 2017 there were still 110 000 deaths globally due to measles.

Life expectancy and child mortality allow us to measure and compare human wellbeing in different places.

FIGURE 3 Her future

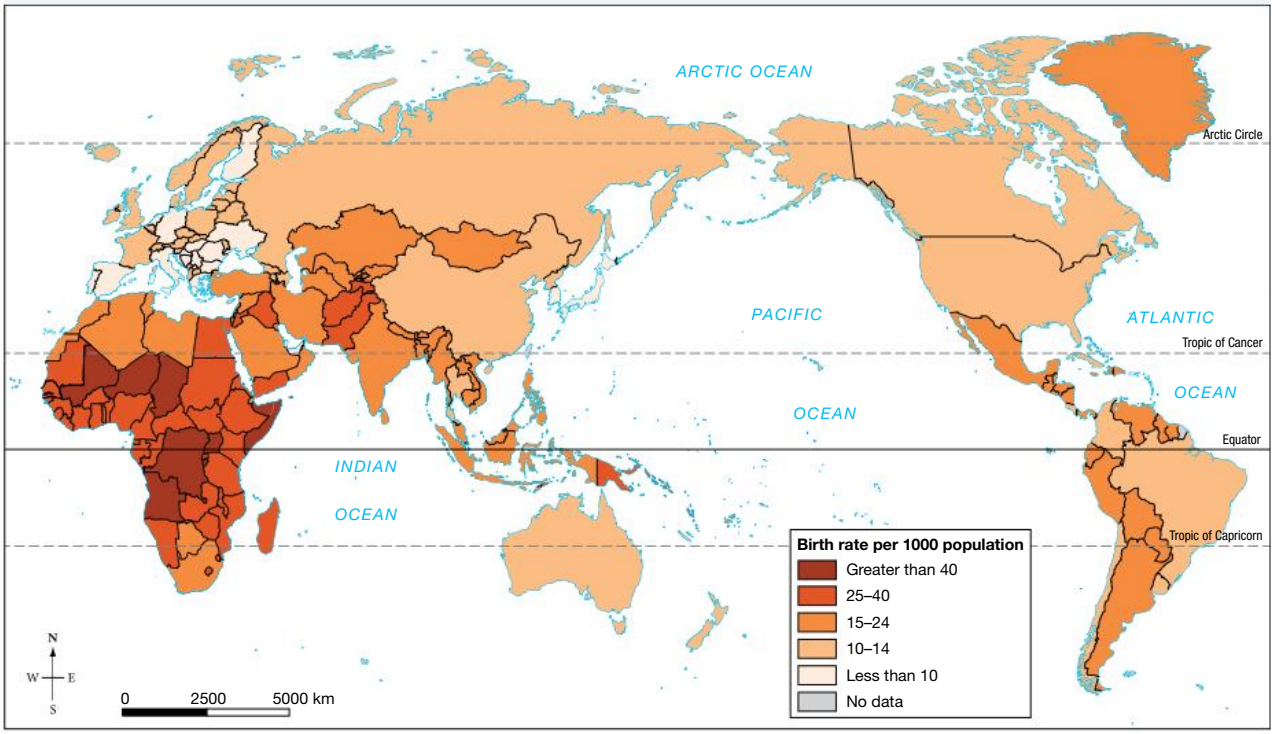


17.4.3 Births and deaths

Every minute there are an estimated 250 births and 105 deaths worldwide. This natural increase equates to an extra 145 people at a global scale every minute. However, the rate of population change varies considerably across the world, with some places experiencing a decline rather than an increase in numbers of people. Rates of population change have an impact on wellbeing, both now and in the future.

FIGURE 4 shows the global distribution of birth rates. The continent of Africa clearly stands out here with the highest figures. In 2010, Africa had a population of one billion; the United Nations projects that by 2050 the African population will be 2.5 billion — three times that of Europe. The majority of this growth will occur in sub-Saharan Africa, where the average **fertility rate** in 2018 was five children per woman. Countries such as Niger and Somalia have fertility rates as high as 7.2 and 6.2 respectively, while Tunisia has the lowest fertility rate in Africa with 2.2 births per woman. Europe has very low birth rates with a fertility rate of 1.6. Ireland and France are slightly higher than this average with fertility rates of 2.0, while the poorest country in Europe, Moldova, has the lowest fertility rate of 1.3. Taiwan recorded the lowest fertility rate in the world in 2018 with 1.2 births per woman. Australia's fertility rate is 1.8.

FIGURE 4 Global distribution of birth rates



Source: © United Nations Publications; The World Bank.

For death rates, as **FIGURE 5** illustrates, sub-Saharan Africa is again at the high end of the spectrum, with many places in that region experiencing death rates above 10 per 1000. However, high death rates are more dispersed, with many European countries, such as Bulgaria and Ukraine, included. Low death rates are widely distributed across the regions of the Americas, much of Asia and Oceania.

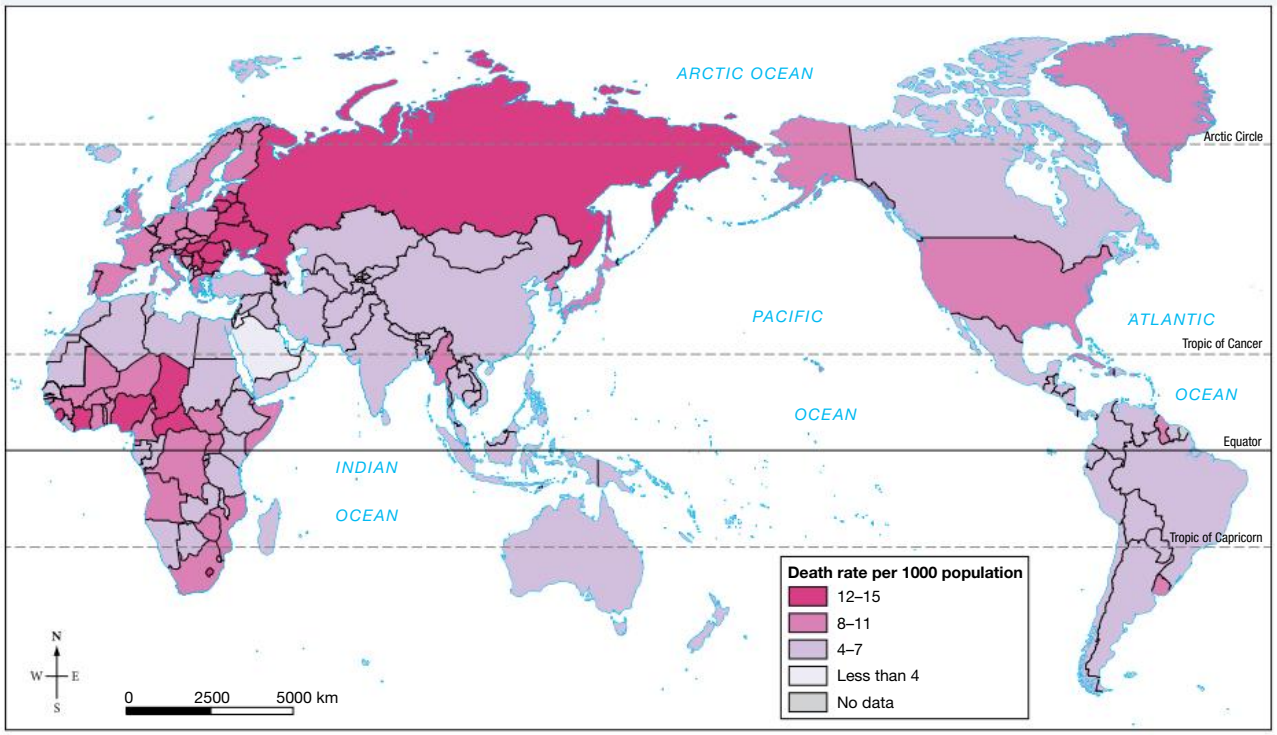
Whether a population increases or decreases is largely dependent on variations in births and deaths producing a **natural increase.** Where a fertility level is well above the **replacement rate** of 2.1 children, population growth will occur. Conversely, fewer births over a period of time will ultimately result in a declining population. **FIGURE 6** indicates the rate of natural population change, which ranges from over 3 per cent growth primarily in African nations (this would result in a doubling of population in approximately 23 years) to negative growth primarily in Europe. It should be noted that on a national scale, population change is also affected by migration.

fertility rate the number of live births per 1000 women of childbearing age (usually 15–44) in a given year

natural increase the difference between the birth rate (births per thousand) and the death rate (deaths per thousand). This does not include changes due to migration.

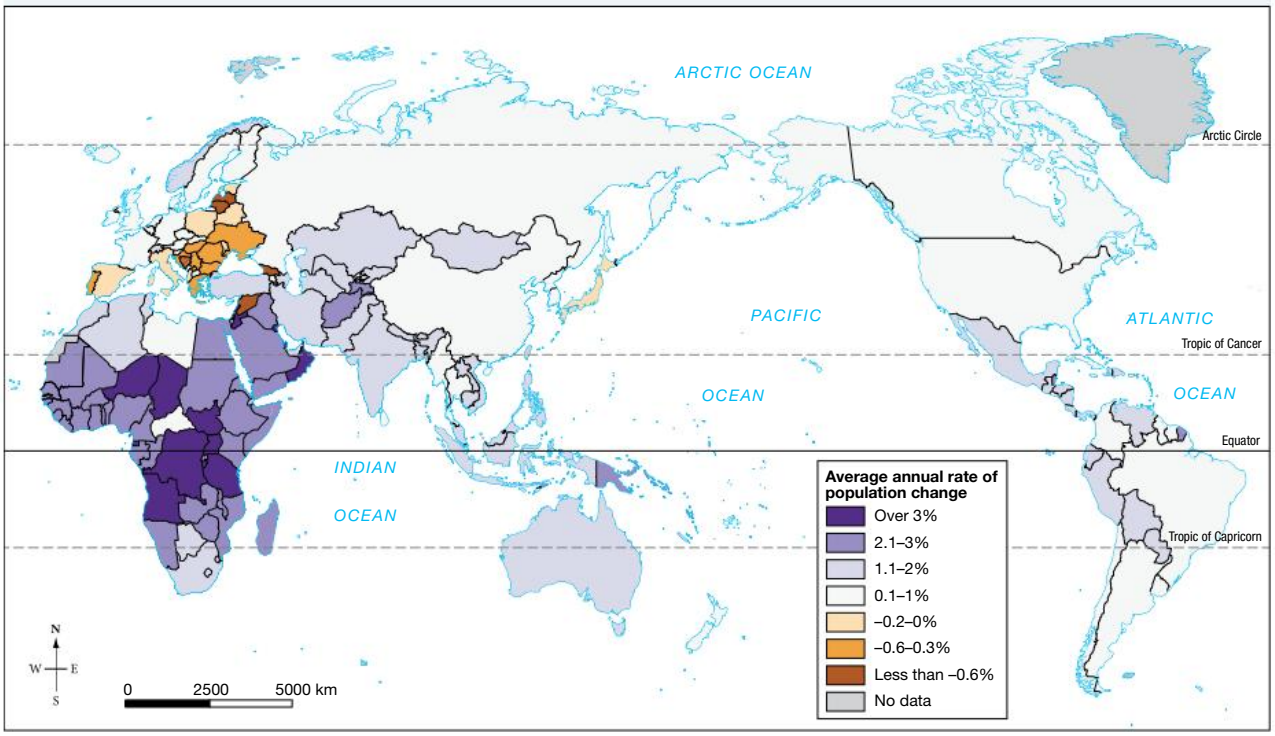
replacement rate the number of children each woman would need to have in order to ensure a stable population level — that is, to 'replace' the children's parents. This fertility rate is 2.1 children.

FIGURE 5 Global death rates



Source: © United Nations Publications; The World Bank.

FIGURE 6 Population change



Source: © United Nations Publications.

17.4.4 Maternal mortality

Rarely would women in Australia consider that pregnancy and giving birth could pose a risk of death. For most women in Australia and other developed countries, childbirth is something that occurs without significant health complications for either the mother or the baby. Unfortunately, for a huge number of women around the world this is not the case, and child-bearing can have a negative impact on their health and wellbeing.

Less economically developed countries (LEDCs) generally experience worse human wellbeing than more economically developed countries (MEDCs). For example, women in low-income countries have a 1 in 36 lifetime risk of **maternal mortality**, whereas this risk for women in high income countries is 1 in 3300. It is also true that within LEDCs, the health and wellbeing of women is generally worse than that of their male counterparts across most age groups. For this reason, ending gender discrimination, achieving gender equality and empowering women and girls are key elements of the United Nations' **Sustainable Development Goals** (SDGs). SDGs 3 and 5 clearly outline targets related to the health and wellbeing of women. Reducing maternal mortality rates is key among these aims. (See section 18.2.2 for the Sustainable Development Goals.)

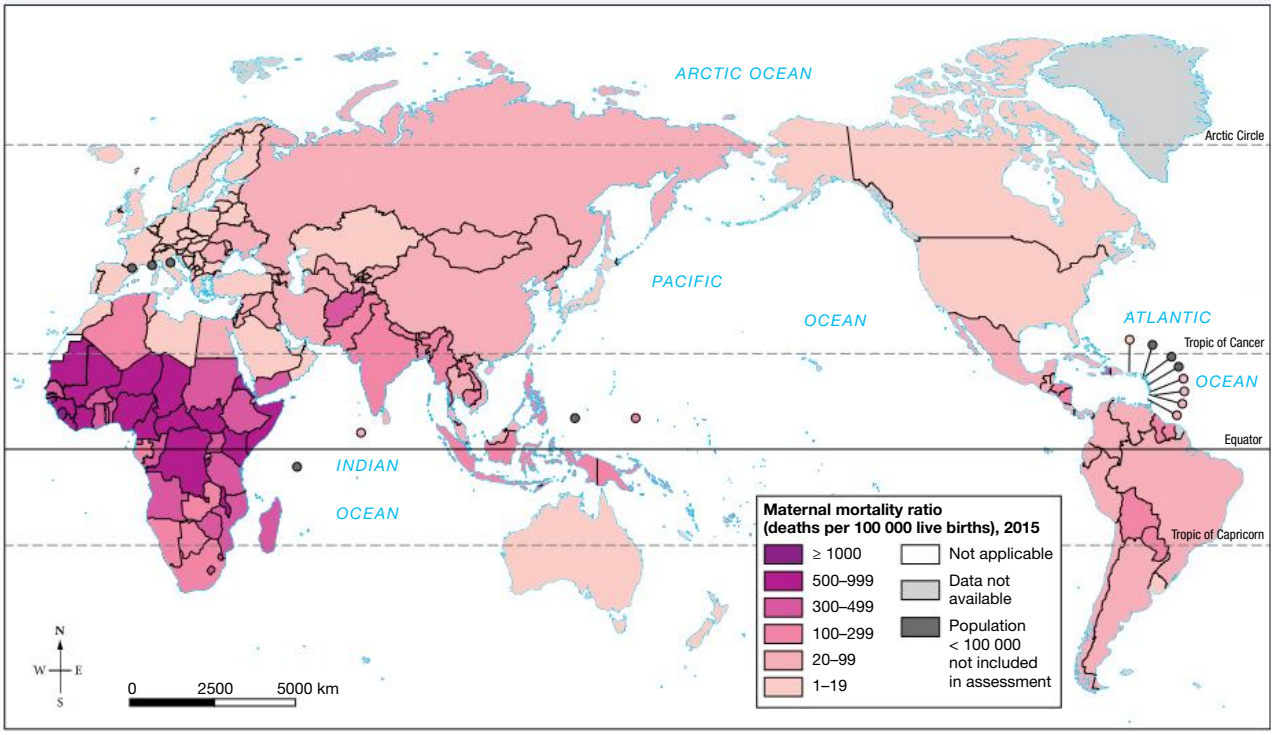
maternal mortality the death of a woman while pregnant or within 42 days of termination of pregnancy

Sustainable Development Goals (SDGs) a set of 17 goals established by the United Nations Development Programme, which aim to end poverty, protect the Earth and promote peace, equality and prosperity

Every day approximately 830 women die from complications related to pregnancy or childbirth. Most of these deaths are from preventable complications: severe bleeding, infections and complications from unsafe abortions. The incidence of maternal mortality and related illness is interconnected with poverty and lack of accessible, affordable quality health care.

The spatial distribution of maternal mortality (see **FIGURE 7**) shows that LEDCs have higher rates of maternal mortality, with the regions of sub-Saharan Africa and southern Asia accounting for the majority.

FIGURE 7 Global scale distribution of maternal mortality



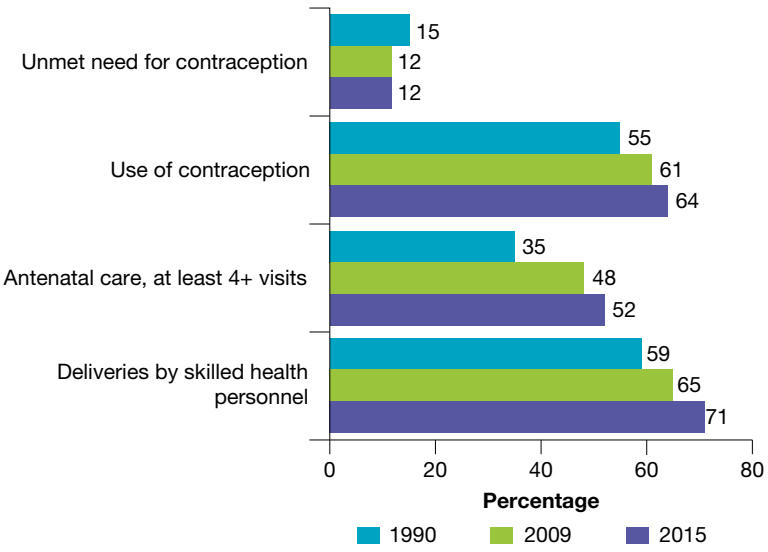
Source: World Health Organization.

Eighty-six per cent of maternal deaths are in sub-Saharan Africa and southern Asia; sub-Saharan Africa accounts for two-thirds of all these deaths. Highest maternal mortality rates are recorded in Sierra Leone and Chad, where mothers have a 1 in 17 and 1 in 18 risk of dying, respecitvely. Two countries account for one-third of total global maternal deaths: Nigeria at 19 per cent (58 000), followed by India at 15 per cent (45 000).

The Millennium Development Goals (MDGs) — the forerunner to the SDGs — set a target of reducing the maternal mortality rate between 1990 and 2015 by three-quarters, and the achievement of universal access to reproductive health by 2015. While maternal mortality fell by 45 per cent during the MDG period, globally the 75 per cent target was not met, particularly in countries in sub-Saharan Africa.

FIGURE 8 indicates progress in terms of access to reproductive health. Most indicators fell well short of universal access (considered to be 80 per cent). While use of contraception has increased, wealthier women continue to have the best access to contraception. The unmet need for contraception among poorer women remains at levels similar to 1990. In sub-Saharan Africa, for example, this figure was 28 per cent in 1990; in 2015 it remained high, at 24 per cent. Providing access to contraception is a means of empowering women to make choices about family size.

FIGURE 8 Global reproductive health indicators, 1990–2015



Source: Data from *The Millennium Development Goals Report 2015*, United Nations, pp. 39, 41.

The SDGs have set a target of a maternal mortality rate below 70 per 100 000 by 2030. This will require an annual drop of 7.5 per cent — more than three times the reduction that occurred under the MDGs. However, Cambodia, Rwanda and Timor-Leste all achieved this type of reduction rate in the 15 years from 2000 to 2015, proving that this goal is achievable.

17.4 ACTIVITY

Create your own version of 'Her future' (**FIGURE 3**), depicting what you imagine your life will be like when you are 35 years old.

HASS skills: Evaluating

17.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 4, 9	Questions 2, 5, 6, 7, 10	Questions 8, 11, 12, 13, 14

Check your understanding

1. Describe the distribution of life expectancy shown in **FIGURE 1**.
2. What age groups are likely to have the highest mortality rates? Why?

3. Using **FIGURES 4** and **5** and an atlas, identify countries that are exceptions to these patterns:
   a. high birth rates in Africa
   b. low birth rates in Europe
   c. low death rates in Asia
   d. low death rates in Europe.
4. Using **FIGURE 6**, identify two countries for each category of natural population change.
5. What are the major contributors to population change at a national scale?
6. Explain the significance of a national fertility level of 2.1 children per woman.
7. Refer to **FIGURE 7**. Describe the variation in maternal mortality on a global scale.
8. Explain how a lack of education may contribute to increased rates of maternal mortality.
9. Why do LEDCs generally experience lower levels of human wellbeing than MEDCs?
10. Explain why women living in developing places are more likely to have lower levels of wellbeing than their male counterparts.

Apply your understanding

11. Predict how life expectancies in sub-Saharan Africa may change if a cure for HIV/AIDS is discovered.
12. Will increased incomes always lead to increased life expectancy? Justify your answer.
13. What implications does an increase in life expectancy have on the provision of health care?
14. What are the implications for a country if its fertility rate is below the replacement rate?

For sample responses for every question, go to www.jacplus.com.au.

17.5 Variations in wellbeing in India

LEARNING INTENTION

By the end of this subtopic you will be able to describe India's changing population and explain the variation that exists in various measures of wellbeing across different regions of the country.

17.5.1 How and why is India's population changing?

China has the biggest population in the world, with a population of 1.4 billion in 2019; however, its population is expected to drop to 1.35 billion by 2050. The population of India, on the other hand, is expected to surpass that of China by 2025, rising from its current level of 1.37 to 1.46 billion. With a predicted population of 1.7 billion by 2050, what happens to India's population will have major implications in terms of the wellbeing of the people of that country.

Although the number of children per woman in India has declined substantially from 5 in the 1970s to 2.3 in 2018, there is considerable regional variation in this rate. Overall, India's population is growing at a rate of 1.1 per cent per year. Improvements in water supply, a decrease in infectious diseases and an increase in education levels have resulted in a reduced death rate since the 1950s, while the birth rate has not declined to the same extent. Infant mortality remains high as over two-thirds of the population are rural dwellers who may not have ready access to health and reproductive services. Children remain a vital part of the family's labour force both on farms (as shown in **FIGURE 1**) and for old age support, so it is essential for families to have more children to improve the chance of them surviving to adulthood. Of the entire population, 27 per cent is under 15 years of age, creating huge momentum for future growth (see **FIGURE 2**).

FIGURE 1 Indian children assisting with rice planting



FIGURE 2 Population pyramid for India (a) 2019 and (b) 2050

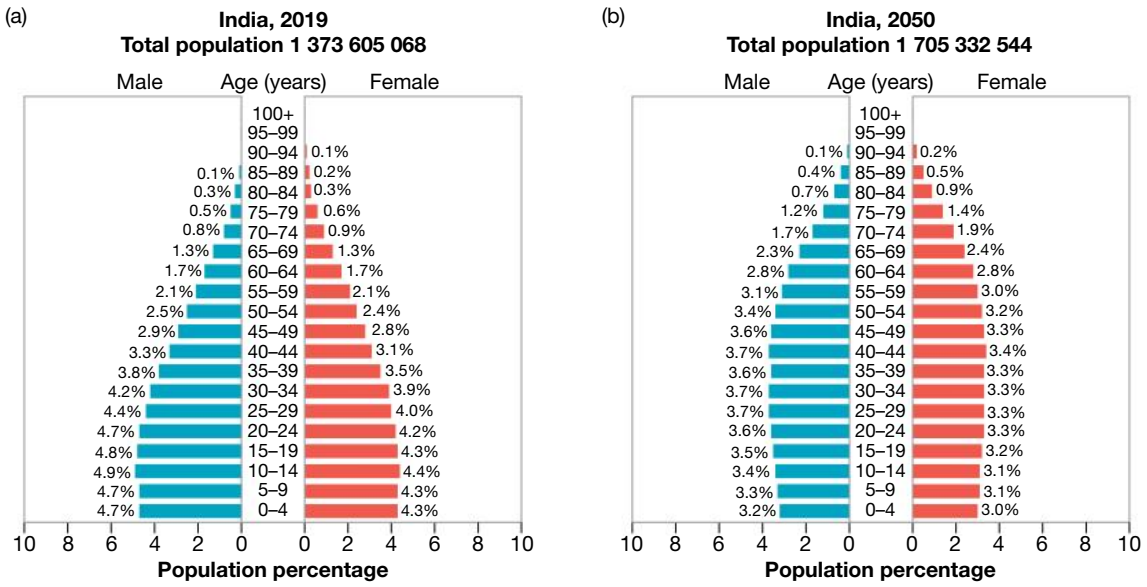


FIGURE 3 Proportion of children 0–6 years to total population, India, 2011

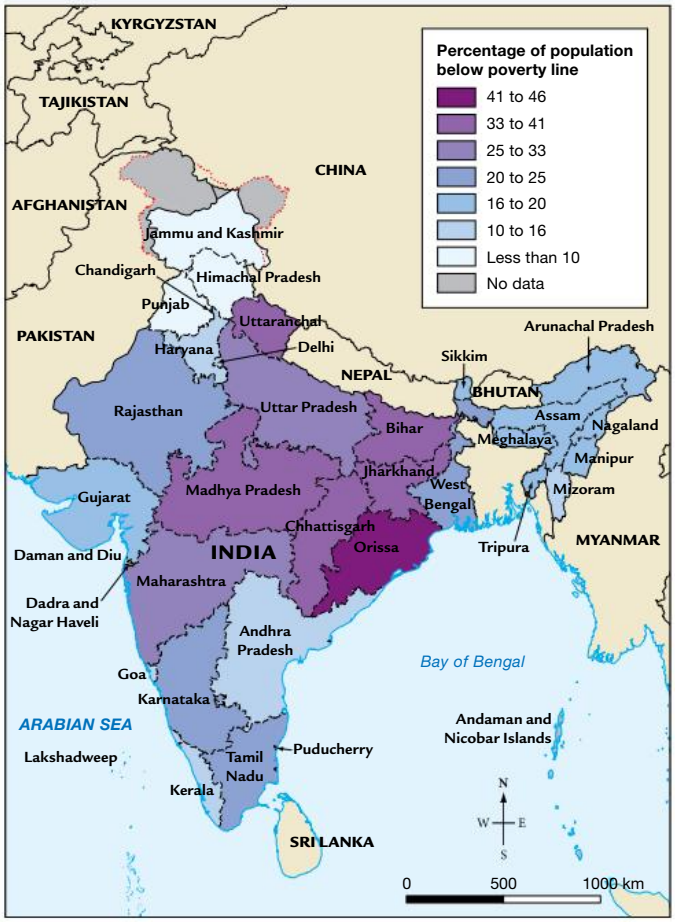


Note: Data drawn from 2011 census; next census due in 2021.
Source: Spatial Vision.

17.5.2 Regional variation in wellbeing

In addition to variations in population structure, the states of India show differences in other important wellbeing-related demographics. The levels of literacy and poverty shown in **FIGURES 4** and **5** reflect a varying distribution of wellbeing in India.

FIGURE 4 Poverty levels in India



Note: Data drawn from 2011 census; next census due in 2021.
Source: Spatial Vision.

FIGURE 5 Literacy rates (percentage) in India, 2011



Note: Data drawn from 2011 census; next census due in 2021.
Source: Spatial Vision.

FIGURE 6 Poverty and literacy levels vary throughout India. States with both high levels of literacy and lower levels of poverty, such as Kerala and Mizoram, are rare.



17.5.3 Maternal mortality in India

There is also a substantial variation of maternal mortality within India (see **FIGURE 7**). Maternal mortality is strongly interconnected with poverty in both rural areas and urban slums: places with poor **sanitation** and a lack of affordable health services are associated with high levels of maternal mortality. In addition, women are likely to be less well-nourished and less literate than males in a household, so they are less likely to be able to access information on health and contraception.

The government of India launched the National Rural Health Mission in 2005, with a specific focus on maternal health. This was reinforced in their 2013 Call to Action. Efforts have been focused on those districts that account for 70 per cent of all infant and maternal deaths. Under this program, community workers have been trained to deliver babies, and 10 million women have been provided with a cash incentive to enable them to give birth in clinics rather than at home. Maternal mortality has fallen, but Human Rights Watch reports that many women are being charged for services as they are unaware of these entitlements.

A related issue for pregnant women in India is the pressure to produce a son. Census data in 2011 revealed the number of female children (0–6 years) has decreased from 927 to 914 girls per 1000 boys in the past decade, despite some overall improvement in the **sex ratio** across all age groups (see **FIGURE 8**). By comparison, the natural human sex ratio at birth would see around 952 girls born per every 1000 boys.

sanitation facilities that safely dispose of human waste (urine, faeces and menstrual waste)

sex ratio the number of females per 1000 males

FIGURE 7 Maternal mortality rates in India



Note: Data drawn from 2011 census; next census due in 2021
Source: Published and issued by Office of the Registrar General, India, Ministry of Home Affairs, www.censusindia.gov.in/vital_statistics/SRS_Bulletins/MMR_Bulletin-2010-12.pdf.

FIGURE 8 Variation in sex ratio within India



Note: Data drawn from 2011 census; next census due in 2021
Source: Government of India, Ministry of Home Affairs, Office of the Registrar General. Map by Spatial Vision.

Males are traditionally preferred over female children: sons are seen as the breadwinners who carry the family name, while daughters are often perceived as an economic burden. Although **female infanticide** is illegal, use of ultrasound for sex-determination tests has led to sex-selective abortions, with an estimated 500 000 girls aborted each year (although sex selective abortion is also illegal). The pressure to produce a son means that many Indian women have multiple pregnancies, thereby increasing their risk of maternal mortality over their reproductive years. **FIGURES 7** and **8** suggest an interconnection between the places of high maternal mortality and those with a large imbalance in the sex ratio.

female infanticide the killing of female babies, either via abortion or after birth

poverty line an official measure used by governments to define those living below this income level as living in poverty

DISCUSS

How have cultural norms, religion and world views within Indian culture contributed to a lack of fairness and equality for females in Indian society?

General capability: Ethical understanding

FIGURE 9 Son preference has resulted in an imbalance in India's sex ratio.



17.5 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 2, 4, 11	Questions 1, 3, 6, 8	Questions 5, 7, 9, 10, 12

Check your understanding

1. With reference to the **FIGURE 2** population pyramids, account for India's changing population growth.
2. From **FIGURE 3**, which three regions of India have the lowest proportion of children aged 0–6 years?
3. Study **FIGURE 4**. Describe the distribution of the states with the highest percentage of the population living below the **poverty line**. (***Note:*** Currently the World Bank's global poverty line indicator is less than U$1.90 per day.)
4. Look at **FIGURE 5**. Name five Indian states that have a literacy rate above the national average.

Apply your understanding

5. Use **FIGURES 3**, **4**, **5**, **7** and **8** to describe the average characteristics of the population in Uttar Pradesh.
6. Describe the characteristics of the state of Orissa in India.
7. Using the data provided throughout this subtopic, describe and account for the variation in wellbeing in India.
8. In which state (or states) of India do you think wellbeing would be highest? Explain your response.
9. Predict the shape of India's population pyramid if the trends in India's sex ratio continue.
10. Suggest measures that could be introduced by the Indian government to help Indian parents see the value of female babies as equal to that of boys.

11. Refer to **FIGURE 4** showing the distribution of poverty in India. To what extent is the interconnection between poverty and maternal mortality (as shown in **FIGURE 7**) evident?
12. Female infanticide occurs in some parts of India. Discuss the issues associated with this practice and its impact on the Indian population now and into the future.

For sample responses for every question, go to www.jacplus.com.au.

17.6 Poverty as a factor in wellbeing

LEARNING INTENTION

By the end of this subtopic you will be able to explain the concept of economic inequality and describe how this affects individuals' wellbeing.

17.6.1 Defining poverty

There is a strong interconnection between development and poverty. The United Nations defines poverty as:

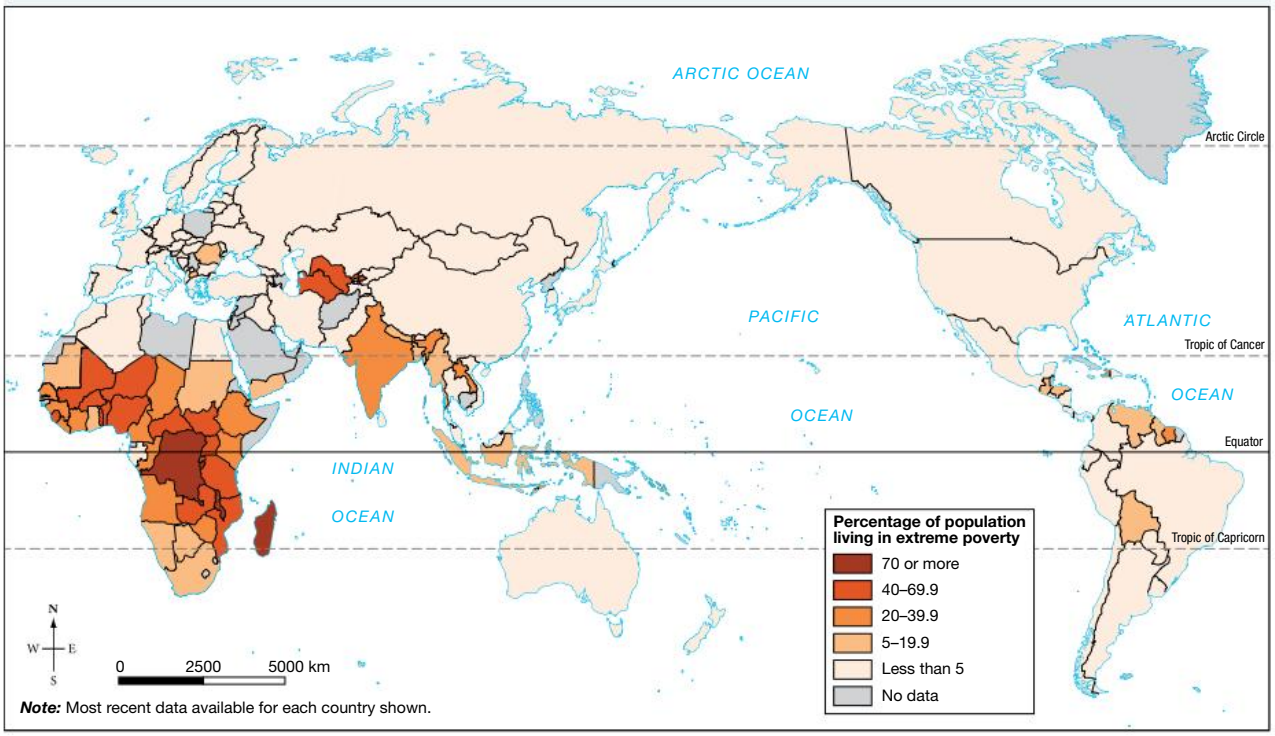
a denial of choices and opportunities, a violation of human dignity. It means not having enough to feed and clothe a family, not having a school or clinic to go to, not having the land on which to grow one's food or a job to earn one's living. It means susceptibility to violence, and it often implies living in marginal or fragile environments, without access to clean water or sanitation.

However, poverty is most often measured using solely economic indicators. More than one billion people live in **extreme poverty**, as represented in **FIGURE 1**.

extreme poverty a state of living below the poverty line (US$1.90 per day), and lacking resources to meet basic life necessities (also known as absolute poverty)

int-7972

FIGURE 1 The proportion of the world's population living on less than U$1.90 per day, the World Bank's global poverty line indicator



Source: World Bank – World Development Indicators.

17.6.2 The haves and have-nots of Rio

How would you like to live with spectacular views over one of the world's most beautiful coastlines? The only problem is that you could be living in a slum without running water and your only access in or out is via hundreds of stairs and laneways. This is what life is like in a typical **favela** in Rio de Janeiro.

According to World Bank statistics, Brazil is the eighth-largest economy in the world. This ranking places Brazil ahead of Russia, South Korea and Australia. Yet, despite the strength of Brazil's economy, the benefits of economic growth have not trickled down to the poor, resulting in large differences in wellbeing across the nation.

In Brazil, some of the most overt inequality of wealth distribution in the world is evident. Almost 55 million Brazilians — a quarter of the population — live in poverty. Incredibly, the wealthiest 5 per cent of Brazil's population earns the same income as the remaining 95 per cent.

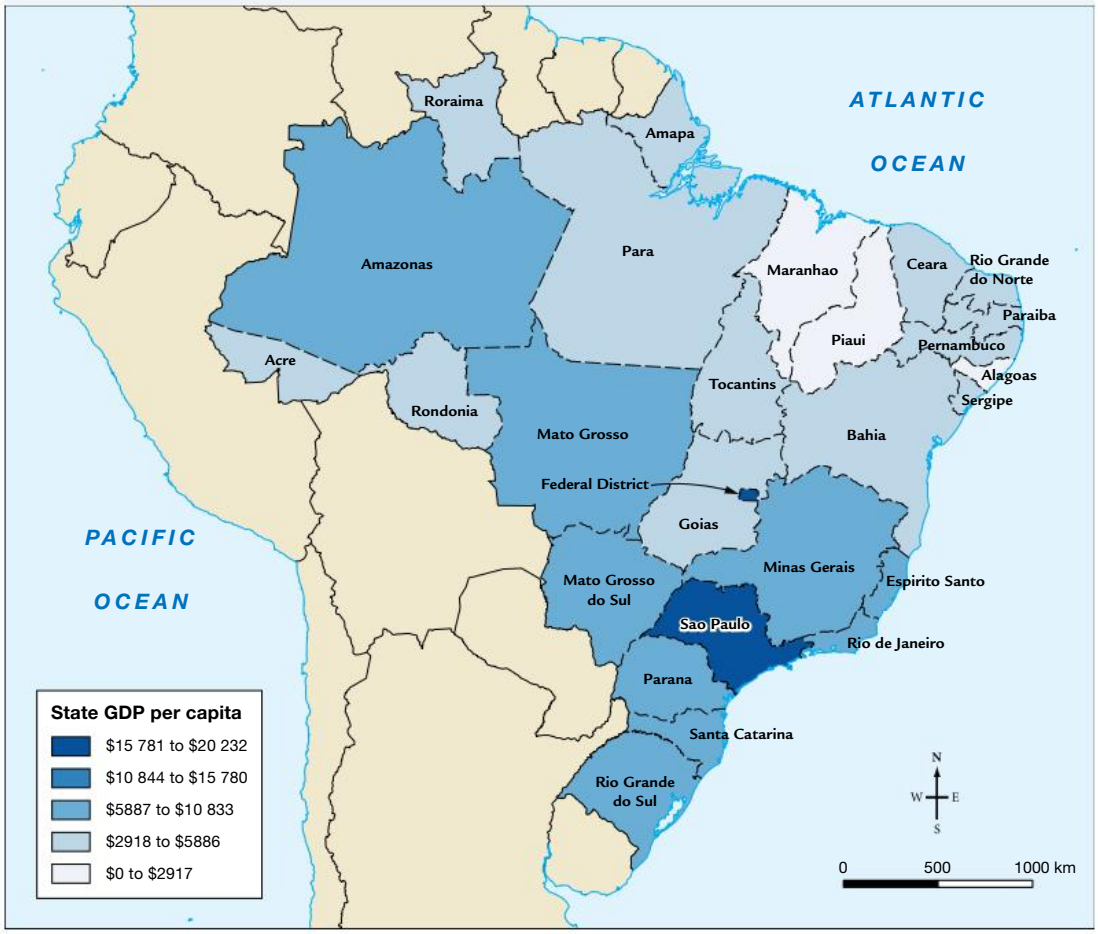
FIGURE 2 shows the variation in wealth experienced across Brazil's different regions, as measured by gross domestic product (GDP).

There is considerable **spatial variation** in wellbeing between regions in Brazil. The majority of industrial development in Brazil has occurred in the south and south-east regions, generating more wealth there. This contrasts markedly with the agriculturally based north-east region, which has higher rates of poverty and infant mortality and lower rates of nutrition.

favela an area of informal housing usually located on the edge of many Brazilian cities. Residents occupy the land illegally and build their own housing. Dwellers often live without basic infrastructure such as running water, sewerage or garbage collection.

spatial variation difference observed (in a particular measure) over an area of the Earth's surface

FIGURE 2 Distribution of wealth per state of Brazil



Source: Instituto Brasileiro de Geografia e Estatística. Made with Natural Earth. Map by Spatial Vision.

Impacts of Rio de Janeiro's development on wellbeing

Rio de Janeiro is a well-known tourist destination in Brazil, famous for its beautiful beaches, spectacular scenery and carnivals. However, for many local people, these elements are far removed from their daily lives. Even within one of the wealthiest cities in the wealthiest region in Brazil, there is considerable variation in wellbeing and living conditions.

The city has experienced rapid growth, starting in the eighteenth century when freed slaves who had worked on plantations came into the city in search of employment. This rural–urban migration still exists today, with thousands flocking to the city in search of opportunity and a new life. New settlers faced the dual problems of low wages and high housing costs, thus forcing them to construct illegal shanties on wasteland or vacant land. Over time, these have developed into entire suburbs, known as favelas. Typically, these slums are located on steep slopes on the edges of the city, although, as the city has expanded, it has wrapped itself around the favelas.

Ironically, the poorest citizens live on unstable slopes with spectacular million-dollar views (see **FIGURE 3**), while the wealthier tend to live on the more stable flatter land closer to the city centre.

Brazil conducts its census every ten years. According to the census in 2010, 22 per cent of Rio de Janeiro's population of over 6.35 million people lived across some 763 favelas. Rocinha (shown in **FIGURE 4**) is considered Rio's largest favela, with its population estimated at between 150 000 and 300 000 people. It is located in the southern zone of the city, in close proximity to the famous beaches of Rio's Ipanema and Copacabana districts.

FIGURE 3 A favela located on a steep slope in Rio de Janeiro



FIGURE 4 Street view of Rocinha favela, Rio de Janeiro



The effect of favela-living on wellbeing

Living conditions in the favelas are extremely difficult as these areas have developed without any type of planning or government regulation and the housing is generally substandard. The resulting issues have an impact on the ongoing development of the city as well as the wellbeing of its citizens.

Issues affecting wellbeing include:

- *lack of infrastructure such as sanitation and piped water*. For example, almost one-third of favela households lack sanitation, leading to higher rates of disease. Garbage has to be put in sectioned-off dumping sites.
- *vulnerability to weather extremes*. For example, heavy rainfall creates landslides and floods on steep slopes. Timber shacks are more vulnerable to collapse than houses built of concrete bricks.
- *lack of access*. There is often only one main road, so movement around the favelas is via narrow lanes and steep staircases (see **FIGURE 4**).
- *long commuting times*. The average time to travel into the city centre of Rio is 1.5 hours by bus. The cost of public transport also takes a sizeable proportion of the average worker's salary. This in turn limits both educational and employment opportunities.

- *lower household income*. The average household income for people living in the favelas is approximately half that of those people living in the inner suburbs.
- *high crime rates*. The incidence of homicide and other crimes is high. This is linked to the influence of drug trafficking and criminal gangs who have established themselves within the relative safety of the favelas.
- *a sense of insecurity felt by residents*. Most people do not have legal title to their land or dwellings and can be moved by the government at any time.

Improvements to wellbeing in the favelas

In order to reduce crime and drug traffickers' control over the favelas, and to improve safety, in 2008 the government introduced Pacifying Police Units (known in Portuguese as the *Unidade de Polícia Pacificadora*, or UPP). By 2014, 37 UPPs were in place. These have had mixed success, with ongoing violence still very much an issue in many areas.

To help improve access for favela residents, the government has installed cable cars to transport people up and down the steep hillsides quickly and effectively, with local residents entitled to one free round trip per day. It is also hoped that the cable cars will allow for expansion of tourism. However, one favela community criticised the government's priorities, maintaining that locals were not properly consulted and that basic services such as sewerage and education should have come first.

As Brazil hosted the 2014 World Cup soccer tournament and the 2016 Olympic Games, the city expanded infrastructure and built new facilities. **FIGURE 5** highlights the major issue that many of the planned Olympic Zones were located on existing favela sites. Many residents were very unhappy at the prospect of being relocated to make way for new sporting venues. Over 3000 families were forcibly relocated. Favela residents

FIGURE 5 Location of Rio's favelas and Olympic venues



Source: UNEP-WCMC 2012. Made with Natural Earth.

claimed that the financial compensation offered was insufficient for a new home and that communities that had existed for generations were being destroyed.

Unfortunately, Brazil's ambitious plan to improve the wellbeing and living conditions of the favelas has been limited by recent economic uncertainty. After the hope provided by the Olympic Games upgrades, the futures of people living in the favelas are much more uncertain.

Preventing the continued growth of favelas by providing adequate low-income housing is the most cost-effective means of improving wellbeing. The cost of upgrading a favela with basic infrastructure is estimated to be two to three times as much as the cost of providing new high-rise housing estates. However, with 65 per cent of Rio's population growth coming from rural–urban migration, it is difficult for authorities to keep up with demand for housing and space.

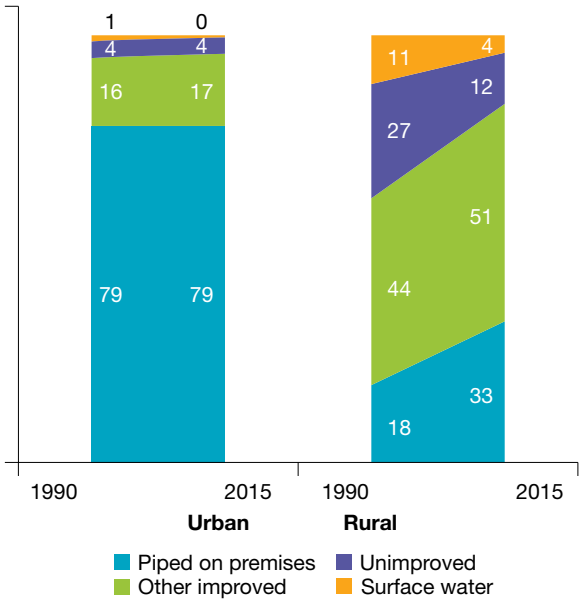
Nationally, the government aimed to eliminate extreme poverty by 2014 with its Brazil Without Misery Plan. It involved the expansion of cash transfer payments to low-income families in exchange for them keeping their children in school and following a health and vaccination program. Improved infrastructure, vocational training and **micro-credit** were also part of this plan. Although the plan reduced the numbers of those living in extreme poverty from 10 per cent in 2004 to 4 per cent by 2012, it ultimately fell well short of its goal; extreme poverty remains, with rates back up to 4.8 per cent in 2017. The challenge of improving the lives of Rio's poor continues.

micro-credit the provision of small loans to borrowers who usually would not be eligible to obtain loans due to having few assets and/or irregular employment

17.6.3 The interconnection between poverty, water supply, sanitation and wellbeing

For many people around the world, lack of access to clean water and lack of adequate sanitation has had a major impact on their health and therefore their wellbeing. Approximately 840 million people do not have access to clean, safe drinking water, and at least two billion people use a drinking water source contaminated with faeces. Over two billion lack basic sanitation. Safe drinking water and basic sanitation are of crucial importance to human health, especially for children. Water-related diseases are the most common cause of death among the poor in less developed countries — they kill an estimated 842 000 people each year, nearly half of whom are children under the age of five. Diseases such as cholera, typhoid, dysentery and worm infestations are directly attributable to contaminated water supplies.

FIGURE 6 Trends in drinking water coverage (%), by rural and urban residency

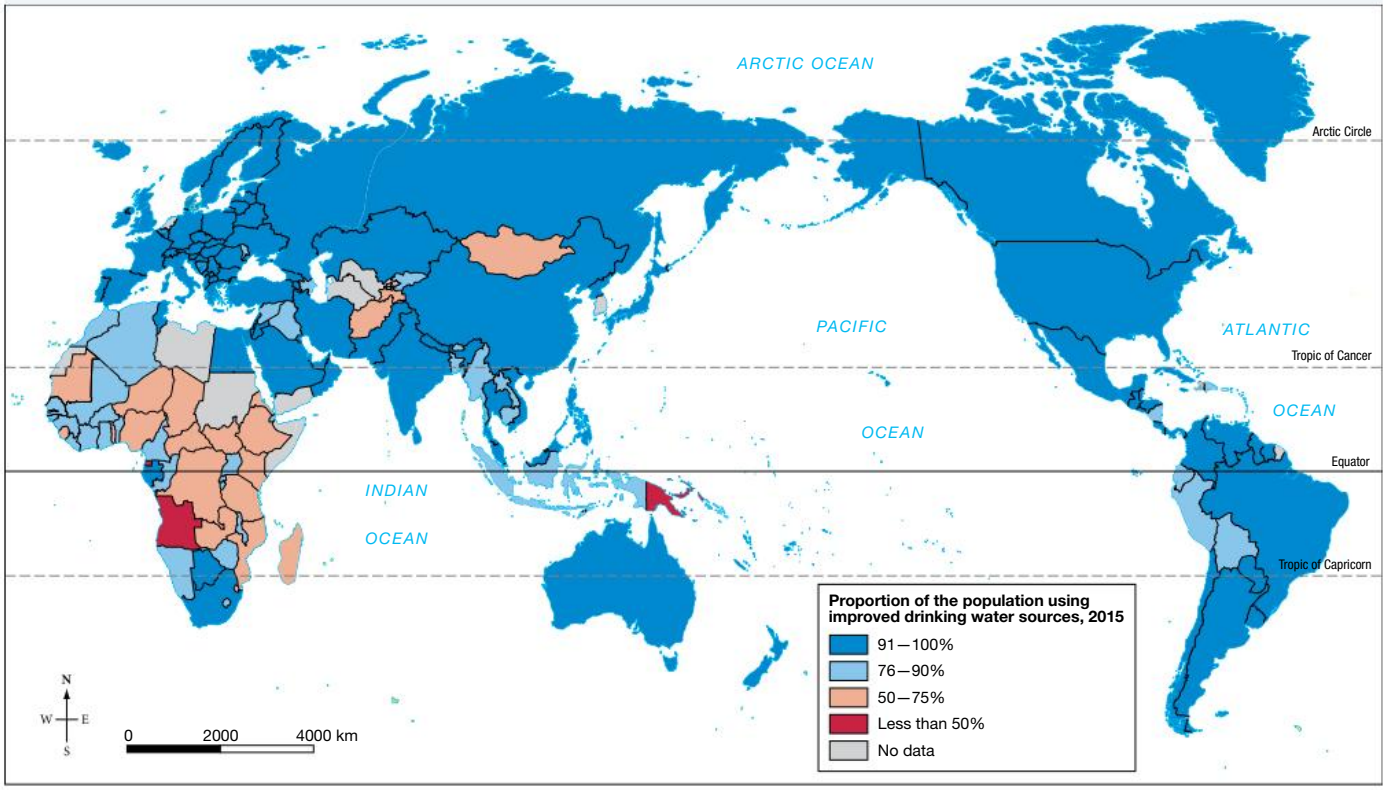


Global progress

Remarkable progress was made under Millennium Development Goal 7 — to halve the proportion of people without access to safe drinking water by 2015. The target was met more than five years ahead of schedule, with 91 per cent of the global population using an improved drinking water source in 2015 compared with 76 per cent in 1990. Fifty-eight per cent of the world's people now have access to piped drinking water. Rural and urban coverage does vary, however, as shown in **FIGURES 6** and **7**.

Progress towards the MDG sanitation target of 75 per cent was much slower and was not met overall, although 95 countries did succeed. Only 68 per cent of the world's population has access to improved sanitation. New targets for improved access to clean water and sanitation have been set for 2030 under Sustainable Development Goal 6.

FIGURE 7 Proportion of the population using improved drinking water sources, 2015



Source: © UNICEF.

There are huge regional variations across the globe as well as within countries. For example, 90 per cent or more of people in Latin America, Northern Africa and much of Asia have improved water supply, in contrast to only 68 per cent in sub-Saharan Africa. In terms of sanitation, most people who lack access are again rural dwellers, even within locations where water supply has improved.

Success stories

Many **non-government organisations (NGOs)** have been involved in successful projects to improve access to water supply and sanitation. The success of these projects hinges not just on provision of clean water and toilets, but also on community involvement and education. Agencies such as Oxfam and World Vision work within communities to provide access to water filters, safe and clean toilets, water pumps and rainwater harvesting systems for collecting and storing water. In addition to the health benefits that they provide, these facilities also free up women and girls from hours of work spent carrying water or finding additional firewood in order to boil unsafe drinking water. Mothers now have more time to work on their farms, potentially improving food availability and income, and girls have more time free from essential chores, so they can instead attend school.

non-government organisation (NGO) an organisation that operates independently of government, usually to deliver resources or serve some social or political purpose

DISCUSS

'Access to adequate sanitation is increasingly a problem in urban places in the developing world.' Evaluate this statement in small groups. **General capability: Critical and creative thinking**

on Resources

Weblink Favelas

17.6 ACTIVITIES

1. Undertake research on one of the following to find out the role unclean water plays in its spread: cholera, typhoid, dysentery, schistosomiasis, worm infestations. **HASS skills: Analysing**
2. Go to the website for either Oxfam or World Vision. Gather the following information on one of their current projects involving improvements to the provision of clean water and sanitation: location of project, scale of project, problems the project aims to fix, what the project involves. **HASS skills: Analysing**

17.6 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 5, 7, 15	Questions 3, 6, 8, 12, 13, 14, 18	Questions 9, 10, 11, 16, 17

Check your understanding

1. Outline the characteristics of a favela.
2. Refer to **FIGURE 2**.
   a. What is the average GDP for the state of Rio de Janeiro?
   b. Describe the distribution of Brazilian states with an average GDP per capita of more than $12 000.
   c. What reason can you give for this pattern?
3. Refer to **FIGURE 3**. Describe how topography has influenced the development of favelas in Rio de Janeiro.
4. With reference to **FIGURE 5**, describe the spatial distribution of favelas in Brazil.
5. How has the development of Rio de Janeiro had an impact on people's wellbeing?
6. Study **FIGURE 4**.
   a. What difficulties would exist for people of different ages living in this street?
   b. Why would the government find it cheaper to build new high-rise housing rather than upgrading existing favelas?
   c. Predict the changes people would face if they are moved from living in a favela like this to living in a high-rise housing estate.
7. What impact does poor sanitation have on health and wellbeing?
8. Refer to **FIGURES 6** and **7**. How has the distribution of places with clean water changed over time?
9. Explain the interconnection between poor sanitation, unclean water, health and wellbeing.

Apply your understanding

10. Explain the interconnection between the development of favelas and movement of people from rural areas into Rio de Janeiro.
11. Discuss the government action to improve wellbeing in favelas on two different scales.
12. Visiting favelas is increasingly popular among tourists. Suggest some positive and negative impacts of tourist tours of favelas. Formulate your own opinion: is such tourism exploiting or helping locals?
13. Why would the estimated population of Rocinha (150 000 to 300 000) vary to such an extent?
14. How might hosting the Olympic Games and World Cup have affected the wellbeing of Rio's residents?
15. What impact does poor sanitation have on the natural environment?
16. Which countries and regions do you expect to make greatest progress in terms of improving access to clean water and sanitation? Justify your answer.
17. What is the likely impact of improved water provision on literacy for girls? Explain.
18. If you were travelling to a place that does not have clean water or the level of sanitation you are used to, what steps could you take to ensure you did not become ill during your visit?

For sample responses for every question, go to www.jacplus.com.au.

17.7 Variations of wellbeing in Australia

LEARNING INTENTION

By the end of this subtopic you will be able to:

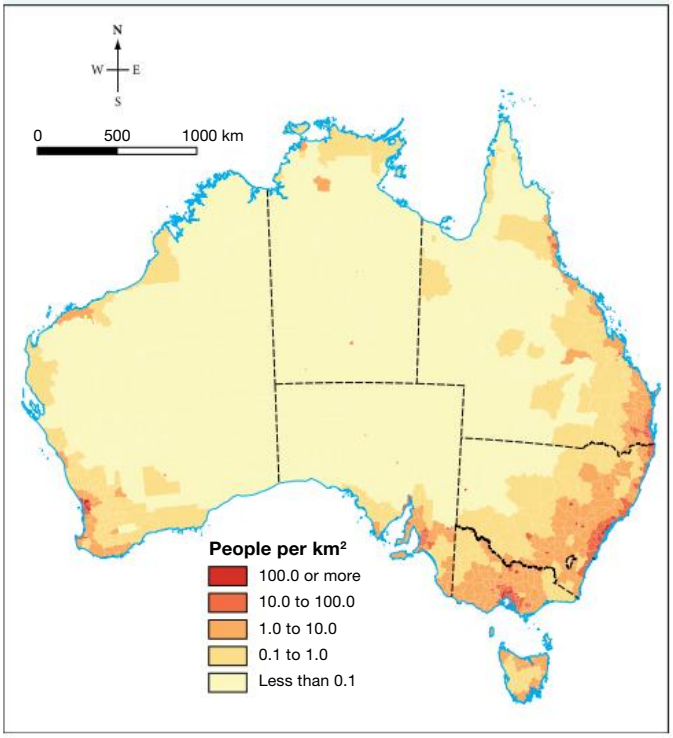
- describe the changing nature of Australia's population
- identify factors that influence Australia's population profile
- make and justify predictions about Australia's changing population profile
- describe the wellbeing of Aboriginal and Torres Strait Islander communities and explain variations between the wellbeing of Australians.

17.7.1 Australia's population

According to the Australian Bureau of Statistics, Australia's population reached 25.4 million in September 2019. Statistically speaking, a typical Australian in that year would be female, born in Australia, aged 37 years and living in a household consisting of a couple and children (although the average household size was only 2.6 people). Of course, Australia's demographic characteristics are much more diverse than this. To what extent do you fit the 'typical' profile?

Most of Australia's population is concentrated in coastal regions in the south-east and east and, to a lesser extent, in the south-west. The population within these regions is concentrated in urban centres, particularly the capital cities (see **FIGURE 1**). Seventy-one per cent of Australians live in major cities with a population of over 100 000; 29 per cent live in rural and remote areas, of whom around 2 per cent live in small towns with a population of less than 1000 people.

FIGURE 1 Australia's population distribution



Source: Spatial Vision.

Aboriginal and Torres Strait Islander peoples make up 3.3 per cent of the Australian population, with a median age of 23 years. With 65 per cent of the Aboriginal and Torres Strait Islander population under 30 and only 3.4 per cent over the age of 65, they are a young population. The non–Aboriginal and Torres Strait Islander population is ageing; with a median age of 37 years; 39 per cent of the population is under 13 and 14.1 per cent is over the age of 65.

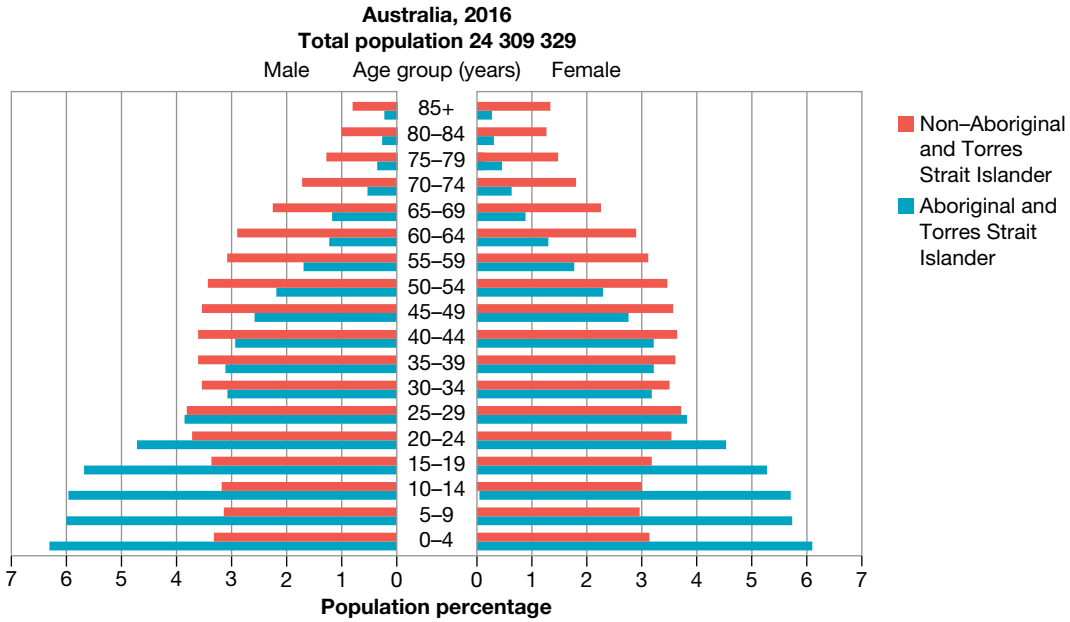
FIGURE 2 Brisbane: a typical Australian urban environment



FIGURE 3 Innamincka: an outback town



FIGURE 4 Population pyramid for Aboriginal and Torres Strait Islander and non–Aboriginal and Torres Strait Islander Australians



17.7.2 Are all Australians equal?

In a just society like Australia, we would expect that everyone is able to experience a similar standard of living. It would be unfair for one sector of a community to experience significant disadvantage when the rest of the community enjoys the privileges of a 'good life'. However, many Aboriginal and Torres Strait Islander Australians consistently experience lower levels of health, education, employment and economic independence than those experienced by other Australians. These **socioeconomic** factors inhibit the ability of Aboriginal and Torres Strait Islander peoples, to contribute to and benefit from all that Australia has to offer.

socioeconomic of, relating to or involving a combination of social and economic factors

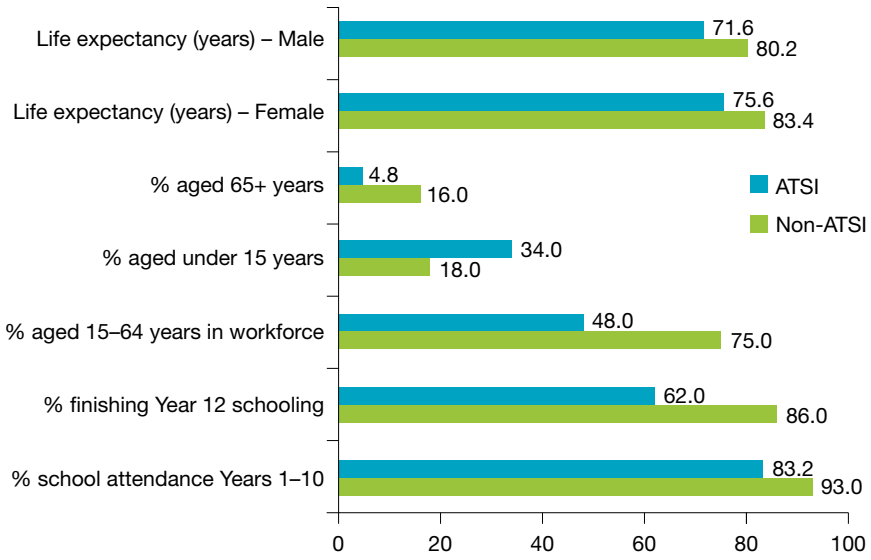
Why does disadvantage exist?

The inequalities may be attributed to three main causes:

- the dispossession of land
- the displacement of people
- discrimination.

Many generations of Aboriginal and Torres Strait Islander peoples have experienced difficulties in accessing the same services and opportunities as other Australians. Disadvantage in one area, for example, poor access to health services, may affect a student's ability to attend school, which may in turn alter their employment prospects. Compared with other Australians, Aboriginal and Torres Strait Islander peoples (as a group) remain disadvantaged (see **FIGURE 5**).

FIGURE 5 Indicators of Aboriginal and Torres Strait Islander wellbeing



17.7.3 Improving wellbeing — closing the gap

In 2008, the Close the Gap program was launched with the aim of eliminating health and wellbeing differences between Aboriginal and Torres Strait Islander and non–Aboriginal and Torres Strait Islander Australians. It set out six key targets:

1. to close the life expectancy gap within a generation
2. to halve the gap in mortality rates for Aboriginal and Torres Strait Islander children under five within a decade
3. to ensure access to early childhood education for all Aboriginal and Torres Strait Islander four-year-olds in remote communities within five years
4. to halve the gap in reading, writing and numeracy achievements for children within a decade
5. to halve the gap for Aboriginal and Torres Strait Islander students in Year 12 attainment rates by 2020
6. to halve the gap in employment outcomes between Aboriginal and Torres Strait Islander and non–Aboriginal and Torres Strait Islander Australians within a decade.

In the ten-year review of the program in 2018, it was noted that only two of the targets — early childhood education and Year 12 attainment — were on track to be met. The remaining target areas, although showing some improvements, were falling short of the desired levels. In the Closing the Gap Reset program outlined in 2020 targets were completely reset in all areas and a greater involvement of Aboriginal and Torres Strait Islander peoples in leading and measuring its progress was announced. Key areas of focus include:

- families, children and youth
- housing and a reduction of children in out-of-home care

- justice, including youth justice
- health
- suicide prevention
- culture and language
- education
- land and sea rights
- eliminating racism and systemic discrimination.

FIGURE 6 Closing the gap will take generations of commitment.



How can we measure First Australians' wellbeing?

Aboriginal and Torres Strait Islander peoples are culturally and linguistically diverse, but their cultures differ markedly from non–Aboriginal and Torres Strait Islander Australian cultures. Traditions of family structure and community obligation, language, obligations to Country and the passing down of culture and knowledge are all viewed and practised very differently in comparison to non-Indigenous cultures. These are important factors that contribute to both identity and wellbeing, yet as indicators, they may be difficult to measure by standards devised by other cultural traditions.

The National Aboriginal and Torres Strait Islander Social Survey (NATSISS) is a six-yearly survey conducted by the federal government. It aims to measure the health and wellbeing of Aboriginal and Torres Strait Islander communities. Some of the data gathered from the survey are highlighted in **FIGURE 7**.

The data reveals some of the key wellbeing issues facing Aboriginal and Torres Strait Islander peoples, but also highlights the cultural and community connections and the importance of these connections in relation to overall sense of life satisfaction and wellbeing. **FIGURE 8** summarises the extent of this participation in family and community life.

FIGURE 7 Some findings from the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) 2014–15

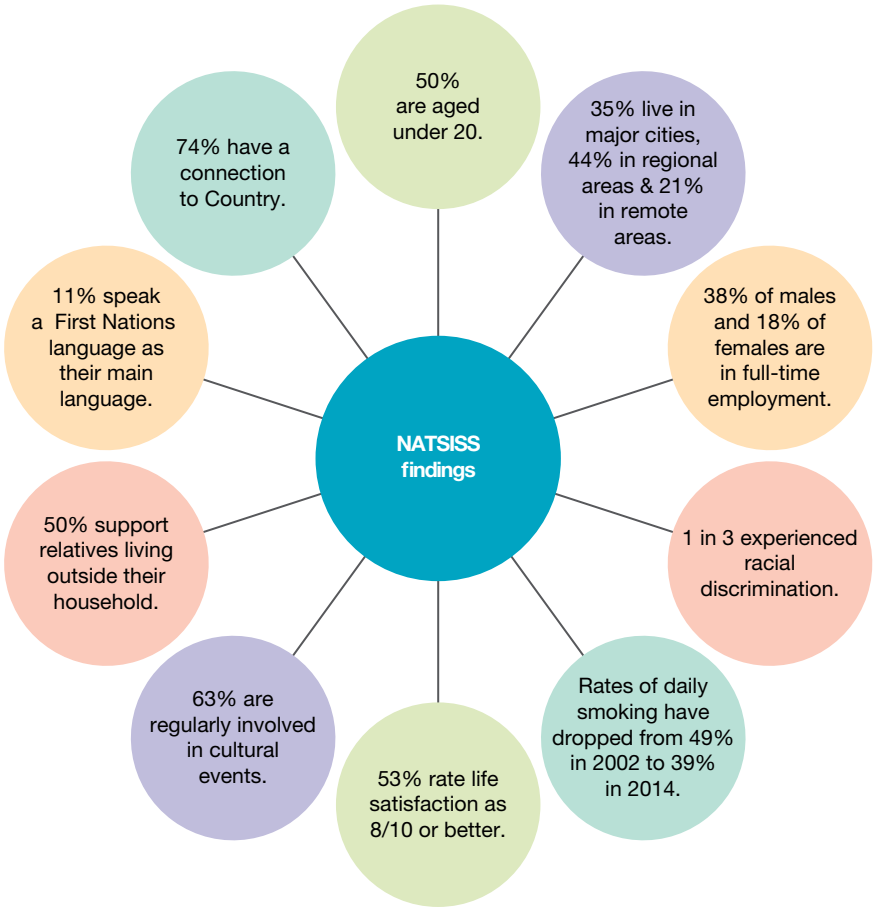
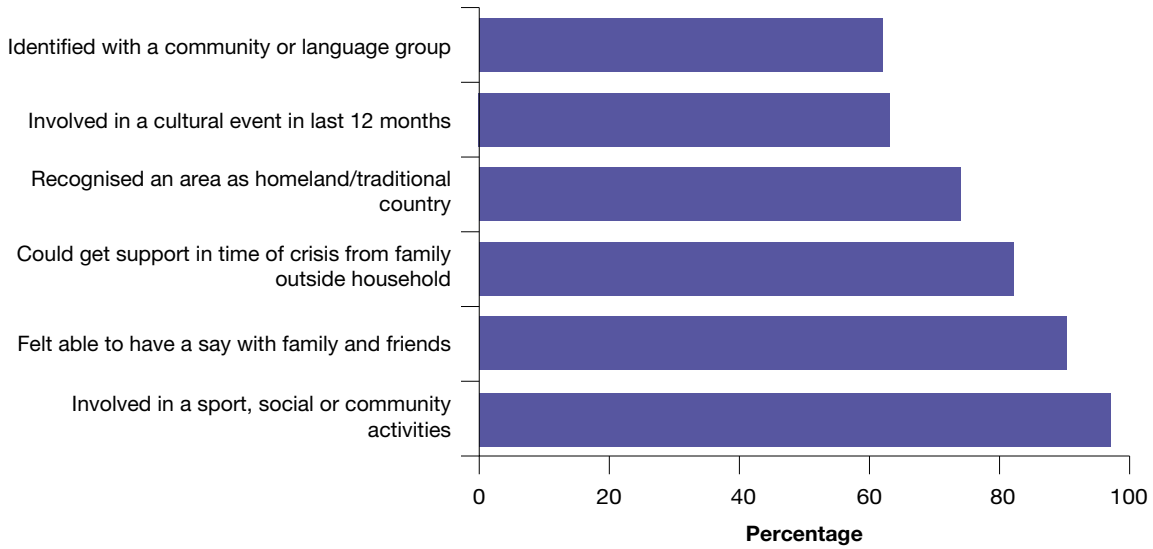


FIGURE 8 Aboriginal and Torres Strait Islander peoples participation in aspects of family, community and cultural life



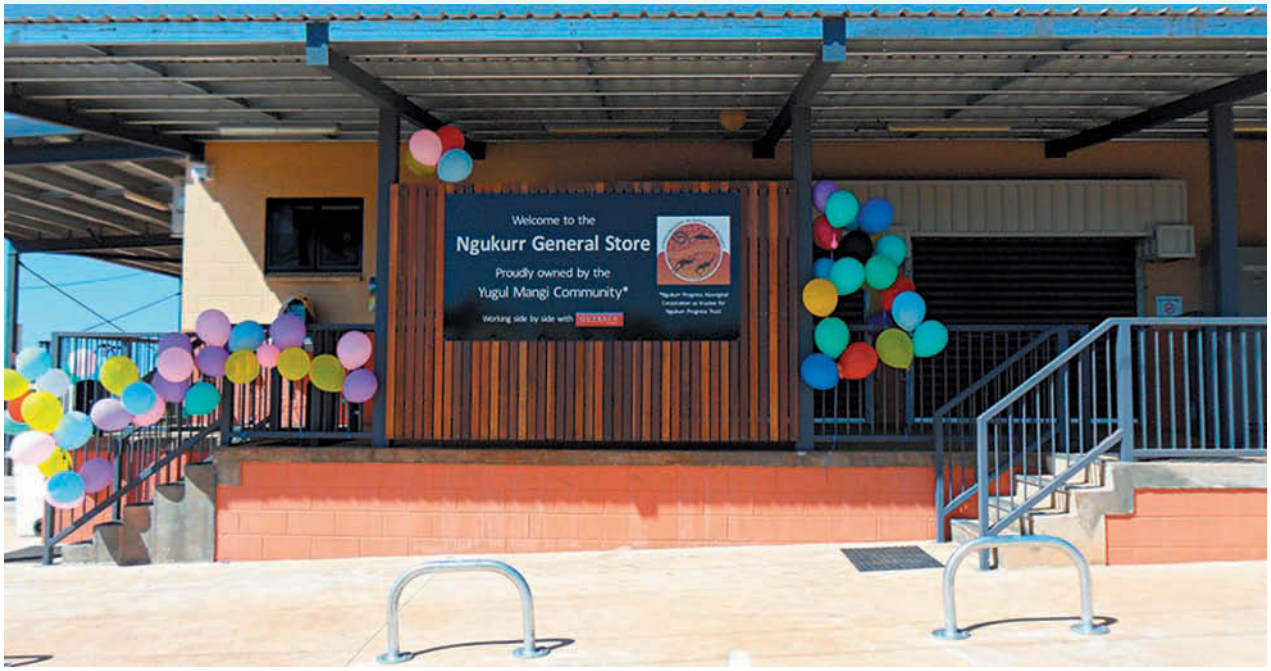
Programs to close the gap

Recognising the divides that exist at home, Australian governments and other agencies such as Oxfam are continuing to push initiatives aimed at tackling some of the problems that many Aboriginal and Torres Strait Islander communities face. Ultimately, all Australians benefit from a united effort to address this disadvantage. When disadvantage is overcome, the need for government expenditure is decreased. At the same time, Aboriginal and Torres Strait Islander peoples will be better placed to fulfil their cultural, social and economic aspirations.

The following initiatives are examples of how both government and non-government agencies are working to improve the wellbeing of Aboriginal and Torres Strait Islander peoples.

- *The National Partnership Agreement on Closing the Gap in Indigenous Health Outcomes*. For example, the Many Rivers Aboriginal Medical Service Alliance in northern New South Wales brings together ten Aboriginal-controlled health organisations that share resources and programs servicing 35 000 people.
- *The Australian government licensing scheme for community stores in the Northern Territory*. This scheme requires store managers to offer a range of healthy food and drinks and to make these attractive to customers. Prior to this, people in remote communities often had little choice. Goods and food were of poor quality and basic consumer protection was lacking. More than 90 Northern Territory stores, such as the one pictured in **FIGURE 9**, are now licensed, with reported improvements in management, hygiene and employment of local staff.
- The *Wylak Project* builds the leadership capacity of Aboriginal and Torres Strait Islander youth by offering grants in three key areas — cultural projects, advocacy/campaigning and learning events.

FIGURE 9 New food store at Ngukurr, Northern Territory



Lombadina Aboriginal community program

Aboriginal and Torres Strait Islander communities are also working hard to improve their wellbeing. The Bardi people, who live in Lombadina a community on the north-western coast of Western Australia (see **FIGURE 10**) are one example of this. Lombadina and the neighbouring Djarindjin community are home

to approximately 200 Bardi people. The Lombadina community is working towards self-sufficiency through ventures that include tourism operations, a general store, an artefact and craft shop, a bakery and a garage. The tourist ventures centre on sharing knowledge of the Bardi people's lifestyle. In addition to providing serviced accommodation, many tours are offered, including cultural tours, fishing charters, kayaking and bushwalking. Lombadina has received a number of tourism awards. The considerable success of these businesses has contributed substantially to the wellbeing of this community.

Lombadina is also involved in the EON Thriving Communities Project. EON is a non-government organisation operating by invitation in Aboriginal communities in Western Australia. It aims to close the gap in terms of health; for example, via the provision of practical knowledge about growing and preparing healthy food in schools and communities. The project has community ownership and is designed to be sustainable, thus improving wellbeing in the long term.

FIGURE 10 Location of Lombadina, Western Australia



Resources

Weblink Lombadina

17.7 ACTIVITIES

1. Conduct internet research into the Closing the Gap Reset. Create an infographic poster outlining the new targets relating to each of the key focus areas. **HASS skills: Communicating and reflecting**
2. Another factor contributing to disadvantage may be the remoteness of some Aboriginal and Torres Strait Islander communities. Investigate the proportions of the Aboriginal and Torres Strait Islander population who live in urban and regional areas compared with those who live in remote and very remote areas. What differences in wellbeing may result from these differences in location? **HASS skills: Analysing**
3. National Close the Gap Day is held in March each year to improve community awareness of the issue of disadvantage and to publicise federal government action. Use the internet to find out what activities are taking place in your state and/or local area for the next Close the Gap Day. **HASS skills: Analysing**
4. Using the internet, research one of the following organisations that have experienced success in combating some of the health, social or educational disadvantages experienced by Aboriginal and Torres Strait Islander peoples. Why have they been successful? What outcomes will be changed for Aboriginal and Torres Strait Islander peoples? What similar organisations operate in Western Australia?
   - Aboriginal Women Against Violence (NSW)
   - MPower — Family Income Management Plan (Qld)
   - Indigenous Enabling Program at Monash University (Vic.)

   Geography concept: Change

17.7 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4	Questions 3, 5, 6, 8	Questions 7, 9, 10

Check your understanding

1. What are some of the reasons that disadvantages exist for Aboriginal and Torres Strait Islander peoples?
2. Refer to **FIGURE 5**. What is the average life expectancy for Aboriginal and Torres Strait Islander Australians and non–Aboriginal and Torres Strait Islander Australians? What is the difference (in years) between these average life expectancies?
3. Explain how the National Aboriginal and Torres Strait Islander Health Survey might give us more insight into the wellbeing of First Australian peoples.
4. What areas are being addressed by the federal government's Close the Gap program?
5. Why is the Close the Gap program necessary?

Apply your understanding

6. Did any of the statistics about Aboriginal and Torres Strait Islander peoples surprise you? Explain your reaction to them, and how they may have either changed or reinforced your own opinions or beliefs.
7. 'Social justice' means fair and equitable access to a community's resources. Do you think Aboriginal and Torres Strait Islander peoples experience social justice in Australia? Explain your answer.
8. How might Aboriginal and Torres Strait Islander tourism initiatives such as those run by the Lombadina community improve the wellbeing of people beyond that community?
9. What do you consider the most significant wellbeing issue facing Aboriginal and Torres Strait Islander Australians today? Use data from this subtopic to support your view.
10. Suggest a way to address the issue you identified in question 9. How could wellbeing in this area be improved?

For sample responses for every question, go to www.jacplus.com.au.

17.8 Thinking Big research project — Improving wellbeing in a low-HDI ranked country

Scenario



Geographers use many different demographic indicators to rank, analyse and discuss the development status of countries. The Human Development Index (HDI) is a meta-indicator that provides a ranking based on a number of different development indicators. The HDI is a composite ranking that includes measures of life expectancy, education and gross national income (per capita) within a country, thus providing insight into the wellbeing of the country's citizens.

The highest possible HDI score is 1.0, and HDI rankings are categorised into four main groups: very high human development (scores from 0.8 to 1.0), high human development (scores of at least 0.7 but less than 0.8), medium human development (scores of less than 0.7 but at or above 0.55) and low human development (scores below 0.55). The majority of countries that are categorised as having low human development are found in Africa; others are located in the Middle East, Central Asia and the Pacific Islands.

You may have only been in the job for a week, but you already have your first major assignment! Your boss, Australia's representative to the United Nations, has asked for a report on countries with the lowest HDI rankings. As part of the team working on this project, you will choose one country to investigate, report on, and make suggestions as to what the Australian government can do to help alleviate the situation.

Task

Choose one country from the lowest HDI-ranked countries and prepare a report that includes:

- a summary of the country's current development status — under the Sustainable Development Goals framework, what areas have been targeted, and what progress has been achieved?
- a discussion of what you have identified as the country's three most pressing problems
- suggestions as to what the Australian government could do to help alleviate these problems and assist this country in raising its HDI ranking.

Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group if you wish to. You can work independently or with a partner, which will allow you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.
- The following table lists the lowest HDI-ranked countries for 2017. Select your country from this list or search online to find the most recent rankings available.

Global rank	Country	HDI score	Global rank	Country	HDI score
189	Niger	0.354	170	Côte d'Ivoire	0.492
188	Central African Republic	0.367	168	Haiti	0.498
187	South Sudan	0.388	168	Afghanistan	0.498
186	Chad	0.404	167	Sudan	0.502
185	Burundi	0.417	165	Togo	0.503
184	Sierra Leone	0.419	165	Comoros	0.503
183	Burkina Faso	0.423	164	Senegal	0.505
182	Mali	0.427	163	Benin	0.515
181	Liberia	0.435	162	Uganda	0.516
180	Mozambique	0.437	161	Madagascar	0.519
179	Eritrea	0.440	159	Mauritania	0.520
178	Yemen	0.452	159	Lesotho	0.520
177	Guinea-Bissau	0.455	158	Rwanda	0.524
176	Congo	0.457	157	Nigeria	0.532
175	Guinea	0.459	156	Zimbabwe	0.535
174	Gambia	0.460	155	Syrian Arab Republic	0.536
173	Ethiopia	0.463	154	Tanzania	0.538
172	Djibouti	0.476	153	Papua New Guinea	0.544
171	Malawi	0.477	152	Solomon Islands	0.546



- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish.
- In the **Media centre** you will find an assessment rubric and a weblink to access the UN Human Development Reports, which will form the basis of your research. You can also use other websites to supplement your research.
- Research your country and compile a summary of development indicator data. Make notes of your research and remember to record details of your sources so you can create a bibliography to include in your report. Add your research notes and source details to the relevant topic pages in the Research forum. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Compile or create relevant maps, images, graphs, tables and diagrams to support your written content, ensuring that geographic conventions such as the use of captions and BOLTSS are applied.
- Once you have completed your summary, you need to identify three key problems that your country faces. Provide an explanation of why these problems are so significant in relation to your country's development (a paragraph or two on each problem will be sufficient).
- The final section of your report should be a discussion of the ways in which the Australian government might assist this country in addressing these key problems and, ultimately, in raising its HDI ranking. Suggest actions that you believe would be effective and explain how they might be implemented.
- Ensure that you have completed all elements of the task and, when satisfied, submit your report, along with your bibliography, to your teacher for assessment.

on Resources

ProjectsPLUS Thinking Big research project — Improving wellbeing in a low-HDI ranked country (pro-0219)

17.9 Review

17.9.1 Key knowledge summary

17.2 Understanding and measuring wellbeing

- Wellbeing may be defined as a good or satisfactory condition of existence; a state characterised by health, happiness, prosperity and welfare.
- We can use quantitative and qualitative indicators to measure wellbeing.
- Indicators include social, technological, environmental, economic and political measures.
- Old descriptions of different levels of development throughout the world used terms such as 'developed North' and 'undeveloped South' or 'First World' and 'Third World'.
- Today we use terminology such as 'more economically developed country' (MEDC) and 'less economically developed country' (LEDC) to describe levels of development.
- There is a strong interconnection between development and poverty.
- Poverty is most often measured using solely economic indicators, but it may be taken to encompass many other aspects of life.

17.3 Wealth and wellbeing

- A wellbeing approach to development takes into account a variety of quantitative and qualitative indicators.
- The Human Development Index (HDI) is one such index. It measures wellbeing according to life expectancy, income and education.
- Other measures of wellbeing include the Happy Planet Index, Gross National Happiness and the Australian National Development Index (ANDI).

17.4 Life expectancy and wellbeing

- Life expectancy started to increase in the mid 1700s, due to improvements in agriculture, working conditions, nutrition, medicine and hygiene.
- Improvements in life expectancy have not been uniform because improvements in living conditions are connected to wealth. Therefore, life expectancy is lowest in developing nations.
- Child mortality rates are also linked to wealth. Those counties where life expectancy is low also have higher rates of child mortality than those where life expectancy is higher.
- The world's population increases by around 145 people every minute, but this is not uniform across the Earth. Sub-Saharan Africa has the highest birth rates, with an average fertility rate above 5 children per woman. This region also has a high mortality rate.

17.5 Variations of wellbeing in India

- India has a rapidly expanding population and is currently the second most populous country in the world. It is predicted that its population will surpass that of China by the year 2025.
- Improvements in health, education and hygiene have significantly improved life expectancy and, although there has been a decrease in the fertility rate, children are an important part of family life.
- Children in India help boost the family budget through working, and later in life they support their ageing parents.

17.6 Poverty as a factor of wellbeing

- Despite the strength of Brazil's economy, the benefits of economic growth have not trickled down to the poor, resulting in large differences in wellbeing across the nation.
- Almost a quarter of the Brazilian population lives in poverty.
- There is considerable spatial variation in wellbeing between regions in Brazil.
- Rio's favelas (slums) are home to millions of the city's poor. Living conditions are difficult and affect the wellbeing of the favela residents.
- Various measures have been undertaken in an attempt to improve life in the favelas.
- With the city's hosting of the 2016 Olympic Games, many favela residents were displaced to make way for Olympic-related venues and facilities.

- There is a strong interconnection between poverty, water supply, sanitation and wellbeing.
- Despite progress being made under the MDGs and now the SDGs, many millions still live without access to safe drinking water or adequate sanitation. This presents a significant risk to health and wellbeing.

17.7 Wellbeing in Australia

- Aboriginal and Torres Strait Islander Australians consistently experience lower levels of health, education, employment and economic independence than those experienced by most other Australians.
- The Close the Gap program set out key target areas for the improvement of Aboriginal and Torres Strait Islander Australians' wellbeing. Only two of these targets are currently on track, with others having seen only some improvement.
- The National Aboriginal and Torres Strait Islander Social Survey reveals some of the key wellbeing issues facing Aboriginal and Torres Strait Islander peoples, but also highlights the strong cultural and community connections and the importance of these connections in relation to overall sense of life satisfaction and wellbeing.
- There are numerous programs that aim to close the health and wellbeing gap between Aboriginal and Torres Strait Islander Australians and other Australians.

17.9.2 Key terms

development defined as 'to lead long and healthy lives, to be knowledgeable, to have access to the resources needed for a decent standard of living and to be able to participate in the life of the community' by the United Nations

ecological footprint a measure of human demand on the Earth's natural systems in general and ecosystems in particular; the amount of productive land required by each person for food, water, transport, housing, waste management and other purposes

experienced wellbeing an individual's subjective perception of personal wellbeing

extreme poverty a state of living below the poverty line (US$1.90 per day), and lacking resources to meet basic life necessities (also known as absolute poverty)

favela an area of informal housing usually located on the edge of many Brazilian cities. Residents occupy the land illegally and build their own housing. Dwellers often live without basic infrastructure such as running water, sewerage or garbage collection.

female infanticide the killing of female babies, either via abortion or after birth

fertility rate the number of live births per 1000 women of childbearing age (usually 15–44) in a given year

gross domestic product (GDP) the value of all goods and services produced within a country in a given period, usually discussed in terms of GDP per capita (total GDP divided by the population of the country)

Human Development Index (HDI) measures the standard of living and wellbeing by measuring life expectancy, education and income

indicator a value that informs us of a condition or progress. It can be defined as something that helps us to understand where we are, where we are going and how far we are from the goal.

industrialised having developed a wide range of industries or having highly developed industries

life expectancy the number of years a person can expect to live, based on the average living conditions within a country

maternal mortality the death of a woman while pregnant or within 42 days of termination of pregnancy

micro-credit the provision of small loans to borrowers who usually would not be eligible to obtain loans due to having few assets and/or irregular employment

natural increase the difference between the birth rate (births per thousand) and the death rate (deaths per thousand). This does not include changes due to migration.

non-government organisation (NGO) an organisation that operates independently of government, usually to deliver resources or serve some social or political purpose

poverty line an official measure used by governments to define those living below this income level as living in poverty

qualitative indicators subjective measures that cannot easily be calculated or measured; e.g. indices that measure a particular aspect of quality of life or that describe living conditions, such as freedom or security

quantitative indicators objective indices that are easily measured and can be stated numerically, such as annual income or the number of doctors in a country

replacement rate the number of children each woman would need to have in order to ensure a stable population level — that is, to 'replace' the children's parents. This fertility rate is 2.1 children.

sanitation facilities that safely dispose of human waste (urine, faeces and menstrual waste)

sex ratio the number of females per 1000 males

socioeconomic of, relating to or involving a combination of social and economic factors

spatial variation difference observed (in a particular measure) over an area of the Earth's surface

standard of living a level of material comfort in terms of goods and services available. This is often measured on a continuum; for example, a 'high' or 'excellent' standard of living compared to a 'low' or 'poor' standard of living.

Sustainable Development Goals (SDGs) a set of 17 goals established by the United Nations Development Programme, which aim to end poverty, protect the Earth and promote peace, equality and prosperity

wellbeing a good or satisfactory condition of existence; a state characterised by health, happiness, prosperity and welfare

17.9.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

Everyone wants a good life, but what does that mean for different people? Can wellbeing actually be measured, and how can we improve it if it's not measuring up?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6283)
Reflection (ewbk-6282)
Crossword (ewbk-6281)
Student Learning Matrix (ewbk-6276)

Interactivity Measuring and improving wellbeing crossword (int-8243)

17.9 Review exercise

Multiple choice

1. What is wellbeing?
   - **A.** A state of existence characterised by good health, happiness, prosperity and welfare
   - **B.** A state of existence characterised by good health, happiness, extreme wealth and welfare
   - **C.** A state of existence characterised by extreme wealth, happiness and a large family
   - **D.** A state of existence characterised by having enough money to live comfortably
2. Which of the following is *not* considered a qualitative indicator of wellbeing?
   - **A.** Facts and figures about how a country is performing
   - **B.** Details about how the people in a particular place feel
   - **C.** An opinion piece news article drawing on personal experiences
   - **D.** How people in a particular place think
3. What does HDI stand for?
   - **A.** Health Development Indicator
   - **B.** Health Developing Index
   - **C.** Human Development Indicator
   - **D.** Human Development Index

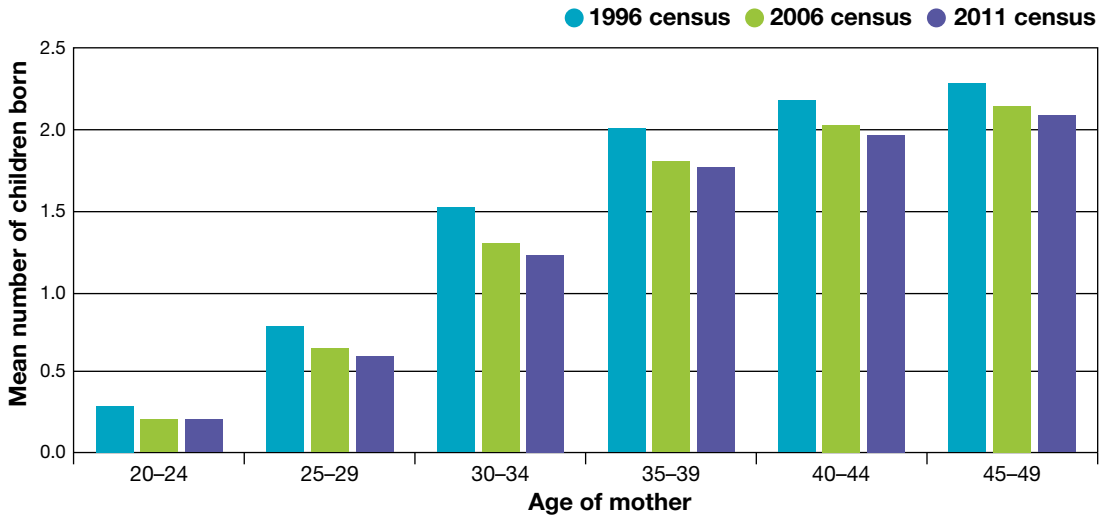
4. What replaced the Millennium Development Goals?
   - **A.** World Health Organization
   - **B.** Sustainable Development Goals
   - **C.** The United Nations
   - **D.** UNICEF
5. How did the MDGs change child mortality rates for children under the age of 5?
   - **A.** They rose from 6 million in 1990 to 6.5 million in 2015.
   - **B.** They remained the same.
   - **C.** They declined from 12.7 million in 1990 to 6 million in 2015.
   - **D.** They declined from 17 000 a day to 7000.
6. What is the name of the index used to measure wellbeing that is specific to Australia?
   - **A.** Australian Wellbeing Index (AWI)
   - **B.** Australian National Development Index (ANDI)
   - **C.** Australian Prosperity Index (API)
   - **D.** Australian Wellbeing Indicator (AWI)
7. Which statement accurately describes the life expectancy (at birth) for an average Australian?
   - **A.** More than someone born in Somalia, but less than someone born in India
   - **B.** The same as someone in Canada, but more than someone in the USA
   - **C.** The same as someone born in Japan, but more than someone born in Indonesia.
   - **D.** None of the above
8. What is meant by the term *favela*?
   - **A.** An area of informal housing usually located on the edge of many Brazilian cities
   - **B.** An area of formal housing usually located in the centre of large cities
   - **C.** The measure of human demand on the Earth's natural systems
   - **D.** Another term meaning 'poverty'
9. What is an NGO?
   - **A.** A government organisation
   - **B.** An organisation that measures the standard of living and wellbeing by measuring life expectancy
   - **C.** An organisation that operates independently of government, usually to deliver resources or serve some social or political purpose
   - **D.** The value of all goods and services produced within a country in a given period
10. What is maternal mortality?
    - **A.** The death of a woman while pregnant or within 42 days of termination of pregnancy
    - **B.** The death of a woman who has children
    - **C.** The killing of female babies, either via abortion or after birth
    - **D.** Murder of a woman

Short answer

11. How have improvements in technology led to an increase in life expectancy?
12. What factors might cause some places to experience a decrease in life expectancy?

13. There is a clear interconnection between women's education and fertility levels. Explain why this is the case. You may find it helpful to consider the information shown in **FIGURE 1**.

FIGURE 1 Careers before babies



14. Examine **FIGURE 2**.

FIGURE 2 A picture can be worth a thousand words for an observant geographer.



a. What does this photograph tell you about the living conditions of the family shown?
b. Do you think this photograph was taken in a less developed or more developed country? Justify your answer.
c. Using the internet, find another photograph of a family somewhere in the world and provide annotations evaluating their living conditions.

15. Suggest how the issue of gender imbalance in India could be solved.
16. How might levels of maternal mortality change in future as an increasing percentage of the world's population lives in cities?
17. How will improving female literacy improve women's wellbeing in both the short and long term?
18. 'Australia's population distribution is likely to remain concentrated in the south-east.' To what extent do you agree with this statement?
19. Explain why people in rural areas in Australia are likely to have a lower level of health than those in urban areas.

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 17 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

17.1 Overview

Video eLesson
- The good life? (eles-1713)

17.2 Understanding and measuring wellbeing

MyWorld Atlas
- Wellbeing in Western Sydney
- Wellbeing in Sudan

eWorkbook
- What is wellbeing? (ewbk-6277)
- Measuring wellbeing (ewbk-6278)

17.3 Wealth and wellbeing

eWorkbook
- Quantitative indicators of human wellbeing (ewbk-6279)
- Qualitative indicators of human wellbeing (ewbk-6280)

Interactivity
- Cartogram showing relative global populations and Happy Planet Index scores, 2016 (int-7973)

Weblink
- HPI

17.6 Poverty as a factor in wellbeing

Interactivity
- The proportion of the world's population living on less than U$1.90 per day (int-7972)

Weblink
- Favelas

17.7 Variations of wellbeing in Australia

Weblink
- Lombadina

17.8 Thinking Big research project — Improving wellbeing in a low-HDI ranked country

ProjectsPLUS
- Thinking Big research project — Improving wellbeing in a low-HDI ranked country (pro-0219)

17.9 Review

eWorkbook
- Reflection (ewbk-6282)
- Crossword (ewbk-6281)
- Student Learning Matrix (ewbk-6276)

Interactivity
- Measuring and improving wellbeing crossword (int-8243)

To access these online resources, log on to **www.jacplus.com.au**.

18 Global responses to human wellbeing

18.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

The world's population is constantly increasing. Can we fit so many people in the space we have without affecting our quality of life?

18.1.1 Introduction

As the world's living standards have improved, our population has also grown. In April 2020 the world's population reached 7.8 billion. It is expected that the number of people on the planet will continue to grow, with experts estimating a population of 9.8 billion in 2050 and 11.2 billion by 2100. It is not just a matter of how many people we can fit in a particular place, but also the manner in which we live (our ecological footprint) that affects our wellbeing. Our wellbeing is clearly interconnected with our population characteristics.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6299)

Video eLesson A long life (eles-1714)

FIGURE 1 The world's population affects our global wellbeing.



18.2 Poverty and the Sustainable Development Goals

LEARNING INTENTION

By the end of this subtopic you will be able to identify the imbalance in wellbeing that exists throughout the world, and describe how the Sustainable Development Goals seek to address this.

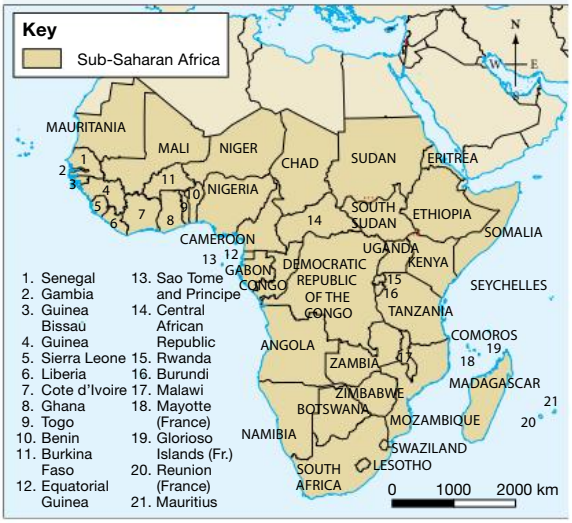
18.2.1 Defining poverty

Poverty is a living condition that is hard to measure and difficult to define. For example, people living in poverty in sub-Saharan Africa may struggle to find a daily meal or access to safe drinking water. This standard of living is known as **absolute poverty** and approximately 1.3 billion people experience this daily. In more developed countries, we may refer to **relative poverty**. In Australia, for example, we compare living standards to a benchmark called the **poverty line**. The majority of the population lives above the poverty line, but those who fall below it struggle to meet their day-to-day needs of adequate shelter, food and education.

Sub-Saharan Africa — the poorest region in the world

Sub-Saharan Africa (see **FIGURE 1**) is affected by many different forms of poverty. Human Development Index (HDI) scores in most countries of sub-Saharan Africa have worsened since 1990, making this region the poorest in the world. Poverty is more common in young families, who often have less assets and higher dependency ratios (people who are too young or too old to work). For others, the poverty is chronic rather than temporary. This means poverty is experienced for most of one's life and is often passed on to one's children, creating a generational cycle that is hard to break. The chronically poor experience hunger, undernutrition, illiteracy, lack of access to safe drinking water and basic health services, social discrimination, physical insecurity and political exclusion. Many will die prematurely of easily preventable deaths. With appropriate support and resources, people living in chronic poverty have the ability to overcome the obstacles that trap them in poverty, and can create a better future for themselves and their children. There are numerous organisations and agencies that work with such communities to help them break the poverty cycle.

FIGURE 1 The countries of sub-Saharan Africa are affected by many forms of poverty.



Source: Worldmap.org.

World hunger

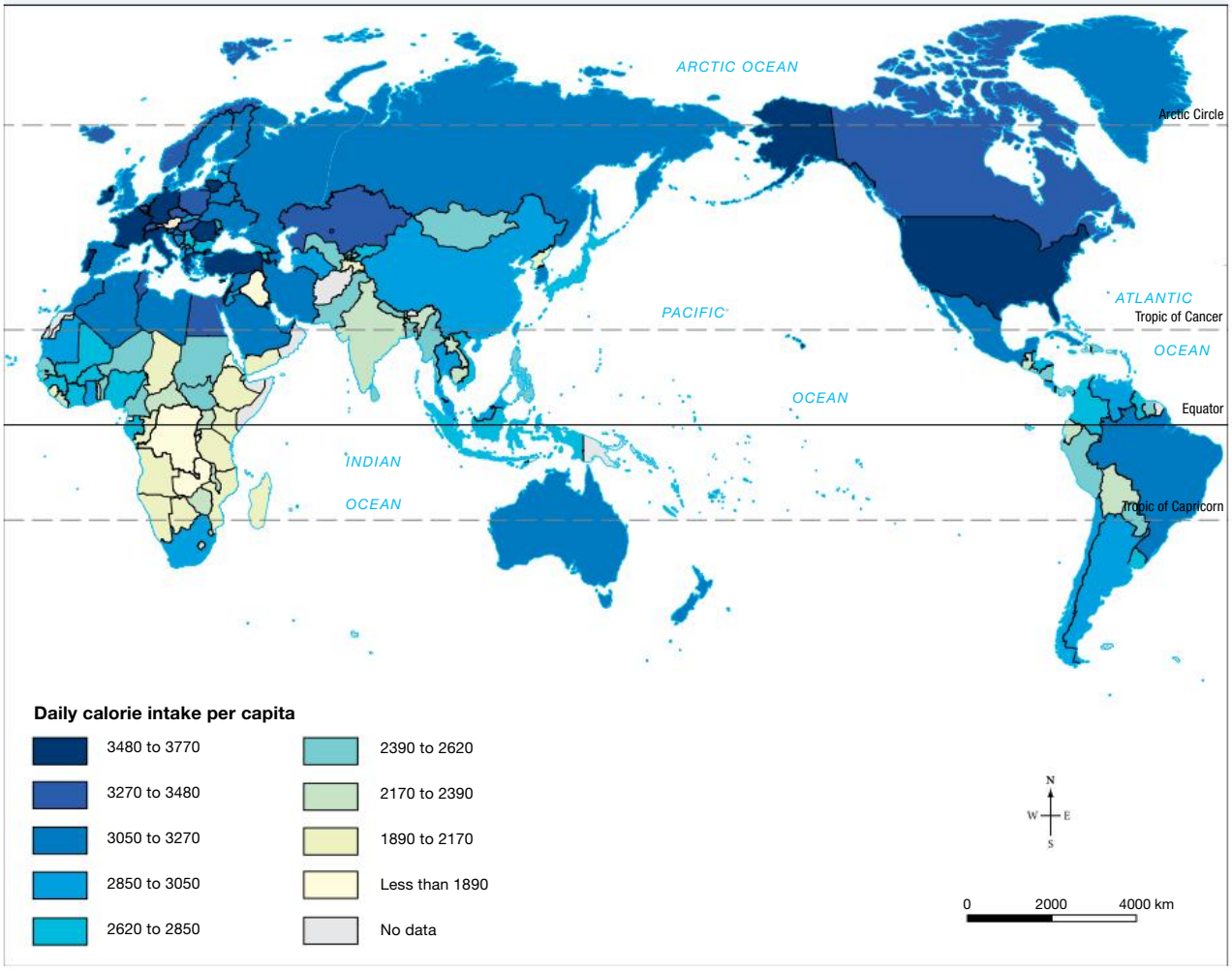
One of the most pressing issues of poverty is hunger, a situation where people experience scarcity of food. Malnutrition is a general term that indicates a lack of some or all nutritional elements necessary for human health. There are two basic types of malnutrition. When we refer to world hunger, we are talking about a lack of food that provides energy (measured in calories), obtained from all the basic food groups, and a lack of protein (from meat and other sources) (see **FIGURE 2**). Another type of malnutrition is micronutrient (vitamin and mineral) deficiency, which may or may not occur with hunger. Recently there has also been a move to include obesity as a third form of malnutrition, expanding on the idea of poor nutrition.

absolute poverty where income levels are inadequate to enjoy a minimum standard of living (also known as extreme poverty)

relative poverty where income levels are relatively too low to enjoy a reasonable standard of living in that society

poverty line an official measure used by governments to define those living below this income level as living in poverty

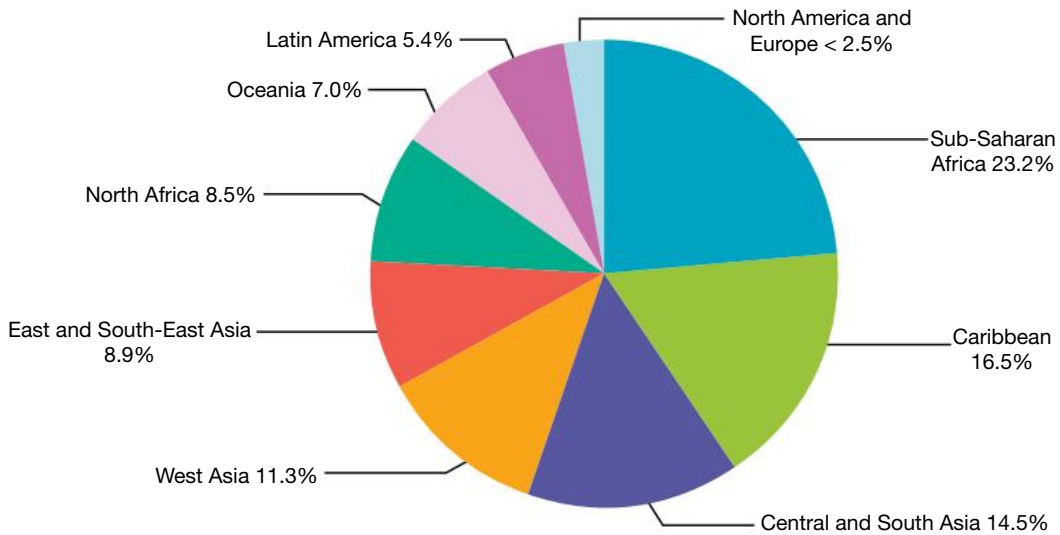
FIGURE 2 Daily calorie intake, per person



Note: Most recent data available

Source: FAO 2013. Made with Natural Earth. Map by Spatial Vision.

FIGURE 3 Prevalence of undernourishment in the world, 2017, by region



Source: Data from *The State of Food Security and Nutrition in the World 2018*, report jointly prepared by FAO, IFAD, UNICEF, WFP and WHO.

18.2.2 Sustainable Development Goals

The Sustainable Development Goals (SDGs) came into being on 25 September 2015 to replace the expired Millennium Development Goals (MDGs). The three overarching themes are to end poverty, protect the planet and ensure prosperity for everyone during the 15 years to 2030. Each of the 17 goals has a number of targets to be met. Indicators are used to assess each target. These SDGs apply to all countries. The United Nations provides an update on the progress towards 2030 in an annual report.

Former New Zealand prime minister and United Nations Development Programme Administrator Helen Clark commented, 'This agreement marks an important milestone in putting our world on an inclusive and sustainable course. If we all work together, we have a chance of meeting citizens' aspirations for peace, prosperity, and wellbeing and to preserve our planet'.

FIGURE 4 While obesity levels are increasing every year in populations of countries such as Australia, billions of people across the world still suffer from starvation.



Source: Global Food Consumption — Richard & Slavomir Svitalsky/Cartoon Movement.

TABLE 1 A brief outline of the Sustainable Development Goals

Sustainable development goal	Targets
Goal 1: End poverty in all its forms everywhere	Major target: • By 2030 no-one should live on less than $1.25 per day.
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Significant targets include: • By 2030 ensure access by all people to safe, nutritious and sufficient food all year round. • By 2030 end all forms of malnutrition.
Goal 3: Ensure healthy lives and promote wellbeing for all at all ages	Targets for 2030 include: • Reduce the global maternity mortality ratio to less than 70 per 100 000 live births. • Attain an under-five mortality of, at most, 25 per 1000 live births. • End the epidemics of AIDS, tuberculosis and malaria.
Goal 4: Ensure inclusive and quality education for all and promote lifelong learning	Targets to achieve include: • By 2030 all boys and girls can complete free, equitable and quality primary and secondary schooling with effective outcomes. • All women and men have equal access to affordable and quality ongoing educational opportunities.
Goal 5: Achieve gender equality and empower all women and girls	Targets include: • End discrimination against all women and girls everywhere and eliminate violence towards them too.
Goal 6: Ensure access to water and sanitation for all	Targets by 2030 include: • Achieve universal and equitable access to safe and affordable drinking water for all. • Achieve access to adequate and equitable sanitation and hygiene for all.

 Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all	Targets for 2030 include: • Provide access to affordable, reliable and modern energy services, especially renewable energies.
 Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all	Major targets: • Sustain economic growth and productivity aiming to achieve by 2030 full and productive employment and decent work for all. • By 2025 eliminate child labour in all its forms, including forced labour, modern slavery, human trafficking and child soldiers.
 Goal 9: Build resilient infrastructure, promote sustainable industrialisation and foster innovation	General targets include: • Develop quality, reliable, sustainable and resilient infrastructure to support economic development and human wellbeing. • Promote inclusive and sustainable industries that raise industries' share of employment and GDP. • Provide universal and affordable internet access to least developed countries by 2020.
 Goal 10: Reduce inequality within and among countries	Key target: • By 2030 achieve and sustain income growth of the bottom 40 per cent of the population.
 Goal 11: Make cities inclusive, safe, resilient and sustainable	Targets include: • By 2030 ensure adequate, safe, affordable and sustainable housing and transport for all. • Protect and safeguard the world's cultural and natural heritage.
 Goal 12: Ensure sustainable consumption and production patterns	2030 targets include: • Achieve the sustainable management and efficient use of natural resources. • Halve per capita global food waste by consumers and during production. • Ensure all people have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.
 Goal 13: Take urgent action to combat climate change and its impacts	Targets include: • Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries. • Integrate climate change measures into national policies, strategies and planning.
 Goal 14: Conserve and sustainably use oceans, seas and marine resources	Significant targets: • By 2025 prevent and reduce marine pollution of all kinds. • By 2020 sustainably manage and protect marine and coastal ecosystems. • By 2020 regulate and end overfishing.
 Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss	Targets: • By 2020 protect inland freshwater ecosystems and all types of forests. • By 2020 prevent the introduction of invasive alien species and prevent the extinction of threatened species. • By 2030 combat desertification and protect mountain ecosystems.
 Goal 16: Promote just, peaceful and inclusive societies	Targets: • End abuse, exploitation, trafficking and all forms of violence against children. • Reduce bribery and corruption in all forms. • By 2030 provide legal identity for all, including birth registration.
 Goal 17: Strengthen the means of implementation and revitalise the global partnership for sustainable development	Targets: • Address finance, technology, capacity building, trade and systemic issues to support sustainable development goals.

18.2.3 What can we do?

The fact that over a billion people experience severe hardship every day can appear extremely daunting. Compassion is the first step, but action is what is required. It is important to remember that those experiencing hardship do not live exclusively in less developed countries. Some of them live in more developed countries, like Australia. Many of them live in places where wellbeing for some is improving dramatically, but there are many who are being left behind.

International aid provides just one avenue for change. It is **grassroots movements** that will provide the greatest and most effective change for those who are most disadvantaged or without a voice. Education can provide a means for people to change their own destiny. Lowering population growth will reduce population pressures on a country's resources and government, and good governance can build a strong economy and provide opportunities for residents.

grassroots movements action by ordinary citizens, as compared with the government, aid or a social organisation

18.2 ACTIVITIES

1. Within your class, divide into groups and assign an SDG to each group. Using the internet, research the targets of each goal and provide a tick or a cross depending on whether you think the world will meet each target as set out. (A number of targets were to have been met by 2020 — have these been achieved?) Be prepared to argue your point of view in a class debate: Are there too many goals and targets to be met by all countries in the world?
   HASS skills: Questioning and researching, Communicating and reflecting
2. In pairs or small groups, design a country-specific program that you think would help alleviate chronic poverty in one of sub-Saharan Africa's most poverty-stricken countries.
   HASS skills: Evaluating
3. Australians living below the poverty line are assisted by charitable organisations and individuals who commit to improving the wellbeing of others. Research and list the services that are available in your local area. Consider other possible initiatives. For example, the Young Australian of the Year Award 2016 went to two individuals who provided a mobile laundry for the homeless. What other services could be provided to assist those in need?
   HASS skills: Evaluating
   General capability: Personal and social capability
4. Poverty can be caused by a number of factors, both natural and human. Create a mind map that explores a natural or human-made cause of poverty; for example, exactly how would conflict or environmental crisis create conditions of poverty?
   HASS skills: Communicating and reflecting

18.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Check your understanding

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 4, 6	Questions 2, 7, 8	Questions 5, 9, 10

1. What is the poverty line?
2. Explain the difference between absolute poverty and relative poverty.
3. What are the three overarching themes of the SDGs?
4. When is the target date for the SDGs be achieved?
5. Refer to **FIGURE 3**.
   a. Which two regions combined make up nearly 40 per cent of the world's undernourished?
   b. Which two regions have the lowest prevalence of undernourishment?

Apply your understanding

6. Using the three overarching themes of the SDGs, create a table to show where each of the 17 goals is aligned.
7. Refer to **FIGURE 2**. Identify the region of sub-Saharan Africa. If we compare the general results for this region with other regions across the world, how does it rate in terms of calorie intake? Give examples of specific places where appropriate.
8. Given sub-Saharan Africa's slow progress in improving the wellbeing of its people, choose three SDGs that are most likely to have an impact on improving the region. Justify your answer.
9. Analyse the **FIGURE 4** cartoon from the perspective of each person.
10. How ambitious is Helen Clark's quote (in section 18.2.2)? Do you think this is achievable by 2030? Which aspects do you think may be more achievable than others? Write an extended response outlining your view, and providing reasons for your opinion.

For sample responses to every question, go to www.jacplus.com.au.

18.3 Health and wellbeing

LEARNING INTENTION

By the end of this subtopic you will be able to explain how health is intrinsically linked to wellbeing, and identify why malaria and HIV/AIDS significantly affect wellbeing, particularly in developing countries.

18.3.1 SDG targets for health and wellbeing

Health is a key indicator of wellbeing. Goal 3 of the SDGs is to 'ensure healthy lives and promote wellbeing for all at all ages'. Key among the 2030 targets for this goal is the eradication of tuberculosis, AIDS and malaria epidemics. Developing nations, where the standard of living and health care services are generally low, are more likely to be affected by such epidemics because they lack the resources to deal with these health issues. In this subtopic, we explore the threats to wellbeing associated with malaria and HIV/AIDs and what is being done to combat them globally.

18.3.2 What is malaria?

FIGURE 1 Malaria-carrying mosquito



Have you ever been kept awake on a warm summer's night by an annoying mosquito buzzing around your head? For us, such an occurrence is merely a nuisance. However, for many people, particularly children under five years of age in Africa, a bite from a malaria-carrying mosquito can be life threatening. Malaria therefore has a major impact on their wellbeing. Fortunately, we do not have that potentially deadly mosquito in Australia.

Malaria is a preventable and curable disease caused by plasmodium parasites transmitted by the female Anopheles mosquito. These parasites destroy red blood cells and initially cause headaches and fever but may also cause death if sufficient organs are affected. There are four species of these parasites, which are found in tropical and subtropical places of the world, with the species commonly found in Africa being particularly severe in its impact. There is therefore a significant interconnection between such tropical conditions and incidence of this disease.

18.3.3 Why should we worry about malaria?

According to the World Health Organization (WHO), in 2017 about 3.75 billion people (half the world's population) located in 87 countries were at risk of malaria (see **FIGURE 2**). There were around 219 million cases of malaria in these 87 countries; however, 49 per cent of malaria cases occurred in just five countries, and four of these are located in sub-Saharan Africa — 92 per cent of recorded cases and 93 per cent of all deaths from malaria were in Africa. Approximately 435 000 people died as a result of contracting the disease.

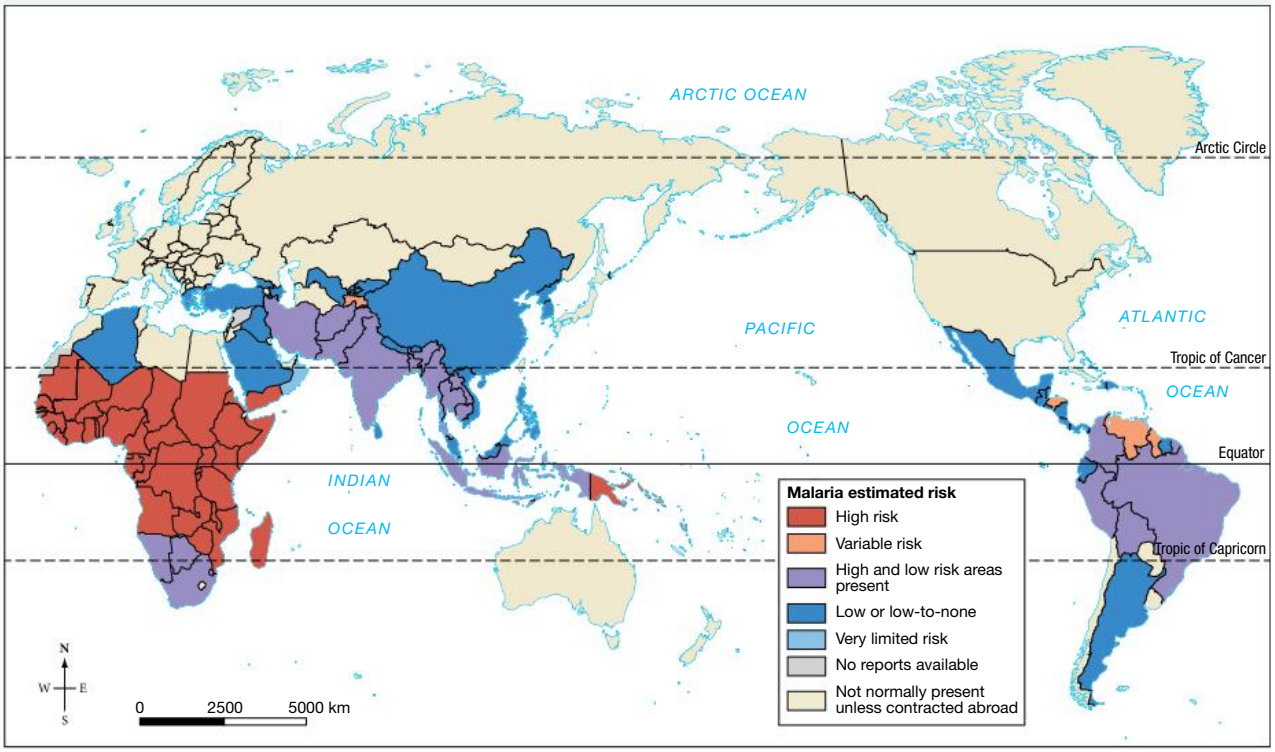
The most at-risk group is children under the age of five; in 2017 approximately 61 per cent (266 000) of the recorded deaths were in this age group. This is the equivalent of one child dying every two minutes. Pregnant women are also particularly vulnerable to malaria and the disease can cause complications such as still and premature births, and low birth weights. Twenty-five million pregnant women are at risk of malaria each year.

Malaria costs Africa approximately $12 billion per year. People affected are not able to work, so this affects both an individual's and a country's income. In addition, malaria accounts for 40 per cent of public health expenditure and between one-third and one-half of hospital admissions.

18.3.4 Malaria control and elimination

To address the aims of malaria control and elimination, the WHO developed the Global Technical Strategy for Malaria 2016–2030, setting a target of reducing global malaria cases and mortality rates by at least 40 per cent by 2020 and 90 per cent by 2030. Before this, under the Millennium Development Goals action, both the number of cases of malaria and the number of deaths due to this disease declined as a result of increased prevention and control measures. Between 2000 and 2015, there was a 37 per cent reduction in global malaria incidence and a fall of 60 per cent in malaria mortality. Progress has not been uniform, however, and has stalled to some extent since 2015. Although 21 countries are set to be declared malaria-free, of the 11 countries that record the most cases of malaria, only India has recorded any significant progress, with a 24 per cent reduction in cases since 2016. Some countries in sub-Saharan Africa have actually recorded an increase in the number of cases of malaria.

FIGURE 2 Distribution of malaria



Source: CDC, July 2018, www.cdc.gov/malaria/travelers/country_table/a.html.

Many government and non-government organisations have been involved in combating malaria — for example, the WHO Global Malaria Programme, Roll Back Malaria, the President's Malaria Initiative, Malaria No More and the Bill and Melinda Gates Foundation. Such organisations have focused on one or more of the following strategies:

- provision of insecticide-treated nets to protect people at night, when mosquitoes most like to bite. More than half the households in sub-Saharan Africa now have at least one bed net (see **FIGURE 4**)
- use of insecticide sprays both to treat inside houses and in mosquito habitat areas
- improved access to diagnostic testing and treatment.

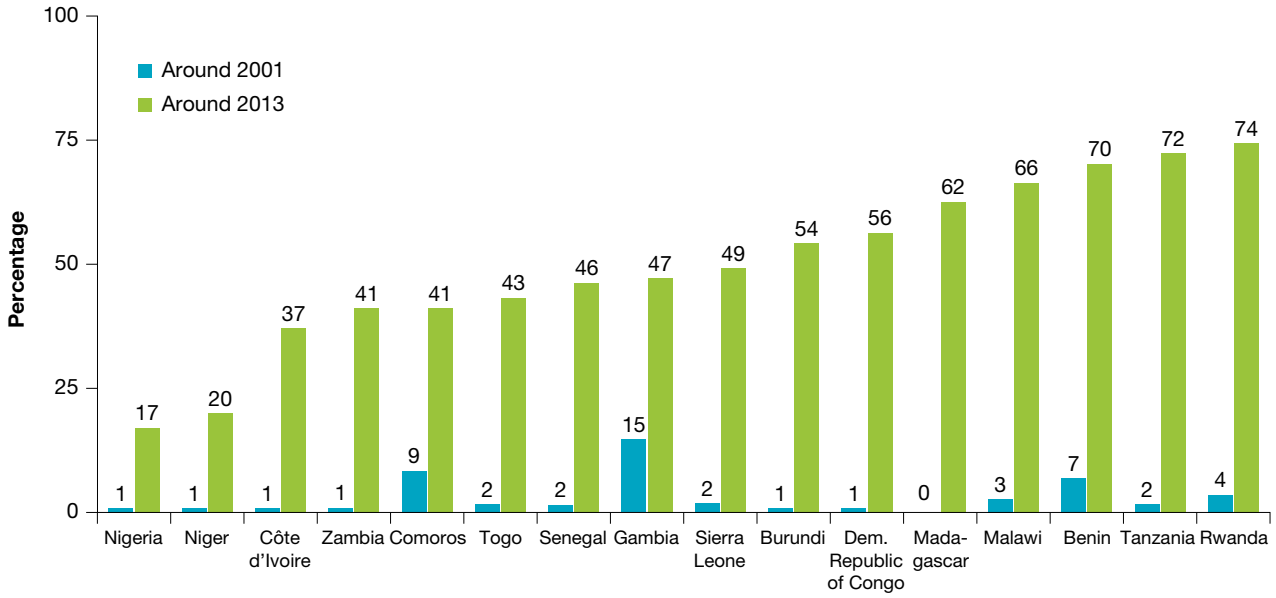
In addition, the Bill and Melinda Gates Foundation is funding the development of a malaria vaccine. In conjunction with the WHO, the vaccine had favourable initial trials and pilot studies are continuing.

One problem for the continued fight against malaria is insufficient funding. Although US$2.7 billion was available in 2018, an estimated US$8.7 billion is needed annually to achieve global malaria targets by 2030. Another concern is drug resistance, particularly along the Cambodia–Thailand border. The WHO launched a global plan to address this issue in 2010. In 2017 a new program 'High burden to high impact — a targeted response' was launched. This is a country-led approach to targeting those countries where malaria rates are increasing.

FIGURE 3 Insecticide-treated nets, Kenya



FIGURE 4 Proportion of children under age five sleeping under insecticide-treated nets in sub-Saharan African countries, 2001 and 2013



Note: 'Around 2001' refers to a survey conducted during 1999–2003. 'Around 2013' refers to a survey conducted during 2012–2014. Most recent data available.

Source: © UNDP.

18.3.5 HIV and AIDS

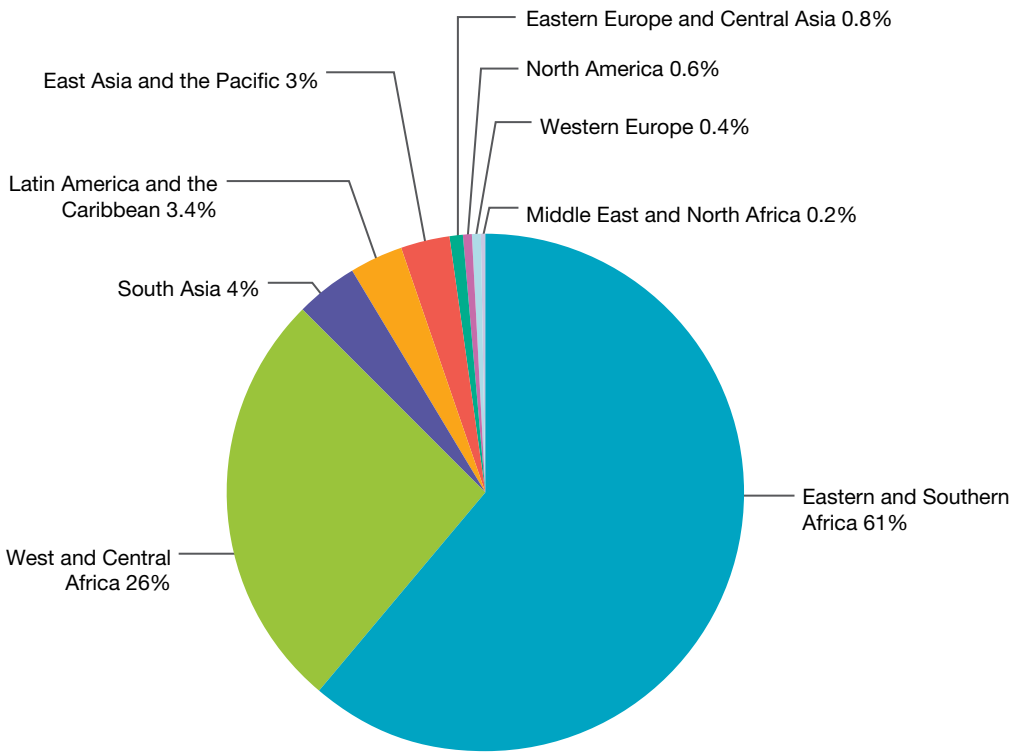
When HIV (Human Immunodeficiency Virus) was first identified in the early 1980s, it was seen as a death sentence. Those infected succumbed to Acquired Immune Deficiency Syndrome (AIDS) and there was little to be done but wait. However, advances in treatments and extensive use of drug combinations mean that today, depending on the infected person's location, having HIV no longer means AIDS is inevitable. Despite this, the disease has a major impact on wellbeing, not only on a local scale but also at a national and regional level.

AIDS is caused by HIV. The virus reduces the body's ability to fight infections. According to the WHO, since 1981, more than 70 million people have been infected and approximately 35 million people have been killed by this pandemic. UNAIDS reported that at the end of 2017, 36.9 million people were living with HIV, of whom three million were children and adolescents under the age of 20. UNAIDS estimates that in 2017 there were 1.8 million new infections (about 5000 every day); of these, 180 000 were children under the age of 15. It is estimated that in 2017, 940 000 people died of AIDS-related illnesses.

The virus is spread via infected bodily fluids entering a person's bloodstream. This may occur via unprotected sex, intravenous drug use, or from mother to child in the womb or through breastfeeding. Women and young people (aged 15–24 years) are disproportionately affected.

As **FIGURE 5** shows, the prevalence of HIV infections in children aged 0–14 years is concentrated in places that lie within sub-Saharan Africa, which, as a region, is home to nearly two-thirds of all people living with HIV. The countries most affected are Swaziland (27.4 per cent), Botswana (22.8 per cent) and South Africa (18.8 per cent). New infections fell by 8 per cent in western and central Africa and 30 per cent in eastern and southern Africa between 2010 and 2017. Globally, the incidence rate of new infections has fallen by 18 per cent in the adult population and by 35 per cent for children since 2010. In 2017, 80 per cent of pregnant women had access to medications to prevent the transmission of HIV to their unborn babies. This is an increase over 2010 levels, where only 40 per cent of pregnant women had access to such medication. However, while 62 per cent of women take antiviral medication while pregnant, only 49 per cent continue to take this medication while breastfeeding. Globally, almost 330 children die every day due to an illness attributed to AIDS.

FIGURE 5 Distribution of children under 15 who are living with HIV, 2017



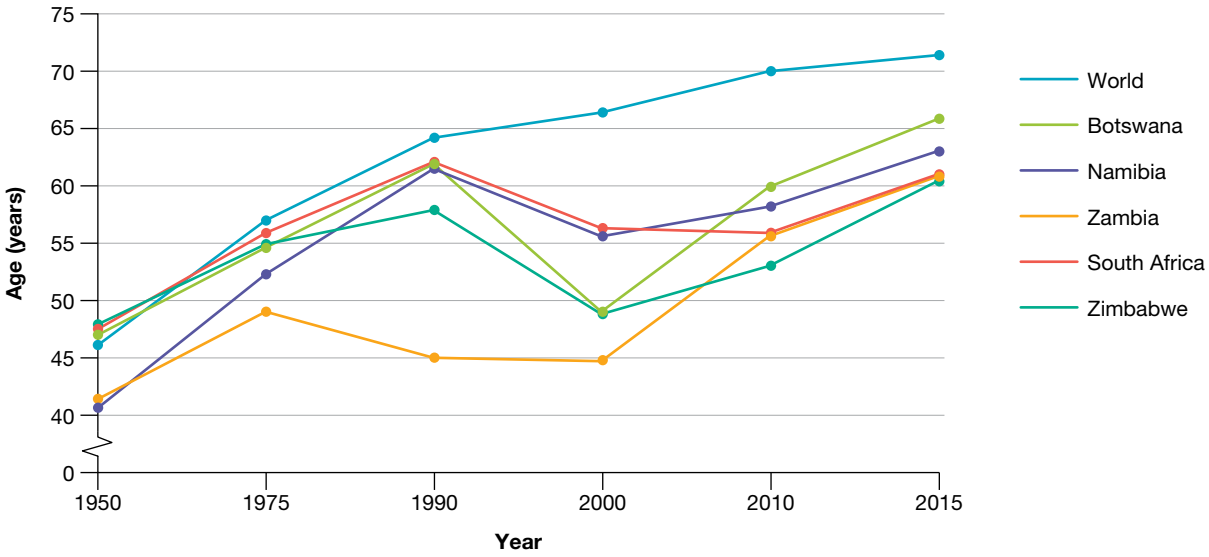
Note: Due to rounding, figures do not add to 100%.

HIV has major impacts across the communities affected, and is reversing decades of improvements in living conditions. The pressures of illness and caring for sick family members can result in loss of income, and children may be taken out of school. Those in poverty may feel they have no choice but to engage in high-risk behaviours to earn income, such as women taking up sex work. In addition, loss of adults to AIDS has had devastating effects on children: globally, an estimated 12.2 million children in 2017 had lost at least one parent to the disease (80 per cent of these live in sub-Saharan Africa), compounding the likelihood they will not attend school and maintaining the **poverty cycle**.

18.3.6 HIV and AIDS successes

There is currently no cure for HIV or AIDS or a vaccination to prevent people contracting the virus. However, since the mid 1990s, antiretroviral treatment (ART) has been available to persons with HIV. These drugs reduce the level of the virus in the infected person, not only extending their life but also reducing the risk of them transmitting the disease to an uninfected partner. In 2017 around 21.7 million (57 per cent of people living with AIDS) had access to this treatment. The number of AIDS-related deaths is now declining, as is the rate of new infections. Approximately US$22–24 billion is needed annually to meet the UNAIDS vision; at the end of 2017 around US$21 billion in funding was available to fund the fight against AIDS in low-income and middle-income countries. An estimated US$29.3 billion will be needed annually by 2030. **FIGURE 6** shows how some countries in southern Africa experienced a major decline in **life expectancy** with the onset of AIDS; however, with improvements in treatment, life expectancy is increasing again.

FIGURE 6 Impact of AIDS on life expectancy, 1950 to 2015



Note: Data shows change in life expectancy at birth in selected countries in southern Africa.

Source: Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2016 Results. Seattle, United States: Institute for Health Metrics and Evaluation IHME, 2017.

AusAID work in Papua New Guinea

The Australian government, via the Department of Foreign Affairs and Trade, committed $100 million in the 2017–18 foreign aid budget to support Papua New Guinea in strengthening its health services. Of this, $12.6 million was directly allocated to fund services linked to sexual and reproductive services. Papua New Guinea faces particular issues in dealing with HIV and AIDS because of its predominantly rural population and because access to many locations is difficult due to rugged topography. The main response activities include education, condom promotion and distribution, **STI** and HIV testing, and treatment delivered mostly

poverty cycle circumstances whereby poor families become trapped in poverty from one generation to the next

life expectancy the number of years a person can expect to live, based on the average living conditions within a country

STI sexually transmitted infection

through a variety of organisations such as the National Catholic AIDS Office, Save the Children Fund and UNICEF. As a result of this work, more than 2700 people with sexually transmitted diseases, such as AIDS, accessed antiretroviral medication.

18.3 ACTIVITY

Complete the **Malaria and HIV** worksheet to learn more about these diseases and efforts to combat them.

HASS skills: Analysing

18.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 4, 6	Questions 2, 7, 9	Questions 5, 8, 10, 11

Check your understanding

1. Which locations are particularly vulnerable to malaria? Why?
2. Explain why children would be more likely to develop malaria than adults.
3. Which places in the world are most affected by HIV/AIDS?
4. How is HIV transmitted?
5. From **FIGURE 6**, during what period does HIV/AIDS appear to have had the greatest impact on life expectancy?

Apply your understanding

6. Predict how the global distribution of malaria may change with an increase in temperatures due to global warming.
7. Predict how the distribution of malaria may change if the problem of drug resistance is not overcome.
8. In what way is malaria both a disease of poverty and a cause of poverty?
9. Imagine a vaccine to prevent malaria is available but in limited supplies. Which countries and which groups of people would you target to receive this vaccination? Justify your answer.
10. How might changing global economic conditions affect the response to HIV/AIDS by aid organisations or donor companies?
11. What could be done to help poor families affected by HIV/AIDS break the poverty cycle?

For sample responses to every question, go to www.jacplus.com.au.

18.4 Government responses to population and wellbeing issues

LEARNING INTENTION

By the end of this subtopic you will be able to explain how the number of children affects the wellbeing of a population, and compare responses to population and wellbeing issues in Japan and Kenya.

The number of children in a family directly affects their wellbeing. In Australia, parents may comment on the cost of raising children. In other countries, children may make a contribution to family income by completing simple jobs such as collecting firewood. At a national scale, the numbers of children also affect the wellbeing of the country as a whole. Concerns about too few or too many children have resulted in a variety of government responses. Two are outlined in the following sections: Kenya and Japan.

TABLE 1 Selected demographic characteristics for Japan and Kenya

Demographic characteristic	Kenya	Japan
Population, mid 2018	51.0 million	126.5 million
Life expectancy at birth	67 years	84 years
Fertility rate	3.9	1.4
Natural increase	2.6%	–0.3%
Infant mortality	36 per 1000	2 per 1000
Projected population 2050	95.5 million	101.8 million
Population under 15 years	41%	12%
Population 60+ years	3%	28%
Percentage urban	32%	92%
Gross national income per capita (US$)	3250	45 470

Source: PRB, Data Sheet, 2018.

18.4.1 Kenya: response to a youthful population

FIGURE 1 The Kenyan population has a high proportion of young people.

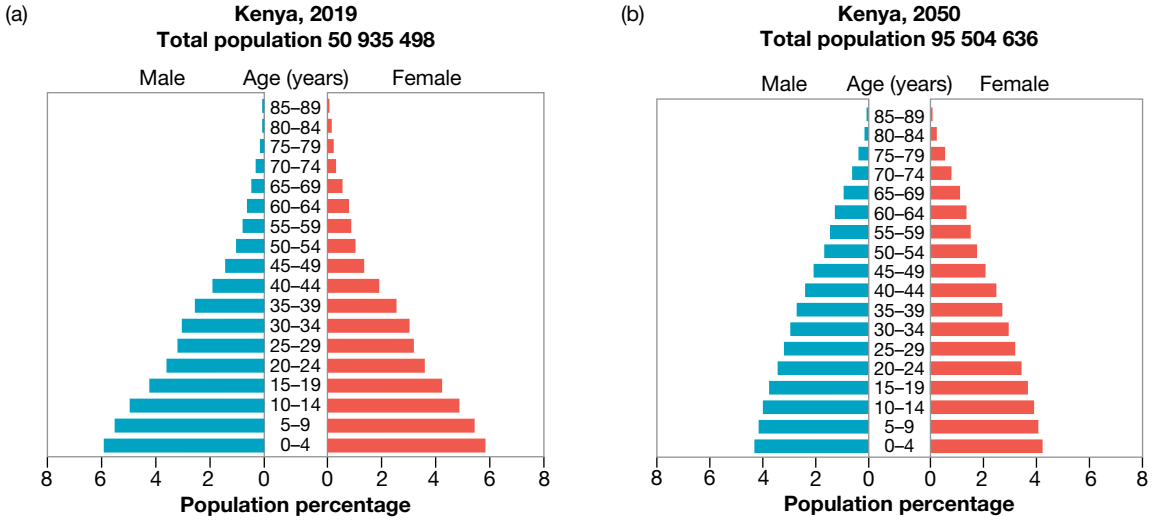


Although Kenya's **fertility rate** has fallen substantially (from a high of 8.1 children per woman in 1967, down to 3.9 children per woman in 2015), the country still has a relatively high rate of population growth. Its **population structure** has a high proportion of young people (see **TABLE 1** and **FIGURE 2**), so by 2030 it is estimated that there will be over 65 million people, with further growth up to 95.5 million by 2050. This increase will put pressure on Kenya's resources in terms of providing food, services and employment. With a predominantly rural population, the amount of land per person available for crop-growing is falling.

fertility rate the average number of children born per woman

population structure the number or percentage of males and females in a particular age group

FIGURE 2 Population pyramid for Kenya (a) 2019 and (b) 2050



Kenya's Vision 2030 is, a national framework for development. Within this framework, population management is an essential component of achieving their wellbeing goals for health, poverty reduction, gender equality and environmental sustainability. The United Nations Population Fund (UNFPA) has been working with the Kenyan government since the 1970s to help improve wellbeing in the country. The UNFPA has provided financial aid to facilitate a range of services to promote wellbeing. These include family planning with free contraceptives provided, increased availability of maternal and newborn health services, services to prevent the contraction of HIV and STIs, advocacy for the education of girls and elimination of gender-based violence. Unfortunately, despite this work, there is still a huge unmet need for family planning in Kenya, particularly among the poorest women, where almost half report they have unplanned pregnancies.

18.4.2 Japan: response to an ageing population

FIGURE 3 High life expectancy and a low fertility rate have led to an ageing Japanese population.



Japan has one of the highest life expectancies in the world, and this, combined with a very low fertility rate, has led to an **ageing population**, with almost one-third of Japan's population in the 60-plus age group (see **TABLE 1** and **FIGURE 4**). Fertility in Japan has been consistently below replacement level since the 1970s. A high standard of living, increased participation of women in the workforce, high costs of raising children and lack of supporting childcare facilities have all contributed to this. Japan's total population is expected to decline from 126 million in 2019 to 120 million in 2030, 109.5 million in 2050 and 83 million by 2100.

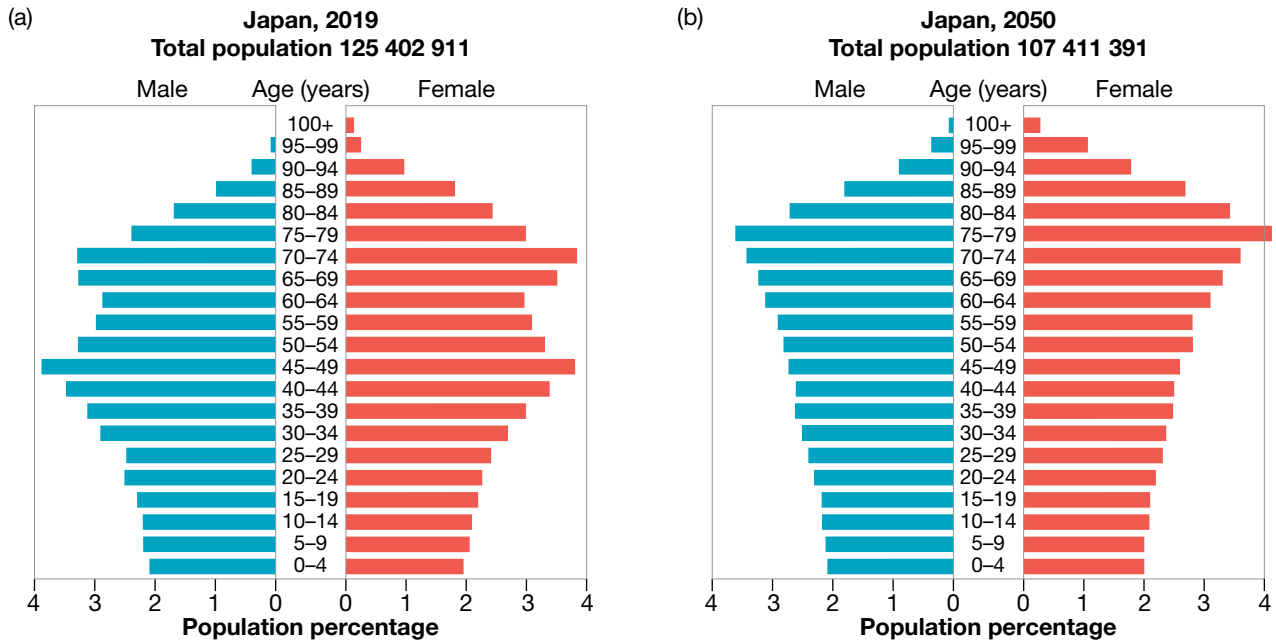
The workforce is expected to fall 15 per cent over the next 20 years and halve in the next 50 years. This means that in 2025, three working people will have to support two retirees. The Japanese government also faces rising pension and healthcare costs. These economic concerns led to the Japanese government implementing a number

ageing population an increase in the number and percentage of people in the older age groups (usually 60 years and over)

of measures in 1994 such as subsidised child care and bonus payments for childbirth via a policy known as the Angel Plan (revised in 1999). In 2009, the government introduced the 'plus one' policy, offering further incentives for families by offering free education, more childcare places and providing fathers with up to 12 months subsidised paternity leave. These policies have been largely ineffective: although the fertility rate rose slightly initially, it has remained well below replacement level.

The Japanese government has historically been reluctant to use immigration to fill labour shortages, and although this may change slowly, improving female workforce participation rates, particularly after marriage, may be a more viable option. In 2018 Japan recorded its highest level of natural decline, with the population falling by 449 000. The difference between the 921 000 recorded births and 1.37 million deaths.

FIGURE 4 Population pyramid for Japan (a) 2019 and (b) 2050



18.4 ACTIVITY

Research the Japanese government's Angel Plan, New Angel Plan and Plus One Policy, designed to help increase the country's falling birth rate.

a. What aspects of the government's beliefs and values led to the development of these plans?

b. What aspects of Japanese culture, values and beliefs have prevented the plans from achieving success?

HASS skills: Analysing

General capability: Intercultural understanding

18.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 5, 6	Questions 4, 7, 8	Questions 2, 9, 10

Check your understanding

1. How has an improvement in living conditions led to a change in population structure?
2. Account for (give reasons for) the variation in shape of the population pyramids for Japan and Kenya in 2019 and 2050.
3. Calculate the difference in life expectancy between Kenya and Japan.
4. By how much is Kenya's population expected to grow between 2030 and 2050?
5. What factors have contributed to low fertility rates in Japan since the 1970s?

Apply your understanding

6. Describe the changing percentage of aged population between 2019 and 2050 in Kenya and Japan.
7. What problems does the Kenyan government face with a large proportion of the populaton being young?
8. What problems does Japan face with a large proportion of the population being aged?
9. How do these issues affect the wellbeing of people in those countries?
10. Of the problems you identified in questions 7 and 8, which do you consider more serious? Why?

For sample responses to every question, go to www.jacplus.com.au.

18.5 The importance of human rights

LEARNING INTENTION

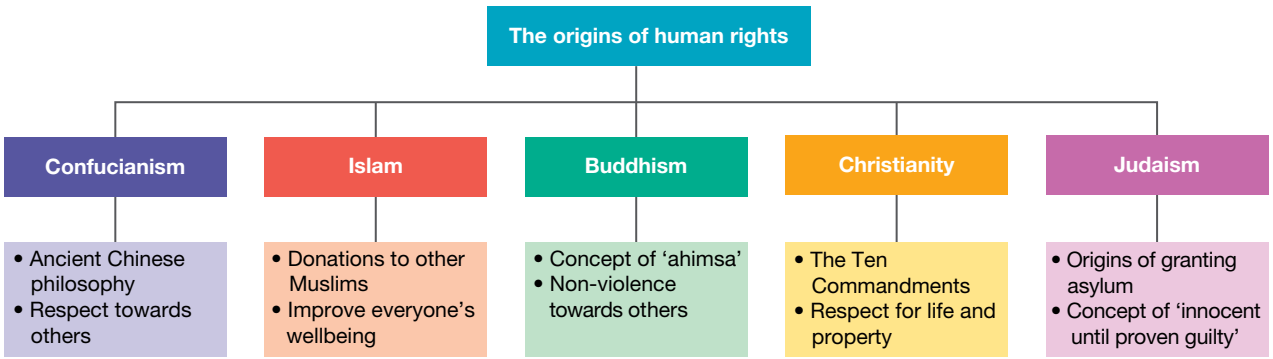
By the end of this subtopic you will be able to:

- describe the basis of human rights
- identify how these can vary between countries
- explain why children have special human rights because of their vulnerability to exploitation and abuse.

18.5.1 The basis of human rights

Global wellbeing is about more than just having enough to eat and being healthy; it extends to also having freedom to exercise your human rights. Human rights are so much a part of our daily lives here in Australia that we tend to take them for granted. Many principles that have been adopted in international human rights practices have their roots in traditions and religions that are thousands of years old. Different countries, societies and cultures have come up with their own definitions over time to suit their particular environment or context.

FIGURE 1 Origins of human rights



In some societies, human rights may be enshrined in law and legislation, whereas in others they may simply exist as guidelines that reflect the values of that particular community. In short, the concept of human rights stems from the belief that there is an instinctive human ability to distinguish right from wrong.

Human rights can be defined in different ways. The Australian Human Rights Commission notes that definitions may include:

- the recognition and respect of people's dignity
- a set of moral and legal guidelines that promote and protect a recognition of our values
- our identity and ability to ensure an adequate standard of living
- the basic standards by which we can identify and measure inequality and fairness
- those rights associated with the Universal Declaration of Human Rights.

18.5.2 The role of the United Nations

The UN was formed in the aftermath of World War II on 24 October 1945 by countries committed to preserving peace through international cooperation and security. Today, nearly every nation (currently 193 countries) in the world belongs to the UN. One of the main aims of the UN Charter is to promote respect for human rights. The **Universal Declaration of Human Rights**, proclaimed by the UN General Assembly in 1948, sets out basic rights and freedoms to which all women and men are entitled, including:

- the right to life, liberty and nationality
- the right to freedom of thought, conscience and religion
- the right to work and to be educated
- the right to food and housing
- the right to take part in government.

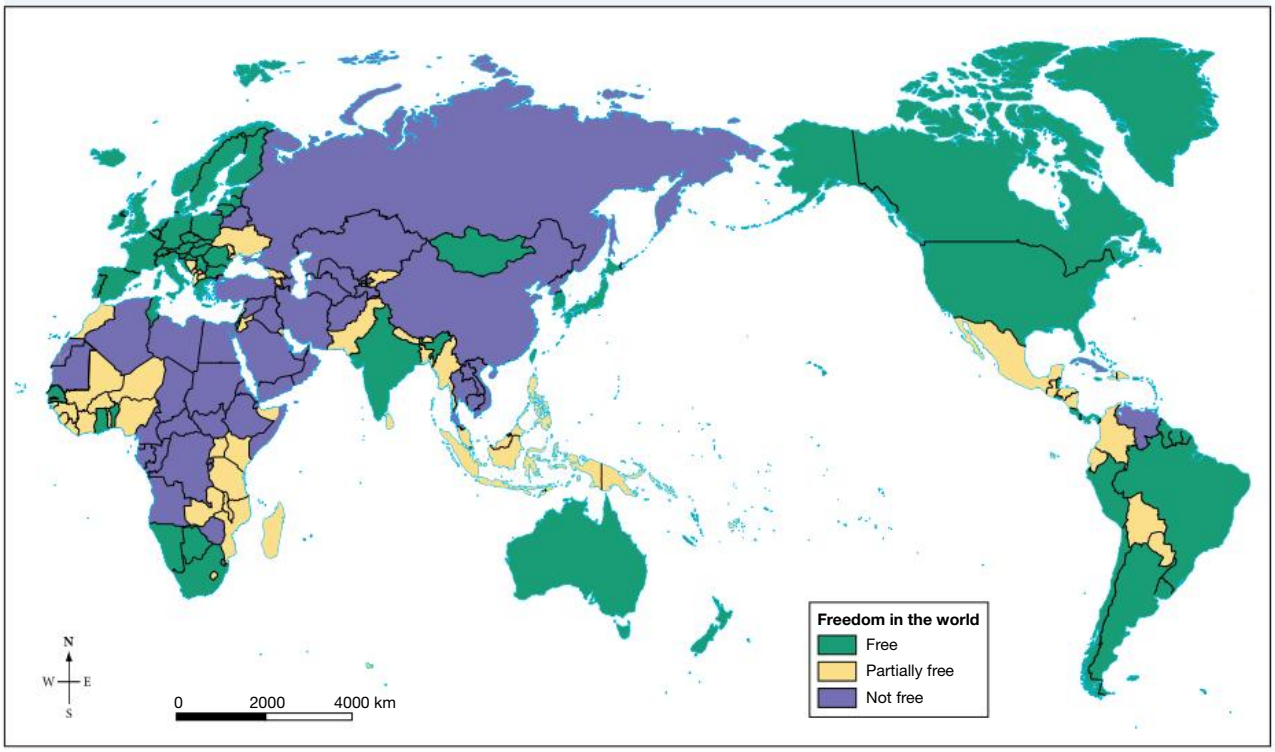
These rights are legally binding by virtue of two **International Covenants**, to which most states are parties. One covenant deals with economic, social and cultural rights, and the other deals with civil and political rights. Together with the Declaration, they constitute the **International Bill of Human Rights**. **FIGURE 2** shows where political rights exist or are lacking throughout the world.

Universal Declaration of Human Rights the first specific global expression of rights to which all human beings are inherently entitled

International Covenants a multilateral treaty adopted by the United Nations General Assembly, in force from 1976; it commits those who have signed the Covenant to respect the civil and political rights of individuals and their economic, social and cultural rights

International Bill of Human Rights the informal name given to the Universal Declaration of Human Rights and the two International Covenants

FIGURE 2 Political rights around the world, 2018. A free country is one where political rights are available and protected. A country that is not free is one where basic political rights are absent, and basic civil liberties are widely and systematically denied.



18.5.3 Who protects our human rights?

Although Australia has agreed to be bound by these major international human rights treaties, they do not form part of Australia's domestic law unless they have been specifically written into Australian law through legislation. The Australian Human Rights Commission is the national organisation that advocates for promotion and protection of human rights. In addition to monitoring economic, social, cultural, civil and political rights, other areas of human rights include peacekeeping, eradication of poverty and the humanitarian tribunals (for example, the International Criminal Court that deals with mass human rights violations, such as genocide). Amnesty International is a global organisation that works to uphold human rights. One area on which it focuses its human rights advocacy is the death penalty (capital punishment), a contentious issue on the global political stage (see **TABLE 1**).

TABLE 1 The death penalty, a violation of the right to life as proclaimed in the Universal Declaration of Human Rights

Top five countries where most executions happened in 2017	Top five countries where most people were sentenced to death in 2017
China*	China*
Iran 507+	Nigeria 621+
Saudi Arabia 146	Egypt 402+
Iraq 125+	Bangladesh 273+
Pakistan 60+	Sri Lanka 218+
USA 23	Pakistan 200+

* Exact figures for China are unknown, but Amnesty International estimates executions to have been in the thousands.
At least 21 919 people worldwide were under sentence of death at the end of 2017.
According to Amnesty International, of 142 countries worldwide, more than 70 per cent of all the world's countries are against capital punishment in law or practice.

Source: Data from Amnesty International.

18.5.4 Protecting the vulnerable

International human rights organisations recognise that children have special human rights because of their vulnerability to exploitation and abuse. The United Nations General Assembly adopted the Convention on the Rights of the Child (the CRC) in November 1989. How are your rights protected? And what are some of the big issues for children's rights today?

Some of the rights and protections that a **child** is entitled to according to the CRC include:

- the right to life
- the right to a name and a nationality
- the right to live with their parents
- the right to freedom of thought, conscience and religion
- the right to privacy
- protection from abuse and neglect
- the right to education
- the right to participate in leisure, recreation and cultural activities
- protection from economic exploitation
- protection from or prevention of abduction, sale or trafficking.

child any person below 18 years of age

Two key areas that are currently a focus for rights are the use of children in conflict and the use of children for labour.

DISCUSS

How are your rights protected? And what are some of the big issues for children's rights in Australia today? How might your perception of what is just and fair treatment be different to children living in other parts of the world?

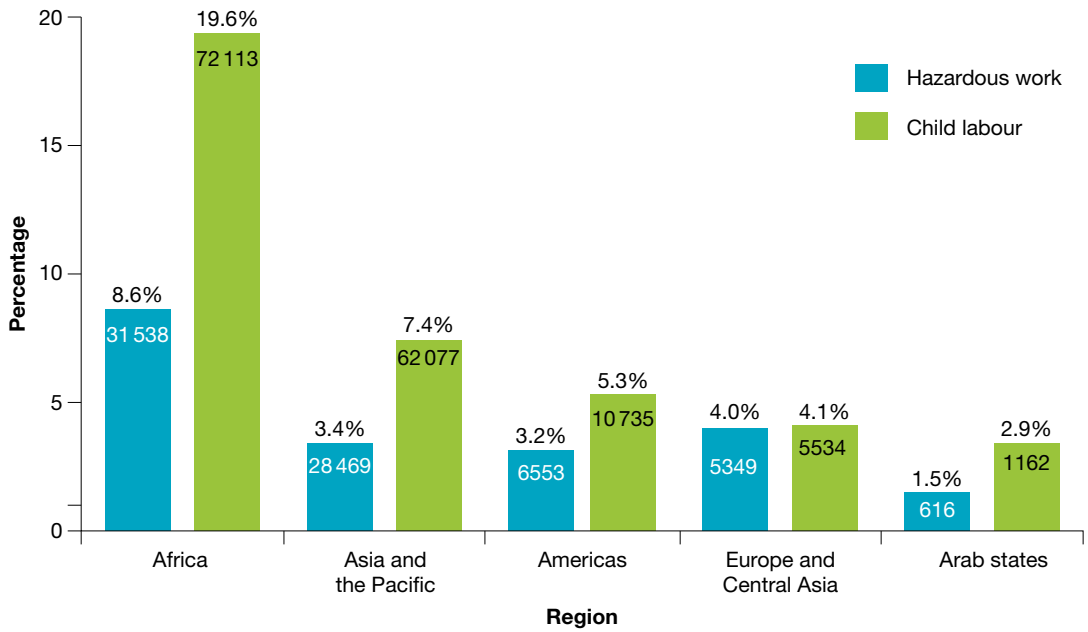
Child soldiers and child labour

child soldiers a child who is, or who has been, recruited or used by an armed force or armed group in any capacity, including but not limited to children, boys and girls, used as fighters, cooks, porters, messengers, spies or for sexual purposes. This term does not refer only to a child who is taking or has taken a direct part in hostilities.

The issue of children in armed conflict has become a pressing one over the past few decades because of the serious risks of involving children in war or conflict situations. Approximately 300 000 children are believed to be combatants in conflicts worldwide. **Child soldiers** have gone to battle in a range of countries, including Afghanistan, the Central African Republic, the Democratic Republic of the Congo, Myanmar, Somalia, South Sudan, Sudan, Syria and Yemen.

Sustainable Development Goal 8 has a target specifically relating to child labour. From 2012 to 2016 child labour declined, but the rate of decline is slowing. Sub-Saharan Africa has seen an increase in child labour. Places in conflict, experiencing disasters and of low income have a heightened risk of child labour.

FIGURE 3 Children's involvement in child labour and hazardous work, by region, 2016



International Labour Organization (ILO) figures for 2016 show that:

- globally, one in ten children work (152 million children between the ages of 5 and 17)
- 73 million children work in hazardous conditions
- the highest number of child labourers are in Africa; almost half the children in labour globally are found there (71.2 million, or one in five children)
- the highest proportion of child labourers is in sub-Saharan Africa, where 27 per cent of children (59 million) work.

In many countries, poor girls are put to work as domestic servants for richer families. In many places, children (especially girls) perform unpaid work for their families. In all cases, children are exploited, and in many cases, they are excluded from attending school (denying them their right to education).

DISCUSS

How might the values and beliefs differ between countries with a higher incidence of child labour and hazardous work compared to those countries with a lower incidence of these issues?

General capability: Intercultural understanding

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate Australian Curriculum topics > Year 10: Geographies of human wellbeing > Child labour around the world

on Resources

Weblink Human Rights Watch

18.5 ACTIVITIES

1. Use the internet to find out when Human Rights Day occurs each year and why the date was chosen.
   HASS skills: Questioning and researching
2. Refer to **FIGURE 2**. Identify one of the countries that is not free and conduct additional research. What violations of this area of human rights have contributed to this rating? You may wish to use the **Human Rights Watch** weblink in the Resources tab as one source of information.
   HASS skills: Questioning and researching
3. Some of the basic human rights are outlined in this subtopic. In pairs or small groups, develop a 'Teenagers' Bill of Rights' (include at least ten rights) that you believe would provide for a better existence for all teenagers.
   HASS skills: Evaluating, Communicating and reflecting
   General capability: Personal and social capability
4. Complete the **Child labour** worksheet to investigate and learn more about child labour throughout the world.
   HASS skills: Analysing

18.5 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 5, 7	Questions 3, 8, 9	Questions 6, 10, 11

Check your understanding

1. What is the International Bill of Human Rights?
2. Define 'human rights' in your own words.
3. Who does the Universal Declaration of Human Rights apply to?
4. What is the name of the document that sets out the rights of children?
5. How is a *child* defined?
6. Why do children need a separate declaration outlining their rights?

Apply your understanding

7. Study **FIGURE 1**. Which philosophies have influenced your understanding of human rights?
8. Consider **FIGURE 2**.
   a. What does this map illustrate?
   b. Which places around the world are 'free', and which are 'not free'?
9. Only a small selection of the rights outlined by the Convention on the Rights of the Child (CRC) is provided in this subtopic.
   a. How would you rank the 10 rights listed in this section in order of importance (1 being the most important)? Justify your choices.
   b. Do you think someone in sub-Saharan Africa would agree with your choices? Explain.

10. Since the 2008 global financial crisis, the situation for child labourers has changed for the worse. Why do you think this might be the case? Justify your explanation.
11. If you had to stay home and babysit your younger siblings, then your right to an education may be compromised. How might simple daily events prevent you from achieving your rights or protections as outlined by the CRC?

For sample responses to every question, go to www.jacplus.com.au.

18.6 CASE STUDY: Syria — the impact of conflict on wellbeing

LEARNING INTENTION

By the end of this subtopic you will be able to evaluate how civil war in Syria has affected the wellbeing of the Syrian people since 2011.

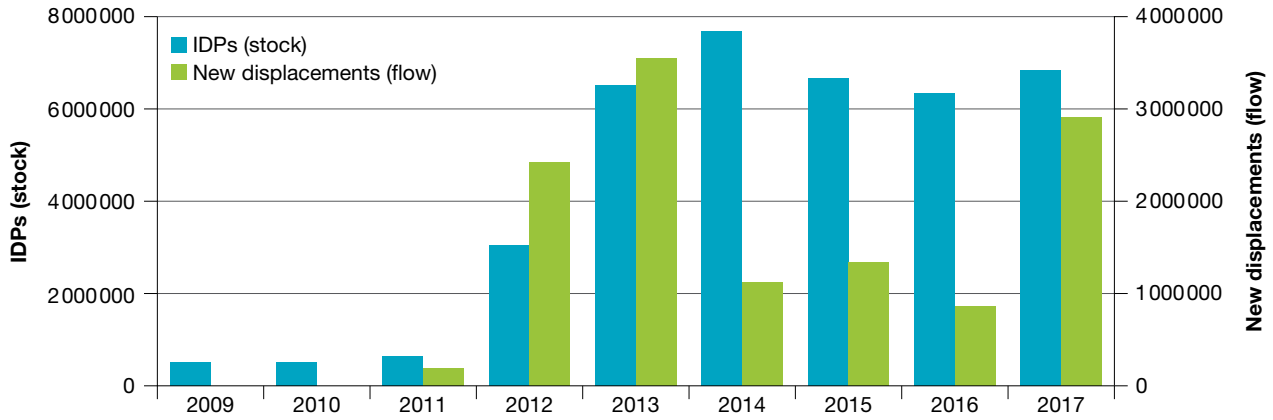
18.6.1 The impact on the Syrian people

The civil war in the Syrian Arab Republic has become a long-term event. It began in 2011 as part of the uprising of its people against the government in the Arab Awakening (also known as the Arab Spring). Civil war does not mean that everyone living in the country is involved in the war, but everyone living in the country is affected by the war. Life and wellbeing is changed.

The Syrian people had four choices when government forces commenced hostilities against their protests in the Arab Awakening: join the Syrian Arab Republic's army, join the rebels, leave the fighting zones or stay in their homes.

By 2018, 7.8 million Syrian people — especially women, children and young men — had fled areas of conflict to somewhere else within the Syrian Arab Republic, becoming internally displaced persons (IDPs) in their own country (see **FIGURE 1**). These people make up one in five of all IDPs globally — this is the largest displaced population worldwide.

FIGURE 1 The number of IDPs in Syria 2011–17



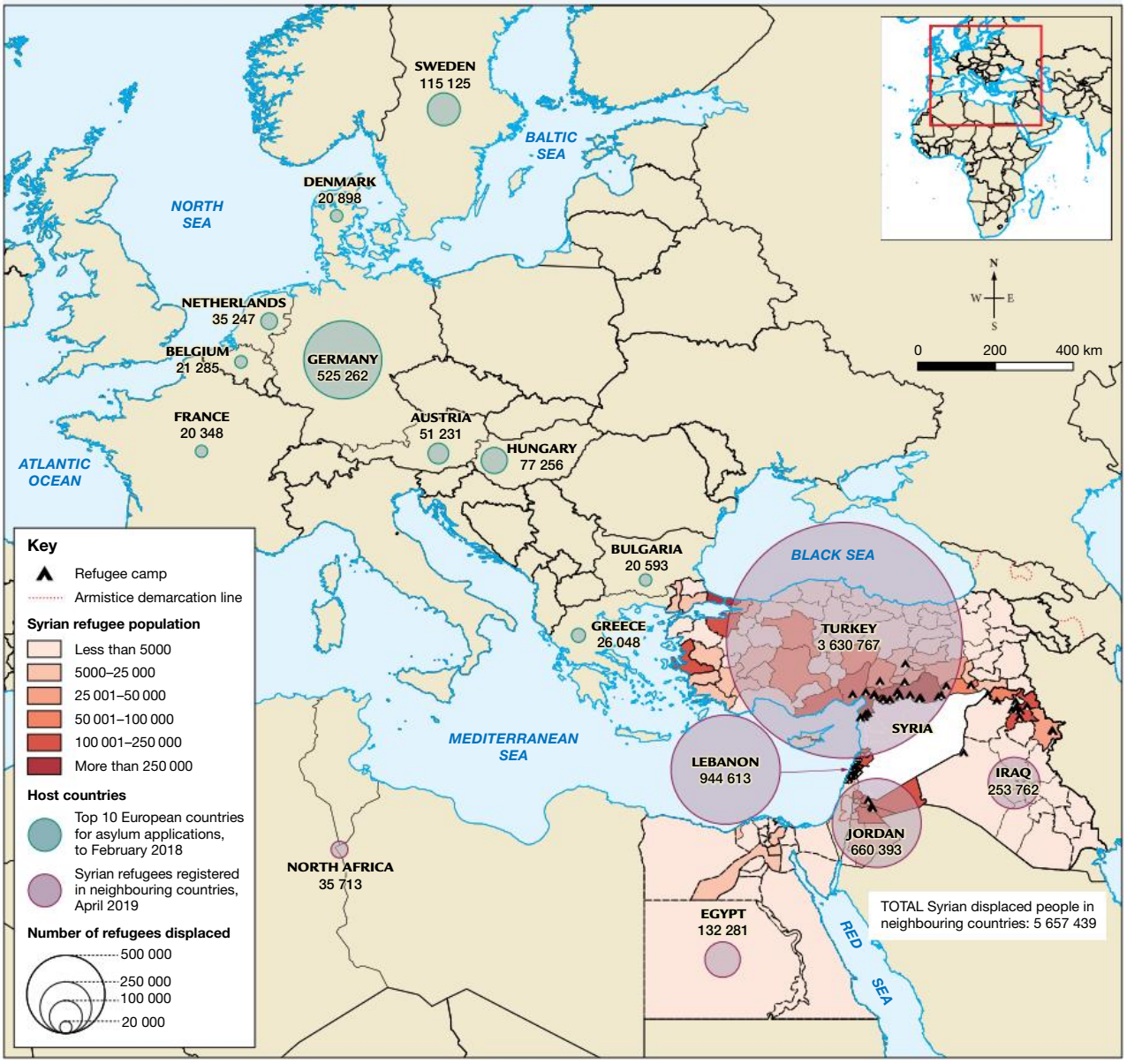
Note: 'Stock' refers to people living in a region during a period of time; 'flow' refers to people entering or leaving a region during a period of time.

Source: © Internal Displacement Monitoring Centre.

In 2013, the Assad-led government declared 'surrender or starve' to its people and began sieges on key cities, particularly the capital city, Damascus, and large populations to the north of the country. Sieges 'lock' people within a city's boundaries, preventing easy movement out and denying entry to the city. In early 2016 it was estimated that between 390 000 and 1.9 million people were trapped in cities.

Multiple opposition groups formed in a wider context throughout the region and began to have a presence in the Syrian Arab Republic. Some of these groups have a religious base and others are terrorist cells. Since then the pressures of conflict in different areas have seen many IDPs flee again, often at night to avoid detection. Some of these people have crossed the border into surrounding countries to become refugees, massing in 'tent cities' on the border with Turkey, with many ultimately moving on either to other neighbouring countries or even further, into Europe (see **FIGURE 2**). The level of liveability for the Syrian people has declined. (For help understanding **FIGURES 2** and **3** see Skillbuilder: Constructing and describing complex choropleth maps in topic 10.)

FIGURE 2 The distribution of Syrian refugees



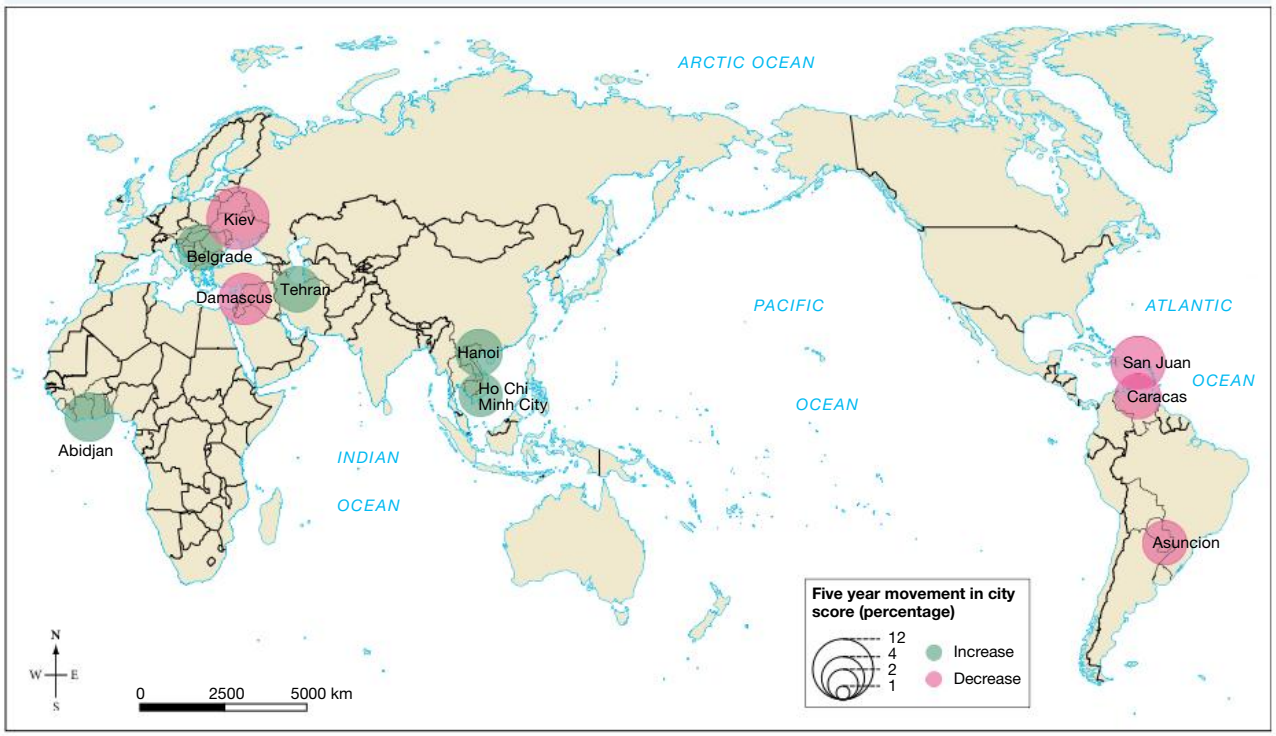
Source: Based on data from UNHCR, Government of Turkey.

18.6.2 The impact on housing

FIGURE 3 shows a significant change in liveability for Damascus from 2008 to 2018. Living conditions have changed: safety in homes is at risk, there is food insecurity and children are traumatised. Global relief organisations estimate that more than 13 million people in Syria need humanitarian aid.

The street-to-street fighting that is a key element of civil war has destroyed buildings, including houses, in major cities such as Aleppo and Homs. Public services such as electricity, running water and gas supplies no longer operate. There is no transport system. Without oil, people rely on wood fires for heating and cooking, but this has brought about local deforestation. War continues to injure and kill local people who have remained in their homes. In late 2014 the United States, United Kingdom and France began airborne bombing of cities to reduce the threat of rebel groups; Russia began air strikes in late 2015. Ongoing bombing strikes by the Syrian regime have further destroyed buildings.

FIGURE 3 Change in liveability score 2008–18, showing the change in Syria in comparison to other areas of significant change



Source: Economist Intelligence Unit.

18.6.3 Feeding the Syrian people

Food insecurity is a daily issue for the war-torn areas of the Syrian Arab Republic. It is not safe to be outside for too long tending plants. Food transport cannot reach the besieged cities. Reports of malnourishment surfaced in 2016 at besieged Madaya (where 40 000 people were trapped) when social media reported that families were stripping the trees of leaves and boiling them to provide one meal a day. Aid organisations negotiated with the Assad government to be allowed to enter the city (free from attack) with a convoy of trucks bringing food, but this was only a short-term solution. As the conflict continues, food remains a major issue for the people trapped in the conflict zones of Syria.

18.6.4 The impact on children

Children in any war-torn area have their lives dramatically changed. The streets are no longer playgrounds. Education is disrupted or abandoned for months or years. Fear enters their lives — the sounds of aircraft, bombing and shooting punctuate their days and nights. Deafness in children becomes a problem. Families are torn apart, with some people fleeing and others staying. Children miss their friends. Young men are recruited for the fight by both sides of the conflict with blackmail, threats, fear and propaganda. Life is insecure, confusing and scary; children grow old before their time.

FIGURE 4 A Syrian refugee makes a cooking fire.



18.6.5 Adapting to life in the besieged cities

The resilience of people is evident in the besieged cities as people become accustomed to a basic lifestyle. Innovation is required: static bicycles are pedalled to generate power for mobile phones, medicines are produced from home remedies, plastic is burned to extract oil derivatives and rooftop gardens produce small amounts of vegetables.

FIGURE 5 The destruction of their homes is just one of the many significant effects the war has had on the children of Syria.



18.6.6 What are the costs to the Syrian Arab Republic?

International peace talks have brought ceasefires in the fighting, but will peace ever be achieved? In 2018–19, the Syrian armed forces continued to retake cities and push terrorist cells out of the country. The costs to the Syrian Arab Republic are immense. So many of its people have fled — more than 5.6 million are refugees and 7 million are IDPs, of whom nearly 3 million are in besieged cities or hard-to-reach locations. Some of those who fled will return to the Syrian Arab Republic, but they too have changed as a result of the experiences they have been through. And how will those who remained perceive the returnees and those who stay away? Families have

been changed forever. The cities will take years to rebuild; more than a quarter of all housing has been destroyed. Services and food supplies will need to be re-established. Children will have years of schooling to catch up on.

FIGURE 6 Residents of Homs go about daily life among the destruction.



18.6 ACTIVITIES

1. Conduct an internet search to locate the latest Human Development Report.
   a. Copy the following table and complete it using data from the report.
   b. Using the indicators in the completed table, describe life in Syria.
   c. From the table, is there an indication of why refugees opt to go to Turkey and Lebanon in preference to other cross-border countries? Support your answer using statistics.

HASS skills: Analysing, Evaluating
General capability: Personal and social capability

Country indicator	Syrian Arab Republic	Turkey	Jordan	Lebanon	Iraq	Egypt
HDI ranking						
GNI per capita						
Public expenditure on education (% of GDP)						
Local labour market (% answering 'good')						
Public health expenditure (% GDP)						
Internet users (% of population)						

2. As a small group activity, use the internet to create a photographic essay with at least six images of life in Syria during conflict. Choose the images carefully and include some qualitative and quantitative data by adding annotations to support your choice of images and to show your understanding of the situation and the impact on the wellbeing of Syrians.

HASS skills: Communicating and reflecting
General capability: Personal and social capability

18.6 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 6	Questions 4, 7, 8	Questions 5, 9, 10

Check your understanding

1. Who are the sides in the civil war in the Syrian Arab Republic?
2. What was the government policy that forced great hardship on the Syrians? Explain its implications.
3. Study **FIGURE 1**.
   a. Which time period saw the greatest movement of Syrians from their homes to another place in Syria?
   b. When did the total number (stock) of IDPs peak?
   c. Suggest reasons for the flow of IDPs from 2014 to 2017.
   d. What does the variation in the IDP totals indicate about the location of Syrians affected by the conflict?
4. **FIGURE 2** shows the cross-border movement of Syrian refugees.
   a. Rank the neighbouring countries from highest to lowest in relation to the number of Syrian refugees registered in each country in November 2017.
   b. Is the distribution of Syrian refugees even across the neighbouring countries? In particular, refer to the situation in Turkey.
   c. Suggest why the refugee camps are found along the borders.
5. Using **FIGURE 3**, state how Syria's capital, Damascus, has faired in terms of liveability as a city.

Apply your understanding

6. Is the wellbeing of the Syrian refugees likely to improve in a cross-border country? Give reasons for your answer.
7. Describe the distribution of Syrian refugees across Europe in 2018.
8. Make a list of the things that Syrian refugees are seeking in order to improve their wellbeing by journeying so far into Europe.
9. Why has food security been one of the most significant issues for Syrian people who have remained in their homes?
10. What might you do to make your life as 'normal' as possible and ensure your wellbeing if you found your neighbourhood in a situation similar to the embattled regions of Syria?

For sample responses to every question, go to www.jacplus.com.au.

18.7 Seeking refuge

LEARNING INTENTION

By the end of this subtopic you will be able to describe why people fleeing from countries involved in conflict in northern Africa and Western Asia have crossed the Mediterranean Sea to find new homes in Europe, and explain the different responses of European countries to this movement of people.

18.7.1 Refugees and asylum seekers

As shown in the case study on Syria, refugees flee conflict and cross a border into another country to seek relief from the trauma of war and make a home elsewhere. All refugees (those who cannot return home due to a fear of persecution because of race, religion, nationality or membership of a social group) have been **asylum seekers**, but not all asylum seekers are found to be refugees. Asylum seekers who

asylum seekers people entering another country asking to be assessed and classified as refugees

are not found to be refugees have either not satisfied the UNHCR criteria to be deemed a refugee or have gone outside of the formal process to seek a place to live.

18.7.2 The movement of people to Europe

Most of those arriving in Europe are fleeing the civil war in the Syrian Arab Republic, with other significant numbers arriving from the ongoing conflict in northern Africa since the Arab Awakening. Syrians have fled through Turkey to reach the shores of the Aegean Sea, from which on a clear day the Greek islands of Lesbos and Kos can be seen a mere 4 kilometres away (**FIGURE 1**). People from northern Africa come across the Mediterranean Sea, particularly from Libya. However, movement across these waters is treacherous in small boats and dinghies, and rate of loss of life by drowning is high (see **FIGURE 3**).

FIGURE 1 Refugees board a dinghy with all their possessions to make the short crossing from Turkey to Greece.



FIGURE 2 Tents of migrants and refugees in the port of Piraeus, Athens, Greece



On the eastern route, Greece's islands are the first point of arrival, where the refugees are fingerprinted, photographed and given a document allowing legal residency for 30 days in Greece. Greece does not accommodate the mass of people arriving on its shores. It is costly for the already poor country to rescue people from the seas and process their movement.

People crossing from Africa reach Italy or Spain as the closest landfall places, or are picked up by the rescue ships in the middle of the Mediterranean Sea and taken either back to Africa or to a European country that will accept them.

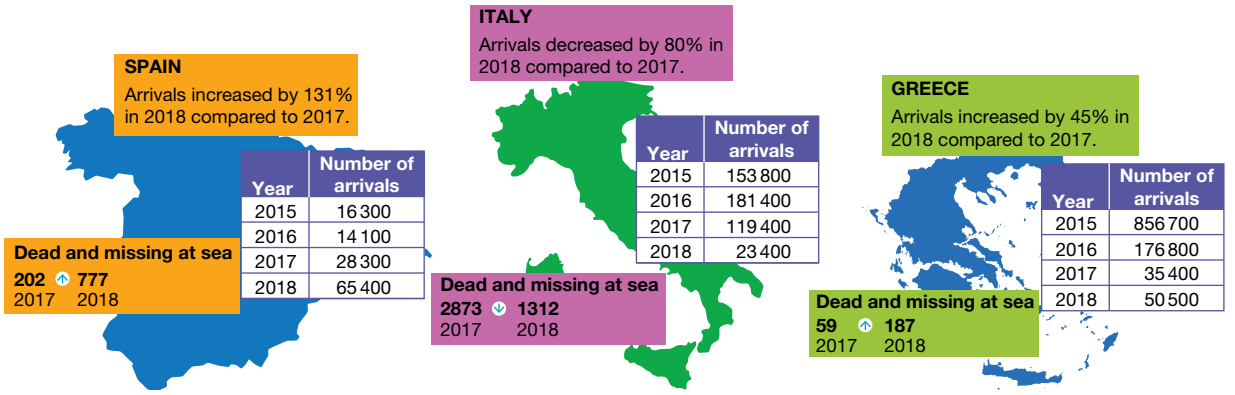
18.7.3 Arranging the journey

It is estimated that 90 per cent of refugees have their journeys organised by criminal gangs, including individual people smugglers and migrant smuggling networks across Europe. Thousands of dollars are extorted for the risky sea crossings and for travel on trains within Europe. High prices are paid for accommodation and fake documents such as passports that allow refugees to apply for asylum elsewhere in Europe, especially in Germany and Sweden. People smugglers often instruct refugees that when a coast guard ship is in sight the boat or dinghy should be destroyed to ensure the refugees' rescue, a meal and health checks before arriving on European soil. **FIGURE 3** shows the number of asylum seekers moving to Europe over a four-year period.

18.7.4 Syrian refugees across Europe

FIGURE 2 in subtopic 18.6 shows the distribution of Syrian refugees throughout Syria's neighbouring countries and beyond, across Europe. After the sea crossing from Turkey, Syrians seeking asylum in Europe entered the region predominantly through Greece, although some entered via Bulgaria and then spread through neighbouring countries.

FIGURE 3 Crossings of the Mediterranean Sea, 2015–18



Source: Data from UNHCR, www.unhcr.org/desperatejourneys.

18.7.5 The European response that affects human wellbeing

In 2015, four times as many refugees arrived in Europe as in 2014. This was to be the peak in arrivals from the eastern Mediterranean route (see **FIGURE 3**). Germany, with its developed economy, high living standards and political compassion was targeted as a place to go. The German community initially showed open-minded goodwill and generosity (see **FIGURE 4a**), but in 2016 attitudes began to change; the numbers of migrants became overwhelming. By mid 2018, 1.4 million people had sought asylum in Germany. In 2018 the surge of asylum seekers from the western Mediterranean route through Spain and onward to Germany raised further concerns about the impact on the German way of life, with issues raised such as housing availability and infrastructure pressure, as well as how people with different languages and cultures would live together.

Sweden had a very open approach to asylum seekers, providing safety for people in need of protection (see **FIGURE 4b**). Permanent residency permits were offered to those with appropriate documents. Accommodation, a small daily allowance, health care and schooling were provided. Early in 2016, Sweden announced tougher rules as it felt that it had reached its limit regarding the numbers of asylum seekers that it could take. Some scenes of violence and criminal activity had changed Swedish attitudes and expulsion of asylum seekers began.

Hungary saw itself as a stepping stone for those moving north, but the sheer number of people moving through the country along disused railway lines, on roads and across paddocks struck fear within the government. In late 2015, a 4-metre-high wire fence was erected along the border with Serbia and patrolled by police with tear gas and water cannons (see **FIGURE 4c**),but refugees found gaps and cut holes to continue their movement north-west, or changed their path to go through Croatia.

Italy, with its influx of refugees from northern Africa, has given the task of caring for the refugees to charities, companies, cooperatives and individuals. Shelters are often substandard and overcrowded (see **FIGURE 4d**). Italy hopes that the people will move on from the southern regions, through Milan and on to other European countries. In 2018 Italy banned the rescue ships operating in the Mediterranean Sea from disembarking asylum seekers at its ports.

France has settled many of the northern African refugees within its cities. Most of these refugees speak French because of France's colonial occupation of areas in northern Africa in the nineteenth century. Some refugees aimed to reach Britain by stowing away on ferries or on trucks travelling through the tunnel under the English Channel. Refugees established a tent camp city near Calais (see **FIGURE 4e**) while they waited to attempt a crossing. Authorities did not approve and in October 2016, amid protests and clashes, the camp was closed and dismantled. A program introduced in France in 2019 aims to assimilate the migrants via a volunteering scheme that will see people contribute to the public good, learn work skills, gain additional language lessons and receive a monthly payment.

FIGURE 4 (a) Welcome to Germany (b) Volunteers providing supplies in Sweden (c) The Hungarian fence (d) Sleeping at an Italian shelter (e) The Calais tent city before it was dismantled in 2016











DISCUSS

Using the criteria of fairness and two other criteria of your choice, evaluate the effectiveness of the responses of two European countries to the Syrian refugee crisis. When you have completed your evaluation, in small groups or as a class discuss the criteria you chose, and why you chose them. What are some of the difficulties involved in providing responses to the refugee crisis? Consider social, economic, political, and environmental perspectives in your discussion.

HASS skill: Evaluating
General capabilities: Critical and creative thinking, Ethical capability

18.7.6 A regional perspective on asylum seekers

The European countries tried to find a regional solution to the flood of migrants and found themselves bickering with each other over decisions made within one country that affected a neighbouring country — a domino effect. Greece, Italy and Spain, as major entry points, felt the pressure as other countries closed their borders and restricted the on-flow of migrants. Some countries felt they had taken their 'fair share' of the numbers of asylum seekers and began turning away those that couldn't prove their status.

By 2019 the European Union (EU) had taken some control of the situation. It claims there is no longer a crisis situation — arrivals in 2018 were at the lowest for five years. The EU works with countries of origin of asylum seekers, in particular Turkey, Syria and Libya, to provide financial assistance and assistance with processing arrivals at the EU borders. It also provides financial, operational and material support to its member states most affected by the arrivals — Greece, Italy and Spain. Since 2015 two EU programs have assisted in the resettlement of 50 000 people across Europe.

18.7 ACTIVITIES

1. Research the members of the European Union and the Schengen Area. In what ways may they have contributed to the mass movement of people?

HASS skills: Questioning and researching

2. Conduct an internet search to find the current Human Development Report and answer the following questions.
   a. Find the HDI ranking for each country in the following table.

Country	Greece	Italy	Hungary	Germany	France	Sweden	Spain
HDI ranking							

   b. How do the HDI rankings for the 'first ports of call' of the refugees compare to the other countries listed?
   c. How might the HDI rankings help to explain the movement of the asylum seekers through Europe?
   d. According to the HDI rankings, which countries might be best placed to cater for the wellbeing of large numbers of people on the move?

HASS skills: Analysing

3. Imagine you are a refugee moving from place to place on your journey across Europe seeking asylum. In small groups, write a series of tweets for Twitter that describe your wellbeing in a number of countries.

HASS skills: Communicating and reflecting
Geography concept: Place
General capability: Personal and social capability

18.7 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 7	Questions 4, 6, 8	Questions 5, 9, 10

Check your understanding

1. What is the difference between a refugee and an asylum seeker?
2. What is the role of people smugglers in the mass movement of people across Europe?
3. What role does Greece play in the movement of Syrian refugees?
4. For what purpose did smugglers encourage refugees to sink their boats?
5. Describe the changing role of rescue ships in the Mediterranean Sea between Africa and Spain/Italy in the movement of refugees over time.

Apply your understanding

6. Use **FIGURE 3** to answer the following questions.
   a. In which year were the greatest number of people arriving in Europe as asylum seekers?
   b. How have the numbers of people arriving changed for each of Spain, Italy and Greece?
   c. Explain how it is that the greatest percentage increase in arrivals (2017–18) occurred in Spain.

d. The 2018 figures show that the arrivals in Italy do not follow the trend in the other countries. Explain the change that occurred in Italy in 2018.
e. Describe the trend seen in the pattern of arrivals 2015–18.

7. Western European countries have the greatest number of Syrians applying for asylum. What factors influence the Syrians push to reach these countries?
8. Use the images throughout this subtopic to contrast the wellbeing of refugees on their journey.
9. Germany has taken in the greatest percentage of the refugees arriving in Europe. Explain how this has affected life in Germany for its residents.
10. Discuss how Europe, as a region, has dealt with the intake of refugees.

For sample responses to every question, go to www.jacplus.com.au.

18.8 Providing assistance for global human wellbeing

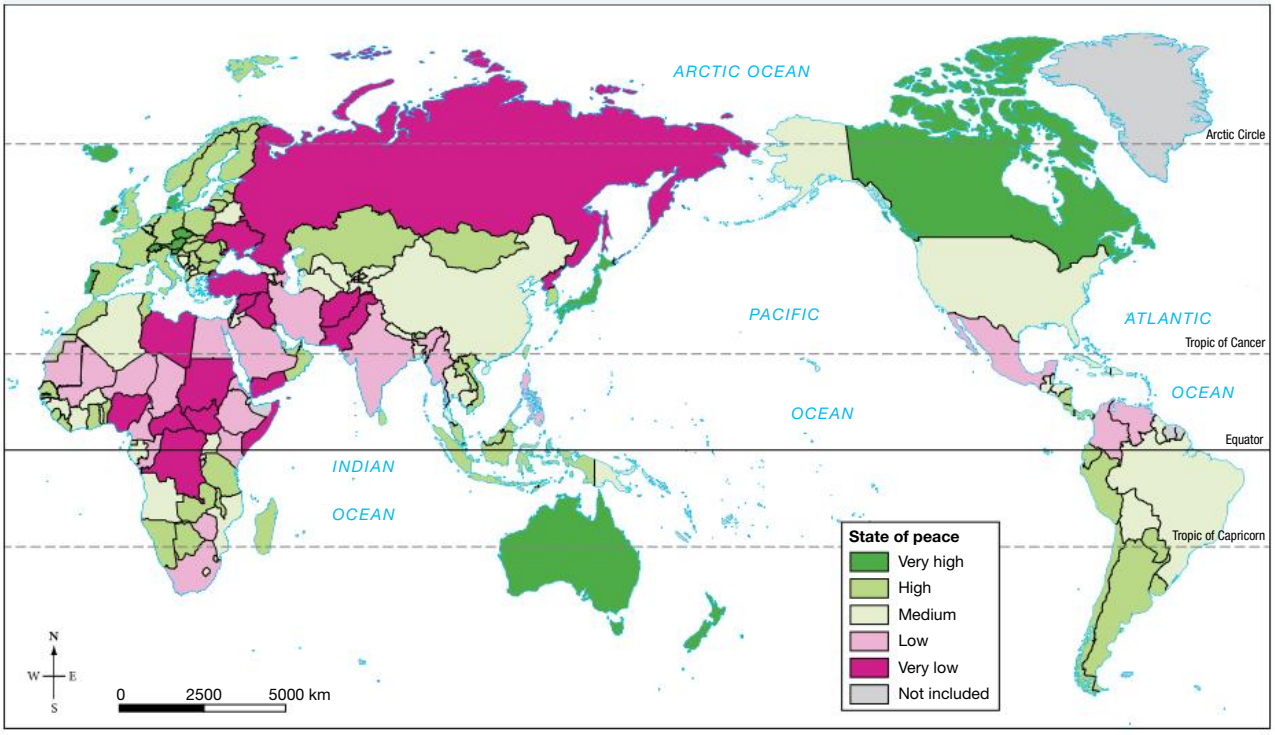
LEARNING INTENTION

By the end of this subtopic you will be able to describe how the Australian government works to promote peace, stability and wellbeing throughout our region and beyond, and identify some of the non-government organisations who work to promote human wellbeing throughout the world.

18.8.1 The Global Peace Index

The Global Peace Index (see **FIGURE 1**) uses 23 indicators and 30 other factors of wellbeing to assess a country's 'peacefulness'. Among the criteria used are elements of peace at home (government stability, democratic processes, community relations, security and trust between people) and peace in foreign relations (military spending levels, commitment to the United Nations and avoidance of war). Where countries experience low and very low states of peace, they are often greatly in need of assistance from other countries throughout the world in order to maintain their people's wellbeing.

FIGURE 1 Global Peace Index, 2018



Source: Institute for Economics & Peace, Global Peace Index 2018: Measuring Peace in a Complex World, Sydney, June 2018. Available from http://visionofhumanity.org/reports.

18.8.2 Caring for human wellbeing

Developed countries across the world provide financial and personnel assistance to those who have their wellbeing pressured by environmental, social, political or economic factors, including in those countries where conflict disrupts lives and makes human wellbeing a struggle such as Syria.

During the twentieth century, Australia accepted many people hoping to improve their wellbeing after conflict. Many thousands of migrants from Europe, in particular Italians and Greeks, arrived after World War II; the Vietnamese came as a result of the Vietnam War; and eastern Europeans came after the break-up of Yugoslavia. In the twenty-first century, conflict in the Middle East, western Asia and Africa has seen people of these cultures seek refuge in an ever-changing multicultural Australia.

18.8.3 Giving aid to bridge the gap

Aid (also known as international aid, overseas aid or foreign aid) is the voluntary transfer of resources from one country to another, given at least partly with the aim of benefiting the receiving country.

Aid may be given by government, private organisations or individuals. **Humanitarianism** is still the most significant motivation for the giving of aid, but it may be motivated by other functions including:

- as a sign of friendship between two countries
- to strengthen a military ally
- to reward a government for actions approved by the donor
- to extend the donor's cultural influence
- to gain some kind of business or commercial access to a country.

18.8.4 What types of aid exist?

Bilateral aid is aid given by governments to donor countries. Multilateral aid is provided through international institutions such as UNICEF. **Non-government organisation** (NGO) or charity aid is voluntary, private, individual donations collected by organisations such as the Red Cross. Aid takes many forms: money, food, medicine, equipment, expertise, scholarships, training, clothing or military assistance (to name just a few). Large-scale aid (top-down aid) is usually given to the government of a developing country so that it can spend it on the projects that it needs. Small-scale aid projects (bottom-up aid) target the people most in need of the aid and help them directly, without any government interference. Aid from NGOs tends to be bottom-up aid.

aid (foreign or international) the voluntary transfer of resources from one country to another, given at least partly with the aim of benefiting the receiving country

humanitarianism concern for the welfare of other human beings

non-government organisation (NGO) a citizen-based association that operates independently of government, usually to deliver resources or serve some social or political purpose

FIGURE 2 The Friendship Bridge across the Mekong River, which connects Thailand with Loas, was built with Australian aid.



There are positive and negative impacts of aid (see **TABLE 1**). Aid can increase the dependency of recipient countries on donor countries. Sometimes aid is not a gift but a loan, and poor countries may struggle to repay the money. Aid may also be used to put political or economic pressure on a country, which may leave its people feeling like they owe their donors a favour. There is also the threat that corruption among politicians and officials will prevent aid from reaching the people who need it most. If aid does not provide for and empower citizens, then wellbeing will not improve.

TABLE 1 Advantages and disadvantages of different types of aid

	Advantages	Disadvantages
Bilateral aid	• Helps expand infrastructure: roads, railways, ports, power generation. • Aid that directly supports economic, social or environmental policies can result in successful programs.	• 'Tied aid' obliges the country receiving aid to spend it on goods and services from the donor country (may be expensive). • Inappropriate technology may be given (e.g. tractors are of little use if there are no spare parts or fuel).
Multilateral aid	• The organisations have clear aims about what they are trying to achieve (e.g. WHO combats disease and promotes health). • Leading experts in their field work to achieve multilateral aid program objectives.	• Sometimes directed only towards specific areas or organisations, leaving many without benefit. • Many come with conditions to make big changes to structures, which can be difficult to manage once aid has 'finished'.
NGO/charity aid	• Usually targeted at long-term development within a country. • Raises awareness of specific situations in a country or region.	• The greatest source of need may not be prioritised (e.g. the 2006 tsunami devastation received many donations, but areas in sub-Saharan Africa were just as much in need daily). • Up to 30 per cent of donations may be 'eaten up' by administration costs.

18.8.5 The role of the Australian government today

The Australian government's official development assistance (ODA) is designed to promote prosperity, reduce poverty and enhance stability in developing countries. In 2018–19, Australia provided $4.2 billion of ODA, 90 per cent of which was allocated to the Indo-Pacific region. Australia's ODA focuses on strengthening private sector development and enabling human development. Specifically, it contributes to investment in trade, infrastructure, agriculture, fisheries, water, health, education, gender equality and effective governance (see **FIGURE 3**).

Australian officials also sit on many international organisations providing a global perspective on issues, including events in conflict zones. For over 70 years Australia has been a member of the many United Nations peacekeeping and security groups providing support in conflict zones. In numerous other organisations, Australia is seen as a key driver of a change in attitude to ensuring civilians caught up in conflict are treated in a humane manner.

In 2017 Australia was elected by the United Nations General Assembly to serve on the UN Human Rights Council from 2018 to 2020. This is the first time Australia had been chosen to serve on this council, and it is seen as a reflection of our commitment to the protection of human rights. In addition to this role, Australia is actively engaged with other entities that promote human rights, such as the Asia Pacific Forum of National Human Rights Institutions, of which the Australian Human Rights Commission was a founding member in 1996.

Among Australia's immigration statistics there is also a specified annual intake of humanitarian refugees. This was increased in 2015 to accept an additional 12 000 refugees from the Syrian crisis for the following five years. For the 2018–19 period, it was expected that Australia's humanitarian refugee intake would be just under 19 000 people.

FIGURE 3 Distribution of Australia's ODA budget by investment priority, 2018–19

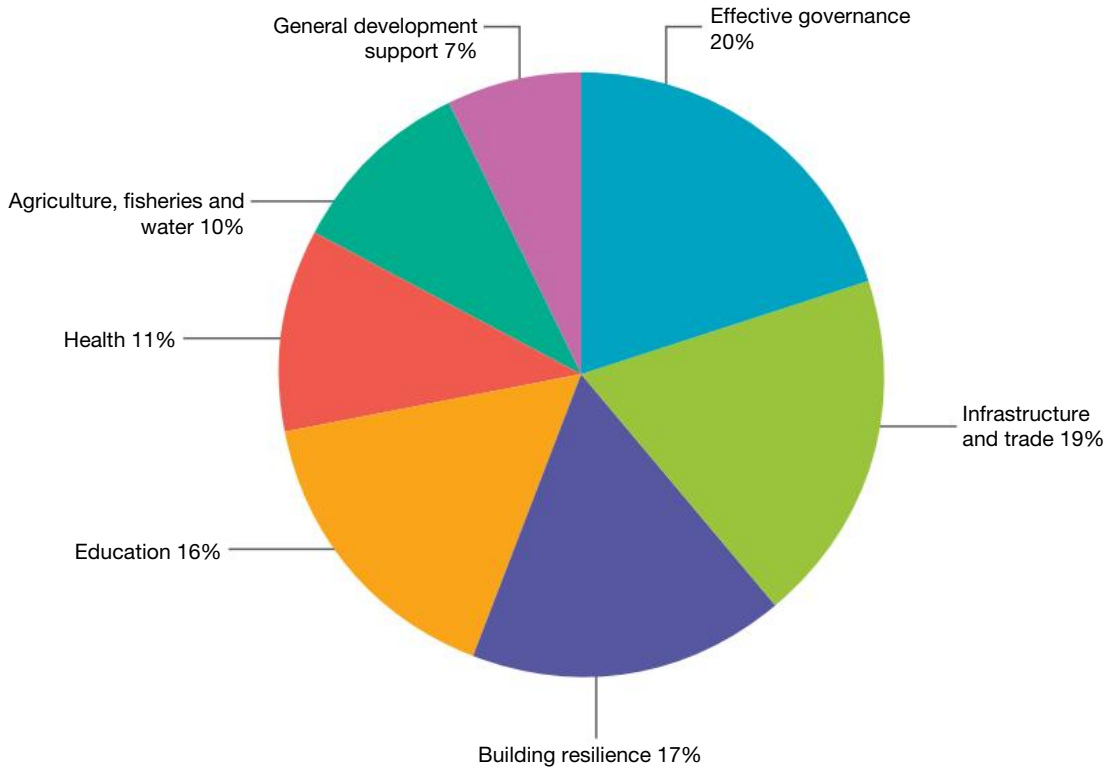
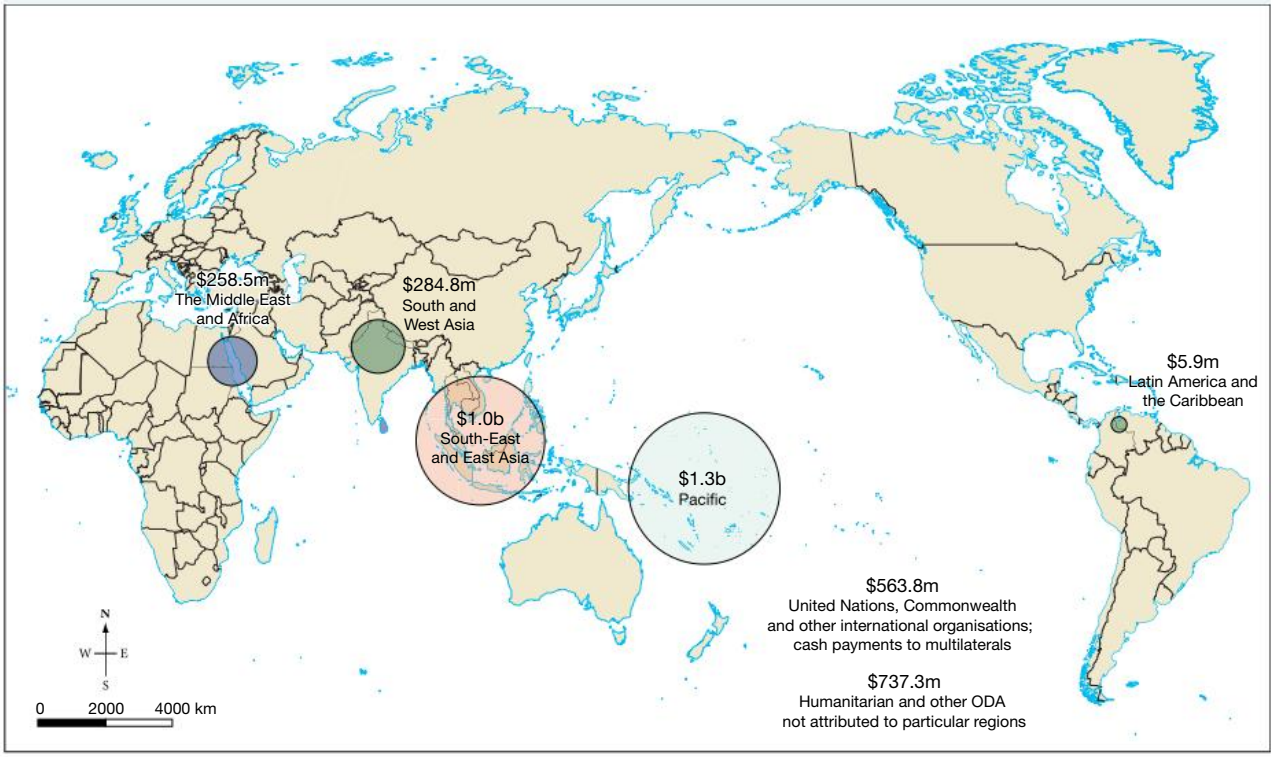


FIGURE 4 Australian ODA by region, 2018–19



Source: Data from © Commonwealth of Australia, DFAT, Australian Aid Budget Summary 2018–19. Map drawn by Spatial Vision.

FIGURE 5 It is in Australia's interests to promote peace and stability throughout the Indo-Pacific region. Australia has provided military personal for numerous peacekeeping missions; our role in East Timor was of particular importance.



18.8.6 International NGOs working for human wellbeing

International NGOs assist the wellbeing of civilians caught up in conflicts. Three significant organisations are Médecins Sans Frontières (also known as Doctors without Borders), the International Red Cross and Red Crescent Movement, and the World Food Programme.

FIGURE 6 Médecins Sans Frontières personnel help children in South Sudan.



- Médecins Sans Frontières provides emergency medical care (see **FIGURE 6**). During conflict, local health systems often fail and hospitals close. In refugee camps, waterways may become contaminated, waste abounds and there is a lack of sanitation, all of which can lead to an outbreak of disease.
- The International Red Cross and Red Crescent Movement is the largest global humanitarian network. It aims to alleviate human suffering, protect life and health, and uphold human dignity.
- The World Food Programme (WFP) steps in when the distribution of food and other resources for the population is disrupted. The WFP saves lives and protects livelihoods, reduces chronic hunger, and restores and rebuilds lives, especially for women and children.

DISCUSS

Hold a class debate on the contention 'Australia should do more to support global human wellbeing'. For help see Skillbuilder: Debating like a geographer in topic 10.

HASS skill: Evaluating
General capability: Ethical understanding

Is aid ever inappropriate? Discuss this in a small group.

HASS skill: Evaluating
General capability: Ethical understanding

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Australia's links with the world > Defence and peacekeeping

on Resources

Weblink	Peacekeeping
Interactivity	Helping others (int-3305)

18.8 ACTIVITIES

1. Using the internet, research an international NGO and show how it is working towards peace in areas of very low peacefulness. Focus on a country not studied in this topic.

   HASS skills: Questioning and researching

2. Write an essay to show how a country's HDI ranking and Peace Index levels indicate that people's wellbeing may change. Use examples from three countries that are in conflict.

   HASS skills: Communicating and reflecting
   Geography concept: Change

3. Use the **Peacekeeping** weblink to learn more about global peacekeeping operations.

   HASS skills: Questioning and researching
   General capability: Personal and social capability

4. Discuss in a small group what limitations might exist in administering an aid program in:
   a. a developing country
   b. a country that has been devastated by a natural disaster (e.g. an earthquake). Suggest possible ways of overcoming the problems you identify.

   HASS skills: Evaluating
   General capability: Personal and social capability

18.8 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 7	Questions 4, 5, 8, 9	Questions 6, 10, 11, 12

Check your understanding

1. Explain the difference between the three types of aid.
2. What role do NGOs play in restoring wellbeing to a country?
3. What assistance does the UN provide for a country to move towards peace?
4. The Global Peace Index (2018) is mapped in **FIGURE 1**. Describe the distribution of places with a very low level of peacefulness and those with a high level of peacefulness.
5. Explain why criteria for assessing peace levels of a country use indicators at home and in foreign relations.
6. Explain how Australia has become a multicultural country.

Apply your understanding

7. The amount and distribution of Australian development assistance is shown in **FIGURES 2** and **3**.
   a. To which regions of the world does Australia provide assistance?
   b. Can you offer an explanation as to why Australia provides assistance to these regions?
   c. More than half of the assistance is provided to improve governance, infrastructure, trade and education. Explain why each of these aspects is important to human wellbeing in the regions receiving assistance.
   d. Suggest any aspects in which you would like to see Australia's priority in assistance expanded. Justify your response.
8. From the conflicts discussed in this topic, which of the countries would you expect to be rated differently on the Global Peace Index in 2025?
9. Australia took on a role in the UN Human Rights Council for 2018–20. What do you think this should have meant in terms of our understanding of the wellbeing of refugees? Explain.
10. Do you think Australia takes enough refugees? Explain your answer.
11. Do the positive impacts of resettling refugees outweigh the negatives for a country like Australia? Outline your view citing at least one social and one economic reason.
12. How optimistic or pessimistic are you regarding the wellbeing of global citizens in the future? Explain your response.

For sample responses to every question, go to www.jacplus.com.au.

18.9 Thinking Big research project — UN report — Global wellbeing comparison

18.9.1 Scenario

The world's population continues to grow, even though the rate of growth has slowed. The distribution of this population is not uniform across the globae, nor does everyone enjoy the same standard or feelings of wellbeing.



Improvements in food production, nutrition, health care, education and hygiene have resulted in rapidly declining death rates, especially in our children. In the year 1870, the global average life expectancy for a person was 29.7 years, and this has steadily risen. Life expectancy in 1950 was 48 years, in 1973 it had risen to 60 years, in 2000 it had reached 66.4 and in 2015 it was 71.4 years. It is predicted that by the year 2050, life expectancy will be between 86 and 90 years, with around 3.7 million people living beyond the age of 100.

The United Nations has asked you to report on changes and variations in human wellbeing found across one developed and one developing country. Life expectancy, child mortality, and the prevalence of disease will all come under your microscope as you investigate and prepare your report.

18.9.2 Task



- Following the guidelines provided in the **Process** section, investigate how human wellbeing varies and how it has changed over time. You need to investigate one developed and one developing nation and include the following criteria in your report:
  - life expectancy
  - child mortality
  - the prevalence of disease.
- You should also suggest reasons for the variations you observe.
- To ensure your report is well rounded, you could also consider access to:
  - education
  - health services
  - an improved water supply
  - adequate nutrition.
- Consider general living conditions in the two countries.
- To add interest to your report, be sure to include relevant maps (with BOLTSS) and statistical information, as well as written information and relevant diagrams and/or images.

18.9.3 Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group if you wish to. You can work independently or with a partner, which will allow you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.
- Select your two countries — remember one must be a developing nation and the other a developed nation.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish.
- In the **Media centre** you will find an assessment rubric and some helpful weblinks that will provide a starting point for your research.
- Make notes of your research and remember to record details of your sources so you can create a bibliography to include in your report. Add your research notes and source details to the relevant topic pages in the Research forum. You can view, share and comment on research findings with your group members. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Compile or create relevant maps, images, graphs, tables and diagrams to support your written content, ensuring that geographic conventions such as the use of captions and BOLTSS are applied.
- Once you have compiled your information and data for the two countries, make comparisons between them and suggest reasons for any variations that exist between the two.
- Ensure that you have completed all elements of the task and, when you are satisfied, submit your report, along with your bibliography, to your teacher for assessment.



on Resources

ProjectsPLUS Thinking Big research project — UN report — Global wellbeing comparison (pro-0218)

18.10 Review

18.10.1 Key knowledge summary

18.2 Poverty and the Sustainable Development Goals

- Absolute poverty is experienced when income levels are inadequate to sustain a minimum standard of living.
- The poverty line is an official measure used by governments to define those living below this income level as living in poverty.
- Relative poverty is a situation in which a person's income levels are too low to enjoy a reasonable standard of living within their society.
- Sub-Saharan Africa is the poorest region of the world.
- One of the most pressing issues of poverty is hunger, which affects over a billion people.
- The Sustainable Development Goals (SDGs) came into effect in September 2015, replacing the Millennium Development Goals.
- There are 17 goals, aimed at improving the wellbeing of the world's people and environment.

18.3 Health and wellbeing

- Health is a key factor in wellbeing. Sustainable Development Goal 3 aims to ensure healthy lives for all. It targets the eradication of tuberculosis, AIDS and malaria by 2030.
- Major health issues such as HIV/AIDS and malaria lead to a high mortality rate in developing nations, especially those in sub-Saharan Africa.
- The group within the population most at risk from health-related issues is children under the age of five.
- Although the incidence of both malaria and AIDS are decreasing at the globallevel, people living in sub-Saharan Africa are most at risk of contracting these diseases.

18.4 Government responses to population and wellbeing issues

- Governments have had to respond to wellbeing issues related to the characteristics of their population.
- Kenya has a youthful population; the government, in conjunction with the United Nations has worked to bring down the country's unsustainably high birth rate, as well as improve health and education services.
- Japan has an ageing population and its population is predicted to fall through the remainder of this century due to a very low fertility rate of 1.4. Government incentives have been unsuccessful in reversing this trend.

18.5 Importance of human rights

- In some societies, human rights may be enshrined in law and legislation, whereas in others they may simply exist as guidelines that reflect the values of that particular community.
- Human rights can be defined in different ways, but definitions generally involve principles of respect, dignity and fairness.
- One of the main aims of the United Nations Charter is to promote respect for human rights. The Universal Declaration of Human Rights sets out basic rights and freedoms to which all people are entitled.
- The Australian Human Rights Commission is the national organisation that advocates for promotion and protection of human rights.
- The United Nations General Assembly adopted the Convention on the Rights of the Child (the CRC) in November 1989.
- Child labour is an ongoing issue, particularly prevalent in regions experiencing conflict and with low income.

18.6 Case Study: Syria — the impact of conflict on wellbeing

- The wellbeing of people in Syria has been affected by the need to flee conflict.
- Many Syrians have been internally displaced; many others have fled to neighbouring countries or across the seas to new lands.
- Some Syrians remain in the towns experiencing conflict and are very resilient in an endeavour to maintain their wellbeing.

18.7 Seeking refuge

- In 2015 the mass exodus of people from western Asia used the freedom of movement between European countries to reach countries with a high HDI ranking, especially Germany.
- By 2019 this exodus continued but in addition large numbers of people were crossing to Europe from Africa.
- European countries had various responses to this situation.

18.8 Providing assistance for global human wellbeing

- Aid may be given by governments, private organisations or individuals.
- There are various reasons for giving aid assistance; humanitarianism is just one of these.
- Bilateral and multilateral aid may take many forms, such as money, food, medicine, equipment, expertise, scholarships, training, clothing or military assistance.
- There are positive and negative impacts of aid.
- The Australian government's official development assistance (ODA) is designed to promote prosperity, reduce poverty and enhance stability in developing countries, particularly those in the Indo-Pacific region.
- Non-government and charitable organisations work in conflict zones addressing the daily wellbeing of people caught up in conflict.

18.10.2 Key terms

absolute poverty where income levels are inadequate to enjoy a minimum standard of living (also known as extreme poverty)

ageing population an increase in the number and percentage of people in the older age groups (usually 60 years and over)

aid (foreign or international) the voluntary transfer of resources from one country to another, given at least partly with the aim of benefiting the receiving country

asylum seekers people entering another country asking to be assessed and classified as refugees

child d any person below 18 years of age

child soldiers a child who is, or who has been, recruited or used by an armed force or armed group in any capacity, including but not limited to children, boys and girls, used as fighters, cooks, porters, messengers, spies or for sexual purposes. This term does not refer only to a child who is taking or has taken a direct part in hostilities.

fertility rate the average number of children born per woman

grassroots movements action by ordinary citizens, as compared with the government, aid or a social organisation

humanitarianism concern for the welfare of other human beings

International Bill of Human Rights the informal name given to the Universal Declaration of Human Rights and the two International Covenants

International Covenants a multilateral treaty adopted by the United Nations General Assembly, in force from 1976; it commits those who have signed the Covenant to respect the civil and political rights of individuals and their economic, social and cultural rights

life expectancy the number of years a person can expect to live, based on the average living conditions within a country

non-government organisation (NGO) a citizen-based association that operates independently of government, usually to deliver resources or serve some social or political purpose

population structure the number or percentage of males and females in a particular age group

poverty cycle circumstances whereby poor families become trapped in poverty from one generation to the next

poverty line an official measure used by governments to define those living below this income level as living in poverty

relative poverty where income levels are relatively too low to enjoy a reasonable standard of living in that society

STI sexually transmitted infection

Universal Declaration of Human Rights the first specific global expression of rights to which all human beings are inherently entitled

18.10.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

The world's population is constantly increasing. Can we fit so many people in the spaces we have without affecting our quality of life?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

on Resources

eWorkbook	Customisable worksheets for this topic (ewbk-6299) Reflection (ewbk-6298) Crossword (ewbk-6297) Student Learning Matrix (ewbk-6291)
Interactivity	Global variations in human wellbeing crossword (int-8244)

18.10 Review exercise

Multiple choice

1. Which of the following factors might *not* cause an area to experience a decrease in life expectancy?
   - **A.** Ageing population
   - **B.** Disease epidemic
   - **C.** Natural disaster
   - **D.** Ongoing conflict
2. Which commonly used method can be put in place to ensure people who contract HIV continue to live healthy productive lives?
   - **A.** Use of antibacterial drugs
   - **B.** Use of antiretroviral drugs
   - **C.** Immunotherapy
   - **D.** Use of needles
3. Which of the following is *not* one of the three overarching or core themes of the Sustainable Development Goals?
   - **A.** Ending poverty
   - **B.** Protecting the planet
   - **C.** Ensuring prosperity
   - **D.** Promoting multinational business development
4. What is the best definition of a grassroot movement?
   - **A.** Action by ordinary citizens to promote and create change
   - **B.** Action taken on environmental issues
   - **C.** Politicians making decisions based on their own local electorate's interests
   - **D.** Environmental damage that forces a wide-scale population shift
5. Which of the following are rights and protections afforded to children under the CRC?
   - **A.** The right to live with their parents
   - **B.** The right to privacy
   - **C.** Protection from abuse and neglect
   - **D.** All of the above

6. Approximately how many children between the ages of 5 and 17 are estimated to be working in hazardous conditions?
   - **A.** 7 million
   - **B.** 17 million
   - **C.** 57 million
   - **D.** 73 million

7. Which European country received the highest number of applications for asylum in 2018?
   - **A.** Sweden
   - **B.** Germany
   - **C.** Turkey
   - **D.** Lebanon

8. What does 'IDP' refer to in terms of refugee data?
   - **A.** Internally displaced persons
   - **B.** Internationally disputed population
   - **C.** Insecure demographic percentage
   - **D.** Identified data provider

9. Which European country had the largest increase of people arriving to seek asylum from 2017 to 2018?
   - **A.** Greece
   - **B.** Italy
   - **C.** France
   - **D.** Spain

10. Which of the following countries rated very highest on the Global Peace Index in 2018? Select all options that apply.
    - **A.** Russia
    - **B.** South Africa
    - **C.** Australia
    - **D.** United States

Short answer

11. Explain how global population distribution might change in the future if:
    - **a.** barriers to movement are removed by governments
    - **b.** people become better educated.
12. What are the long-term impacts of a low rate of natural increase in population?
13. How might the distribution of malaria on a global scale change in the future? Account for your answer.
14. Why is HIV/AIDS considered to be a pandemic?
15. Do you think Kenya or Japan has a more difficult fertility problem to deal with? Give reasons and examples to support your answer.
16. 'If we all work together, we have a chance of meeting citizens' aspirations for peace, prosperity, and wellbeing and to preserve our planet.' Identify and explain what you believe are the two biggest challenges to the world achieving Helen Clarke's goal.
17. The Convention on the Rights of the Child was adopted by the UN in 1989. Suggest how technological change since 1989 might have had an impact on one of the rights outlined in section 18.5.4.
18. Explain two reasons why food security is a major issue for people who live in warzones. Give examples from the conflict in Syria to support your reasons.
19. Predict whether human wellbeing, in general globally, will increase or decrease overall during your lifetime. Give reasons for your view that include references to three of the Sustainable Development Goals and whether or not you think these will be achieved in the next 70 years.

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 18 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

18.1 Overview

Video eLesson
- A long life (eles-1714)

18.2 Poverty and the Sustainable Development Goals

eWorkbook
- Spatial variations between countries (ewbk-6292)
- Population — an issue affecting development and wellbeing (ewbk-6293)

18.3 Health and wellbeing

eWorkbook
- Malaria and HIV (ewbk-6294)

18.4 Government responses to population and wellbeing issues

eWorkbook
- Gender — an issue affecting wellbeing (ewbk-6295)

18.5 The importance of human rights

eWorkbook
- Child labour (doc-32100)

Weblink
- Human Rights Watch

MyWorld Atlas
- Child labour around the world

18.8 Providing assistance for global human wellbeing

eWorkbook
- Are all Australians equal? (ewbk-6296)

Interactivity
- Helping others (int-3305)

Weblink
- Peacekeeping

MyWorld Atlas
- Defence and peacekeeping

18.9 Thinking Big research project — UN report — Global wellbeing comparison

ProjectsPLUS
- Thinking Big research project — UN report — Global wellbeing comparison (pro-0218)

18.10 Review

eWorkbook
- Reflection (ewbk-6298)
- Crossword (ewbk-6297)
- Student Learning Matrix (ewbk-6291)

Interactivity
- Global variations in human wellbeing crossword (int-8244)

To access these online resources, log on to **www.jacplus.com.au**.

HISTORY

HISTORY CONCEPTS AND SKILLS

19 History concepts and skills 594

THE MODERN WORLD AND AUSTRALIA

20 The modern world and Australia 618

DEPTH STUDY 1: INVESTIGATING WORLD WAR II (1939–1945)

21 World War II 650

DEPTH STUDY 2: INVESTIGATING RIGHTS AND FREEDOMS (1945–THE PRESENT)

22 Rights and freedoms (1945 to present) 732



19 History concepts and skills

19.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

Aboriginal and Torres Strait Islander readers are advised that this topic may contain photos of or references to people who have died.

19.1.1 Links with our times

History is more than just dates or random names or events that occurred in the past. History is the story of humanity and as such it captures the heart and soul of all of our societies. People throughout the world commemorate important events in a variety of ways.

The men in the image below were participating in a 1940s 're-creation' weekend in Pickering, North Yorkshire, England. The attendees were dressed in a variety of 1940s clothing including military or civilian dress, which contributed to a realistic atmosphere. The men in the photo were dressed as soldiers of the United States Army in World War II.

World War II was fought between the Allied powers (Britain, the United States, the USSR, France, Australia, New Zealand and others) and the Axis powers (Germany, Italy and Japan). This conflict took more lives and destroyed more property across the world than any war before it or since.

It is through historical records such as archives, letters, weapons and other historical sources that historians are able to discover the mysteries of our past. Historians research, compile, evaluate and report their findings in an attempt to discover the truth about our past in an unbiased manner.

on Resources

- **eWorkbook** Customisable worksheets for this topic (ewbk-6309)
- **Video eLesson** Investigating the past (eles-1057)

SOURCE 1 Men participating in a weekend event in which they reconstructed life in wartime 1940s.



19.2 Concepts in History

LEARNING INTENTION

By the end of this subtopic you will be able to explain how and why we study history, and describe the eight historical concepts and explain why they are important.

19.2.1 Why study History?

History is full of stories of individuals living, striving to survive and often dying in challenging, difficult times as well as stories of individuals thriving in times of peace. History can confuse you, amaze you and even shock you with these stories; at times it is difficult to understand the mindset of people and societies of the past, while at other times it is easy to relate to their lives and the decisions they made in the situations they faced.

What is a historian?

A historian is a person who researches, interprets and writes about the past, including the history of countries, people, periods of time, and particular events and issues. Historians conduct research into past civilisations, cultures and societies. They try to build up a picture of how people in other times lived and acted. Historians try to make sense of past ideas, customs and beliefs, the ways people were ruled and how they made their living. Historians inquire into the past by examining sources, including archives, diaries, books and artefacts. They also try to understand and explain how people's lives were shaped by other people and events, what they thought about their times and how they brought about changes in their own world.

19.2.2 The value of history

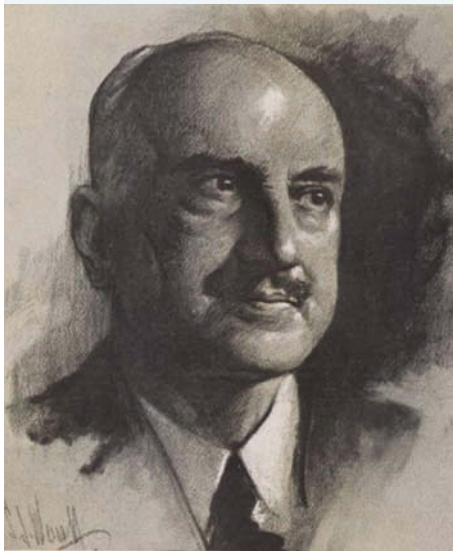
History is more than just the study of events of the past and the discovery of why events occurred. As stated previously, history is the story of individuals and how they react to the events surrounding them.

The term history originates from the ancient Greek term *historia*, which originally referred to inquiry or the act of acquiring knowledge through inquiry. The study of history is important as it allows us to understand our heritage, to understand where our ideas, society, laws and other aspects of life come from, and by doing so hopefully prevent similar events from occurring again. History allows us to realise that while humanity is made up of a variety of cultures and societies it is more importantly made up of individuals who have more similarities than differences.

History, the present and the future

The phrase 'hindsight is 2020' is often used after an event occurs when people wish they had chosen differently; however, the future is difficult to predict. History allows us to look back at our past, reflect on the actions taken and hopefully avoid repeating the past mistakes to make the world a better place in the future.

SOURCE 1 A drawing of the philosopher George Santayana (1863–1952) from the cover of *Time* magazine in February 1936. He is popularly known for the aphorism 'Those who cannot remember the past are condemned to repeat it'.



History, work and leisure

The study of History not only teaches us about our past it also prepares us for our future by teaching us a variety of skills that are easily transferable to any chosen career. These skills will enable you to:

- carry out research
- organise information and determine its accuracy
- draw conclusions and make decisions based on evidence
- recognise the difference between fact and opinion
- understand that there are a variety of opinions when approaching any problem
- think critically
- communicate effectively
- present your findings and conclusions through reports, media, books, lectures and exhibitions.

SOURCE 2 Visitors in front of room 306 at the National Civil Rights Museum in Memphis, Tennessee (in the United States). The museum is built around the former Lorraine Motel, which was one of only a few hotels for black people. The motel was where civil rights campaigner Martin Luther King Jr. was assassinated. While staying in room 306 in April 1968, King was fatally shot on the balcony outside the room. A local not-for-profit group saved the site for use as a civil rights museum.



A person trained in history may conduct research and analysis for governments, businesses, individuals, historical associations and other organisations. They may work in administrative or policy roles where they can make use of their research and analysis skills. A person trained in history may be involved in preserving artefacts or historic records. Conservation work similar to that shown in **SOURCE 2** is one of the key responsibilities of historians and archaeologists.

There are a number of other careers related to historians. These include:

- anthropologists and archaeologists
- archivists, curators and museum workers
- curators
- documentary and film makers
- economists
- history teachers
- lawyers
- lecturers, tutors and researchers
- police and armed forces
- political scientists
- sociologists
- writers and authors.

A knowledge of history not only gives us a variety of transferrable skills, but also gives us insight into the people, places and events often discussed in movies and books. It also allows us to appreciate historical sites such as the Colosseum in Rome, Italy or Auschwitz-Birkenau in Krakow, Poland because we know the events that occurred there and the stories of the individuals that were involved.

History and democracy

Australia is a democratic society; our political representatives and leaders of our country are chosen through the electoral process and we vote for the party we believe will best represent us in parliament. However, to vote responsibly and make sound judgements about the issues that the politicians raise it is important to understand the historical basis of those issues.

DISCUSS

How may understanding our past help us avoid repeating mistakes in the future?

General capability: Ethical understanding

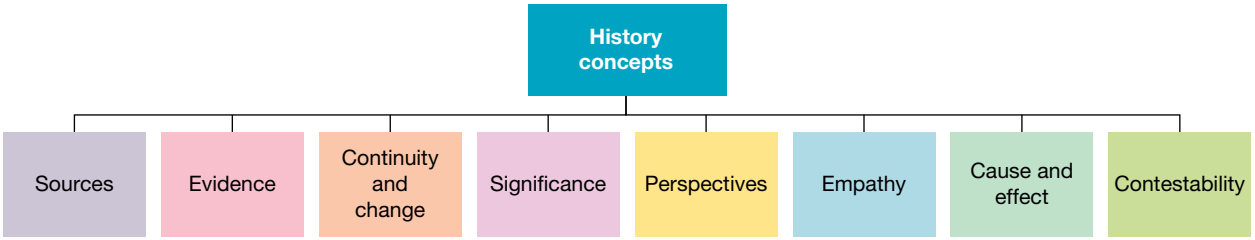
19.2.3 What are the History concepts?

History can be compared to a jigsaw puzzle, with each piece representing an event, issue or person that interlinks with the pieces surrounding it. Each piece cannot give a precise picture of our history on its own, it needs the surrounding pieces in order to give the full picture of what occurred and how it affected society; the puzzle is ongoing, each day another piece is added. The jigsaw puzzle tells the stories of individuals living, striving to survive and often dying in challenging, difficult times as well as stories of individuals thriving in times of peace.

Through historical records historians attempt to discover the truth about our past in an unbiased manner. They do this using a variety of important historical concepts in order to determine the story of humanity.

The concepts are discussed here in detail and an understanding of them will help you successfully study History and gain a complete understanding of the topics covered in Year 10.

SOURCE 3 A diagram showing the eight concepts in History



19.2.4 Sources

To complete this historical jigsaw puzzle, historians often relate their studies to a mystery; there are a variety of clues scattered across the world in museums, libraries, archaeological digs and other sources that will allow the historian to hypothesise what occurred in the past, the events that caused it and the after-effects.

It is the role of the historian to question everything, to never take anything at face value and always critically analyse historical sources to ensure that a balanced evaluation of the event/issue/person can be given.

Historical sources are the clues to the history mystery that historians are attempting to solve. Like detectives or scientists, historians form a **hypothesis** to explain what may have occurred and then use the historical sources to support their hypothesis, they also review sources that contradict their hypothesis to ensure a balanced understanding is created.

Just like in any other mystery not all clues will be easily available and at times historians will have to make educated guesses with the evidence that they have before them.

Primary and secondary sources

Historical sources are divided into primary and secondary sources; they are the key sources of information that historians use to complete their historical research. **Primary sources** were created during the period of time that the historian is investigating, for example, a film clip of Martin Luther King Jr's 'I have a Dream Speech'. Whereas **secondary sources** are reconstructions of the past, created by people after the time period that the historian is studying, for eample, a documentary about Martin Luther King Jr's fight for civil rights culminating in his 'I have a Dream' speech in Washington D.C.

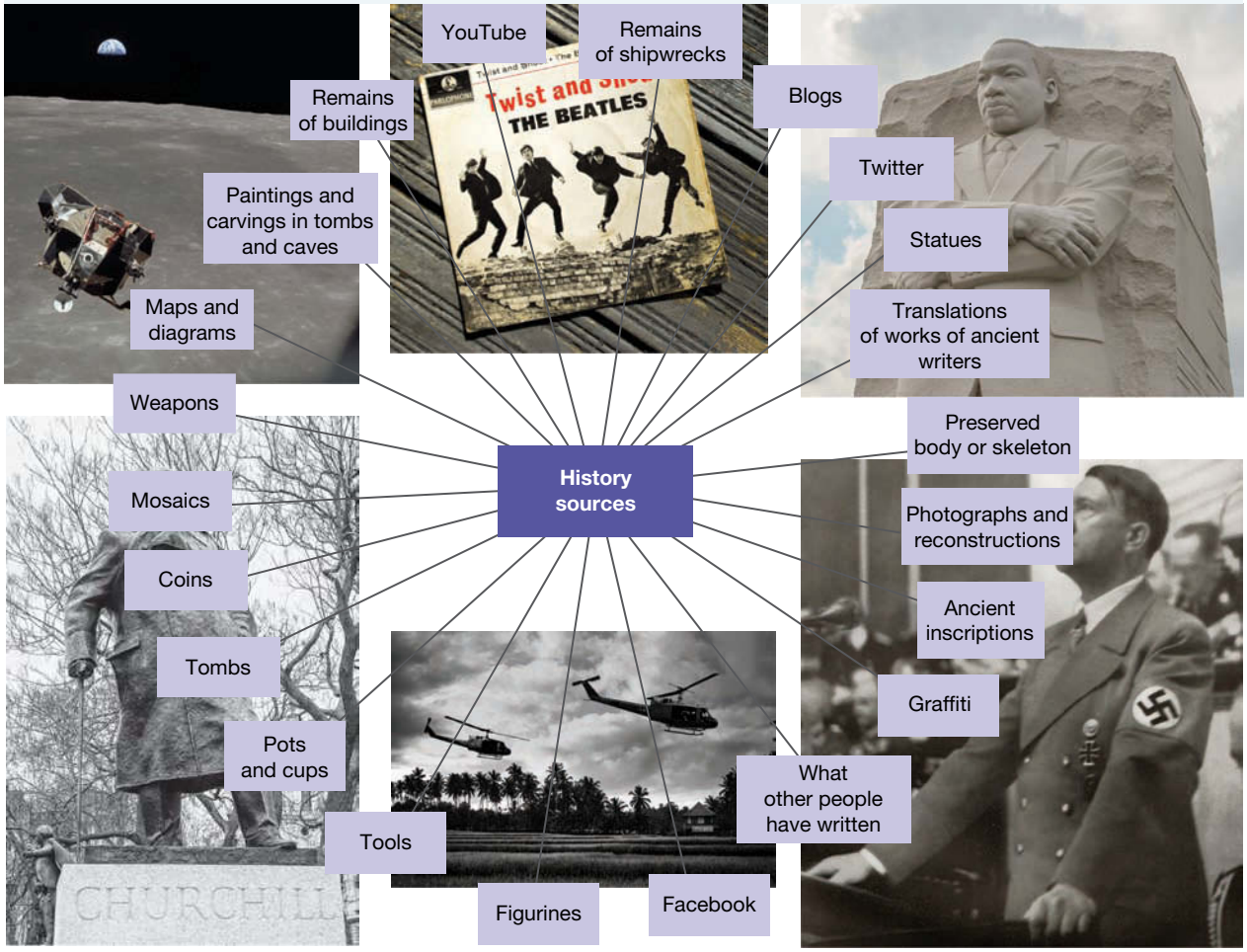
hypothesis (plural: hypotheses) a theory or possible explanation

primary sources objects and documents that were created or written in the period that the historian is investigating

secondary sources reconstructions of the past written or created by people living at a time after the period that the historian is studying

Primary sources can be broken down into written and archaeological sources. Written primary sources include letters, newspapers, songs, poetry as well as social media accounts, such as Twitter. Archaeological sources are often called **artefacts** (they can sometimes include written sources if writing is inscribed on them, for example, on a tomb or pottery) and include works of art, weapons, toys, jewellery.

SOURCE 4 Some types of primary sources



Secondary sources are just as varied as primary sources and can include books, articles, websites, models, **timelines**, computer games and other software, and documentaries. In order to create secondary sources historians will:

- base their research on primary sources
- interpret their research
- use the research to explain what happened to others.

Analysing and evaluating sources

Having obtained a variety of primary and secondary sources, historians must analyse and evaluate them in order to present information in a clear manner. They pose a variety of critical analysis questions about the sources and attempt to answer them to create a thorough understanding of the historical sources.

Examples of historical source analysis questions are:

- What is the message (what is the creator trying to tell us)?
- What is the purpose (why was the source created)?
- What is the author's perspective?
- What is the historical context (what was happening at the time the source was created)?
- How contestable are the sources?

artefact an object made or changed by humans

timeline a diagrammatic tool representing a period of time, on which events are placed in chronological order

While the historian is evaluating the sources, it is important that they are respectful of the cultures and people groups that these sources originate from and ensure their research recognises the work of other historians in the correct manner. They do this in a variety of ways when they collate their information and subsequently present their findings.

For example, when researching the Stolen Generations (the removal of Aboriginal and Torres Strait Islander children from their families by the Australian government) it is crucial that historians take into consideration the perspectives of the people who were directly affected, their children and that of the government. Doing this will give the historian a clear picture of the causes of the Stolen Generations and give an understanding of its effects.

19.2.5 Evidence

Primary and secondary sources provide **evidence** for historians to present the story of an event, issue or person. This evidence helps historians to construct the historical narrative (story) that they are researching, support their hypothesis, or prove or disprove a conclusion. Primary and secondary sources are also used by historians to support their arguments or to argue against claims they disagree with.

Historians identify information within these sources that can assist them in their studies. They realise that historical sources contain lots of information, and at times only portions of that information is relevant to their study. After obtaining that information, historians will critically analyse the evidence using a variety of questions, identified in the previous section under 'Analysing and evaluating sources'.

It is often said that history is written by the victors; this means that only the evidence of those who were successful at any given time present their version of the events. However, there is always a variety of evidence available and it is the job of the historian to find and evaluate it.

Recognising that there are a variety of interpretations and opinions relating to any historical event, issue or person allows historians to gather significant amounts of information, analyse it and present a clear unbiased picture. For example, Adolf Hitler was heralded as the saviour of Germany by some people in the country, after Germany's defeat in World War I, its treatment within the Treaty of Versailles and the economic crises faced during the Great Depression. This viewpoint is presented in the text excerpt in **SOURCE 5**, written by Joseph Goebbels to commemorate the Führer's birthday.

SOURCE 5 Propaganda chief Joseph Goebbels talking about Adolf Hitler in an article titled 'Our Hitler', published in April 1935 to commemorate the Fürer's birthday

Fellow citizens! I believe it is time to portray to the entire nation the man Hitler, with all the magic of his personality, all the mysterious genius and irresistible power of his personality.

There is probably no one left on the planet who does not know him as a statesman and as a remarkable popular leader. Only a few, however, have the pleasure of seeing him as a man each day from close up, to experience him, and as I might add, to come as a result to a deeper understanding and love for him. These few wonder how it is possible that a man who only three years ago was opposed by half of the nation stands today above any doubt and every criticism. Germany has found a unity which will never be shaken. Adolf Hitler is the man of fate, who has the calling to save the nation from terrible internal conflict and shameful foreign disgrace, to lead it to longed-for freedom.

If this was the only historical evidence that historians used to research Hitler, we would not get an accurate representation of the man who was to become responsible for the death of nearly 6 million European Jews as well as countless Romani, homosexuals and other political prisoners.

However, to gain a true representation of Hitler, historians may also read the **SOURCE 6**, a report written by a British businessman working in Germany in 1937 about the bombing of Almeria, a Spanish town, by the Nazis.

evidence information that indicates whether something is true or really happened

SOURCE 6 Report by Mr. Law, a British businessman about the bombing of Almeria

I am told, on what I believe to be very good German authority, that really the most dangerous man of all is the Führer himself. He falls into fits of passion and will listen to no advice. It was on his orders and against the advice of the Foreign Office and the army that recently an American was beheaded. It was again on his direct orders and before he could receive any advice that the bombardment of Almeria took place.

If this is true — as I believe it to be — the picture is not a cheerful one. No-one wants war; certainly, but when you have a passionate lunatic at the top who still commands the devotion of the populace and who is evidently prepared to run great risks, then already the situation is dangerous…

By evaluating both of these pieces of evidence, historians can see that Hitler was a complex individual who fostered devotion from those who were members of his Nazi party, but was rightly considered an extremely dangerous individual by others.

Without evidence, historians are merely telling a story without supporting their research and it can become nothing more than a myth or legend with little substance.

19.2.6 Continuity and change

History allows us to look back at our past, reflect on the actions taken and hopefully avoid repeating past mistakes to make the world a better place in the future. Historians identify the changes that have occurred over time throughout societies all over the world; they also identify times throughout history where it appears as if nothing major has changed. This is known as **continuity and change**. At its most basic, change refers to something that is different from what has occurred in the past, this change may occur suddenly like a sudden change in political leadership or take considerable amounts of time for example changes in technology. Continuity refers to things that endure and remain relatively unchanged over time; this is often seen in smaller communities or tribes that are isolated from the modern world.

SOURCE 7 An aerial view of the ceremony dedicating the Shrine of Remembrance in Melbourne, 1934. The shrine was built in remembrance of the men and women of Victoria who served, and those who died, in World War I.



SOURCE 8 An aerial view of the Shrine of Remembrance, Melbourne, present day



By comparing historical events that occur at the same time, between and among historical periods, and between the past and the present, historians are able to understand the sequence of events, causes and effects and therefore pinpoint those events that become known as turning points within history.

Continuity and change can be seen by comparing objects from the past to similar objects in today's modern society — for example, mobile phones from the 1980s that were the size of house bricks compared to modern smartphones that have more technology in them than was used to power the mission to the Moon. It can also be seen when we analyse daily life and the changes that have occurred within society. There have been several changes within society in relation to the changing role of

continuity and change the concept that while many changes occur over time, some things remain constant

women in the last 50 years; prior to World War II, most women were housewives and if they did work it was in secretarial, nursing or teaching roles. However, after World War II, women moved into non-traditional roles throughout society and men took on more responsibilities in raising children.

The use of timelines is an excellent way to display continuity and change as well as showing cause and effect throughout societies. It assists historians to recognise patterns of continuity and change, often through researching societal viewpoints on religion, human rights, key events and the actions of individuals and groups. An example is investigating how Charles Perkins was seen to bring change to Australian society and the way that Aboriginal communities and individuals were treated throughout New South Wales in particular; he did this by organising the Freedom Rides through New South Wales to show the inequality between the white community and the Indigenous communities.

19.2.7 Cause and effect

The historical concept of **cause and effect** is used to examine relationships between historical events, issues and people, how they relate to other events, issues or people and how one can cause another event or have a short or long-term effect. For example, Germany was not allowed to participate in the Paris Peace Conference after World War I, or have a say in the terms of the Treaty of Versailles; the Allies dictated the terms within the treaty to Germany and Germany was told that if they did not sign the Treaty they could be faced with war starting up again. The short- and long-term effects of this decision were disastrous for the world at large; within Germany it caused much political unrest, which ultimately led to the rise of Hitler who went on to invade Poland, start World War II and murder millions of Jews, Romani, homosexuals, political prisoners and others in his attempts to create the perfect German nation.

SOURCE 9 Traders gather in growing panic outside the New York Stock Exchange on 24 October 1929.



Historians need to demonstrate the relationships between events and developments within the different communities around the world. The example above shows how the Paris Peace Conference and the Treaty of Versailles can be considered to be contributing causes of the rise of Hitler and the start of World War II. At the same time as Germany was coming to terms with the Treaty of Versailles, the United States of America was entering a period of time known as isolationism — which means they did not want to participate in world politics at all. However, the crash of the US stock market in October 1929 would lead to the Great Depression, resulting in the United States calling for many of its international loans to be repaid immediately in an effort to bolster and secure its economy. Unfortunately, this led many countries around the world to also feel the effects of the stock market crash and the Great Depression became a global event.

As they study the cause and effect of events, historians also make judgements about the importance of these events and how they relate to other similar events throughout history, thus enabling them to see whether there are similarities or differences and what they are.

cause and effect the concept that every historical event will have a cause, and every event or action is likely to be the cause of subsequent effects or consequences

significance the importance assigned to particular aspects of the past, for example, events, developments, movements and historical sites

19.2.8 Significance

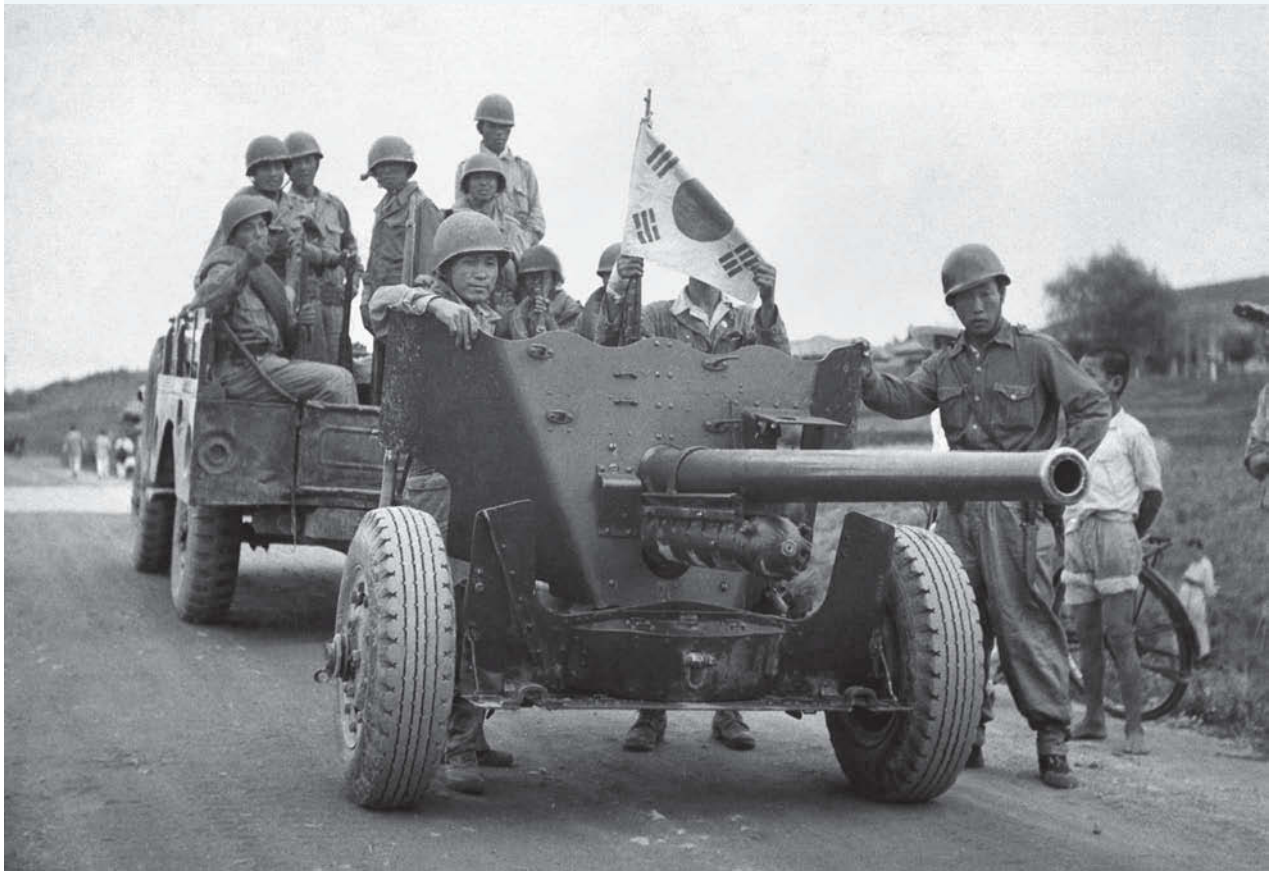
As historians place historical **significance** upon events, issues or people of the past, they begin to critically evaluate the information they have researched and analysed and attempt to propose explanations, trends and relationships that caused the issues and the subsequent effects.

Historians critically evaluate all of the information from a variety of sources, both primary and secondary, and will often work with other historians and academics to draw their conclusions; occasionally they will have to negotiate and/or resolve issues that are causing debates.

Historians give significance to important turning points throughout history that affected not only their local societies but the world at large. However, the subject of history is so immense that it is virtually impossible for us to learn or study all of it. Therefore, by evaluating data and information, historians identify the significance in what they believe are the most important events — and this is where debate may occur. When applying significance to any turning point within society, historians recognise that there are a variety of viewpoints to any historical story depending on who is telling the story. This can be seen when viewing and critically analysing historical sources and evaluating the information in them.

As the historian is evaluating their information they must be able to justify why the information they have gathered is of historical significance to a larger audience. Furthermore, it is important to realise that the historical significance may change over time and may vary between groups of people. An excellent example of this is the Korean War, which has greater significance to the people of North and South Kore, for example, than for the general public of Australia (see **SOURCE 10**).

SOURCE 10 The Korean War, a war between North Korea (supported by China and the USSR) and South Korea (supported by the United Nations) lasted from 1950 to 1953. Here, South Korean military forces are evacuating Suwon Air Base as a result of the rapid advance of communist North Korean troops in 1950. The fighting received little public attention in western countries, such as the United States and Australia, particularly in comparison to the war that preceded it (World War II) and the war that came after it (the Vietnam War). For this reason, the Korean War is often referred to as 'The Forgotten War'. However, millions of people lost their lives during the conflict, including soldiers and civilians, and the war had a long-term detrimental effect on all of Korea. North Korea and South Korea remain divided.



19.2.9 Perspective and empathy

Two of the most important concepts that must be used when studying History are perspective and empathy. It is important for historians to empathise with the people they study; without empathy it is near impossible to fully understand what people experienced in the past.

Empathy is the ability to understand how people thought and felt in the past; it is the ability to put yourself in the position of the person you are studying at their time in history. In order to use empathy you need to imagine; however, it is not the imagination that is required to write a creative writing piece, instead it is historical imagination based on evidence. Having empathy allows historians to not only appreciate what people experienced, but also allows them to identify the motives behind actions and differing opinions, how beliefs and values were an influence and to compare the experiences of people in the past.

Empathy is related to **perspective**, as perspective is understanding the past through the points of view of the people who lived through these events. Historians gain perspective through reading diaries of individuals and visiting museums or historical sites of important events in history. Perspective also allows historians to recognise differing opinions, attitudes and values and by analysing the similarities and differences of individuals, historians are able to gain a full understanding of the history they are studying.

It is equally important to realise that as we learn about people from the past and attempt to understand their perspective to empathise with them, it is often difficult to understand their actions as we may be judging them from our contemporary mindsets. Instead we need to take into consideration the values and attitudes of the society that is being studied to appreciate why the decisions were made.

19.2.10 Contestability

Throughout their research, historians will come across sources that have differing interpretations than their own, and this leads to debates and further understanding of the issues they are researching. This is known as **contestability**, and it is an important concept to understand in the study of history. Historical understanding of any event, issue or person is always influenced by the historian's own experiences, background and level of education as well as what the historical source contains within it and omits. For example, an article praising Adolf Hitler written by Himmler will be contestable as it will only present the bias of the Nazi regime and deny the fear felt by the Jewish population of eastern Europe.

empathy the ability to understand and share another person's thoughts and feelings

perspective point of view or attitude

contestability when particular interpretations of the past are open to debate

DISCUSS

Working in small groups, think of something that happens in our own time that some people believe is wrong. An example could be the way some countries are wealthy while in others children die of starvation and preventable diseases. Do you think that at some time in the future people might consider ours to have been an unjust age?

General capability: Ethical understanding

19.2 ACTIVITIES

1. Using the internet and/or other information sources, find the meaning of the word 'sympathy'. Explain how empathy is different from sympathy.
   HASS skills: Questioning and researching
2. Why can history be compared to a jigsaw puzzle?
   General capability: Literacy

3. Complete the following paragraph by choosing words from the box. Historians conduct _____ into past _____, _____ and societies. Historians try to build up a picture of the ideas and _____ of people in the past, how they lived and acted and how their lives were shaped by other _____ and _____. They inquire into the past by examining _____, including archives, diaries, books and artefacts.

civilisations	beliefs	cultures	events	research	sources	people

General capability: Literacy

4. Explain why evidence is important in the study of history.
5. Why are perspective and empathy considered two of the most important concepts in studying History?

General capability: Critical and creative thinking

6. Look closely at **SOURCE 2**. The National Civil Rights Museum in Memphis was the first civil rights museum in the United States. Room 306 has been kept just as it was when Martin Luther King was assassinated in 1968. Why do you think so much effort goes into conserving such traces of the past?

History concept: Evidence
General capability: Literacy

7. Compare and contrast **SOURCES 5** and 6. What similarities and differences do they have?

General capability: Literacy

8. Imagine you are a historian from 2080, writing a report on historical events of 2020. Which events would you believe are historic turning points, and why?

History concept: Continuity and change
General capability: Literacy

9. Imagine that you are one of the people or groups being persecuted by the Nazis during World War II. How would you feel after reading **SOURCE 3**? Would you feel scared or confused? Explain.
10. Suggest why any one of the following possible events might have historical significance in the future for a historian researching and writing about the age we are living in.
    a. There was an increase in the number of Australians who did not practise religion.
    b. Inequality (the gap between rich and poor) increased in Australia.
    c. The government did impose lockdown measures during the Covid-19 pandemic.

History concept: Significance

19.3 Skills in History

19.3.1 What skills will you build this year?

This year, you will continue to build your ability to use the four broad categories of skills in the Humanities and Social Sciences. The following point will remind you of these four key skills.

1. **Questioning and researching** involves locating relevant and detailed information and/or data from a range of appropriate sources. In Year 10 History this includes researching some major turning points of World War II.
2. **Analysing** involves interpreting information to identify the main features or ideas, then examining the information closely to determine how the parts relate to the whole. In Year 10 History this includes the impact of the deep social divisions of the Great Depression on the rise of fascist and communist ideologies.
3. **Evaluating** means examining your interpretations of information to draw evidence-based conclusions. It requires taking into account ambiguities and multiple perspectives in a source and proposing potential responses to contemporary challenges or issues. In Year 10 History this includes understanding the multiple causes of World War II.
4. **Communicating** your ideas means presenting information in a range of formats to suit the intended audience and purpose. This includes essays, oral presentations, debates, tables and cartoons. Reflecting on your skills is also an important part of the process. In Year 10 History this includes political cartoons and propaganda posters.

19.3.2 SkillBuilders in the topic

In addition to these broad HASS skills, there is a range of essential practical skills that you will learn as you study History. The SkillBuilder subtopics in this topic will tell you about the skill, show you how to apply the skill and let you practise the skill with tasks related to the concepts covered in this subject.

The SkillBuilders you will use in Year 10 are listed below:

- SkillBuilder: Analysing cause and effect with graphic organisers
- SkillBuilder: Analysing historical debate
- SkillBuilder: Analysing political cartoons and propaganda posters

19.4 SkillBuilder: Analysing cause and effect with graphic organisers

LEARNING INTENTION

This SkillBuilder shows you how to use graphic organisers to analyse cause and effect. Analysing cause and effect with graphic organisers is part of the Analysing HASS skill.

19.4.1 Tell me

What are graphic organisers and how can they be used to analyse cause and effect?

Graphic organisers are visual ways of representing many things including cause and effect. They can be used to show:

- who or what made something to happen or change
- who supported the change and who opposed it
- which effects were intended and which were unintended
- how an event affected individuals and the wider world.

Graphic organisers are particularly useful where:

- there are multiple causes that could have led to the one event
- there is a chain of causes in which some factors lead to events that then contribute to causing a further event
- there are multiple effects flowing from an event.

There are a variety of different types of graphic organisers that are suitable to effectively show the causes and effects of a historical event or issue, these include cause and effect chains, T-charts and fishbone diagrams. The number of causes or effects will determine which type of graphic organiser is used; some can be modified when the causes and effects are more complex.

Why is it important to analyse causes and effects?

Historians analyse cause and effect to understand why events happened as they did and the consequences of the events. If we understand the causes of devastating events, such as the Great Depression and World War II, we have a better chance of avoiding them in future. However, it is important to recognise that identifying sequences of events does not in itself prove cause and effect and that sometimes a range of factors might have contributed to an event.

The following example can be used to illustrate this point. An intoxicated driver crashes his or her car into a tree. In such an event it might at first seem that cause and effect are very easy to explain. The driver was drunk and therefore the driver caused the crash. However, what if there were other possible causes? Suppose the road was slippery because of heavy rain? Suppose also that the car's steering or brakes were found to be faulty? Suppose the driver had to swerve towards the tree to avoid an oncoming vehicle that was on the wrong side of the road. In such circumstances, the driver's state of intoxication may not have been the cause of the crash.

However, it might still have contributed to the event if a sober driver could have controlled the car and avoided the crash. Using graphic organisers will not necessarily prove one explanation to be better than another, but it will help us to see the different factors at play and to weigh up the evidence.

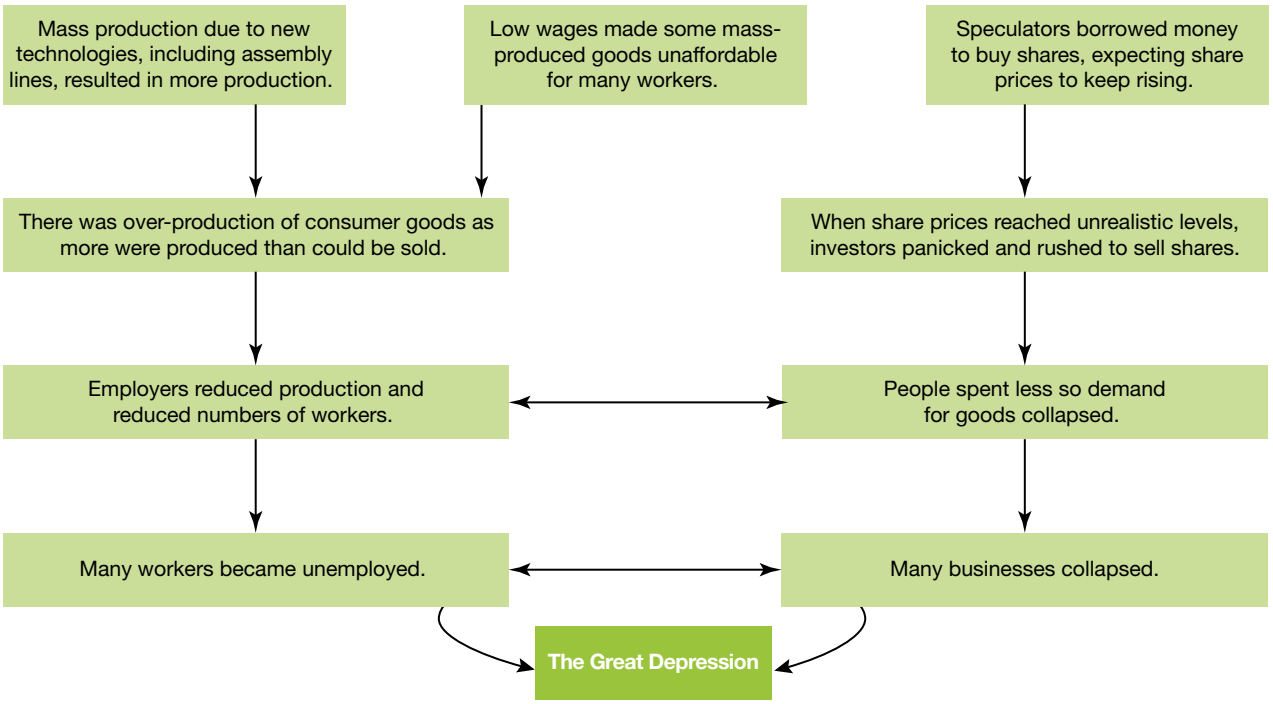
19.4.2 Show me

There were a number of developments that contributed to the outbreak of World War II. These include the peace treaties that followed World War I, the weaknesses of the League of Nations, the Great Depression and the rise of European fascism and Japanese militarism. These events can be considered to be causes of World War II, but they were also effects of other issues. We can use graphic organisers to show what caused each of these events.

Example 1: Causes of the Great Depression

Using the graphic organiser in **SOURCE 1** we can see how a chain of causes led to the Great Depression.

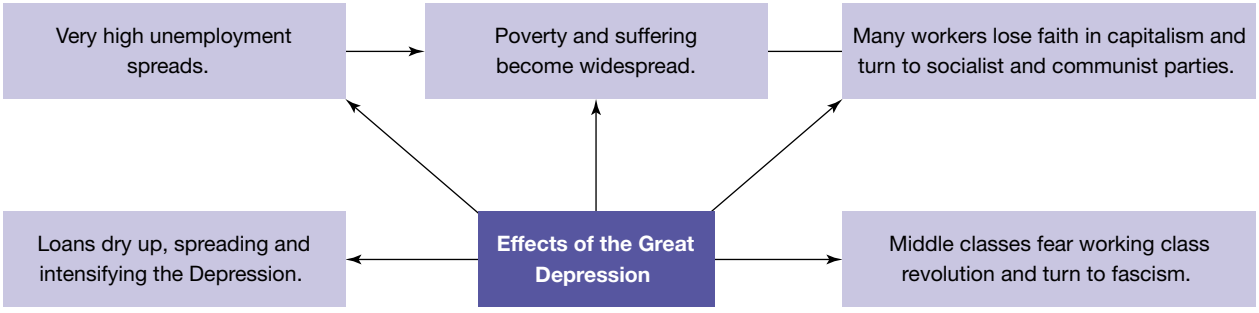
SOURCE 1 Causes of the Great Depression



Example 2: Effects of the Great Depression

When an event has multiple effects a different type of graphic organiser can be useful. The example in **SOURCE 2** could be used to show the effects of the Great Depression.

SOURCE 2 Effects of the Great Depression



19.4.3 Let me do it

Complete the following activities to practise this skill.

19.4 ACTIVITY

1. Design and complete an appropriate graphic organiser to analyse the causes of World War II. (Refer to topics 20 and 21 for more information.) You should aim to demonstrate the relationships between the following factors in your graphic organiser:
   - the peace treaties that followed World War I
   - the effects of the weaknesses of the League of Nations
   - the Great Depression
   - the rise of European fascism
   - the rise of Japanese militarism
   - Japanese aggression in China
   - Nazi Germany's defiance of the Treaty of Versailles
   - aggression by Nazi Germany and fascist Italy
   - appeasement.
2. Use your graphic organiser for the causes of World War II to answer the following questions analysing cause and effect. (Refer to topics 20 and 21 for more information.)
   a. Explain how the terms of the World War I peace treaties contributed to the rise of European fascism.
   b. Explain how the Great Depression contributed to the rise of European fascism.
   c. How did the weakness of the League of Nations encourage aggression by the fascist powers?
   d. How did the Western policy of appeasement encourage aggression by the fascist powers?
   e. How did the rise of militarism lead to Japanese aggression?
   f. Identify the consequences of unchecked Japanese aggression in China.

HASS skills: Communicating and reflecting
History concept: Cause and effect
General capability: Critical and creative thinking

19.5 SkillBuilder: Analysing historical debate

LEARNING INTENTION

This SkillBuilder shows you how to analyse a historical debate. Analysing a historical debate is part of the Analysing HASS skill.

19.5.1 Tell me

What is a historical debate?

A debate is an argument between two or more people in which opposing views are expressed regarding a particular issue. Its purpose is both to reveal the 'truth' and, in the case of a public debate, to influence public opinion. Debates can occur face to face or be conducted using a range of different media such as newspapers, social media or television.

Why is a debate a valuable source of information?

Debate is important to historians because it reveals information, not only about the issue at its centre, but about those involved in the debate as participants and audience members. In this case, you will be analysing opinions expressed about the dropping of atomic bombs on Japan to force their surrender at the end of World War II. Some historians argue that this action was justified and save many other lives in the long-term; others argue that the action was not justified because there was evidence that the Japanese were already beginning to discuss options for negotiating an end to the war.

19.5.2 Show me

How to analyse a historical debate — a step-by-step approach

One of the most challenging aspects of analysing a debate is working out what is fact and what is simply designed to 'score points' with the readers, listeners or viewers. Examine each excerpt in turn, asking the following questions:

a. What are the major arguments that have been made?
b. Are there any obvious flaws in the arguments presented; for example, are they simplistic, unrealistic or irrelevant?
c. What supporting evidence is given for each argument, and how accurate do you think this evidence is?
d. Are some points skimmed over or ignored? If so, why might this be?
e. Does the writer/speaker criticise the character of his or her opponent(s)? If so, what words/phrases are used to characterise them?
f. Is there any evidence of bias? If so, what is it?

The final stage of your analysis involves drawing conclusions about the validity of the arguments presented. The conclusions you draw are always open to challenge and should be revised if you find compelling evidence to the contrary.

Model

SOURCE 1

SOURCE 1 From 'Nightmares beyond Atomic', in *Wartime*, the official magazine of the Australian War Memorial, Winter 2015, by Richard Frank

The advent of the reality of nuclear weapons will continue to focus the attention of later generations on the end of the Asia-Pacific War. Yet ... With the evidence now available, the nightmare recognised at the time — that an invasion of the Japanese home islands would produce stupendous casualties on both side — is more than validated.

a. *What are the major arguments made?*
   The main argument is that dropping atomic bombs on Japan resulted in fewer deaths and casualties than invading Japan would have caused.
b. *Are there any obvious flaws in the arguments presented — for example, are they simplistic, unrealistic or irrelevant?*
   The argument is simplistic because it overlooks the fact that both options would have meant significant loss of life and injury.
c. *What supporting evidence is given for each argument, and how accurate do you think this evidence is?*
   The evidence is referred to, but it is not described in detail. The view is simply asserted as being 'validated' because of the existence of 'evidence'.
d. *Are some points skimmed over or ignored? If so, why might this be?*
   One of the key points that is ignored is that the one significant difference between the two options (in terms of loss of life and injury) was that dropping the atomic bomb only killed Japanese people, whereas an invasion would have also killed allied soldiers.
e. *Does the writer/speaker criticise the character of his or her opponent(s)? If so, what words/phrases are used to characterise them?*
   People who oppose the view are not directly criticised, but the description of 'later generations' suggests that people with other views are too removed from the 'real' situation to understand it fully.
f. *Is there any evidence of bias? If so, what is it?*
   The publisher of this text is the Australian War Memorial, so it is likely the writer will be biased towards showing Australian military allies and their actions in a positive light.

19.5.3 Let me do it

Complete the following activity to practise this skill.

19.5 Activities

1. Analyse **SOURCE 2** using questions a–f detailed in the Show me section.

SOURCE 2 Extracts from an article arguing for the banning of nuclear weapons, published on *The Conversation*, 6 August 2015. Written by Tilman Ruff, Associate Professor, International Education and Learning Unit, Nossal Institute for Global Health, School of Population and Global Health, University of Melbourne.

Ban the bomb: 70 years on, the nuclear threat looms as large as ever

On this day 70 years ago, the world and the preconditions for its health and survival changed forever. A crude bomb containing 60 kilograms of highly enriched uranium exploded 580 metres above Hiroshima. Equivalent to 15 000 tons of TNT, it was 2000 times more powerful than the British Grand Slam bomb, the largest produced until then. . .

Rumours had been circulating in Hiroshima that the city was being saved for something special. It was. The burst of ionising radiation, blast, heat and subsequent firestorm that engulfed the city on August 6 killed 140 000 people by the end of 1945. Many were incinerated or dismembered instantly; others succumbed over hours, days, weeks and months from cruel combinations of traumatic injury, burns and radiation sickness.

Three days later, another B-29 carrying a bomb equivalent to 21 000 tons of TNT headed for Kokura. Because of clouds blocking visibility, its cargo was dropped over Nagasaki instead, raining similar radioactive ruin and killing 90 000 people by the end of 1945.

In both cities, ground temperatures reached about 7000° Celsius. Radioactive black rain poured down after the explosions. . .

The survivors of the two bombings bore the legacy of terrible injuries and scars on top of the cataclysmic trauma of what they witnessed. They also faced discrimination and ostracism, reduced opportunities for employment and marriage, and increased risks of cancer and chronic disease, which stalk them, even 70 years later, for the rest of their days.

Over the past 30 years I have had the privilege of visiting Hiroshima and Nagasaki on a number of occasions. What never ceases to amaze me is the extraordinary compassion, wisdom and humbling humanity of hibakusha [people affected by the atomic bombings]. Never have I heard even the slightest hint of an understandable desire for revenge or retribution.

The constant yearning of hibakusha is that no-one else should ever suffer as they have suffered: nuclear weapons must be removed from the face of the earth.

HASS skills: Analysing
History concepts: Sources, Contestability

2. Sometimes a photograph can provide a very persuasive argument in a debate. Analyse **SOURCE 3**, using questions a–f in the **Show me** section as a guide to your thinking, and write a paragraph discussing the impact of adding this photograph to an article advocating the banning of nuclear weapons.

SOURCE 3 Hiroshima, Japan, after the atomic bomb was dropped, 1945



HASS skills: Analysing
History concepts: Sources, Contestability

19.6 SkillBuilder: Analysing political cartoons and propaganda posters

LEARNING INTENTION

This SkillBuilder shows you how to analyse political cartoons and propaganda posters. Analysing political cartoons and propaganda posters is part of the Analysing HASS skill.

19.6.1 Tell me

What are political cartoons and propaganda posters?

Political cartoons are drawings created by cartoonists to comment on political or societal issues of the time. They often use humor, irony, symbolism and other persuasive techniques to reflect on these issues. Political cartoons are often published in newspapers or magazines as well as online.

Propaganda posters use similar techniques and images as political cartoons in order to persuade societies' attitudes or behavior towards an issue — for example, persuading men to join the Australian Army and serve in World War II. Political groups and other organisations also use propaganda to push their specific agendas to persuade people to agree with them and may spread false information in the form of exaggeration or hyperbole to convince individuals to join them. Propaganda posters can and often do present facts within them, however, it is important to note that most of them contain a fair amount of bias within them.

Why is it important to analyse political cartoons and propaganda posters?

Propaganda posters and political cartoons are both excellent examples of primary sources and are extremely useful in understanding the history of periods of time in which they were created. During World War II, propaganda posters and cartoons used several techniques, including playing on people's fears or prejudices. Their aims were varied, from urging people to grow their own food to encouraging them to enlist. These posters and cartoons can tell us a great deal about the time and give us insights into people's perspectives, as well as helping us to evaluate how their perspectives were influenced by events, ideas and beliefs.

19.6.2 Show me

In order to accurately analyse a propaganda poster or political cartoon, historians consider the subject matter, aims and techniques within the text to ensure that they gain a full understanding of it. When analysing the text the following questions maybe asked:

1. Who created the poster or cartoon (if known)?
   - Where, when and for what organisation was it created?
   - What was occurring during the period of historical study when the text was produced?
2. What is the main subject/issue of the text?
   - What background and/or minor details are shown?
3. What techniques were used — for example, symbolism, specific colours? And what effect do these techniques have on the text?
4. What is the message of the text?
   - What is the creator of the text trying to tell us about the subject/issue? What writing can be found within the source?
5. What is the purpose of the text?
   - Why was it created and for whom?

6. What is the author's perspective?
7. How useful is the text in providing us information about the subject/issue?
8. How contestable is the text?
   - To what extent is the text accurate and reliable?
   - What information does it include and what information does it exclude?

These questions have been applied to **SOURCES 1** and **2**, which are examples of World War II posters and cartoons.

SOURCE 1 'This is the Enemy', a poster produced in the United States by artists Karl Koehler and Victor Ancona in 1942 for the Artists for Victory Campaign



AUSTRALIAN WAR MEMORIAL ARTV10464

SOURCE 2 'What's Cookin'?', a cartoon produced in Australia by artist Noel Counihan in 1944



AUSTRALIAN WAR MEMORIAL ART90007

Source: © Noel Counihan/Copyright Agency, 2020.

The bold italicised words within the questions about each source are the correct terms that are used in our study and assessments of History in Year 10 and ATAR History studies.

Questions about SOURCE 1	Answers
1. Who created the poster or cartoon (if known)? • Where, when and for what organisation was it created? • What is the ***historical context*** of the text that was produced?	It was created by Karl Koehler and Victor Ancona in the United States in 1942 for the Artist for Victory Campaign. The ***historical context*** of the poster is that the United States had entered World War II the day after the Japanese attack on Pearl Harbor on 7 December 1941.
2. What is the main subject/issue of the text? • What background and/or minor details are shown?	The main subject of the image is the face of a Nazi officer. There are no background details but reflected in the officer's monocle (eye glass) is a victim of Nazism hanging from a gallows.
3. What techniques were used — for example, symbolism, specific colours? And what effect do these techniques have on the text?	The gallows is used as a symbol of Nazi atrocities. The stark use of black and white rather than colour for the gallows symbolises death. The way the officer's face is drawn is a caricature, with downturned lips and a sharp nose suggesting extreme harshness and cruelty.
4. What is the ***message*** of the text? • What is the creator of the text trying to tell us about the subject/issue? • What writing can be found within the source?	The ***message*** of the text is that the Nazi officers are to be considered enemies. The only text is 'This is the enemy', which reinforces the idea that everything this man represents is a threat to humanity.
5. What is the ***purpose*** of the text? • Why was it created and for whom?	The United States entered the war in late 1941 after the Japanese attack on Pearl Harbor so the ***purpose*** of the cartoon is to help rally support for the US war effort against Nazi Germany as well as Japan. Its intended audience is the US public, particularly those who may have had doubts about the reasons for US involvement in the war against Nazi Germany.
6. What is the author's ***perspective***?	The author's ***perspective*** is strongly anti-Nazi and its message is that Nazi Germany is an evil, cruel enemy.
7. How ***useful*** is the text in providing us information about the subject/issue?	The poster provides ***useful*** evidence for US commitment to the war in 1942 and the US government's efforts to influence public opinion in favour of the war effort by portraying Nazis as evil murderers.
8. How ***contestable*** is the text? • To what extent is the text accurate and reliable? • What information does it include and what information does it exclude?	***Contestability*** of the poster can be seen in two different aspects: 1. The accuracy and reliability of the message are overwhelmingly supported by other primary sources that are available from this time period. 2. The information that it provides to the reader is that it clearly states the US government's opinion regarding the Nazi regime and the dangers they represent to the world. However, the poster excludes any perspectives from other countries (ally or enemy).

Questions about SOURCE 2	Answers
1. Who created the poster or cartoon (if known)? • Where, when and for what organisation was it created? • What is the ***historical context*** of the text that was produced?	It was created by Noel Counihan in Australia in 1944. We do not know what organisation it was created for. The ***historical context*** of the poster is that by 1944 the tide of war had turned firmly against Nazi Germany.
2. What is the main subject/issue of the text? • What background and/or minor details are shown?	The main subject of the image is Adolf Hitler. He is depicted sitting on a huge bomb with a burning fuse that does not have long to go before it explodes.
3. What techniques were used — or example symbolism, specific colours? And what effect do these techniques have on the text?	The bomb is a symbol of the destructive power unleashed by the war. The cartoon caricatures Hitler by depicting him looking ridiculous as he sits forlornly wringing his hands, unable to avoid Nazism's coming fate.
4. What is the ***message*** of the text? • What is the creator of the text trying to tell us about the subject/issue? • What writing can be found within the source?	The ***message*** of the poster is that days of Hitler and the Nazi regime are numbered. The creator of the text is clearly stating that the war against Nazi Germany is successful and it is only a matter of time before they are defeated. The only text is 'What's cookin'?', which means 'What is happening?' Clearly Hitler is about to be 'cooked'.
5. What is the ***purpose*** of the text? • Why was it created and for whom?	The ***purpose*** of the poster is to give people hope and some pleasure after years of hardship and sacrifice. Its intended audience is the Australian public.
6. What is the author's ***perspective***?	The author's ***perspective*** is strongly anti-Nazi and its message is that Hitler will soon suffer the fate he deserves.
7. How ***useful*** is the text in providing us information about the subject/issue?	The poster provides very ***useful*** evidence for attitudes in Australia in 1944, at the time when it was clear that the Axis was losing the war.
8. How ***contestable*** is the text? • To what extent is the text accurate and reliable? • What information does it include and what information does it exclude?	***Contestability*** of the poster can be seen in two different aspects: 1. It is probably accurate and reliable in representing Australian attitudes during this time period towards Germany and the war. However, as Germany was not defeated until May 1945, the poster's accuracy is questionable as it does not display an accurate or reliable representation of the actual war situation. 2. The information seen within the poster shows Australian attitudes and a hope for a better future; however, it does not clearly state the attitudes and hopes of Australia's allies or that of Germany and her allies.

19.6.3 Let me do it

Complete the following activities to practise this skill.

19.6 ACTIVITIES

1. Now that you have seen two examples, use the questions in the Show me section to analyse **SOURCES 3** and **4**.

SOURCE 3 'This is the Most Important Job you Ever Did: Australian Textile Industry . . . and that Means You', a poster issued by the Department of War Organisation and Industry in Australia in 1942



Source: Australian War Memorial ARTV02161

SOURCE 4 'Which Way?', a poster created by Daryl Lindsay and issued by the Australian Commonwealth Military Forces Southern Command in Australia between 1939 and 1943



Source: Australian War Memorial ARTV06721

2. Based on your analysis of **SOURCES 3** and **4**, answer the following questions.
   a. How are Australian women depicted in **SOURCE 3** and why?
   b. In what two ways are Australian men depicted in **SOURCE 4** and why?
   c. Describe the different aims of these two propaganda posters.
   d. What aims do the two posters share?
   e. Why might these posters have been effective or ineffective in achieving their aims?
   f. Write a general statement summarising reasons why propaganda posters can be very useful evidence for historians investigating World War II.

HASS skills: Analysing
History concepts: Sources, Contestability

19.7 Review

19.7.1 Key knowledge summary

19.2 Concepts in History

- Historians investigate and interpret the past.
- History helps us to understand our heritage and appreciate other cultures.
- History helps us to understand the present and what the future may hold.
- History provides us with essential skills.
- Historical sources are divided into primary and secondary sources. They are the key sources of information that historians use to complete their historical research. Analysing and evaluating historical sources as evidence relates to analysing sources to judge how reliable they are and explore the different points of view, or perspectives, of people from the past.
- Continuity and change is the ability to recognise that while many changes occur over time, some things remain constant.
- Cause and effect relates to understanding that every historical event will have a cause, and every event or action is likely to be the cause of subsequent effects or consequences.
- Significance is the ability to make judgements about the importance assigned to particular aspects of the past, for example, events, developments, movements and historical sites.
- Historians try to discover how people thought and felt at different times in the past.
- Using historical imagination requires using your imagination but basing your ideas on evidence.
- We should avoid judging people from the past by the standards of our own age.
- Contestability reflects that historians can have differing interpretations about sources and this leads to debates and further understanding of the issues they are researching.

19.3 Skills in History

- Questioning and researching involves locating relevant and detailed information and/or data from a range of appropriate sources.
- Analysing involves interpreting information to identify the main features or ideas, then examining the information closely to determine how the parts relate to the whole.
- Evaluating means examining your interpretations of information to draw evidence-based conclusions.
- Communicating your ideas means presenting information in a range of formats to suit the intended audience and purpose.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6309)
Reflection (ewbk-6308)
Student Learning Matrix (ewbk-6304)

Interactivity Historical skills and concepts crossword (int-7660)

19.7.2 Key terms

artefact an object made or changed by humans

cause and effect the concept that every historical event will have a cause, and every event or action is likely to be the cause of subsequent effects or consequences

contestability when particular interpretations of the past are open to debate

continuity and change the concept that while many changes occur over time, some things remain constant

empathy the ability to understand and share another person's thoughts and feelings

evidence information that indicates whether something is true or really happened

hypothesis (plural: hypotheses) a theory or possible explanation

perspective point of view or attitude

primary sources objects and documents that were created or written in the period that the historian is investigating

secondary sources reconstructions of the past written or created by people living at a time after the period that the historian is studying

significance the importance assigned to particular aspects of the past, for example, events, developments, movements and historical sites

timeline a diagrammatic tool representing a period of time, on which events are placed in chronological order



RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 19 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

19.1 Overview

Video eLesson
- Investigating the past (eles-1057)

19.4 SkillBuilder: Analysing cause and effect with graphic organisers

eWorkbook
- Skillbulder: Analysing cause and effect with graphic organisers (ewbk-6305)

19.5 SkillBuilder: Analysing historical debate

eWorkbook
- SkillBuilder: Analysing historical debate (ewbk-6306)

19.6 SkillBuilder: Analysing political cartoons and propaganda posters

eWorkbook
- SkillBuilder: Analysing political cartoons and propaganda posters (ewbk-6307)

19.7 Review

eWorkbook
- Reflection (ewbk-6308)
- Student Learning Matrix (ewbk-6304)

Interactivity
- Historical skills and concepts crossword (int-7660)

To access these online resources, log on to **www.jacplus.com.au**.

20 The modern world and Australia

20.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

After the horrors of World War I, how did the world change?

20.1.1 Links with our times

In 2008, the world experienced the global financial crisis (GFC), resulting in millions suffering ongoing unemployment in some of the world's richest countries. This led to calls for more control over economic activities to prevent it ever happening again.

SOURCE 1 The Great Depression in the early 1930s, led many workers to travel great distances in search of work.



Across much of the developed world, the decade after World War I was a time of growing prosperity. In the United States the 'Roaring Twenties' seemed to be a period of rapid, unstoppable growth of wealth. But, like during the GFC in 2008, people's expectations and hopes came crashing down with the collapse of the world economy in 1929 and the beginning of the Great Depression.

In the decades following the Depression deep social divisions arose and people saw the rise of the competing ideologies of communism and fascism. And while World War I was called 'the war to end all wars', just 20 years after the signing of peace treaties that officially brought the war to an end, the world was once again at war — this time it would be on an even more catastrophic scale.

on Resources

- **eWorkbook** Customisable worksheets for this topic (ewbk-6329)
- **Video eLesson** The inter-war years (eles-2598)

int-6871

SOURCE 2 A timeline of the modern world, 1918–1939

CE

1918



1919
The Treaty of Versailles is signed and revolutionary outbreaks take place across Europe.

1920

1921
The Bolsheviks win the Russian Civil War.

1922

1922
Mussolini and his fascists take power in Italy.

1923
Hitler attempts to seize power in Germany in the unsuccessful Munich Putsch.

The former Tsarist Russian Empire becomes the Union of Soviet Socialist Republics (USSR).

1924

1924
The Nazis win only 3 per cent of votes in German elections.

1926

1928
Almost one in five people own a car in the US.

The first Australian screening of a 'talkie' takes place.

1928

1929
The Great Depression begins.



1930

1931
Under the Melbourne Agreement, Australian governments agree to cut spending.

1932

1932
Unemployment reaches its peak in the worst year of the Depression.

1933
Hitler and the Nazis gain power in Germany.

Germany and Japan leave the League of Nations.

1934

1934
Italy invades Abyssinia (Ethiopia).

1936

1936
The Spanish Civil War begins.

Stalin begins purges of his opponents in the Communist Party and the military in the USSR.

1937
Japan invades China.

1938

1939
Germany invades Poland and World War II begins.

1940

CE

20.2 Examining the evidence

LEARNING INTENTION

By the end of this subtopic you will be able to describe the wide range of sources that provide evidence on the history of the decades between the world wars.

20.2.1 How do we know about the inter-war years?

In this topic we will survey some of the big political, economic and social changes that shaped the world and Australia between the end of World War I in 1918 and the outbreak of World War II in 1939. The most significant changes include the growing influence of communism, the unprecedented economic crisis of the Great Depression and the rise of fascism.

We have an enormous number and variety of primary sources for the period often described as the inter-war years — that is, the period of history between World War I and World War II. These sources include those created by governments, the mass media and individuals. When considered together, these sources give historians a comprehensive picture of what it was like to live in the inter-war years and experience the changes that characterised the period.

Official sources

By this period, governments and parliaments were keeping thorough records of their decisions, policies and debates. Public servants were also required to keep records. So, for most countries, we have official records of matters related to trade, health, employment, housing, foreign policy, education and every aspect of society for which governments had responsibility. In fact, it is often possible to know more about how political parties and governments made decisions then than about political decision making today. In Australia, for example, the records of Cabinet meetings (top-level meetings of governments) are kept secret for 30 years, and many other countries have similar rules.

Mass media

In most countries there were far more daily newspapers published during this period than there are today. Political parties of all kinds also published their own newspapers to spread their views. Back issues of newspapers provide day-to-day reports and images of events from those times, but they are not always reliable sources. Photography had also become more widely used.

SOURCE 1 A group of Americans eat lunch on the running board of a Model T Ford during the 1920s. By then mass production had enabled the price of a Model T to drop to about a third of what it had been in 1909.



SOURCE 2 Japanese tanks terrorising the people of Nanjing, China. The Japanese Imperial Army slaughtered over 200 000 people between December 1937 and January 1938.



Two new forms of mass media also gained huge influence during this period. They were radio, which Australians called the 'wireless', and film, which many called the 'flicks'. Film had an enormous influence. By the end of the 1920s, when Australia's population was just 6.5 million, 2.75 million movie tickets were being sold every week. Around 95 per cent of these movies were American, and they contributed to the spread of American influences. Film also became an important medium for recording world events and social changes. And political parties were quick to recognise that film provided new opportunities for propaganda in an age when many people believed that the camera did not lie.

SOURCE 3 Three young children with their dolls sharing one bed in a Melbourne slum around 1935



Personal records

Many people who lived through the Great Depression and other events of the inter-war years kept diaries or wrote letters about their experiences. Some wrote and published memoirs, providing first-hand accounts of those times.

SOURCE 4 A charity worker's account of poverty in the 1930s, from Greig Smith, Secretary, Charity Organisation Society, in the Melbourne *Argus*, 7 March 1931.

The other day a social worker … visited a home in an outer suburb … The door was opened by a neatly dressed woman who had clearly been weeping … she broke down in a distressing manner when she told of her husband's daily heart-breaking search for work. Two years ago he had lost a steady job … Never since has he been able to get anything better than intermittent work — casual jobs which have become fewer as the Depression has deepened. In recent months he has walked the streets … from early morn till setting sun in a fruitless search for a job of any kind or any duration. His clothing has become shabby, his boots are worn nearly off his feet, and his wife is well-nigh distracted as daily she sees his spirit slowly breaking. The children are hungry, their clothing is threadbare, and the loss of the home is an imminent probability.

20.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 5, 6	Questions 4, 7, 8	Questions 3, 9, 10

Check your understanding

1. Why can we often learn more about government decisions in the inter-war years than those of today?
2. Why do we have more newspaper sources for this period than for the present?
3. What were three of the most significant changes that took place between 1918 and 1939?
4. List four areas of government responsibility during the inter-war years for which we have evidence from official records.
5. What two new forms of mass media gained much influence during the inter-war years?

Apply your understanding

6. If the people in **SOURCE 1** were first-time car owners, as almost 20 per cent of Americans were at this time, how do you think they would feel about the age they were living in and about their future prospects?
7. Look closely at **SOURCE 2**. What evidence does it provide of Japanese aggression in China?
8. Study **SOURCE 3**.
   a. Describe what you see in the image.
   b. How useful is the source as evidence of poverty in the 1930s?
9. Read **SOURCE 4**.
   a. What has happened to the family?
   b. How do you think the family members would feel about their situation?
10. Using the four sources in this subtopic, write a short paragraph describing some general features of the changes that took place in the 1920s and 1930s.

For sample responses to every question, go to www.jacplus.com.au.

20.3 The peace treaties and the League of Nations

LEARNING INTENTION

By the end of this subtopic you will be able to:
- explain how the harsh terms of the peace treaties after World War I were contributing causes of World War II
- describe how the weaknesses of the League of Nations prevented it from stopping World War II.

20.3.1 The peace treaties

On 11 November 1918, the German government accepted an **armistice** that ended all fighting in World War I. German troops were exhausted and their morale was broken. The army had run out of reserves, many German people were starving and food supplies were low. The Allies had won the war but they now had the task of creating peace. Would they make treaties that took revenge for Allied losses and suffering or would they seek a peace that would last?

armistice a ceasefire or truce that ends fighting in a conflict, so terms for permanent peace can be discussed

reparations payments of money or materials by a nation defeated in war, as compensation for damage caused

Allies Britain, France and the other states on the winning side in World War I

Five million Allied troops had died to achieve victory in World War I. Another 13 million had been wounded, many of them permanently disabled. The financial cost was also enormous, and France had suffered the destruction of farmland as well as entire towns and villages. Germany and the other Central Powers had also suffered terribly. They had lost 3.5 million troops and another 8 million were wounded. However, as many people on the Allied side saw it, the Central Powers, especially Germany, had caused the war and should be made to pay.

SOURCE 1 The ruins of the Cloth Hall in Ypres, Belgium, in 1917. This structure was devastated by artillery fire during World War I.



Source: AWM E00720.

The Treaty of Versailles

On 28 June 1919, after five months of negotiations, delegates from the Allied countries and Germany signed the Treaty of Versailles. Germany's National Assembly regarded many of the terms set out in the treaty's 440 articles as so harsh that at first they refused to sign. Penalties imposed on Germany included restrictions on the size of its military forces as well as **reparations** payments to the **Allies** and loss of territory.

Territorial losses

All German overseas colonies were seized. The provinces of Alsace and Lorraine were returned to France. German territory in the east was given to Poland, and **plebiscites** were to be held in German East Prussia and Silesia to enable their people to choose between remaining part of Germany or being absorbed into Poland. The German Rhineland was to be occupied for 15 years.

Military and economic terms

Military terms: Germany was permitted to maintain a volunteer army of no more than 100 000, but it was not allowed to use conscription or to possess an air force or submarines. Its navy was to be reduced in size and it was barred from manufacturing or trading in war materials.

Economic terms: Germany's rich Saar coalfields were to be controlled by France for 15 years. German railway stock and large ships were to be handed over and Germany was to build a further million tonnes of ships for the Allies. Huge quantities of coal, steel and other raw materials were also to be given to the Allies. In addition, Germany was required to pay for all civilian damage suffered by the Allies. Under Clause 231, Germany had to accept blame for causing the war.

plebiscite direct vote in which electors give their opinion on an issue

mandates commission to act on behalf of the League of Nations to govern a people considered not ready to govern themselves

The other peace treaties

Each of the other defeated Central Powers was also made to sign a treaty.

- *The Treaty of Saint-Germain* dismantled the Austro-Hungarian Empire and required Austria to pay reparations. The south-western parts of the empire were united with Serbia and Montenegro to form the new nation-state of Yugoslavia.
- *The Treaty of Trianon* took more than 70 per cent of Hungary's territory to create the new nation-state of Czechoslovakia.
- *The Treaty of Neuilly* transferred parts of Bulgaria's territory to Greece, Romania and Yugoslavia.
- *The Treaty of Sevres* took away Turkey's Middle East territories. These states were divided between Britain and France to administer as League of Nations **mandates**.

SOURCE 2 A map showing how Europe was changed by the peace treaties

int-6688



Source: Map by Spatial Vision.

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- Overview > **The inter-war period**

20.3.2The League of Nations

Germany's Kaiser had been overthrown in a revolution in November 1918. US President Woodrow Wilson had wanted a more lenient treaty that would have strengthened democracy in Germany and created conditions more likely to preserve peace. France and Britain, however, wanted to weaken Germany and make it pay for their losses. The Treaty of Versailles created intense bitterness in Germany, but one hope for lasting peace was the formation of the League of Nations. It was Wilson's idea and when it was formed it held promise as a guardian of world peace. Had it worked, it might have made up for the weaknesses of the rest of the peace settlement.

The League's main task was to prevent wars. The Covenant of the League was approved at the Versailles Conference in 1919. At first the League had 42 member states, including Australia. It was made up of a General Assembly (of all member states) and a Council. The Assembly met once a year but the Council met more frequently to deal with urgent problems. It consisted of Permanent Members and Non-permanent Members. The major powers (Britain, France, Italy and Japan) were the Permanent Members. The Non-permanent Members were elected from the other member states.

SOURCE 3 Some Articles from the Covenant of the League of Nations

Article 8
The Members recognise the maintenance of peace requires the reduction of national armaments to the lowest point consistent with national safety.

Article 10
The Members of the League undertake to respect, and preserve against external aggression, the territorial integrity and existing political independence of all Members of the League …

Article 11
Any war or threat of war, whether immediately affecting any of the members or not, is hereby declared a matter of concern to the Whole League, and the League shall take any action that may be deemed wise and effectual to safeguard the peace of nations.

The League also had several special organisations. For example, the Permanent Court of Justice was set up to resolve international legal disputes, the Health Organization was formed to combat epidemics and the International Labour Organization was concerned with industrial and economic problems. The peace treaties had given Allied countries, mainly Britain and France, mandates to administer Turkey's Middle Eastern territories and Germany's overseas colonies. As these territories were not considered to be colonies that belonged to those countries, the League's Mandates Commission was set up to ensure that the administering powers carried out their responsibilities.

Weaknesses of the League

The League never had the power to achieve its aim of preventing major wars. It could order parties in a conflict to negotiate in the Assembly, where aggressors could be warned. If that failed, the League could take steps such as ordering a trade embargo to hurt the aggressor nation's economy. The League could threaten military action against an aggressor. But it had no military force of its own and could not compel its members to provide forces. In any case, under the League's rules, any decision of the Council or Assembly had to be unanimous, so any country could prevent the League taking action to solve a crisis.

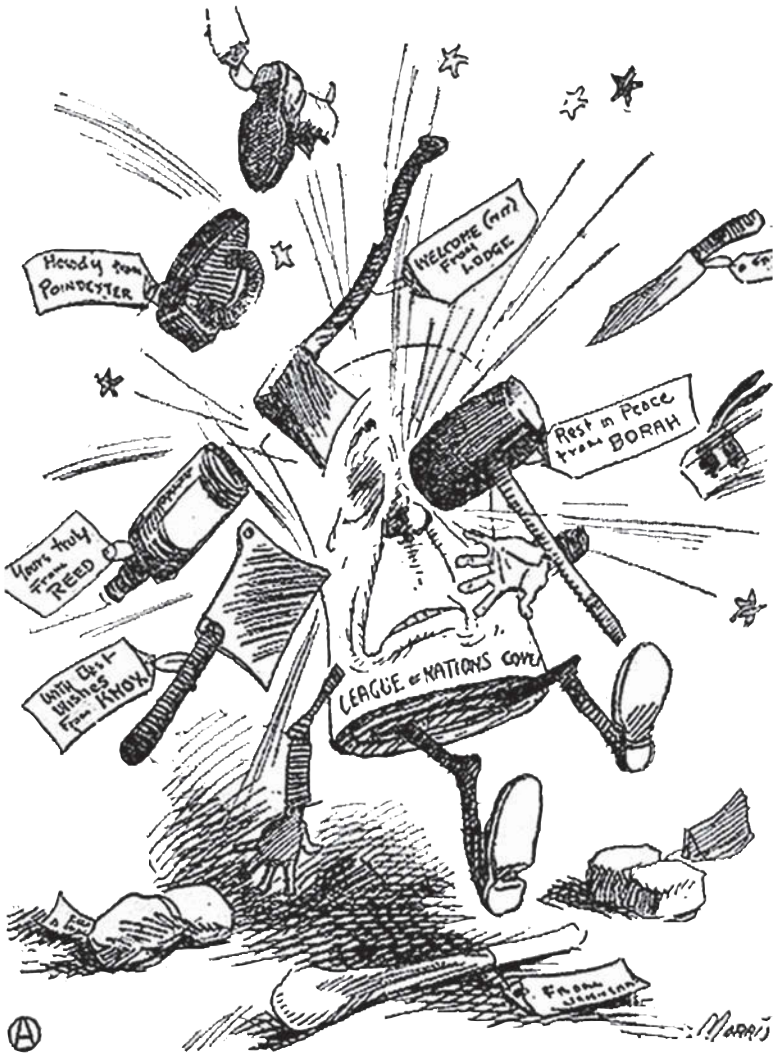
A further major weakness was that some important nations were not League members. The US Congress refused to endorse the Treaty of Versailles, so the United States did not join the League. Germany was not

allowed to join until 1926 and Russia did not join until 1934. Germany and Japan both left in 1933 and Italy quit in 1937. Despite its failure, the League was an important first attempt to design a world organisation to prevent war.

Faith in the League of Nations

After the great suffering caused by World War I, there was worldwide public support for the idealistic aims of the League. A League of Nations Union was formed to encourage people to support those aims and to counter the previously held belief that war was glorious. The League of Nations Union had branches in many countries, including Australia, where its members included politicians from the major political parties. With such support, the organisation was able to introduce League of Nations ceremonies and ideas into public schools, and junior branches formed in those schools. A special League of Nations Day was first observed in Australian schools in 1930. Such activities created great hope that there would never be another world war.

SOURCE 4 A political cartoon about the League of Nations from *Literary Digest* at the time, titled 'Can it survive?'



SOURCE 5 A League of Nations Union Junior Branch certificate, published in *Education*, the journal of the New South Wales Public School Teachers' Federation, 15 November 1934



20.3 ACTIVITY

Imagine that you are a school student in 1934. Your school has been awarded the certificate for forming a junior branch of the League of Nations Union (see **SOURCE 5**). You have been asked to give a short speech explaining why you and your fellow students are proud to be members and why your generation supports the work of the League of Nations for world peace.

Write the speech you would give. Be sure that your speech explains the significance of the formation of the League as an attempt to maintain world peace.

As a starting point, consider how important it was to people at the time, the impact it had at the time and how successful it was in meeting its aims.

History concept: Significance
HASS skills: Communicating and reflecting

20.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 2, 3, 5, 6, 8, 10	Questions 1, 4, 9, 11, 12	Questions 7, 13, 14, 15

Check your understanding

1. Explain what you understand each of the following terms to mean: reparations, plebiscites, mandates.
2. Name the four treaties between the Allies and the defeated Central Powers.
3. Explain why Germany's National Assembly at first refused to sign the Treaty of Versailles.
4. Write a short summary or create a graphic organiser to show the military and economic terms of the Treaty of Versailles.
5. What became of Turkey's Middle Eastern territories under the Treaty of Sevres?
6. Whose idea was the League of Nations?
7. Which major nations were not League members and how would this have weakened the League?
8. Which countries were Permanent Members of the Council of the League of Nations?

Apply your understanding

For help with analysing cartoons, go to the SkillBuilder in topic 9 History concepts and skills.

9. Describe what you see in **SOURCE 1** and explain how it helps you to understand why there was strong support for a very harsh treaty with Germany.
10. Using **SOURCE 2** as your evidence, describe the territorial losses suffered in Europe by:
    a. Germany
    b. Austria-Hungary
    c. Bulgaria
    d. the Union of Soviet Socialist Republics (USSR, the former Russian Empire).
11. As the USSR was not one of the defeated powers, why do you think its territorial losses (shown in **SOURCE 2**) were endorsed by the peace treaties?
12. Using the information in this subtopic and **SOURCE 3**:
    a. describe the main aim of the League of Nations
    b. outline three reasons why the League of Nations had little real power to prevent wars.
13. Look closely at **SOURCE 4**.
    a. Describe the way the League of Nations is depicted in this cartoon.
    b. Explain the message of the cartoon.
    c. Given that the League of Nations was a peacekeeping organisation, why is this cartoon ironic?
14. Which of the sources in this subtopic gives you the clearest evidence of why the harsh terms of the peace treaties after World War I were likely to cause further trouble in Europe? Explain your choice.

15. Supporters of the Treaty of Versailles have argued that it was less harsh than the Treaty of Brest-Litovsk, which Germany imposed on the Russians when they withdrew from the war. Do you think this fact justified a harsh treaty? How fair and realistic do you think it was to expect Germany to pay huge compensation?

For sample responses to every question, go to www.jacplus.com.au.

20.4 The 'Roaring Twenties'

LEARNING INTENTION

By the end of this subtopic you will be able to explain how and why for some people the 1920s was an age of prosperity, mass consumption and new freedoms, but for others it was a time of persisting poverty, discrimination and social and political divisions.

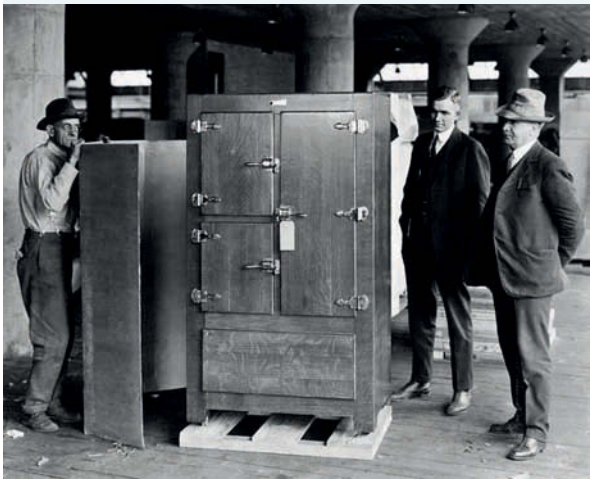
20.4.1 New technologies and changing values

During the 1920s, few people realised that forces that would bring another war were already taking shape. The decade of the 1920s has often been described as a carefree time when people put the gloom of the war years behind them. The wealth that some people had and the influence of jazz music, new dance crazes, motion pictures (movies), motorcars, new technologies and mass production all contributed to the decade being called the 'Roaring Twenties'. However, while for some it was an age of prosperity, confidence and fun, for most people around the world, the 1920s was anything but 'roaring'.

assembly line mass production method in which each worker completes the same operation over and over

New technologies created new consumer goods. In the 1920s manufacturing was stimulated by the post-war demand for goods such as telephones, household appliances and cars (see **SOURCES 1** and **2**). The greatest growth occurred in the United States, where industrial output doubled between 1921 and 1929. How did this happen? In 1913, Henry Ford introduced the **assembly line** to manufacture his Model T automobile. Assembly lines made manufacturing much cheaper and led to big increases in production and sales. Other manufacturers soon followed Ford's example.

SOURCE 1 One of the first self-contained refrigerators, made by the US company Frigidaire. The photograph was taken around 1921.



SOURCE 2 Advertisement for electrical appliances, published in *Aussie* magazine, 15 December 1920



Mass-produced goods had to find mass markets, so advertising was used to encourage mass consumption. The introduction of **hire purchase** encouraged people to buy new goods because they no longer had to save up their full cost before buying. As more people bought goods, more jobs were created so even more people had money to spend. By 1929 there was one car for every five Americans; in comparison, there was only one car for every 43 people in Britain and fewer still in most of Europe.

Manufacturing also grew in Australia as British and American companies set up Australian branches. General Electric made toasters, irons and heaters and General Motors and Ford opened motor vehicle assembly plants in Australia in the mid 1920s. For those who could afford it, the consumer age had arrived. However, real wages barely improved in Australia through the 1920s.

hire purchase buying and using a product while paying for it in instalments

prohibition 1920s nationwide ban in the United States on the making, transporting or selling of alcoholic drinks

Changing values

The mood of the 1920s was expressed through the music, fashions and entertainment. Jazz had been created by African Americans. It became widely popular in the United States and around the world, especially through musicians such as Louis Armstrong and Duke Ellington. New dances such as the Charleston were performed at music halls and dance clubs. The United States had introduced **prohibition** in 1920 and it remained illegal to sell alcohol until 1933. But millions of Americans defied the law by drinking in illegal bars called 'speakeasies' that were often operated by gangsters.

People also became obsessed by aviation, which combined speed, thrills and novelty. When Bert Hinkler made his record-breaking England to Australia flight, 80 000 people turned out to cheer him as he landed in Melbourne.

Reacting to change

Women were gaining more freedom and independence in this age. Some, called 'flappers', shocked conservatives by wearing short dresses, smoking cigarettes and drinking alcohol in public. But many people were horrified by such changes in values and behaviour. Mixed bathing on beaches, even in neck-to-knee costumes, was seen as another sign of declining morals. Women received most blame for a suspected increase in sexual relations outside marriage. In Australia, churches warned of the evils of alcohol and called for a return to traditional values (see **SOURCE 4**).

SOURCE 3 A typical 'flapper' of the 1920s



SOURCE 4 From the Catholic newspaper the *Freeman's Journal*, 25 March 1925

There is the sensual and barbaric music, the modern sexual dances, and alcoholic refreshments, and a general acceptance of the standards and conversation that obtain among an irresponsible and jazzing generation.

on Resources

Weblink The Roaring Twenties experience

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- Overview > **Post-world war peace**

20.4.2 The other side of the 1920s

The image of the 1920s as an age of prosperity and excitement ignores the experiences of most people. In the United States, rural workers gained little and African Americans especially suffered poverty and discrimination. Although the United States had suffered much less in the war than other Allied nations, there were problems readjusting to peace. Many demobilised soldiers were unemployed while the cost of living doubled in two years. When workers went on strike for better pay they were violently suppressed.

Intolerance in the United States

African Americans, migrants and political **radicals** experienced the hatred of many white Americans. The Ku Klux Klan grew rapidly in the 1920s. By 1925 this violent racist movement had five million members (see **SOURCE 5**). It incited **lynchings** and other atrocities against black Americans and preached hatred of blacks, Catholics, Jews, non-English migrants and socialists. There were race riots in many cities.

SOURCE 5 A Ku Klux Klan initiation ceremony during the 1920s



Conservative politicians and the press convinced many Americans that there was a 'Red' conspiracy to overthrow the US. In 1919 and 1920 more than 10 000 suspected communists and **anarchists** were arrested. On 15 April 1920, two men were shot dead in a payroll robbery. Two Italian Americans, Nicola Sacco and Bartolomeo Vanzetti, were charged with these murders even though they had sound alibis and there was no evidence against them. Sacco and Vanzetti were found guilty and sentenced to death because they were anarchists. In 1925, another man confessed to being a member of the gang that carried out the killings. Despite this, Sacco and Vanzetti were executed on 23 August 1927. On that day more than 250 000 people protested in Boston.

radicals a person who advocates fundamental or revolutionary changes in current practices, conditions or institutions

lynching the execution of a person without authority or process of law

anarchists revolutionaries who want an equal society based on cooperation rather than government or coercive laws

Division in Europe

After the war there were bitter social divisions in Europe. Many French socialists believed that revolution was near. British society was also deeply divided. No longer the 'workshop of the world', Britain experienced widespread poverty and unemployment. In the early 1920s, working-class unrest was violently suppressed. Mounted police attacked hunger marches led by demobilised soldiers. In Ireland, British forces conducted a savage campaign against Irish rebels.

Italy came close to a socialist revolution after the war. Demobilised peasant soldiers seized land from wealthy landowners, while in towns and cities workers took over the factories. The rich and the middle classes, who feared that Italy would follow the path of Russia, turned to the fascists to save them. Similar conflicts erupted in Germany and parts of the former Austro-Hungarian Empire.

Unrest in the colonies

Independence movements grew in many colonies of the European powers immediately after the war. Many revolutionaries were inspired by the example of the Russian Revolution. In 1919 in the Dutch East Indies (modern Indonesia) the Islamic Union called for independence. In 1920 the Indies Communist Party was formed. It attempted an uprising against the Dutch in 1926–27, but its leaders were hanged and thousands of others were imprisoned. In French Indochina, the French Foreign Legion terrorised the people to crush dissent against French rule. But the Legion's brutality drove many Vietnamese to support movements such as the Viet Nam Quoc Dan Dang, which was formed in 1927 to fight for Vietnam's independence (see **SOURCE 6**).

SOURCE 6 An eyewitness description of the behaviour of troops of the French Foreign Legion in Indochina during the 1920s, from Walter G. Langlois, *Andre Malraux: The Indochina Adventure*, London, 1966

An unleashed soldiery … now terrorises the entire country. They steal, rape, condemn to death, and execute … Legionnaires enter homes, take what catches their fancy, indulge in outrages against women and young girls. For trifles, without proof, men and youths are arrested and shot in cold blood without trial … and the region lives under a real reign of military terror … If it is with such methods that we intend to pacify the country, we are gravely mistaken.

DID YOU KNOW?

In British India in 1919, an unarmed Indian crowd was fired upon by troops commanded by General Reginald Dyer in the town of Amritsar. In this massacre, 372 people were killed and at least 1000 were wounded. In the following years the Indian National Congress became a mass movement dedicated to ending British rule.

DISCUSS

In groups, discuss the following topic: 'The 1920s — why we owe it a debt today'.

History concept: Significance

20.4 ACTIVITY

Study **SOURCE 5**. Use the internet to prepare a report on the racist activities of the Ku Klux Klan during the 1920s. Explain how its extreme ideology was similar to that of European fascist movements. For help starting your research, see topic 1 HASS skills.

History concepts: Source, Evidence

20.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 4, 5, 6, 8	Questions 2, 3, 9, 10	Questions 7, 11, 12, 13

Check your understanding

1. What is an assembly line?
2. Describe the impact in the United States of mass production and hire purchase.
3. Describe the social changes that led to the 1920s being called the 'Roaring Twenties'.
4. Identify the groups in the United States who suffered poverty, intolerance and discrimination during the 1920s.
5. Explain why there was deep division and conflict in Europe and the United States during the 1920s.
6. Describe the responses of Dutch, British and French colonial powers to independence movements in their colonies.
7. Why might oppressed groups generally have considered this period to be anything but the 'Roaring Twenties'?

Apply your understanding

8. Look at the appearance of the refrigerator in **SOURCE 1**. Describe ways in which it differs from a modern refrigerator and explain what differences such an appliance would have made to people's lives.
9. Study **SOURCE 2**.
   a. Describe the aim of this advertisement.
   b. To what aspirations is it appealing?
   c. Explain what this source tells us about new technologies, marketing and consumers in the 1920s.
10. Explain how **SOURCES 3** and **4** can be used as evidence of conflicting values in the 1920s.
11. Explain how **SOURCE 6** provides evidence of reasons why colonised peoples resisted European rule after World War I.
12. Referring to the sources in this subtopic, identify ways in which the 1920s was a decade of change and ways in which it was a period of reaction to change.
13. Write a brief paragraph in which you consider how accurately the term 'Roaring Twenties' describes the decade of the 1920s.

For sample responses to every question, go to www.jacplus.com.au.

20.5 The Great Depression

LEARNING INTENTION

By the end of this subtopic you will be able to:
- explain how and why the Great Depression was a time of mass unemployment, poverty, and social and political divisions
- identify how this would contribute to the rise of political extremism.

20.5.1 The coming of the Great Depression

There are reasons to believe that World War II might not have occurred but for the Great Depression. Problems had been developing in the world economy since at least the mid-1920s and in October 1929 the New York **stock exchange** collapsed (see **SOURCE 1**). Panicking investors sold shares as prices continued to fall. By the end of

stock exchange a place where stocks (shares in companies) are bought and sold

December 1929, $40 billion had been wiped off the value of US shares. Many shareholders, **stockbrokers** and business owners lost everything. The effects of the crash spread rapidly. Millions of people lost their jobs and the world was plunged into its worst crisis since World War I. This was the Great Depression and for many people it was worse than the war.

SOURCE 1 Traders gather in growing panic outside the New York Stock Exchange on 24 October 1929.



Two problems arose from the enormous growth in production of goods and prices of shares in the United States during the 1920s. First, companies produced more goods than they could sell, while most Americans were too poor to buy them and many products could not find foreign markets. The second problem was speculation: investors used borrowed money to buy shares, expecting to sell them for quick profits when share prices rose. By the late 1920s this had caused share prices to reach unrealistic levels. When investors lost confidence and rushed to sell shares, their prices collapsed.

The result was a huge fall in demand for goods and services, so production was cut and employees were sacked. As unemployment levels rose, people spent less and more jobs were lost. Banks closed and poverty spread (see **SOURCE 2**). Millions of desperate Americans wandered the country seeking any work they could find. Because the United States was the most important centre of the world economy, the Depression quickly spread to other countries.

stockbroker someone whose job is to buy and sell shares on behalf of others

SOURCE 2 An extract from the *New Republic* by Edmund Wilson, 1933, showing poverty during the Depression

There is not a garbage-dump in Chicago which is not diligently haunted by the hungry. Last summer [in] the hot weather, when the smell was sickening and the flies were thick, there were a hundred people a day coming to one of the dumps … A widow who used to do housework and laundry, but now had no work at all, fed herself and her fourteen-year-old son on garbage. Before she picked up the meat, she would always take off her glasses so that she couldn't see the maggots.

Germany was hit particularly hard. Its industry depended on foreign loans, as did the German government to meet reparations payments. By 1929 the German economy had only just reached its pre-war levels. Foreign loans dried up and German exports collapsed. By 1932, six million Germans were unemployed.

DID YOU KNOW?

Extremes of wealth and poverty helped to trigger the Great Depression. During the 1920s, the 36 000 wealthiest families in the United States received as much income as all of the 12 million people in the nation's poorest families. Low-paid workers could not afford to buy the goods produced in US factories. Today, the top 20 per cent of US households has more than 90 per cent of the country's financial wealth; economic inequality remains an enormous problem.

The Great Depression in Australia

Australians had experienced some of the changes associated with the 'Roaring Twenties', such as Hollywood movies, new fashions, and jazz and dance music, but unemployment reached 11 per cent during the decade and there was much industrial conflict, including a police strike in Melbourne in 1923. Australia had not had a booming economy during the 1920s, but it was among the nations that were hardest hit by the Depression.

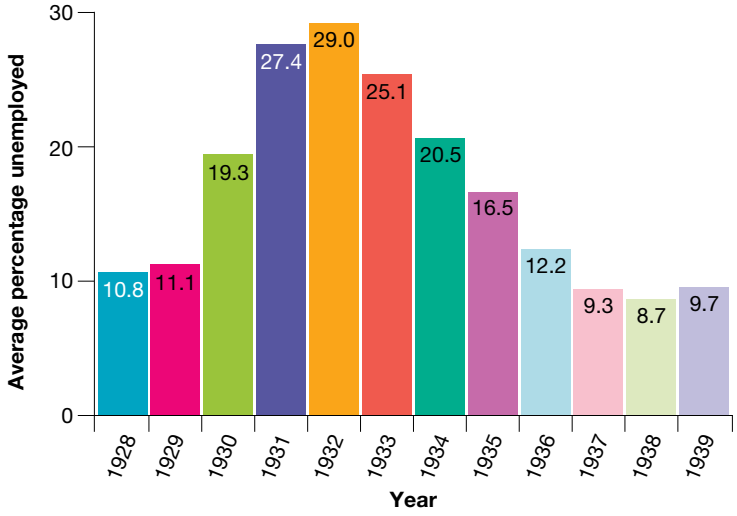
To understand why Australia was badly affected, we need to look at how the economy was structured. Australia's prosperity was based on high prices for increasing exports of primary products and the inflow of foreign investment. But Australia owed a large and increasing amount of interest to overseas lenders. Any big fall in exports or export prices and any reduction of overseas loan funds would cause problems.

When the Great Depression struck, world prices of primary products collapsed and loan funds dried up. With loans no longer available to pay for public works and construction projects, many workers lost their jobs. This reduced demand for goods produced in other industries. By 1930 nearly 20 per cent of Australian workers were unemployed and many others had only part-time work. In 1932 unemployment reached almost 30 per cent; this figure was the same for Western Australia as for the rest of Australia.

As Australia could no longer borrow to pay for imports and keep up interest payments on debts, the Australian government raised tariffs to make imports more expensive. Australia's imports fell and exports increased, but prices for them fell so steeply that they barely increased Australia's earnings.

int-6689

SOURCE 3 Australian unemployment rates from 1928 to 1939



Source: Based on Australian Bureau of Census and Statistics, *Labour Reports*, 1920–40.

Dealing with the Depression

Because the Depression was a world problem, Australian governments felt powerless to end it. They thought they should treat their budgets in the same way a family would: when times were hard they should spend less. But as governments cut spending, more workers lost their jobs, people had less to spend and the situation worsened. At first the United States followed a similar course, but under President Roosevelt's New Deal the United States expanded **welfare** and funded public works programs that helped the country to recover.

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- Overview > **The Great Depression**

20.5.2 Living through the Great Depression

Few rich Australians were affected by the Depression, and some of them profited from it. Life went on for Australia's high society. The social pages of newspapers reported on rounds of balls, garden parties, shopping sprees and overseas trips proceeding much as they had before the Depression. In contrast, many small farmers were already in debt by 1929 as a result of droughts and falling prices. In Western Australian, despite a bumper crop of wheat in 1931, the price collapsed, leading to protests by the Wheatgrowers' Union. At first, banks evicted farmers who could not meet loan repayments, but most farmers were saved by government relief and legislation that froze their debts until conditions improved.

Workers suffered the most. At first governments relied on charities to provide for the unemployed. But charities could not deal with poverty on such a vast scale, and accepting charity was a bitter blow to people's pride. State governments provided some relief work for the unemployed but it was paid at less than the basic wage (see **SOURCE 4**). Unemployed workers were further humiliated by having to queue for the **dole** or sustenance payments, which became known as the 'susso'. Men tramped the streets in search of work. Many people went hungry, and malnourished children sometimes collapsed at school. Some people scavenged scraps from garbage bins. A survey in Melbourne found that almost 10 per cent of children suffered malnutrition and/or preventable diseases by the age of six.

In most cases no government support was provided for rent or clothing, so many faced eviction and homelessness when they could not pay their rent. Families were forced to live in shantytowns built on wasteland (see **SOURCES 5** and **7**). In these desperate times people banded together to help each other and joined demonstrations to protest against unemployment and evictions. But many felt a terrible sense of helplessness.

welfare government system to provide help to members of society who need support

dole payments to the unemployed, usually in the form of coupons to exchange for food

SOURCE 4 Unemployed workers constructing the Yarra Boulevard in Melbourne, known as 'Susso Drive', in order to receive sustenance payments during the 1930s Depression



SOURCE 5 A shantytown home during the Great Depression



SOURCE 6 A newspaper article describing fierce job competition in 1930 from *The Sydney Morning Herald*, 13 February 1930

In answer to a three-line advertisement offering employment to two girls experienced in bottling and labeling, 200 girls stormed the offices of Mr Knight, toilet preparations agent … yesterday morning. Many were well educated and carried references from leading city firms … Some told pitiful tales of privations their families have been through owing to unemployment, and almost begged for the position.

SOURCE 7 Unemployed workers sheltering in a cave in the Sydney Domain, 25 June 1930



DID YOU KNOW?

According to the 1933 census, 40 000 Australians were living in shantytowns in makeshift shelters of old iron, canvas and other scrap materials.

Plans to help Australia through the crisis

The most radical plan was proposed by Jack Lang, the Labor premier of New South Wales. Lang wanted a temporary halt to interest payments to British lenders so more help could be given to the unemployed. All other Australian governments rejected this proposal, seeing it as an act of disloyalty to Britain.

Another plan was proposed by Labor federal treasurer E. G. Theodore. He believed that instead of cutting spending, the government should print more money to encourage spending and stimulate industry. This plan was abandoned because the banks were against it.

Instead, through the Melbourne Agreement, the Commonwealth and states agreed with the advice of Sir Otto Niemeyer, from the Bank of England, that Australian governments had to cut costs and begin to pay back their loans. In June 1931, the Commonwealth and states agreed to cut government spending, including government wages, salaries and pensions. The basic wage was reduced by 10 per cent and rates of interest on government debts were reduced. Taxes were raised to increase revenue. At the same time, the Commonwealth Bank was to provide credit to finance public works and create paid work for the unemployed.

In Australia, improvement came slowly after August 1932, but it had more to do with the recovery of the world economy than with government policies. Even in 1939 nearly 10 per cent of Australian workers were unemployed.

20.5 ACTIVITY

Working in small groups, use all the sources in this subtopic to write and perform a short play that conveys what people experienced during the Great Depression. Your script could focus on one aspect, such as unemployment and poverty. Create characters based on information gleaned from the sources. Use your imagination to add more detail about their lives before and during the Depression years.

History concepts: Source, Evidence, Empathy
HASS skills: Communicating and reflecting

20.5 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 3, 4, 6, 10	Questions 1, 5, 7, 8	Questions 2, 9, 11

Check your understanding

1. Describe the problems that were caused in the United States by overproduction of goods and by inequality.
2. Draw a flow chart showing how each problem associated with the economic crash caused further problems.
3. Explain why Germany and Australia were particularly badly affected by the Great Depression.
4. Outline the main ideas of the three plans that were suggested to deal with Australia's economic problems.
5. Explain why some sections of society suffered greatly during the Great Depression while others hardly suffered at all.

Apply your understanding

6. Explain what you can tell about the economic crash of October 1929 from **SOURCE 1**.
7. Describe what **SOURCE 2** reveals about the desperation of unemployed Americans in 1932.
8. Referring to **SOURCE 3**, describe the trends in Australian unemployment between 1928 and 1939.
9. Imagine you are a newspaper reporter in the 1930s. Use **SOURCES 4**, **5**, **6** and **7** as your evidence to write a report on problems facing unemployed workers during the Great Depression.
10. Use the words provided in the box below to complete the following paragraph about the impact of the Great Depression on Australia.

export	1950s	dropped	import	employment
unemployment	rose	government	tariffs	1930s

By the mid _____, the world economy began to improve and _____ prices for Australia's wool and wheat _____. The improvement in business confidence gradually led to increased _____ and Australians were able to leave the worst of the Depression behind them. Thousands of families had battled their way through the Great Depression. At the end of it, Australians had been forced to examine their beliefs and to look more critically at their _____ and society.

11. Create a flow diagram to show how overproduction and inequality in the United States contributed to a stockmarket crash there and how the effects spread to other countries causing further consequences.

For sample responses to every question, go to www.jacplus.com.au.

20.6 Communism — dream or nightmare?

LEARNING INTENTION

By the end of this subtopic you will be able to:

- describe the rise of communism in Russia and the impacts of Stalin's brutal dictatorship
- explain how communism inspired fear and hatred among those who dreaded working-class revolt.

20.6.1 The drift to dictatorship in Russia

With the 1917 Revolution in Russia, there was an expectation among the Bolsheviks that revolutions of workers and peasants in other countries would also be triggered. In the chaos that followed the war there were several attempted revolutions in Europe. These uprisings failed but the Bolshevik Revolution continued to inspire many workers and other disadvantaged groups, especially during the hardships of the Great Depression. However, the system that developed in the USSR was not the workers' paradise that many revolutionaries had dreamed of.

SOURCE 1 A Bolshevik propaganda poster from 1920, titled 'Comrade Lenin cleans the Earth of scum'



The Bolshevik Revolution was based on the idea of creating a communist society in which everyone would be equal. At first the Bolshevik government, headed by Lenin, handed control of factories and other businesses to committees of workers and land was given to peasant **soviets** to redistribute. But when production slumped, the Bolsheviks appointed managers to run enterprises. To hold on to power, the Bolsheviks abolished all other political parties, including other **socialist** parties. The Bolsheviks had to be ruthless to survive, especially during the Civil War from 1918, in which they fought against armies of **White Russians**, who were aided by the armed intervention of Britain, France, the United States and Japan.

When the Civil War ended in 1921, the Bolsheviks controlled most of the former Russian Empire. In that year they crushed a revolt by sailors of the Kronstadt Naval Base who demanded an end to one-party rule. These sailors had once been among the Bolsheviks' strongest supporters. Faced with such discontent, the Bolsheviks took a temporary step backwards, relaxing economic controls. But there was no relaxation of Bolshevik political control.

20.6.2 Stalin's dictatorship

In 1924, Lenin died of a stroke. Joseph Stalin was the General Secretary of the Communist Party, as the Bolshevik Party was now called. Stalin used this position to outmanoeuvre his rivals, including Leon Trotsky, who had been the main organiser of the 1917 Revolution. Trotsky was exiled in 1928 and by the end of 1929 Stalin was the **USSR**'s undisputed dictator.

Under Stalin's collectivisation policy, peasant farms were combined into huge collective farms between 1929 and 1935. Peasants who resisted were executed or sent to slave labour camps. Thirteen million peasants starved to death as their grain was confiscated and distributed to the cities or exported to fund the growth of manufacturing in 1932–33. In 1928, Stalin launched the first of a series of five-year plans to develop industries. The successes of these plans were achieved by harsh

soviets councils, originally elected by workers or peasants
socialist an economic system based on public ownership of industry to create greater equality
White Russians those who wanted to crush the revolution and restore the old Russian order
USSR the Union of Soviet Socialist Republics, or Soviet Union, the name of the former Russian Empire from 1922

SOURCE 2 Starving children at Samara Camp during the famine in Russia. During the Civil War, under the policy called War Communism, the Bolsheviks seized grain from peasants to feed soldiers and workers. There were terrible famines and many peasant uprisings against the Bolsheviks.



SOURCE 3 From a poem in the Soviet Communist Party newspaper *Pravda* in 1931

Great Stalin, O Leader of the Peoples,

Thou who didst give birth to man,

Thou who didst make fertile the earth,

Thou who didst rejuvenate the centuries,

Thou who givest blossom to the spring,

Thou who movest the chords of harmony,

Thou splendour of my spring,

O Thou

Sun reflected in a million hearts.

workplace discipline and forced labour by political prisoners. Stalin's labour camps were soon full of such prisoners as his secret police arrested suspected **dissidents**.

In the Great Purge from 1936 to 1938, Stalin unleashed a wave of terror in which all of his critics in the Communist Party and several Red Army generals were killed. In a series of show trials, former leading Bolsheviks were forced to confess to crimes such as treason and sabotage. Russia was now a state in which people's lives were controlled by terror, strict censorship and propaganda that portrayed Stalin almost as a god.

Communism and anti-communism

Despite the horrors of Stalin's rule, the idea of communist revolution continued to find supporters in **capitalist** countries where workers were exploited and oppressed. It also inspired fear and hatred among people who dreaded any kind of working-class revolt. The ideas of communism and anti-communism would influence almost every political conflict for decades.

dissidents people who publicly disagree with government policy or actions

capitalist economic system based on private ownership of capital, free markets and competition

20.6 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 4, 9	Questions 5, 7, 10, 11	Questions 6, 8, 12, 13

Check your understanding

1. Describe the original measures undertaken by the Bolsheviks to give control of production to workers and peasants.
2. Explain why they soon abandoned those measures.
3. Describe how the Bolsheviks treated other political parties.

4. What event prompted the Bolsheviks to relax economic controls?
5. How did Stalin rise to power?
6. Explain the main features of the collectivisation of agriculture.
7. Describe the methods used by Stalin to eliminate his rivals, both real and potential.
8. Create a timeline of developments in post-revolution Russia to show the drift to dictatorship and the consolidation of Stalin's rule.

Apply your understanding

9. Look closely at **SOURCE 1**. Identify the sections of Russian society represented by each of the figures Lenin is sweeping away.
10. Explain the policy of War Communism. To what extent does the **SOURCE 2** photograph provide evidence of the harsh consequences of that policy?
11. Describe the way that Stalin is portrayed in **SOURCE 3** and discuss how Soviet citizens who had pinned their hopes on the revolution might have felt about such propaganda.
12. **SOURCES 1** and **2** conjure up very different images of life under Lenin.
    a. Which source makes its point most effectively and why?
    b. What other types of sources would help a historian arrive at a more balanced assessment of life under Lenin?
13. Some historians have observed that, while the Bolsheviks had claimed to be establishing a society that would be based on equality and democracy, under Stalin's rule Soviet society became as unequal as it had been under the Tsars, and power had become even more concentrated. How much had really changed in the former Russian Empire? Explain your response.

For sample responses to every question, go to www.jacplus.com.au.

20.7 The rise of fascism

LEARNING INTENTION

By the end of this subtopic you will be able to:
- describe the characteristics of fascist movements
- explain why fascist movements arose in several countries in the 1920 and 1930s
- identify how fascism posed a threat to human rights and world peace.

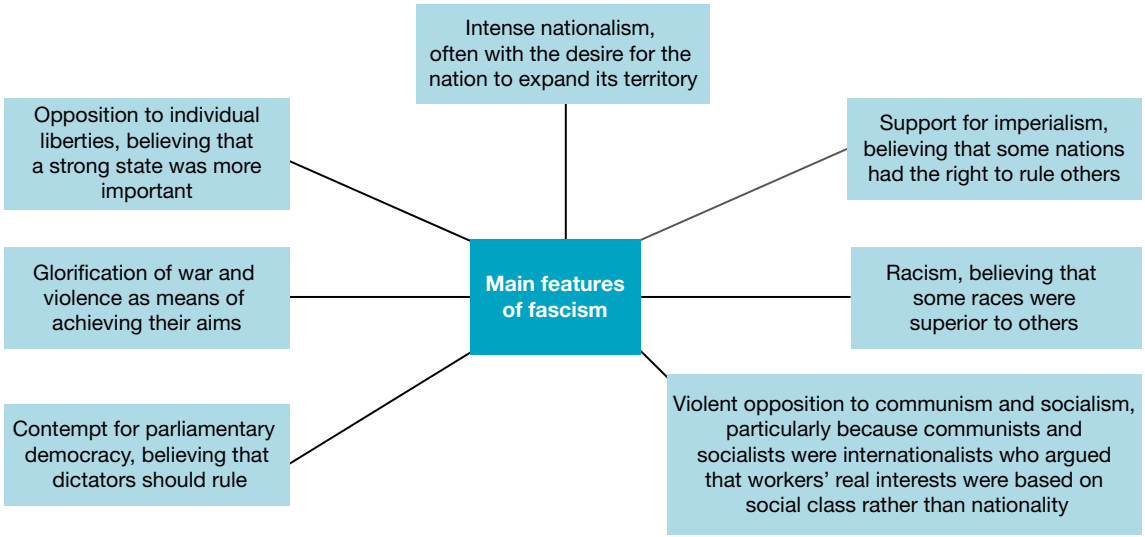
20.7.1 The nature of fascism

The Great Depression caused mass unemployment, poverty and misery around the world. But in the longer term it had even worse consequences. It led to the rise of fascism, which would present the greatest threat to human rights and world peace in the inter-war years. This extremist movement arose from the deep social divisions that followed World War I, but it gained most backing during the Depression years of the early 1930s. Support came not from those who suffered most in the Depression but from those who feared that communist or socialist workers might seize power.

Fascist movements developed in many countries in the 1920s and 1930s. While they aimed to appeal to all social classes, fascists found most support among middle-class people who feared the influence of socialism and communism. Although there were significant local differences, fascist movements shared many common characteristics (see **SOURCE 1**).

Significant fascist movements arose in the inter-war years in many European countries, including Italy, Austria, Hungary, Finland, France, Belgium, Spain, Romania and Britain. There were also fascist or extreme right movements in the United States and Australia.

SOURCE 1 Main features of fascism



SOURCE 2 In ancient Rome, the annually elected leader carried a bundle of sticks wrapped around an axe. It was called the *fasces* and it symbolised strength and power. Mussolini revived it in 1919 as the symbol of Italian fascism.



20.7.2 Fascism in Italy

Italy was the first country in which fascists gained power. During World War I there had been heavy fighting in Italy's own territory. The war's end brought rising prices, high unemployment and nationalist resentment that Italy had not gained more from the peace treaties. Italy experienced great social conflict after the war. Its strong communist movement was inspired to follow the example of the Bolsheviks in Russia and **foment** a revolution.

However, by 1919 fascism was also a powerful movement in Italy. Italian fascist thugs, called 'blackshirts', fought trade unionists, socialists and communists in street battles. Fascists bashed their political opponents and burned the offices of newspapers that dared to criticise them. They gained support from the middle classes and the rich by violently breaking up strikes. In 1922, their leader, Benito Mussolini (see **SOURCE 5**), organised a fascist march on the capital, Rome. The Italian king regarded Mussolini as an ally against the communists and socialists and invited him to become prime minister.

Once Mussolini was in power, he suspended elections and banned other political parties. Mussolini was now a dictator. As Il Duce (the leader) he turned Italy into the world's first fascist state. Workers' rights were destroyed while employers were protected. Mussolini dreamed of recreating the might of ancient Rome. Fascists controlled the mass media and the education system and they used them to **indoctrinate** a generation.

foment encourage or foster (rebellion)
indoctrinate to teach or instruct in a way that is almost brainwashing

SOURCE 3 Education was used as a powerful tool of indoctrination in fascist Italy. This extract from a compulsory textbook issued to eight-year-olds argues the need for blind obedience and loyalty to the leader.

The eyes of the Duce are on every one of you. No-one can say what is the meaning of that look on his face. It is an eagle opening its wings and rising into space. It is a flame that searches out your heart to light there a fire. Who can resist that burning eye, darting out its arrows? But do not be afraid; for you those arrows will change into rays of joy. A child, who, even while not refusing to obey, asks 'Why?', is like a bayonet made of milk … 'You must obey because you must,' said Mussolini, when explaining the reasons for obedience.

DID YOU KNOW?

Although all fascist movements were racist, Italian fascism was not anti-Semitic (anti-Jewish) until it came under the influence of German Nazism. When Mussolini first seized power, his Fascist Party had wealthy Jewish Italians among its supporters and members.

20.7.3 Fascism in Australia

Extreme right-wing movements in Australia included the King and Empire Alliance, which was launched in Melbourne in 1920 by conservative politicians, businessmen and ex-servicemen. Its intention appears to have been to seize power if a Labor government tried to introduce socialism. Similar groups in the 1920s included the Melbourne-based White Guard and the Sane Democracy League. During the Depression era, more organisations of this nature emerged in Australia and several of them formed secret armies to fight any threat of socialism.

The New Guard movement

The best known and largest of these Australian groups was the New Guard. It was formed in 1931 and at its peak had 36 000 members. It was strongly influenced by fascist movements in Europe, and it attracted many middle-class supporters. Its leader, Eric Campbell, was an admirer of Mussolini. The New Guard fought street battles with Labor and Communist supporters. At the opening of the Sydney Harbour Bridge in 1932, a mounted New Guard member, Frances De Groot, succeeded in cutting the ribbon ahead of Labor premier Jack Lang. Slashing the ribbon with his sword, he declared the bridge open 'in the name of the decent and respectable people of New South Wales'. De Groot had fought with the 15th Hussars on the Western Front in World War I, when he earned his sword. De Groot's upstaging of Lang at the ceremony was not only a security blunder, it also gave the New Guard strong publicity.

SOURCE 4 Frances De Groot, on horseback and in military uniform, uses his sword to cut the ribbon at the opening of the Sydney Harbour Bridge in 1932.



The New Guard even planned to overthrow the Lang government in New South Wales. An armed revolt was avoided when the New South Wales governor dismissed Lang from office in May 1932. However, support for such extremist movements declined quickly as Australia recovered from the Depression.

20.7.4 Fascism in Germany and Spain

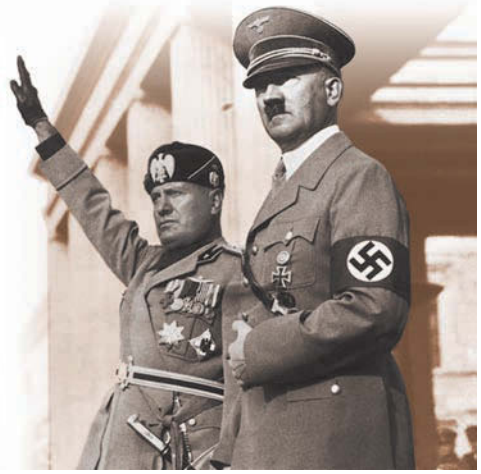
The most significant result of the rise of fascism was felt in Germany. At the end of World War I the country was bitterly divided. Following the abdication of the Kaiser, Germany became a democratic republic. However, the German Spartacists (communists) wanted to follow the Bolsheviks' example and establish a socialist republic based on workers' soviets. The moderate socialists wanted to reform Germany through parliamentary democracy.

The republic was first threatened when the left attempted a Bolshevik-style revolution in 1919. But a much greater danger came from the extreme right. Fascist groups, composed mostly of ex-soldiers, blamed

Germany's defeat and humiliation on socialists, communists and Jews. The government used groups of fascist ex-soldiers, called *Freikorps*, armed with artillery, machine guns, grenades and flame-throwers, to crush the Spartacist uprisings of 1919.

In March 1920, these fascist ex-soldiers tried to seize power in the Kapp **Putsch**, but they were thwarted by resistance from the German socialist trade unions. The next fascist attempt to seize power was made by Adolf Hitler, who had become the leader of the National Socialist German Workers' (Nazi) Party in 1921. Hitler first attempted to seize power in the Munich Putsch of 1923. The putsch was defeated. Hitler's rise was then delayed by growing German prosperity during the late 1920s. Hitler consolidated his position in the party, building up his private armies and refining terror tactics and propaganda. Eventually, the Nazi rise to power was made possible by the Great Depression. In just ten turbulent years following the Munich Putsch, Hitler's Nazis were to gain control of Germany and lead the country towards another world war.

SOURCE 5 Mussolini (left), giving the fascist salute, with Adolf Hitler on a visit to Germany in 1937. The swastika (on Hitler's sleeve) was adopted as the symbol of Nazism.



Fascism in Spain

Fascists also gained power in Spain. In 1936, General Francisco Franco and other Spanish military leaders started a rebellion against Spain's democratically elected republican government. In the three-year Spanish Civil War, Franco was supported by the Spanish fascists (Falange), the wealthy Spanish landowners, the leaders of the Catholic Church, Spanish monarchists and, most importantly, forces from Fascist Italy and Nazi Germany. The German Luftwaffe (air force) used Spain to test the tactics they would later use in World War II.

The Spanish Republic received some assistance from the Soviet Union and Mexico and from idealistic international volunteers (see **SOURCE 6**), including about 60 Australians. However, Franco triumphed. This was partly because of the assistance provided by Hitler and Mussolini and partly because the Western democracies turned a blind eye to fascist aggression while preventing much aid from reaching the Spanish Republic. With Franco's victory in 1939, Spain became another fascist dictatorship.

SOURCE 6 A group of British anti-fascist volunteers who fought in Spain in 1936



Source: Tom Mann Centuria Inglesa Antifascista. From the collection of the Noel Butlin Archive Centre.

Putsch an attempt to seize political power by force

20.7 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 4, 6, 7, 8, 13	Questions 5, 9, 10, 11, 14, 15, 19	Questions 12, 16, 17, 18, 20, 21

Check your understanding

1. Among which social class did fascism find the most support?
2. What fears drove many members of that class to support fascism?
3. What factors in Italy after World War I created conditions for change?
4. Who were the 'blackshirts' and how did they behave?
5. What means did fascists in Italy use to influence Italian society?
6. Describe the tactics used by Mussolini to gain power in Italy.
7. Name some right-wing movements active in Australia in the 1920s.
8. Which social classes in Australia were attracted to these right-wing movements?
9. Why did support decline after the Depression?
10. In what way did the New Guard gain attention?
11. Describe two unsuccessful attempts by German fascists to seize power in the 1920s.
12. With whose assistance did fascism triumph in Spain by 1939?

Apply your understanding

For help with analysing sources, go to the SkillBuilder in topic 9 History concepts and skills.

13. How would you classify **SOURCE 1**? Is it a historical source? Explain.
14. Referring to **SOURCE 1**, write a brief description of the main features of fascism.
15. Describe the Italian fascist symbol in **SOURCE 2** and identify reasons why Italian fascists would have chosen a symbol from ancient Rome.
16. Analyse **SOURCE 3** using the following questions:
    a. Who would have produced the textbook from which this extract is taken?
    b. For what readers was it intended?
    c. Why was such material produced?
    d. What beliefs and values was it attempting to instil?
    e. How effective might it have been as propaganda in a situation where fascists also controlled the mass media?
17. Study **SOURCE 4**.
    a. Why do you think De Groot took this action? Consider his own words to help you with your answer.
    b. What aspects of this image might be considered frightening or alarming to a member of the Australian public at that time if they saw it in a newspaper?
18. Describe the dress of both fascist leaders in **SOURCE 5** and explain what aspect of their ideology would have led them to wear military-style outfits.
19. **SOURCE 6** provides a clue as to why some British volunteers went to Spain to fight fascism in the 1930s. Support for what political ideal is represented in the source?
20. Why did fascism appeal to people during the 1920s and 1930s? If similar economic conditions existed today, do you believe that fascist movements could gain popularity? Explain.
21. Using the sources and other information in this subtopic, evaluate the historical significance of the rise of fascism. In your answer you should consider its influence at the time, how many people and countries were affected, and its consequences.

For sample responses to every question, go to www.jacplus.com.au.

20.8 Thinking Big research project: TV Quizmaster

20.8.1 Scenario

Because you are a historian specialising in the World War II period, the producers of a television quiz show have commissioned you to prepare multiple-choice questions for a contestant whose special subject is Japan from 1894 to 1941, particularly the rise of extreme nationalism and militarism in Japan from the late nineteenth century, the similarities between Japanese ultra-nationalism and European fascist movements, and Japanese aggression that contributed to Japan joining the fascist powers in World War II.

20.8.2 Task

You are to research and write 12 multiple-choice questions that will be used in the quiz show, ensuring that your questions cover the following aspects of Japanese history in the period from 1894 to 1941. Ensure that you write at least one multiple-choice question on each of the following:

- The Sino-Japanese war of 1894–95
- Japan's motives for siding with the Allies in World War I
- How the Great Depression contributed to the rise of extreme nationalism and militarism in Japan
- Japanese military aggression in Manchuria and northern China from 1932
- The similarities between Japanese ultra-nationalism and European fascism
- The Rome–Berlin–Tokyo Axis
- The Rape of Nanjing
- Why Japan confined its aggression to China until 1941
- Where Japanese aggression occurred in 1941
- Why Japan attacked Pearl Harbour in 1941

SOURCE 1 Japanese solders celebrate the capture of Nanjing, China



20.8.3 Process

- Open the ProjectsPLUS application in the Resources for this topic. Open the **Project set-up** tab to enter the project due date and set up your project group so you can work collaboratively. Working in groups of two will enable you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics (the dot points in the task section) loaded to guide your research. You can add further topics to the Research forum if you wish.
- Start by revisiting the content in subtopics 20.7 The rise of fascism (You could also look ahead to topic 21, subtopics 21.4 Japanese militarism and 21.6 Overview of World War II to 1944.)
- Supplement your knowledge by conducting further research using the library or the internet. The weblinks in the **Media centre** will provide a useful starting point. Remember to record details of your sources so you can create a bibliography to submit with your quiz questions.
- Add your research notes and source details to the relevant topic pages in the Research forum. You can view, share and comment on research findings with your partner. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- When you are satisfied with your research, write your 12 multiple-choice questions. You should provide four possible responses, and identify the correct answer, for each question. Ensure that your questions are difficult enough to challenge the quiz contestant!
- Submit your multiple-choice questions and your bibliography to your teacher for assessment and feedback.

SOURCE 2 Stricken US battleships during the attack on Pearl Harbour



on Resources

projectsPLUS Thinking Big research project: TV Quizmaster (pro-0204)

20.9 Review

20.9.1 Key knowledge summary

20.2 Examining the evidence

- We have vast amounts of sources for this period.
- Sources include official records, mass media reports and personal records such as diaries, letters and memoirs.

20.3 The peace treaties and the League of Nations

- At the peace conferences after World War I, harsh terms were imposed by the victors on the defeated powers; this caused great bitterness.
- The League of Nations offered the only hope of preventing further wars but it lacked any effective powers to stop aggression.

20.4 The 'Roaring Twenties'

- The 1920s was an age of mass production, mass consumption and changing values.
- It was also an age of intolerance, discrimination, poverty, deep social divisions and political unrest.

20.5 The Great Depression

- The 1930s depression was caused by overproduction, speculation and extreme inequality.
- It quickly spread around much of the world.
- Some countries, including Australia and Germany, were particularly badly affected.

20.6 Communism — dream or nightmare?

- The Bolshevik (communist) Revolution soon became a one-party dictatorship.
- The one-party dictatorship was turned into a one-man dictatorship under Joseph Stalin.
- Although it had turned into a nightmare in the USSR, the communist dream continued to find followers in the capitalist world.

20.7 The rise of fascism

- Fascism first came to power in Italy.
- This ideology was violently nationalist, racist, anti-communist, anti-socialist and anti-democratic.
- Fascist movements formed in many countries, including Australia, Germany and Spain.

20.9.2 Key terms

Allies Britain, France and the other states on the winning side in World War I
anarchists revolutionaries who want an equal society based on cooperation rather than government or coercive laws
armistice a ceasefire or truce that ends fighting in a conflict, so terms for permanent peace can be discussed
assembly line mass production method in which each worker completes the same operation over and over
capitalist economic system based on private ownership of capital, free markets and competition
dissidents people who publicly disagree with government policy or actions
dole payments to the unemployed, usually in the form of coupons to exchange for food
foment encourage or foster (rebellion)
hire purchase buying and using a product while paying for it in instalments
indoctrinate to teach or instruct in a way that is almost brainwashing
lynching the execution of a person without authority or process of law
mandates commission to act on behalf of the League of Nations to govern a people considered not ready to govern themselves
plebiscite direct vote in which electors give their opinion on an issue
prohibition 1920s nationwide ban in the United States on the making, transporting or selling of alcoholic drinks
Putsch an attempt to seize political power by force
radicals a person who advocates fundamental or revolutionary changes in current practices, conditions or institutions
reparations payments of money or materials by a nation defeated in war, as compensation for damage caused
socialist an economic system based on public ownership of industry to create greater equality
soviets councils, originally elected by workers or peasants

stock exchange a place where stocks (shares in companies) are bought and sold
stockbroker someone whose job is to buy and sell shares on behalf of others
USSR the Union of Soviet Socialist Republics, or Soviet Union, the name of the former Russian Empire from 1922
welfare government system to provide help to members of society who need support
White Russians those who wanted to crush the revolution and restore the old Russian order

20.9.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

After the horrors of World War I, how did the world change?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question outlining your views.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6329)
Reflection (ewbk-6328)
Crossword (ewbk-6327)
Student Learning Matrix (ewbk-6319)

Interactivity Origins of World War II crossword (int-7661)

20.9 Review exercise

Multiple choice

1. What are two reasons why the League of Nations was weak?
   - A. The League was dominated by the United States and ignored by the USSR.
   - B. The League had no military force of its own and it could not compel members to provide military forces.
   - C. Germany and Italy never joined the League.
   - D. The League rarely held meetings and it was not interested in peace.

2. What was a financial arrangement that encouraged mass consumption in the 1920s called?
   - A. Credit cards
   - B. Advance purchase
   - C. Hire purchase
   - D. Pay-as-you-go

3. What were two factors that contributed to causing the Great Depression?
   - A. Too many goods were produced and too few people could afford to buy them.
   - B. Ordinary people had too much money and spent even more.
   - C. Henry Ford made poor quality cars and gave them away for free.
   - D. Companies produced fewer goods and charged too little for them.

4. The Great Purge of the 1930s took place in which of these countries?
   - A. Italy
   - B. Germany
   - C. Japan
   - D. The USSR

5. Which of the following were two fascist or extreme right-wing movements in Australia in the inter-war years?
   - **A.** The New Guard and the Sane Democracy League
   - **B.** The Ozzie Nazi Party and the Mussolini Fan Club
   - **C.** The Campbell United Party and the Adolf Admiration League
   - **D.** The Anti-democratic League and the Ku Klux Klan

6. Which of the following groups thwarted the fascist attempt to seize power in the Kapp Putsch in Germany in 1920?
   - **A.** The Catholic Church
   - **B.** The socialist trade unions
   - **C.** The German Army
   - **D.** The Nazi Party

7. Which two countries' governments provided aid to the Spanish Republic in the Spanish Civil War?
   - **A.** The United States and Portugal
   - **B.** France and Italy
   - **C.** Germany and Brazil
   - **D.** Mexico and the USSR

Short answer

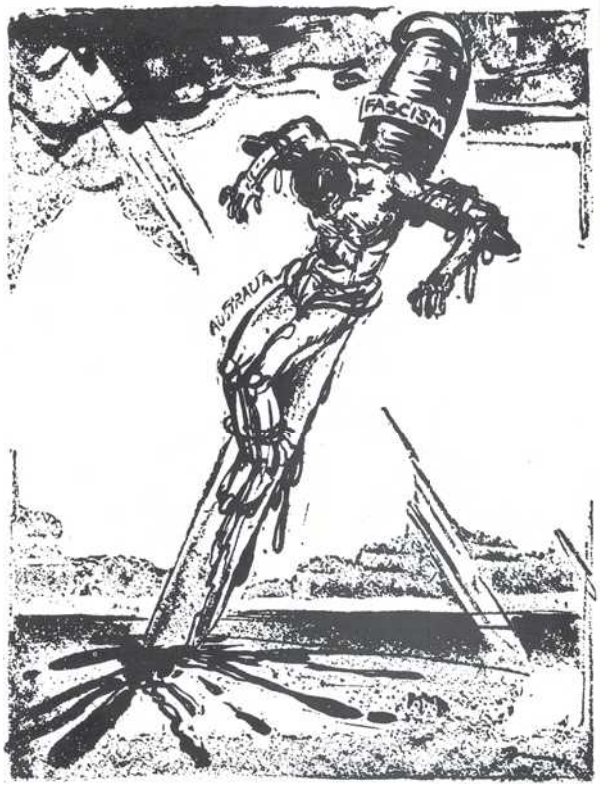
8. Analyse **SOURCE 1** using the questions that follow.
   - **a.** Is this a primary or secondary source?
   - **b.** Who or what organisation or movement created the poster?
   - **c.** When and where was it produced?
   - **d.** What is the significance of the time and place of its creation?
   - **e.** What was its purpose and who was it aimed at?
   - **f.** What is its message?
   - **g.** How effectively does it convey that message?

   Answers to historical questions are not, of course, so simple as that stated in **SOURCE 2**.

SOURCE 2 From Eric Hobsbawm, *Age of Extremes*

The origins of the Second World War have produced an incomparably smaller historical literature than the causes of the First, and for an obvious reason. With the rarest exceptions, no serious historian has ever doubted that Germany, Japan and (more hesitantly) Italy were the aggressors. The states drawn into the war against these three, whether capitalist or socialist, did not want a war, and most of them did what they could to avoid one. In the simplest terms the question who or what caused the Second World War can be answered in two words: Adolf Hitler.

SOURCE 1 A German socialist poster for the July 1932 elections



9. Your task is to produce an argument either in support of the view that Hitler was the cause of World War II or against such a view. In your argument, you should refer to sources encountered in this topic. Questions you might consider in forming your argument could include:
   - **a.** Is the cause of any big event ever simple?
   - **b.** Would the war have occurred without Hitler?
   - **c.** Would Hitler have gone to war if the democracies had stood up to him earlier?
   - **d.** Do the politicians who advocated appeasement bear some responsibility for the war?

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 19 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

20.1 Overview

Video eLesson
- The inter-war years (eles-2598)

Interactivity
- A timeline of the modern world, 1918–1939 (int-6871)

20.3 The peace treaties and the League of Nations

eWorkbook
- After the Great War (ewbk-6320)

Interactivity
- Map of how Europe was changed by the peace treaties (int-6688)

MyWorld History Atlas
- The inter-war period

20.4 The 'Roaring Twenties'

eWorkbook
- Prosperity and freedom?(ewbk-6321)

Weblink
- The Roaring Twenties experience

MyWorld History Atlas
- Post-world war peace

20.5 The Great Depression

eWorkbook
- A depressed decade (ewbk-6322)

Interactivity
- Australian unemployment rates from 1928 to 1939 (int-6689)

MyWorld History Atlas
- The Great Depression

20.6 Communism — dream or nightmare?

eWorkbook
- Communism — dream or nightmare? (ewbk-6323)

20.7 The rise of fascism

eWorkbook
- Fascism — another solution to post-war problems? (ewbk-6324)
- The rise of Nazism (ewbk-6325))
- Using graphic organisers (ewbk-6326)

MyWorld History Atlas
- The Great Depression

20.8 Thinking Big research project: TV Quizmaster

ProjectsPLUS
- TV Quizmaster (0204)

20.9 Review

eWorkbook
- Reflection (ewbk-6328)
- Crossword (ewbk-6327)
- Student Learning Matrix (ewbk-6319)

Interactivity
- Origins of World War II crossword (int-7661)

To access these online resources, log on to **www.jacplus.com.au**.

21 World War II

21.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content concepts covered in this topic.

What was Australia's role in the deadliest conflict in human history? Why did we join the fight?

21.1.1 Links with our times

During the twentieth century more than 230 million people died in wars; many others have been killed since the beginning of this century. After World War I, people were horrified to learn that almost nine million troops had died on both sides in that terrible conflict. Yet World War II cost many times more lives. Historians' estimates of the numbers of dead vary from over 50 million to over 70 million. Whatever the correct figure, World War II was by far the deadliest conflict in human history. In this war the number of civilian deaths was approximately double the number of military deaths, and more than a third of the civilian deaths were deliberate killings in Japanese, Nazi and other fascist war crimes.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6351)

Video eLesson World War II (eles-2600)

SOURCE 1 The slouch hat is a recognisable symbol of the Australian army who fought in both World War I and World War II and whose sacrifices and efforts we still commemorate on Anzac Day every year.



int-6693

SOURCE 2 A timeline of the course and consequences of World War II

BCE



1938
German troops occupy Austria. Czechoslovakia is weakened as the Sudetenland is ceded to Germany at the Munich Conference.



1939
Britain declares war on Germany. Australia forms the 2nd AIF.



1940
Germany overruns Western Europe. The Battle of Britain prevents a German invasion of Britain. British and Australian forces inflict defeats on Italian troops in North Africa.



1941
The AIF achieves victories over Italian forces in Libya and over the Vichy French in Syria. Germany invades Yugoslavia, Greece and the USSR. Australians hold out for months against German forces in the Tobruk siege. Japan enters the war on the side of the fascist powers with attacks on the US naval base at Pearl Harbour and on British Malaya. The USA enters the war.

1942
Japanese conquer most of South-East Asia. Singapore falls. Darwin is bombed. The Battles of the Coral Sea and Midway are setbacks for Japan. Japanese submarines raid Sydney Harbour. Australians turn back the Japanese advance in Papua. German forces are defeated in El Alamein.

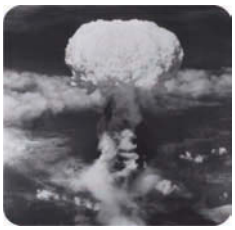


1943
Australians defeat Japanese forces in New Guinea. The Russian Red Army defeats Germans at Stalingrad and in the Battle of Kursk. Mussolini is overthrown in Italy.

1944
The 'D Day' landings take place in France. British and Indian forces drive the Japanese back in Burma. The US defeats Japanese forces on Pacific islands.

1945
Germany surrenders in May. Atomic bombs are dropped on Hiroshima and Nagasaki in August. Japan formally surrenders in September. The United Nations is formed.





CE

21.2 Examining the evidence

LEARNING INTENTION

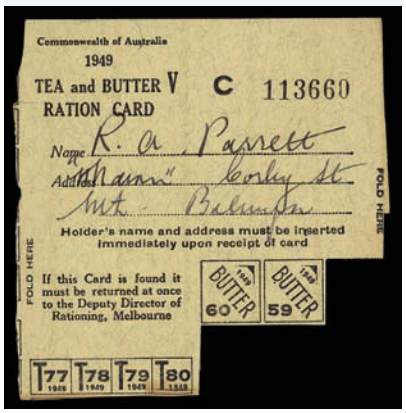
By the end of this subtopic you will be able to describe the wide range of sources that can provide evidence about the history of World War II and Australia's involvement in it.

21.2.1 How do we know about World War II?

In this topic we investigate World War II, especially Australia's involvement in the terrible conflict. Nearly 40 000 Australians died on active service, including almost 8000 Australian prisoners of war who died mostly from malnutrition, diseases and mistreatment. The human cost of World War II was even more horrific for many other nations.

Because of its global scale and its impact, the range of sources of evidence for World War II is truly enormous. These sources include artefacts as well as written and visual sources.

SOURCE 1 A 1949 ration card for tea and butter



Written sources and artefacts

Many thousands of books and articles have been written about World War II. Vast quantities of written primary sources and material remains are held in museums, archives and libraries. They include military records, campaign maps, soldiers' letters, diaries and memoirs, propaganda and weapons, as well as other kinds of evidence. Australia has extensive collections of such sources, including military equipment and dioramas depicting specific battles. Many can be viewed online through the Australian War Memorial website.

SOURCE 2 Tom Uren was a former minister in the Whitlam Labor Government (1972–75). In this extract from his memoirs he describes events before his unit became prisoners of war on 23 February 1942.

All the blokes in our unit were excited and couldn't wait to go … A brigadier gave a talk about what the Japanese were doing in the countries they had overrun, such as China; we were told they were raping women and bayoneting children … We disembarked at Koepang on the western side of Timor on 12 December 1941 … From 19 January 1942 we endured almost daily bombing raids by the Japanese … On 20 February 1942 we heard a rumour that the Japanese had landed on the other side of the island and most of our troops were sent around to engage them … Our first engagement was with Japanese paratroops who had landed on the outskirts of a village called Babaoe … We got on the last truck pulling out of the village just as the Japanese paratroops came up the main street firing at us. It was a pretty narrow escape … The Japanese were not taking prisoners.

About 500 paratroopers had landed and in the four days of intense fighting that ensued, we killed almost all of them. During those four days of the battle, brutal things were done on both sides. Some of our stretcher-bearers had their throats cut [by the Japanese] and were hung up by their feet … In the heat of war, man is capable of the most barbaric and inhumane actions.

Visual sources

World War II was the first major conflict in which movie cameras were used extensively to document events and make propaganda films. The best-known Nazi propaganda films were made by Leni Riefenstahl. In her first documentary *Der Sieg des Glaubens* (Victory of Faith), Riefenstahl recorded the 1933 Nuremberg Nazi Party rally to portray Adolf Hitler as a great German statesman rather than the cruel dictator he was. Film was also used by the Allies both for propaganda and to record events. American director John Ford filmed battles in which US Marines overcame fierce Japanese resistance in the Pacific in 1944 and 1945. Art and still photography were also widely used to record wartime events, as they had been during World War I. Art and photographs provide some of the starkest evidence of this conflict.

SOURCE 3 Nurses searching through rubble after German bombers struck a children's hospital in London in 1940



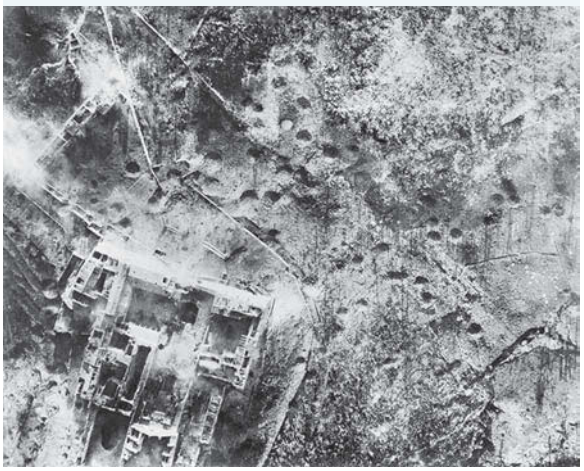
Source: AWM 003288.

SOURCE 4 During the German siege of Stalingrad in the USSR in 1942, Russian women risked their lives carrying supplies to the city's defenders.



Source: AWM P02018.133.

SOURCE 5 This aerial view shows the results of the Allied bombing of the ancient monastery of Montecassino in Italy on 29 February 1944. The Germans had used the monastery as a position for firing down upon advancing Allied soldiers.



Source: AWM MED1826.

SOURCE 6 The central figure in this painting is a blind prisoner struggling through a concentration camp just after it was liberated by the Allies.



Source: Moore, Alan
Blind man in Belsen (1947)
Oil on canvas, 51.2 × 61.4 cm
Australian War Memorial ART27620.

on Resources

Video eLesson The Blitz in Britain (eles-2601)

21.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways.

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 4, 7	Questions 5, 6, 8, 9	Questions 2, 10, 11

Check your understanding

1. Where would you find written primary sources from World War II?
2. Explain how the use of movie cameras expanded the kinds of evidence that we have for World War II.
3. Make a list of the visual primary sources that can provide evidence for World War II.
4. Who made the best known Nazi propaganda films?
5. In what theatre of World War II did John Ford direct films?

Apply your understanding

6. Why do you think the card shown in **SOURCE 1** would have been issued to Australians at home during World War II?
7. Read **SOURCE 2**.
   a. Why were the men in Tom Uren's unit eager to fight the Japanese?
   b. When and where did they fight?
   c. What was Tom Uren's view of the way this part of the war was fought?
8. What do **SOURCES 3** and **4** reveal about some reasons why civilians made up so many of the casualties of World War II?
9. Look closely at **SOURCE 5**.
   a. Why was it thought necessary for the Allies to destroy this historic monastery?
   b. What are the advantages of aerial photographs as sources?
10. Describe the details in **SOURCE 6** and explain how this artwork conveys the horror of the Nazis' persecution of their victims.
11. Using all of the sources in this subtopic as your evidence, write a short account of the ways in which large numbers of people suffered and died in World War II.

For sample responses to every question, go to www.jacplus.com.au.

21.3 The Nazis take power in Germany

LEARNING INTENTION

By the end of this subtopic you will be able to:

- explain how key factors contributed to the Nazis' rise to power
- describe how they consolidated that power in Germany
- identify these factors as including resentment against the Treaty of Versailles, the myth that Germany had been betrayed and the Great Depression.

21.3.1 The *Dolchstosslegende* and economic woes

The main cause of World War II was aggression by the Nazi regime that controlled Germany from 1933 to 1945. This fascist party, headed by Adolf Hitler, led Germany into war in 1939. But how did it gain power? Three factors in particular helped the rise of the Nazis: resentment of the Treaty of Versailles; the myth that Germany had been betrayed; and the Great Depression.

Many Germans bitterly resented the harsh terms of the Treaty of Versailles and its humiliating clause blaming Germany for the war. German **right-wingers** reacted with the *Dolchstosslegende*, the 'stab in the back' myth. It held that Germany had not been defeated but was betrayed by the 'November criminals', the democratic socialists who created the republic, signed the armistice and accepted the hated treaty. This myth undermined the **Weimar Republic** from the beginning.

The impact of the 1930s Depression

In the early 1920s, Germany suffered **hyperinflation**, which wiped out the value of its currency (see **SOURCE 1**). However, from 1924 to 1929 the government managed to improve Germany's finances and international relations. Under the 1924 Dawes Plan, reparations payments were spread over a longer period and Germany was given loans to help rebuild its economy. Under the Locarno Treaty of 1925, Germany accepted its western borders set by the Treaty of Versailles, and in 1926 Germany was admitted to the League of Nations. However, as the Great Depression spread through industrialised countries from 1929, Germany was most severely affected. As foreign loans dried up, investment fell and by 1932 six million Germans were unemployed.

SOURCE 1 During the hyperinflation of the early 1920s, German Deutschmarks lost so much of their value that, as shown here, they were used as waste paper, insulation and fuel for heating. Middle-class people saw their savings wiped out.



DID YOU KNOW?

In September 1918, General Ludendorff, who had almost dictatorial powers in Germany, persuaded the Kaiser to transfer power to a civilian government and demand that it seek an armistice. Germany's military leaders then shifted the blame for the nation's defeat and humiliation from the military and the old order to the new democratic government.

21.3.2 The fall of democratic government

When the Depression hit, Germany had a coalition government headed by the Social Democratic Party (SPD). The SPD wanted to raise taxes on the rich to maintain payments to the unemployed. The non-socialist parties opposed this, so the coalition split and the government collapsed. President Hindenburg used the crisis to appoint an authoritarian Centre Party government that lacked support in the **Reichstag**. When elections were held in September 1930, moderate parties lost ground. The Communist Party increased its percentage of votes from 10.6 to 13.1, but the Nazi Party climbed from just 2.6 to 18.3 per cent.

Hindenburg still refused to appoint a government that had majority support, so new elections were scheduled for 27 July 1932. Before the elections, the Nazis' **paramilitary** wing, the *Sturmabteiling* (known as the SA), launched a wave of street violence against the **left-wing** parties. In the elections the Nazis gained 37.3 per cent of the vote to become the largest party in the Reichstag. Following a Reichstag vote of no confidence in the government, further elections were held in November. Although the Nazi vote fell by 4 per cent, on 30 January 1933 Hindenburg invited Hitler to become Chancellor (prime minister) of a right-wing coalition government. In less than two months Germany would be transformed into a Nazi dictatorship.

right-wingers supporters of conservative beliefs, such as individual enterprise, and the belief that government should not intervene in the economy

Weimar Republic the democratic system of government in Germany from 1919 to early 1933, so called because its constitution was written in the city of Weimar

hyperinflation such an extreme rise in prices that a currency loses any real value

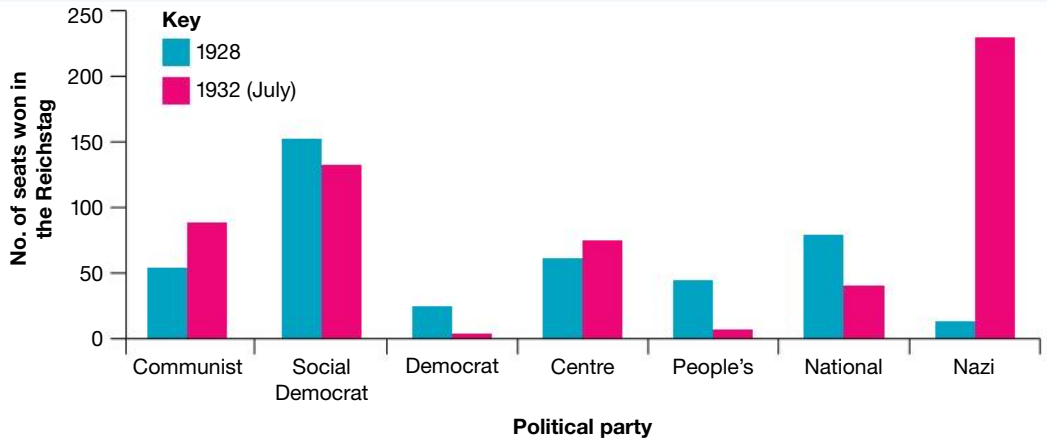
Reichstag the German Parliament

paramilitary armed forces outside the official military

left-wing support for progressive beliefs, such as the intervention of government in society to create greater equality

int-6690

SOURCE 2 Numbers of seats won by parties in the Reichstag in 1928 and 1932



Nazi ideology and tactics

How did the Nazis get so far? In 1921 Hitler had become their first president, and the SA was created to terrorise socialists and communists. By 1923 the party had support from several army officers.

The basic ideas of Nazi ideology were:

- only the strong survive
- communism is a Jewish ideology
- the Germanic master race must defeat its racial enemies, especially the Jews

int-6691

SOURCE 4 A modern artist's impression of a Nazi rally



- Germany must gain *Lebensraum* (living room) for its expanding population by taking land from non-**Aryan** races
- the *Führerprinzip* (leader principle) dictates that all opposition must be crushed and there must be total obedience to the leader.

After a failed attempt to seize power in 1923, Hitler focused on building support. The Hitler Youth was founded in 1926 to indoctrinate young Germans. The Nazis gained supporters through public spectacles such as the Nuremberg rallies, through the support of influential individuals, such as Alfred Hugenberg, who controlled 700 newspapers, and through propaganda blaming Germany's problems on communists and Jews. Joseph Goebbels was appointed to head the Nazi propaganda unit in 1929. He organised the party's election campaigns and won over many middle-class voters, who turned from other conservative parties to the Nazis out of fear of communism.

SOURCE 3 The text on this Nazi poster translates as 'In the deepest need Hindenburg chose Adolf Hitler for Reich Chancellor. You too should vote for List 1'.



21.3.3 Consolidating power

A month after Hitler became Chancellor, the Reichstag was severely damaged by fire and the Nazis stirred up fears of a communist uprising. Hitler persuaded Hindenburg to issue a Decree for the Protection of People and State. This allowed for imprisonment without trial and the abolition of freedom of the press, speech and assembly. During the weeks preceding the March 1933 elections, the Nazis used the decree to restrict campaigning by other parties. Despite their intimidation of voters, the Nazis won only 43.9 per cent of the vote, so they formed a coalition with the small Nationalist Party and barred the Communists from taking the seats they had won.

Aryan term used by the Nazis to describe 'pure-blooded' Germanic peoples



A Hitler appealed to almost all members of society. He promised to take care of the workers and farmers, and to return the middle class to the good fortune and peace they remembered from childhood.

B Hitler saw himself as a symbol of Germany. Before every speech, he studied pictures of himself to perfect his movements and signals. Before speaking, he paused for a long time, forcing the crowd to wait, hushed, for him to begin. Then he spoke passionately, often spitting with the effort.

C By the mid 1930s, six out of every ten young German people had joined the Hitler Youth. They could join when they were ten years old, with separate organisations for boys and girls. As Hitler Youth members, they were brainwashed with Nazi Party ideology, particularly anti-Semitism (anti-Jewish views). By 1936 there were about four million members.

D Hitler was the first world leader to make political use of filmmakers. Films demonstrated to his supporters that he was moving with the times, but they did something more important: if the Third Reich was to last for 1000 years, as he promised, these films would be kept for future generations.

The Enabling Act of 23 March 1933 gave Hitler dictatorial powers and gave his government the power to make laws and change the Constitution as it wished. In the Reichstag, only the SPD had the courage to vote against the Act.

Nazification of Germany

By 1934 the Nazis controlled German social, political, economic and cultural life.

- Nazi courts were established to try 'political criminals'.
- Anti-Nazis and Jews were forced out of jobs in the civil service.
- Trade unions were abolished and the German Labour Front was established to control workers.
- 'Un-German' books were publicly burned.
- Like the Communist Party, the SPD was banned. Other parties dissolved themselves.
- German communists, socialists and other anti-Nazis were sent to **concentration camps**.
- Education was made a tool of Nazi propaganda.
- The Nazis organised attacks against Jews and Jewish property and a boycott of Jewish businesses; they also banned Jews from the civil service and professions.
- Under the Nuremberg Laws of 1935, Jews lost their German citizenship and political rights. Marriage and sexual relations between Jews and Aryans were banned.

To prepare for war, Hitler needed the support of the army leaders so he eliminated Ernst Röhm and other SA leaders, who wanted the regular army to be amalgamated with the SA under SA leadership. On the 'Night of the Long Knives', 30 June 1934, Hitler used the other Nazi paramilitary force, the *Schutzstaffel* (or SS), to murder around 180 leading SA members and more than 200 other political opponents. To justify this, Hitler claimed that the SA was planning an uprising. The murders created a close relationship between the Nazi regime and the army, and led to the dominance of the SS in the Nazi state.

When Hindenburg died on 2 August 1934, Hitler assumed total power as *Führer* (absolute ruler) of Germany. He became commander-in-chief and all soldiers were required to take a personal oath of loyalty to him.

concentration camps prison camps where people were beaten, tortured, starved and used as slave labour

DISCUSS

Could the Nazis have gained power in Germany without Adolf Hitler? Is there a Hitler in every great leader who seeks power?

General capability: Critical and creative thinking

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- World War II > **Causes of World War II**

21.3 ACTIVITY

Use the internet and other resources to find out what happened on *Kristallnacht* (the 'Night of the Broken Glass'), 7 November 1938.

Questions to consider include:

- Where did it occur?
- When did it occur?
- Who were the main participants?
- What happened to them?
- How did other countries react?

HASS skills: Analysing
History concepts: Source, Evidence

21.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 4, 5, 6, 10	Questions 2, 9, 11, 12	Questions 7, 8, 13, 14, 15

Check your understanding

1. Explain the meaning of the German term *Dolchstosslegende*.
2. Why was the *Dolchstosslegende* myth so damaging to democratic government in Germany?
3. Describe how Germany's economy had improved before the Great Depression.
4. Identify the main ideas of Nazi ideology.
5. Describe the tactics the Nazis used to gain power.
6. Describe methods the Nazis used to eliminate their opponents between 1933 and 1934.
7. Explain why Hitler was willing to murder members of his own party.
8. What anti-Jewish measures did the Nazis adopt in 1934 and 1935?
9. Create a timeline of events from 1919 to 1934 that contributed to Germany becoming a Nazi dictatorship.

Apply your understanding

10. Explain how the situation shown in **SOURCE 1** could have driven many middle-class Germans into supporting extreme right-wing parties.
11. Use **SOURCE 2** to work out which parties gained votes and which lost votes between 1928 and 1932. Explain the reasons for these changes.
12. Analyse **SOURCE 3** as an example of Nazi propaganda.
    a. Consider its use of persuasive techniques.
    b. Evaluate why or why not the poster would appeal to middle-class voters.
13. Study **SOURCE 4** and explain how the Nazis used slogans, film and public rallies as part of their tactics to take over Germany.
14. Create a concept map to graphically show how a number of different causes contributed to the fall of German democracy and the rise of the Nazi dictatorship.
15. Consider the historical significance of Adolf Hitler for the Nazis' success in gaining power in Germany and transforming that country. Do you think the Nazi victory could have been achieved without Hitler? Did it depend on him as an individual? Outline your views.

For sample responses to every question, go to www.jacplus.com.au.

21.4 Japanese militarism

LEARNING INTENTION

By the end of this subtopic you will be able to describe how extreme nationalists and militarists in Japan shared many values of European fascists, and explain how nationalists and militarists gained control of Japan during the 1930s and committed aggression in China.

21.4.1 Japanese imperialism

Fascist regimes in Germany and Italy would soon threaten world peace. However, peace was already threatened by **militarism** and extreme nationalism in Japan. World War II began in 1939, but for the Chinese people the war began with a Japanese invasion in 1931 and expanded with a further invasion in 1937. This was the beginning of Japan's attempt to create an Asia–Pacific empire.

militarism excessive influence of military values and pro-war ideas

Since the late nineteenth century, Japan had wanted to follow the European powers' example by creating an empire. In the Sino-Japanese War (1894–95) Japan invaded Korea and took Formosa (modern Taiwan) and the Ryuku Islands from China. In the Russo-Japanese War (1904–05) Japan gained control of much of Manchuria. Then, in 1910, Japan annexed Korea. During World War I Japan sided with the Allies to gain Germany's territorial rights in China and German colonies in the north Pacific.

Aggression in Manchuria

The Great Depression contributed to the rise of Japanese militarism, as economic hardship led to growing support for the military and nationalists who wanted Japan to gain colonies for raw materials and export markets. Japan's military soon had more power than its civilian government. When the Japanese prime minister opposed an aggressive foreign policy in 1930 he was shot by an extreme nationalist.

In the following year an explosion on the Japanese-owned South Manchurian railway line was used as a pretext for an invasion of Manchuria. By early 1932 the Japanese military, acting against instructions from Japan's government, had occupied all of Manchuria, changed its name to Manchukuo and claimed it was not part of China. In the same year, the Japanese bombed Shanghai and occupied parts of northern China. China protested to the League of Nations but, when it censured Japan in 1933, the Japanese withdrew from the League. Because they were more concerned with threats to peace in Europe, the Western powers and the League took no effective action.

SOURCE 1 Location of Japanese aggression in north-east Asia, 1894–1938



Source: Map by Spatial Vision.

DID YOU KNOW?

On 12 December 1937 Japanese aircraft deliberately sank a US gunboat that was escorting oil tankers in China. Japan apologised for this 'accident' and paid compensation. The United States did not retaliate.

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- World War II > **Causes of World War II**

21.4.2 Fascist alliances and the second Sino-Japanese War

Japanese ultra-nationalist societies had much in common with European fascists. They encouraged fanatical devotion to military values and to the emperor, who was considered to be divine. These societies were violently nationalist, racist, anti-communist and anti-democratic. They assassinated their political opponents or frightened them into silence. In 1932 a new Japanese prime minister was assassinated for speaking out against the military. By 1937, Japanese schoolchildren were being indoctrinated in extreme nationalist values and forced to take part in military training.

The Axis and the invasion of China

Japan and Germany became allies through the Anti-Comintern Pact in November 1936. When Italy joined the pact in 1937, these three powers were united in the Rome-Berlin-Tokyo Axis.

In July 1937 Japan launched a full-scale attack against China, quickly taking the cities of Beijing, Guangzhou and Nanjing. The Chinese Communists and Nationalists had been fighting a civil war since 1927, but in 1937 they agreed to an armistice to enable them to form a united front. For the next eight years they fought back against the Japanese from their country's vast interior.

SOURCE 2 A Japanese soldier about to behead a Chinese prisoner during the massacre known as the 'Rape of Nanjing'. This photograph is one of several that were preserved by a Chinese employee of a photo studio.



SOURCE 3 This photo, taken in Nanjing in 1937, shows Japanese soldiers watching as Chinese civilian prisoners are placed in a pit to be buried alive.



The Rape of Nanjing

The most appalling Japanese atrocities took place in the Chinese city of Nanjing (formerly called Nanking). There, between December 1937 and January 1938, the Japanese slaughtered between 200 000 and 300 000 Chinese civilians and prisoners of war. There were mass rapes of Chinese women and other atrocities including burying or burning people alive and using prisoners for bayonet practice.

SOURCE 4 From American journalist Edgar Snow's eyewitness description of Japanese atrocities in Nanjing in 1937

> Mothers had to watch their babies beheaded then submit to raping … Thousands of men were lined up and machine gunned. Sometimes groups were used for bayonet exercises. When the [Japanese] victors grew bored … they tied their victims, poured kerosene on their heads and cremated them alive.

DISCUSS

Even wars are supposed to have rules. So why did soldiers like those described in section 21.4.2 and **SOURCE 4** commit atrocities? Are soldiers more ethical in today's wars? **General capability: Ethical understanding**

21.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 5, 6	Questions 2, 7, 8	Questions 4, 9, 10

Check your understanding

1. Explain how the Great Depression led to the rise of militarism in Japan.
2. Describe the relationship between the Japanese military and the Japanese civilian government in the early 1930s.
3. Create a timeline matching each of the following events with the year in which it occurred.
   Event:
   - Japan invades Manchuria.
   - Japan withdraws from the League of Nations.
   - Japan bombs Shanghai and occupies parts of northern China.
   - The Japanese prime minister is shot for opposing an aggressive foreign policy.

Year:			
1930	1931	1932	1933

4. Identify and describe the similarities between Japanese extreme militarism and European fascism.
5. World War II is usually described as taking place between 1939 and 1945, but when did it begin for China?

Apply your understanding

6. Use **SOURCE 1** to identify the sites of Japanese aggressive imperialism from 1894 to 1933. Why might Japan have chosen these areas as targets for imperialist expansion?
7. **SOURCE 4** is described as an 'eyewitness description'. Does this make it more reliable as a historical source? Explain.
8. How might the validity of **SOURCE 4** be questioned by a historian?
9. For many decades after World War II, Japanese nationalists continued to deny that the Rape of Nanjing took place. Explain how the evidence in **SOURCES 2**, **3** and **4** provides proof of Japanese atrocities.
10. The Western powers condemned Japanese aggression but took no effective action against it. Imagine you are a Western newspaper journalist in 1937. Write an article supported by the sources in this subtopic to convince your readers that action should be taken.

For sample responses to every question, go to www.jacplus.com.au.

21.5 The road to war in Europe

LEARNING INTENTION

By the end of this subtopic you will be able to:

- explain the steps that lead to the outbreak of World War II in Europe in September 1939
- identify a series of aggressive acts by fascist Italy and Nazi Germany
- describe the failure of Western democracies to act against such aggression.

21.5.1 Aggression and appeasement

Germany, Italy and Japan all threatened world peace, and in 1936–37 the danger increased when they became allies. The world's best hope for preserving peace was the League of Nations, but it proved to be ineffective. By 1939, the world was once more on the brink of war.

Hitler wanted alliances with Britain (as a fellow Aryan nation) and Italy (as a fellow fascist nation). The main foreign policy aims of Nazi Germany were to:

- overturn the Treaty of Versailles and reclaim territory lost under the treaty
- take territory from the Slavic 'racial inferiors' of the Soviet Union
- destroy world communism
- control sources of raw materials for Germany's economy and for rearmament
- unite all German people in the **Third Reich**.

Mussolini also wanted to gain territory. In the 1920s Italy had established control over Albania and waged military campaigns to assert control over two of its North African colonies — Somalia and Libya. Until 1936, however, Italy and Germany were potential enemies. Mussolini saw Germany as a danger to Austria's independence and therefore to the stability of Italy's northern frontier. In April 1935 Italy joined Britain and France in protesting against German rearmament in defiance of the Treaty of Versailles.

Italy invades Abyssinia

Mussolini ordered Italian military attacks on **Abyssinia** in October 1935. Italy used poison gas and extremely brutal tactics to overcome the poorly armed Abyssinians. Italian forces captured the capital, Addis Ababa, in May 1936, but the Abyssinians continued to wage a guerrilla war.

As a League member, Abyssinia demanded action against Italy. In November 1935 the League voted for economic sanctions (no arms sales to Italy and a ban on importing Italian goods) to force an Italian withdrawal. But in December, Britain and France made a secret agreement to hand part of Abyssinia to Italy. Public outrage forced them to abandon this agreement. However, the League's sanctions were ineffective because Germany, Japan and the United States did not support them and because oil was not embargoed. With Britain and France supporting League sanctions, Mussolini moved closer to Hitler.

Appeasement

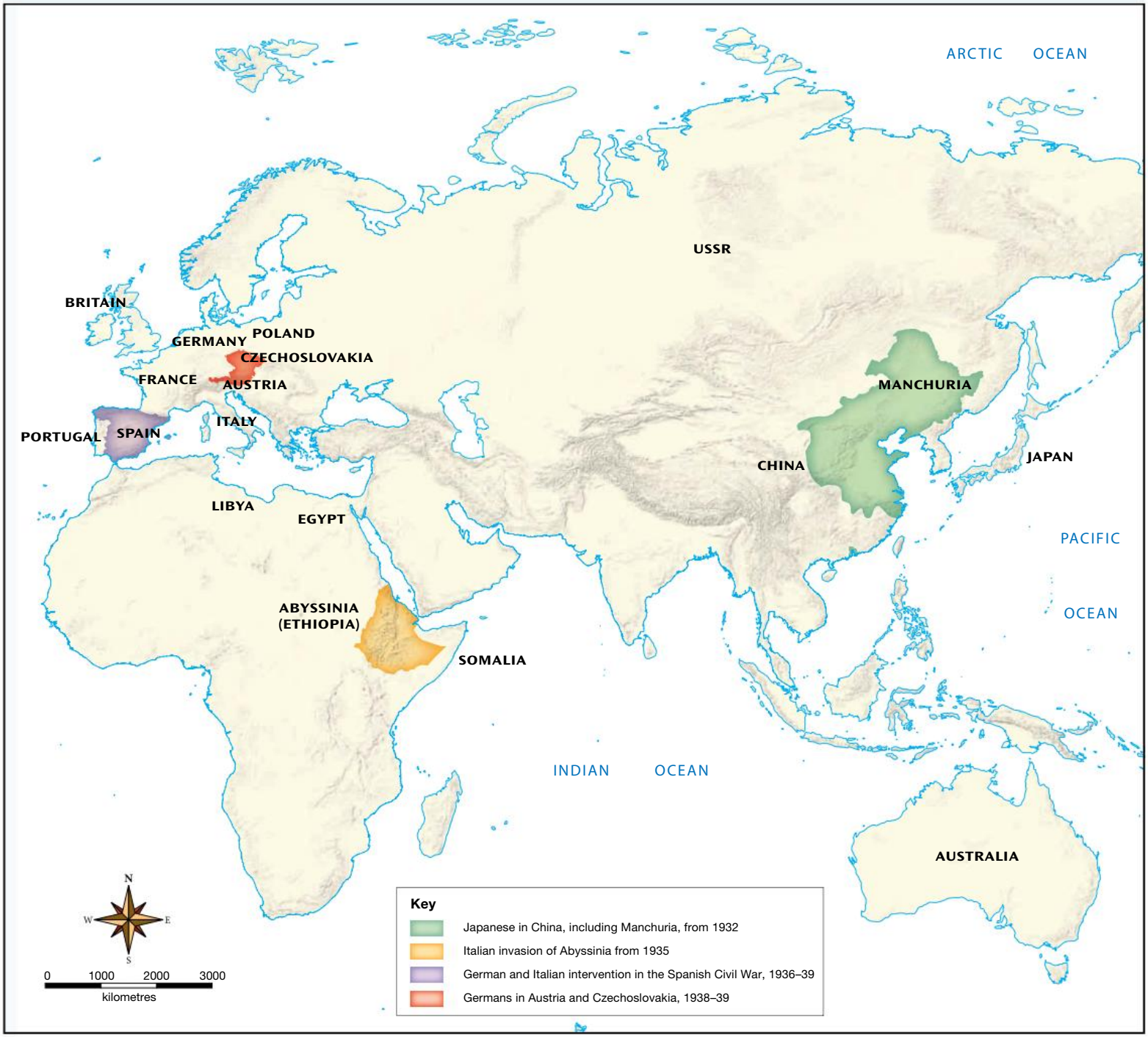
After the terrible human cost of World War I, there was very little support in the Western democracies for risking another war by standing up to fascist aggression. The United States could not be counted on for support because it had adopted an **isolationist** foreign policy to avoid being drawn into Europe's conflicts. Also, there was much sympathy for fascism among many British conservatives, who saw Hitler as a bulwark against communism. France feared to take a stand without British support so the Western democracies followed a policy of appeasement. This meant giving in to Japan, Germany and Italy, hoping they would be satisfied and war would be avoided.

Third Reich the Nazi name for their regime in Germany. Reich means empire.

Abyssinia the only independent African state in 1935; now called Ethiopia

isolationist foreign policy based on avoiding involvement in the affairs of other countries

SOURCE 1 Aggression by fascist powers in the 1930s



Source: Map by Spatial Vision.

Steps in appeasement

The Western democracies took no effective action against several German breaches of the terms of the Treaty of Versailles:

- In March 1935 Hitler announced that Germany had an air force and was reintroducing conscription. Britain and France protested but did nothing more.
- In June 1935 the Anglo-German Naval Agreement allowed Germany a navy 35 per cent the size of Britain's Royal Navy.
- In March 1936 Britain and France failed to act when Hitler marched 20 000 troops into the demilitarised Rhineland.

Uniting the fascists

The Spanish Civil War (see subtopic 20.7) brought Germany and Italy together as allies. Many British conservatives also sympathised with General Franco's fascists in Spain. Britain and France failed to aid the elected Spanish Republic and even denied it the right to buy arms to defend itself.

From 1934 the Soviet Union had adopted a policy of building **United Fronts** with the Western democracies against fascist aggression. After Germany and Italy sent military aid to Franco, the Soviets sent aid to the Spanish Republic. But by the end of 1938, when it was clear that Britain was willing to accept a pro-fascist victory in Spain, the Soviet Union abandoned Spain and the aim of building an alliance with the democracies. The defeat of the Spanish Republic meant the end of any hope of a united front against fascism, the strengthening of the fascist alliance and encouragement of further aggression.

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- World War II > **Causes of World War II**

21.5.2 The final steps to war

At the Hossbach Conference of November 1937, Hitler told his generals to prepare for a major war in the mid 1940s. Between 1938 and 1939 Germany and Italy committed more acts of aggression. The Treaty of Versailles banned any *Anschluss* (union) of Germany and Austria, but on 12 March 1938 the German army invaded Austria and received a warm welcome. Germany then annexed Austria. In April Britain recognised the enlarged Germany.

United Fronts policy of communist parties forming alliances with other parties to combat fascism

Hitler used false claims that Germans were being persecuted in Czechoslovakia to destroy that country in 1938–39. When Czechoslovakia was created in 1919, it included the mainly German population of the Sudetenland. From March 1938 Hitler encouraged Sudeten Germans to cause unrest. In October 1938 at the Munich Conference, after Hitler had prepared for war, British prime minister Neville Chamberlain agreed to Hitler's demand for immediate control of the Sudetenland. In March 1939, in breach of the Munich Agreement, Hitler invaded and broke up what remained of Czechoslovakia.

SOURCE 2 This composite photograph was made soon after the 1938 Munich Conference. It shows the four leaders who signed the Munich Agreement playing cards. They are from left to right: Hitler; Edouard Daladier, the French president; Neville Chamberlain, the British prime minister; and Mussolini.



Source: AWM P02436.001.

SOURCE 3 A Sudeten woman tearfully salutes Hitler as he rides through territory taken from Czechoslovakia under the Munich Agreement



Britain and France now saw that appeasement had failed and resolved to resist any further Nazi aggression. When Hitler demanded territory from Lithuania and Poland at the end of March 1939, Britain and France gave guarantees to Poland of aid against aggression. In April Italy annexed Albania and in May Germany and Italy signed the Pact of Steel, promising military support if either of them was at war.

SOURCE 4 From a speech by Australian prime minister Robert Menzies, in *The Sydney Morning Herald*, 26 August 1939

It may well be that Germany still has some grievances which would be all the better for … discussion. But if, instead of entering into discussion, instead of going into friendly conference, instead of recognising that there are, after all, two sides to most questions, the attitude of Germany is to be, 'We will take whatever our military strength will permit us to take, and we will not negotiate with our military inferiors', there is obviously an end to all law and order among the nations, and the absorption of Poland would lead to attacks upon other smaller European countries, upon one ground or another, until a vast dominion of force has been established … the British and French Governments have given their pledge to Poland and to several other European countries … those pledges will be honoured.

We in Australia are involved, because the destruction or defeat of Great Britain would be the destruction or defeat of the British Empire, and leave us with a precarious tenure on our own independence.

DID YOU KNOW?

From 1923 the **dominions** of the British Empire had the right to decide their own foreign policies. This was recognised in British law under the Statute of Westminster in 1931. But while Canada, Ireland and South Africa took up this independence, Australia continued to defer to Britain on matters of foreign policy. Australia supported appeasement because it feared that Britain would be unable to defend Australia if war broke out in both Europe and the Pacific.

dominions the British Empire's self-governing settler colonies

World War II begins

On 23 August 1939, after failing to make progress towards a military alliance with Britain and France, the Soviet Union did a complete about-face, signing a non-aggression pact with Hitler. The pact provided for a secret carve-up of Poland and the Baltic states. The Soviet dictator, Joseph Stalin, thought this pact removed the danger of being isolated in a war against Germany.

Germany could now invade western Poland without risking Soviet opposition. On 1 September 1939 the German invasion of Poland began. Britain responded by declaring war on Germany on 3 September. Hitler was surprised that this invasion provoked Britain and France into declaring war. He had wanted a war of conquest in eastern Europe. Instead he had provoked a war with the western European powers.

SOURCE 5 Soviet dictator Joseph Stalin in 1938



on Resources

Video eLesson Hitler at the Nuremburg rally (eles-2599)

21.5 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 7	Questions 4, 6, 8, 9, 10	Questions 5, 11, 12

Check your understanding

1. Describe the aims of German and Italian foreign policies.
2. Identify and list the reasons Italy changed from opposing German rearmament to becoming Germany's ally.
3. Explain the motives for appeasement in:
   a. Britain
   b. France.
4. Explain why the annexation of Austria was an act of aggression even though most Austrians welcomed it.
5. How did Britain and France betray Czechoslovakia at the Munich Conference?
6. Make a timeline of steps towards war in Europe from 1935 to 1939.

Apply your understanding

7. Use **SOURCE 1** to locate and list the sites of fascist aggression in the 1930s.
8. A composite photograph is an image made up of several photographs. What do you think the creator of the composite photograph in **SOURCE 2** was saying about the role of these four leaders in the 1938 agreement that destroyed Czechoslovakia? Consider the following questions in your response:
   a. Why are the leaders depicted as card players?
   b. Which leaders have laid their cards on the table?
   c. Which leaders are still holding their cards?
   d. What do each of the actions listed above symbolise?
9. Suggest two possible reasons for the tears of the woman in **SOURCE 3**.
10. Explain why Stalin (pictured in **SOURCE 5**) wanted a united front with the Western democracies. Why did he finally settle on a pact with Hitler?
11. Using **SOURCE 4** and other information in this subtopic, explain why appeasement failed to prevent war.
12. Make a list of sources and other information from this subtopic that would support an argument that appeasement should be regarded as a significant cause of World War II.

For sample responses to every question, go to www.jacplus.com.au.

21.6 Overview of World War II to 1944

LEARNING INTENTION

By the end of this subtopic you will be able to describe how the war developed between 1 September 1939, when Nazi Germany invaded Poland, and 'D-Day' 6 Jun 1944, when British, US and Canadian troops landed on the beaches of Normandy in France.

21.6.1 The war in Europe and North Africa

World War II began in Europe but soon spread to North Africa and then to Asia and the Pacific. Its battles were fought on land, in the air and at sea, and its combatants included **partisans** as well as regular forces. Unlike World War I, it really was a war of **ideologies**, a war the Allies fought to stop the expansion of fascist rule.

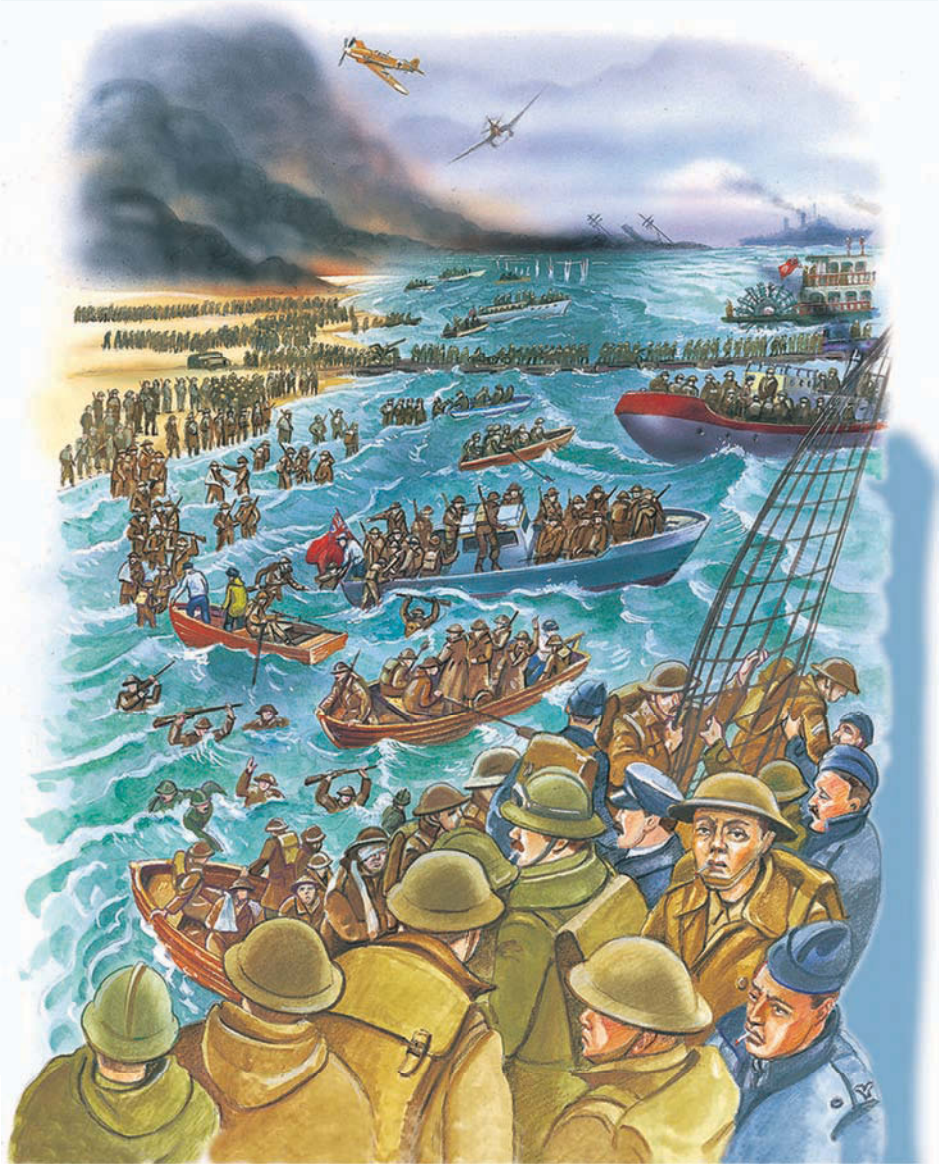
partisans irregular fighters using guerrilla tactics behind enemy lines

ideologies sets of ideas or beliefs that guide an individual, group, society or nation and provide the basis of political systems

When Germany invaded Poland on 1 September 1939 it used a new tactic — *blitzkrieg*. This method of high-speed attack used tanks supported by fighter planes and dive-bombers. Britain, Australia, New Zealand and France declared war on 3 September. However, British and French troops were too far away to provide any help to the Poles. Despite heroic resistance, western Poland fell to the Nazis and eastern Poland was occupied by the Soviet Union. In April 1940 Germany overran Norway and Denmark to secure iron-ore supplies. In May it again used *blitzkrieg* tactics to invade the Netherlands, Belgium and France. In late May Belgium surrendered. France was defeated by 17 June.

As the Germans advanced, 340 000 Allied soldiers were pushed back to the beaches of Dunkirk in northern France. Had it not been for the crews of more than 800 hastily assembled British boats that rescued troops, Britain would have suffered terrible losses. Instead, Britain was able to evacuate most of its troops, as well as many French, Dutch and Belgian soldiers.

SOURCE 1 A modern artist's impression of the Dunkirk evacuation



DID YOU KNOW?

'Blitzkrieg' means 'lightning war'. The term was invented by *Time* magazine reporters rather than German commanders.

The British Empire stands alone

While Germany occupied most of France, a right-wing, pro-German French government was set up under Marshal Pétain in the south. Vichy France, as this regime was known, was now Germany's ally. The British Empire stood alone, facing German-occupied Europe. With the United States and the USSR remaining neutral, Britain's only allies were the defeated European nations' governments-in-exile.

The Battle of Britain

When the new British prime minister, Winston Churchill, made it clear that his country would not negotiate for peace, Hitler planned Operation Sea Lion, the invasion of Britain, in which devastating air attacks were to be followed by landings of German troops.

For a seaborne invasion to succeed, Germany first had to win control of the air. On 10 July 1940 the **Luftwaffe** struck convoys of ships in the English Channel. It then targeted airfields, military installations, ports and cities, killing 15 000 British civilians. But the **Royal Air Force (RAF)** fighter aircraft fought the Luftwaffe tenaciously during the Battle of Britain. Over 500 airmen lost their lives, but they denied the Nazis control of the air and the invasion was prevented.

SOURCE 2 From speeches by Prime Minister Winston Churchill in 1940

We … shall defend our island whatever the cost may be, we shall fight on the beaches, we shall fight on the landing grounds, we shall fight in the hills; we shall never surrender …

I expect that the Battle of Britain is about to begin. Upon this battle depends the survival of Christian civilisation … Hitler knows that he will have to break us in this island or lose the war. If we stand up to him all Europe may be free …

New battlefields after 1940

By the end of 1940 the war had reached a stalemate. Germany had failed to crush Britain, but Britain lacked the capacity to invade Europe. Direct battles could and did take place in North Africa and the Balkans, however. Italy had entered the war as Germany's ally in June 1940, and within a month Italian forces had captured British Somaliland and parts of Egypt. In November 1940 the British struck back with a devastating air attack on the Italian fleet and a land attack that forced an Italian retreat. German forces came to Italy's aid and the British were pushed back into Egypt in February 1941. Germany then attacked Yugoslavia and Greece, conquering those countries in April and May 1941. With their nations overrun, Yugoslav and Greek partisans continued to fight behind German lines.

Germany invades Russia

In June 1941 Hitler betrayed Stalin by launching Operation Barbarossa to achieve his original aim, the conquest of the Soviet Union. The invasion force included three-quarters of Germany's armed forces, as well as Hungarian, Romanian, Finnish and Italian troops and 'volunteers' from 'neutral' Spain. Partly because Stalin failed to respond quickly, many Soviet planes were destroyed on the ground and the Axis forces were at first able to advance quickly. But *blitzkrieg* tactics were ineffective on Russia's vast plains. As rain turned the roads to mud the German advance slowed. By December it was halted by the harsh Russian winter and by fresh Soviet divisions from Siberia who drove the invaders back from Moscow. The attack on the USSR gave the British Empire a powerful ally.

Luftwaffe the German air force during World War II

Royal Air Force (RAF) Britain's Royal Air Force

SOURCE 3 From a letter from Hitler to Mussolini explaining the reasons for the German invasion of Russia

The martial spirit to make war, after all, lives only on hopes. These hopes [of the British] are based solely on two assumptions: Russia and America. We have no chance of eliminating America. But it does lie in our power to exclude Russia. The elimination of Russia means, at the same time, a tremendous relief for Japan in East Asia, and thereby the possibility of a much stronger threat to American activities through Japanese intervention.

int-6694

SOURCE 4 Europe at the beginning of 1942



Source: Map by Spatial Vision.

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- World War Two > **World War II in Europe**

21.6.2 The Pacific War

Japan was Germany's Axis partner, but with a million troops engaged in China it did not widen its role until December 1941. Japan sought an Asian and Pacific empire, or what it described as the 'Greater East Asian Co-prosperity Sphere'. Its first step was the occupation of French Indochina in July 1941 with the cooperation of Vichy French authorities.

On 7 December 1941 waves of Japanese planes from aircraft carriers struck the US naval base at Pearl Harbor in Hawaii, destroying half the US fleet. US president Franklin D. Roosevelt had strongly sympathised

with the Allies, but many Americans opposed America's involvement in the war. The attack ensured public support when Roosevelt declared war the very next day. Britain had gained another powerful ally.

On 8 December the Japanese invaded Malaya and attacked other British, Dutch and US colonies in Asia. By April 1942 the Japanese had taken Hong Kong, the Philippines, Malaya, Singapore, the Dutch East Indies and much of Burma. However, in May 1942 in the Battle of the Coral Sea, a US aircraft carrier force engaged Japanese warships and troopships heading for Port Moresby in Papua. Although both sides suffered heavy damage, the Japanese were prevented from taking Port Moresby by sea.

SOURCE 5 US battleships burn after the Japanese attack on Pearl Harbor



int-6695

SOURCE 6 The extent of the Asia–Pacific region controlled by Japan by July 1942



Source: Map by Spatial Vision. Reproduced with permission from Pearson Australia, (Re) *History Zone 2* by Robert Darlington, Vicki Greer, John Hospodaryk.

DID YOU KNOW?

The Battle of the Coral Sea in May 1942 marked the first time US and Australian forces halted the Japanese advance in the Pacific.

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- World War Two > **World War II in the Pacific**

21.6.3 Turning points and counter-offensives

Crucial land, air and sea battles in 1942 and 1943 represented turning points in the European and Pacific wars. Counter-offensives against the Axis powers and Japan began to inflict serious defeats on both these enemies.

- In the Battle of Midway in June 1942 Japan lost its aircraft carriers, inflicting damage to its naval strength.
- In October 1942 British Empire forces defeated German forces at El Alamein in Egypt. By November the Germans were retreating in North Africa, and in May 1943 they were forced to surrender.
- From November 1942 Soviet Red Army troops fought back ferociously at Stalingrad. On 2 February 1943 the German 6th Army surrendered. In July 1943, in the Battle of Kursk, the biggest tank battle of World War II, Germany's tank force was almost completely destroyed.

SOURCE 7 Soviet troops advancing on German positions during winter fighting on the Eastern front



The Allied counter-offensives

- By 1943 the Axis powers were clearly losing the war. Bombing raids by US and British Empire aircraft were destroying German cities and industry.
- After British and US troops invaded Italy in July 1943, Mussolini was killed by Italian anti-fascists and the Allies fought a bloody campaign against German forces in Italy's north.
- On 'D-Day', 6 June 1944, British, US and Canadian troops landed on the beaches of Normandy in France and began driving the Germans out of western Europe.
- By the end of 1943 the Germans were retreating before the Red Army all along the Eastern Front.
- In the Pacific War, Australian troops defeated the Japanese in Papua between July 1942 and January 1943, and then fought them in New Guinea. In November 1942 the United States inflicted another big naval defeat on the Japanese, and by March 1944 British and Indian troops were turning the Japanese back in Burma while US forces were destroying Japanese bases in the islands of the Pacific.

21.6 ACTIVITIES

1. Conduct research into the battles of Stalingrad and Kursk and prepare a report on whether or not they should be regarded as the major turning points in the war in 1943.
   Questions to consider include:
   - How relevant was it to people living at that time?
   - How many people were affected?
   - How long were people's lives affected?
   - How important and long-lasting were the consequences?

   History concept: Significance
   HASS skills: Questioning and researching
2. Make a timeline of all the dates and events referred to in this subtopic. Which of these events led to other events, in your opinion? Create a consequences diagram to show this. **History concept: Cause and effect**
   HASS skills: Questioning and researching

21.6 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 5, 9, 11	Questions 4, 6, 8, 10, 12, 13	Questions 7, 14, 15, 16

Check your understanding

1. Where were *blitzkrieg* tactics used by Germany in 1939 and 1940 and how effective were they?
2. Describe the situation facing the British Empire after 17 June 1940.
3. Explain why the war had reached a stalemate by the end of 1940.
4. Explain how the war expanded to North Africa, the Balkans and the Soviet Union (USSR) in 1940–41.
5. Explain Japan's motives for widening its role in the war from China to the wider Asia–Pacific region from December 1941.
6. Explain how Japanese aggression enabled US President Roosevelt to overcome US opposition to involvement in the war.
7. What events can be regarded as the main turning points in:
   a. the war in Europe and North Africa between October 1942 and June 1944
   b. the war in Asia and the Pacific between June 1942 and March 1944?

Apply your understanding

8. Referring to **SOURCE 1**, explain why the Dunkirk evacuation was vital for Britain's ability to keep fighting.
9. Read **SOURCE 2**.
   a. According to Churchill, what was at stake in the Battle of Britain?
   b. Explain how such speeches would have helped to strengthen the will of the British people to fight.
10. Read **SOURCE 3**.
    a. Identify two reasons Hitler gave for attacking Russia and state them in your own words.
    b. Explain why this might be regarded as a poor decision on Hitler's part.
11. Study **SOURCE 4**. Identify and list:
    a. Nazi Germany's allies in Europe by 1942
    b. countries occupied by Germany by 1942
    c. countries occupied by Italy by 1942
    d. countries that were neutral.
12. Describe what is shown in **SOURCE 5** and explain how such images would have convinced US citizens to support Roosevelt's declaration of war.
13. Using **SOURCE 6**, identify and list the countries attacked and occupied by Japan by 1942. Why might Australia have had cause to be concerned by Japan's occupation of these countries?
14. Soviet Red Army troops, like those shown in **SOURCE 7**, played a vital role in turning the tide of war in favour of the Allies. What advantages might they have had over their Axis enemies?
15. Why were there two main theatres of war from December 1941?
16. Outline the events of the Battles of Stalingrad and Kursk.

For sample responses to every question, go to www.jacplus.com.au.

21.7 Australians at war: enlistment and the Mediterranean battles

LEARNING INTENTION

By the end of this subtopic you will be able to:
- explain how Australia responded to the outbreak of war
- describe how unprepared Australia was for another world war
- identify where Australians fought against Axis forces up to 1942.

21.7.1 Enlisting for the war

On 3 September 1939 Prime Minister Robert Menzies announced in a radio broadcast that, because Britain had declared war on Germany, 'Australia is also at war'. While most Australians agreed it was their duty to support Britain, after the experiences of World War I, they no longer imagined that war was a glorious adventure.

Menzies' statement was a continuation of Australia's adherence to a common British Empire foreign policy and it was immediately supported by the Labor Party. Yet, Australia was ill-prepared for another world war. The Royal Australian Navy (RAN) had been equipped to assist the Royal Navy, so it was better prepared than the other services. But the Royal Australian Air Force (RAAF) had only 3500 personnel in 1939 and no modern warplanes, while the army had only a small core of professional soldiers and a militia of part-time reserves, who met once a week for training.

Much larger land forces had to be recruited but the Australian government was at first reluctant to send troops to Europe, as it feared that Japan might suddenly enter the war and threaten Australia. However, many Australians believed that their government had a duty to help Britain as quickly as possible. The result was that Australia formed two separate land forces. The militia, or Citizen Military Forces, was expanded by voluntary and compulsory service for the defence of Australia. A second Australian Imperial Force (2nd AIF) was raised by voluntary enlistment for service overseas.

Recruiting the Second AIF

Recruiting for the 2nd AIF began in October, but there was no great rush to enlist. This was partly because there was little action at this stage of the war, which came to be called the 'phoney war'. Hitler had completed the invasion of Poland, but the Allies took no effective steps against him. It was not until the lightning fast German advances between April and June 1940 that most Australians realised how serious the war situation was.

At least two other factors impeded recruiting. One was that Australia still discriminated against Aboriginal and Torres Strait Islander volunteers through the requirement that recruits must be 'substantially of European origin', although Aboriginal and Torres Strait Islanders were soon to be fighting in the overseas campaigns of 1940–41. Another reason was that the Great War had shattered the myth of war as a glorious adventure. People now understood that victory, if it could be won at all, would come at a high cost in lives.

There was, however, a rush to enlist in the RAAF, as many young men realised that this would be an aerial war. But the RAAF was initially prepared to accept only a tiny fraction of the almost 70 000 who had applied to join by March 1940.

DID YOU KNOW?

Approximately 39 800 Australian soldiers, sailors and airmen and 700 civilians were killed in World War II from a population of almost seven million, compared with around 60 000 out of fewer than five million in World War I.

21.7.2 The Second AIF goes to war

Four divisions were raised for the Second AIF. As there had been five divisions in the First AIF, these new divisions were called the 6th to the 9th divisions. The 6th, 7th and 9th Divisions were sent to the Middle

East. The 8th was sent to Malaya. Early in 1940 the 6th Division was trained in Palestine. In battles in Libya, between January and March 1941, the 6th Division achieved spectacular victories over the Italians. By March, ten Italian divisions had been destroyed, tens of thousands of Italian troops had surrendered and British Empire forces had gained their first victory of the war.

SOURCE 1 Extract from Michael McKernan, *All In! Australia During the Second World War*, Thomas Nelson, Melbourne, 1983. Michael McKernan was a senior lecturer in history and an assistant director of the Australian War Memorial.

Unfortunately for the patriots, recruiting proved to be a great disappointment. Instead of a flood there was a trickle in all centres …

Uncertainty over the use of the special force and rates of pay influenced some 'eligibles' not to enlist …

Many of the early recruits testified that their army pay was the first wage they had ever received, moving from school to the dole to the army.

Recruiting in 1939 was, therefore, utterly different from the wild, excited scenes enacted outside army depots in 1914 …

The failure of recruiting … alarmed the government …

Greece and Crete, March–May 1941

The next campaign, in Greece, saw a tragic defeat. The Australian 6th Division fought alongside Greek, British and New Zealand troops to halt the German invasion. But the Germans used tanks supported by dive-bombers, and the under-equipped Allied defenders were forced to retreat to Crete, where they fought a **rearguard action**. While the main army was evacuated, the Australian 2/7th Battalion held the Germans back. More than 3000 Australians were taken prisoner.

rearguard action direct engagement with the enemy by troops protecting a retreating force

int-6696

SOURCE 2 Theatres of war involving Australian forces in North Africa, the Middle East and Greece, 1941–42



Source: Map by Spatial Vision. Reproduced with permission from Pearson Australia, (Re) *History Zone 2* by Robert Darlington, Vicki Greer, John Hospodaryk.

SOURCE 3 From the diary of Major Henry G. Quinn of the Australian 2/7th Battalion, written during the fighting in Crete

30 May 41
FOOD SHORTAGE ACUTE and plane not yet arrived, as arranged …

High ridge on right fwd flank occupied by enemy — from here he directed fire onto our posns [positions]. Our fire unable to reach them …

Heat terrific and nerves straining under the terrific hammering. All troops anxious to be allowed to attack …

31 May 41
ORDERS TO HOLD ON for another 24 hrs … position hopeless, and the fact that no further ammn [ammunition] is arriving, makes it necessary to safeguard every round.

NO AIR SUPPORT is rendering our position untenable … orders to withdraw received … a nightmare trip down the cliffs to the beach.

BN [BATTALION] PERSONNEL EMBARK BUT MAJORITY LEFT 12 Bn personnel got aboard a barge, but nothing seen of the rest … there were no more barges left.

4 Jun 41

	OFFICERS	ORs [other ranks]
Unit strength, as at 10 Apr 41, when Bn sailed for GREECE	33	726
Lost in Greece	2	150
Bn strength on landing on CRETE	31	576
Lost on CRETE	24	511
Total of the remaining members of the Bn.....	7	65

Tobruk and El Alamein

In June 1941 two brigades of the Australian 7th Division took part in a campaign to defeat Vichy French forces in Syria. The Australians captured several forts and defeated the experienced French Foreign Legion.

Meanwhile, the defeat of the Italians in Libya had forced Hitler to send in German forces in February 1941. The Allies were pushed back to Tobruk, on Libya's coast, where an epic siege began. The Allied troops were ordered to hold Tobruk to delay the German advance on the Suez Canal and the Persian Gulf oilfields. The garrison of 24 000 included 14 000 Australians, mostly of the 9th Division. The siege of Tobruk lasted from April to December 1941. The defenders suffered from disease, flies, fleas, intense heat and insufficient water. They sustained 3000 casualties during daily German air raids and ground attacks led by tanks. The defenders were caught in a trap so the Germans called them the 'Rats of Tobruk'. The Australians adopted that name with pride.

DID YOU KNOW?

The English-language German radio program called 'Germany calling' that described the Allied troops as 'poor desert rats in a trap' was not a propaganda success in this case. Thumbing their nose at the suggestion, the Australian soldiers even cast an unofficial medal for themselves depicting a rat. The metal used to make the medals came from a German bomber the Australians had shot down with captured German guns.

When Japan entered the war in December 1941, all AIF divisions except for the 9th were shipped home to face the new danger. The 9th Division **spearheaded** the British infantry in the first major Allied victory over the Germans. This was the 12-day-long Battle of El Alamein in October 1942.

spearhead to lead an attack

SOURCE 4 Australian defenders using a captured Italian anti-aircraft gun to ward off German planes during the siege of Tobruk***Source:*** AWM 040609



Source: AWM 040609.

21.7 ACTIVITIES

1. Write a script of a dialogue between two potential recruits, one whose father suffered terrible injuries in the Great War and the other who has been unemployed since leaving school. Their dialogue should be discussing whether or not to enlist.
   History concepts: Source, Evidence
   HASS skills: Communicating and reflecting
2. Evaluate the significance of the feats of the 'Rats of Tobruk' in giving Australia a World War II legend to rival the original Anzac legend. You will need to conduct further research for this task.
   Questions to start with include:
   - When and where did it happen?
   - Who was involved?
   - How important was it to people living at that time?
   - How many people were affected?
   - How did it change the course of the war?
   - How important and long-lasting were the consequences?

   History concept: Significance
   HASS skills: Evaluating

21.7 EXERCISES

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 4, 6	Questions 5, 7, 8, 9	Questions 2, 10

Check your understanding

1. Describe the state of Australia's readiness for war in September 1939.
2. Explain how attitudes to enlistment were affected by:
   a. the experience of World War I
   b. discrimination against Indigenous volunteers
   c. the 'phoney war'.
3. Explain why the new AIF divisions were called the 6th, 7th, 8th and 9th.
4. Why did the Australian government send only three of the four AIF divisions to the Middle East?
5. Describe the strength of the Royal Australian Air Force (RAAF) in 1939.

Apply your understanding

6. Read **SOURCE 1**.
   a. Explain why this source can be regarded as reliable and thoroughly researched.
   b. Why was recruiting a 'great disappointment'?
   c. Describe how economic considerations influenced some to enlist and others not to enlist.
7. Using **SOURCE 2** and other information in this subtopic, briefly outline the campaigns in which Australians fought around the Mediterranean in 1941–42.
8. Read **SOURCE 3**.
   a. Explain why this diary should be considered a reliable source.
   b. Using the diary extract as your evidence, describe the problems endured by 2/7th Battalion and explain why its losses were so great.
9. Suggest why the Australians in **SOURCE 4** were using Italian weapons and how they had acquired them.
10. Imagine you are a war correspondent reporting on the AIF in the Middle East. Use the sources in this subtopic to write a short paragraph about Australians in that theatre of war.

For sample responses to every question, go to www.jacplus.com.au.

21.8 Australia under threat

LEARNING INTENTION

By the end of this subtopic you will be able to describe how Australia responded to Japan's entry into World War II, and explain the significance of the fall of Singapore for Australia's defence during the remainder of the war.

21.8.1 A major turning point in the war for Australia

Australia's deepest fear became reality when Japan entered the war in December 1941. Australia's most experienced troops, three of the four AIF divisions, were far away, fighting alongside British forces. Australians had hoped that, if Japan entered the war, the British would defend Australia. But Britain was fighting for its own survival and lacked the resources to protect Australia and the Asia–Pacific region.

SOURCE 1 Curtin's call for American help against Japan

The Australian government … regards the Pacific struggle as one in which the United States and Australia must have the fullest say in the direction of the Democracies' fighting plan … Australia looks to America, free of any pangs as to our traditional kinship with the United Kingdom.

We know the problems that the United Kingdom faces. We know the constant threat of invasion … But we know too that Australia can go, and Britain can still hold on.

We are therefore determined that Australia shall not go, and we shall exert all our energies towards shaping a plan, with the United States as its keystone, which will give to our country some confidence of being able to hold out until the tide of battle swings against the enemy.

On 27 December 1941 Japanese troops were advancing quickly down the Malay peninsula towards Singapore. On that day John Curtin, Australia's recently elected Labor prime minister, declared that Australia would look beyond Britain to shape its own foreign policy.

'Fortress Singapore' falls

To Australia's near north, Malaya and Singapore were defended by more than 130 000 British Empire troops, consisting of Indian and British forces and the Australian 8th Division. It was said that Singapore, with its British naval base, could not be taken, but by the end of January 1942 Malaya had fallen and Singapore was directly threatened. Japanese bombers had sunk two British battleships sent to Singapore within a few days of the attack on Pearl Harbor.

Singapore's defence was poorly organised and, on 15 February 1942, the British commander surrendered his army to a Japanese force that was less than half its size and would soon have run out of ammunition. Singapore's defenders, including 15 000 Australians, became prisoners of war (POWs).

SOURCE 2 Japanese troops advancing during the invasion of Malaya on 14 January 1942



Source: AWM 127894.

SOURCE 3 British and Australian POWs in Korea on 24 October 1942. These soldiers were transported to Korea after being captured at the fall of Singapore.



Source: AWM 041103.

Australia exposed

When Singapore fell, Australians felt even more exposed. Their fears were justified when, on 19 February, Darwin was hit in two Japanese air raids by about 90 bombers with fighter escorts. At least 243 people were killed and there was widespread panic. Many more air raids followed throughout 1942 and 1943. The Japanese had overrun Rabaul, in New Britain, on 23 January, and captured the small Australian forces on Java, Ambon and Timor in February. However, 'Sparrow Force', an independent Australian company, waged guerrilla warfare on Timor with the help of Timorese people until 1943.

DID YOU KNOW?

On 1 June 1942 the war came even closer when two Japanese midget submarines were sunk in Sydney Harbour. Although it is now clear that Japan did not have the resources to invade Australia in 1942, the threat was frighteningly real at the time.

Despite Australia's concerns, both Winston Churchill and the US government wanted the Australian 7th Division, returning from the Middle East, to be sent to Burma. Curtin, however, angrily insisted that these men return to Australia. They were later to fight in the New Guinea campaigns.

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- World War Two > **World War II in the Pacific**
- World War Two > **World War II at home**

21.8.2 The cruel fate of the people of Singapore

Australian historians have tended to focus their research on the consequences of the fall of Singapore for Australia and particularly for the POWs. However, vast numbers of Singaporeans were also to die as a result of the Japanese occupation that followed the British surrender. As it had done in China from 1937, the Japanese Imperial Army unleashed a reign of terror against the ethnic Chinese in Singapore. The main aim appears to have been to destroy ethnic Chinese resistance before it could begin. Under a system called *Sook Ching*, the *Kempeitai*, the Japanese military police, rounded up ethnic Chinese civilians, took them to isolated spots and slaughtered them. Estimates of the numbers killed this way range between 25 000 and 50 000. In 1962, the unidentified remains of many of the victims were unearthed and in the following year they were buried beneath the site where a memorial was to be erected (see **SOURCES 4** and **5**).

SOURCE 4 The Memorial to the Civilian Victims of the Japanese Occupation, in Singapore



SOURCE 5 The inscription on the Memorial to the Civilian Victims of the Japanese Occupation



During the remaining years of the occupation, the *Kempeitai* maintained control through a network of informers who reported on any signs of resistance among the ethnic Chinese population. Singaporean schoolchildren were forced to learn Japanese and to sing the Japanese national anthem, and the people lived in constant fear of further Japanese atrocities.

21.8 ACTIVITY

Conduct a roleplay of an argument between Labor (led by Curtin), and anti-Labor politicians about whether, in light of the threat from Japan, the focus of their foreign policy should be shifted towards the United States rather than the United Kingdom. Try to convey their different perspectives and, especially, reasons for their opposing positions.

Consider the following questions:

- What mattered to them?
- What did they believe in?
- What did they fear and what did they hope for?
- Did they have feelings similar to or different from ours?

HASS skills: Evaluating
History concept: Significance

21.8 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions	Questions	Questions
1, 2, 3, 4, 8, 10	5, 7, 9, 11	6, 12, 13

Check your understanding

1. What events in December 1941 aroused great fears in Australia?
2. Identify reasons Australia lacked troops for its defence in December 1941 and reasons for Britain's inability to assist Australia.
3. Explain why the Australian government clashed with Britain over the redeployment of the Australian 7th Division.
4. Who were the *Kempeitai*?
5. Describe the methods used by the Japanese to control the ethnic Chinese population of Singapore.
6. Explain the Japanese motives for such acts.
7. Why might estimates of the number of Chinese killed vary so widely?
8. What groups comprised the British Empire troops defending Malaya and Singapore?

Apply your understanding

9. Read **SOURCE 1**.
   a. What did John Curtin say about the danger to Australia and the need to seek support other than what could be provided by Britain?
   b. Explain what Curtin meant when he said, 'But we know too that Australia can go, and Britain can still hold on. We are therefore determined that Australia shall not go'.
10. **SOURCES 2** and **3** depict Japanese troops advancing through Malaya, and British and Australian prisoners of war. What effects do you think such scenes would have had on the morale of both sides and on their attitudes to each other?
11. Look closely at **SOURCES 4** and **5** and suggest what the memorial reveals about Japanese treatment of Chinese civilians in Singapore and about Singaporean feelings about those experiences.

For help with determining Significance see topic 19 History concepts and skills.

12. Referring to all sources in subtopic 21.8, identify why the fall of Singapore, the bombings on the Australian mainland and the Japanese capture of islands to Australia's north should be regarded as a turning point in the war.
13. During the two decades following the Paris Peace Conferences of 1919, Australia had shown almost no independence from Britain. Curtin's speech of 27 December 1941 is regarded by many historians as a turning point in Australian foreign policy. Curtin was criticised by former Prime Minister Robert Menzies, who was intensely pro-British, and by other conservative politicians, who called the speech 'deplorable'. How significant was Curtin's 'Australia looks to America' speech given Australia's history up to that point?

For sample responses to every question, go to www.jacplus.com.au.

21.9 Australians in the Pacific War: Kokoda

LEARNING INTENTION

By the end of this subtopic you will be able to describe and identify how Australian troops had their first victory against the Japanese Imperial Army when they turned the tide of battle against the Japanese on the Kokoda Track in Papua.

21.9.1 The Kokoda Track

In early 1942 Japan's advances in the Pacific seemed unstoppable. Australia lacked the ships and planes to prevent a Japanese landing on the north or west of the Australian mainland. If that happened, a '**scorched earth**' policy was to be adopted. In fact, by March the Japanese had insufficient ships and troops to invade Australia. However, their fortress at Rabaul was crucial for their Pacific operations and they wanted to occupy Papua and New Guinea to strengthen their hold on it. A Japanese invasion force was sent to take Port Moresby, in Papua. But between July and November 1942 Australian troops repelled them on the Kokoda Track.

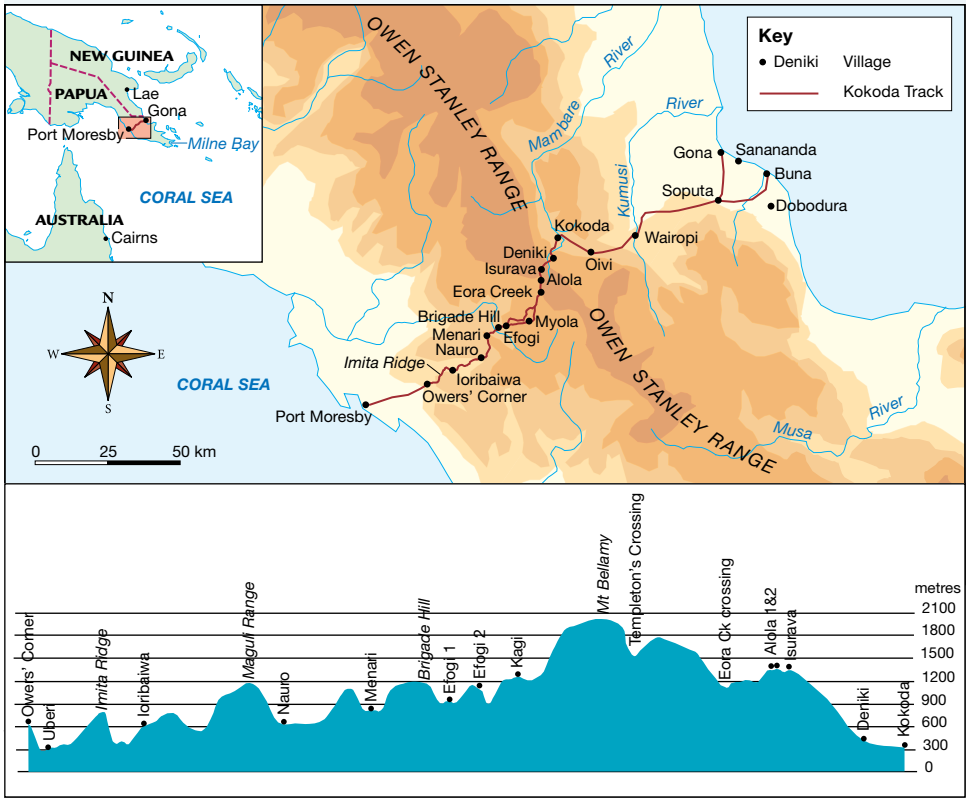
With the AIF 6th and 7th Divisions not yet available, the 8th Division in captivity and the 9th Division in the Middle East, the only Australian troops standing in the way of a Japanese invasion of Papua were three **militia** battalions stationed in Port Moresby. The Kokoda Track was a steep and muddy trail that wound from Port Moresby through the dense jungle, across the rivers and over the mountains of the rugged Owen Stanley Range (see **SOURCE 1**). In June 1942 militiamen of the 39th Battalion were ordered to advance with troops of the Papuan Infantry Brigade (PBI) along this track to stop any Japanese advance towards Port Moresby from Papua's north coast.

'scorched earth' military strategy of destroying or removing everything that could be used by an advancing enemy

militia a body of men called up for military service only in emergencies

int-6697

SOURCE 1 Map and cross-section of the Kokoda Track



Source: MAPgraphics Pty Ltd, Brisbane.

Japan's attempt to take Port Moresby by sea had already been prevented by the Battle of the Coral Sea in May. So the Japanese planned to capture it by two land attacks. The first was to be across the Kokoda Track, the second was to follow a landing at Milne Bay. For their Kokoda advance, almost 6000 Japanese troops were landed near Gona on Papua's north coast on 19 July.

DID YOU KNOW?

The Kokoda campaign is sometimes called the 'Battle for Australia'. Had the Japanese captured Port Moresby, they would have been able to dominate the Coral Sea and bomb Queensland, almost at will.

21.9.2 The Kokoda battles

The men of the 39th Battalion were mostly 18- and 19-year-old Victorian conscripts. They were barely trained, under-equipped, poorly supplied and at times outnumbered. They reached Kokoda village on 15 July and on 23 July they first clashed with the Japanese at Awala. The Australians and Papuans were forced back to Kokoda village and then further back to Deniki. After more than two weeks of attacks and counterattacks, the defenders were carrying out a fighting retreat. On 14 August they fell back to Isurava.

It was not until late August that reinforcements from the 53rd Battalion of militia and the 7th Division AIF began to reach them. But even with these reinforcements, the Australians were forced back to Imita Ridge, just 50 kilometres from Port Moresby, on 17 September. They were ordered to hold that position at any cost. On 24 September lack of supplies forced the Japanese to withdraw in a fighting retreat. The tide of the battle had turned. On 2 November the Australians regained Kokoda. During the campaign, 607 Australian troops lost their lives and 1015 were wounded. There is no accurate record of the numbers of Papuans who gave their lives in this crucial campaign.

SOURCE 2 An account of Japanese tactics in the Kokoda campaign

[Japanese] tactics appeared to follow a definite pattern. A mobile spearhead advanced rapidly … While the spearhead deployed and engaged the opposition, support troops would site a machine-gun … Feint or deliberate attacks disclosed the width and strength of the defensive positions by drawing the enemy's fire … The stronger support elements, coming forward, cut their way round their opponents' flanks, either to force a withdrawal or to annihilate the defenders in a surprise attack from the rear.

SOURCE 3 From the war diary of the 39th Battalion for 29 July 1942

ENEMY were reported to be advancing on our posns [positions] from the NORTH. Lt. Col. OWEN … was hit just above the right eye by a sniper … By this time (0320 hrs) the ENEMY were firing from our rear and closing in on the flanks … Our line then broke completely and orders were given for a hasty withdrawal … Our tps [troops] retired to DENEKI where they again took up defensive posns. They were very tired and morale was low.

SOURCE 4 Members of 39th Battalion after fighting at Isurava, September 1942



Source: AWM 013288.

DISCUSS

Hold a class discussion on whether the Kokoda campaign should be regarded as of such significance that it should rank alongside Gallipoli in Australian military history. In your discussion, you could consider such factors as the youth and inexperience of the 39th Battalion and the importance of the Kokoda battles in the overall outcomes of the Pacific War. **General capability: Critical and creative thinking**

on Resources

Weblink The Kokoda Track

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- World War Two > **World War II in the Pacific**

21.9 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 5, 7	Questions 3, 6, 8, 9	Questions 4, 10, 11, 12

Check your understanding

1. Explain why and how the Japanese aimed to capture Port Moresby.
2. Identify reasons the Australian government would have considered it vital to hold Port Moresby.
3. Why were the Australian 39th Battalion and Papuan Infantry Brigade disadvantaged in the Kokoda battles?
4. Describe the assistance they received from late August 1942.
5. How many Australian troops were killed or wounded during the Kokoda campaign?

Apply your understanding

6. Using the scale and other information from **SOURCE 1**, explain what difficulties soldiers would have experienced fighting along the Kokoda Track.
7. Draw a diagram to illustrate the Japanese tactics described in **SOURCE 2**.
8. Explain how **SOURCE 3** provides supporting evidence for the description in **SOURCE 2**.
9. Describe the conditions shown in the photograph in **SOURCE 4** and explain how such conditions would have added to the hardships of the Kokoda campaign.
10. Make a timeline of the events of the Kokoda battles from July to November 1942. What do you consider to be short-term effects and long-term effects of the outcome of the battles?
11. Before Kokoda, the militia was popularly regarded as inferior to the AIF. Explain how its achievements on the Kokoda Track would have changed that view.
12. How different might the outcomes for Australia in the Pacific War have been if the Japanese had captured Port Moresby?

For sample responses to every question, go to www.jacplus.com.au.

21.10 Australians in the Pacific War: beyond Kokoda

LEARNING INTENTION

By the end of this subtopic you will be able to:

- describe how Australian troops were deployed
- identify what they achieved following the Kokoda campaign
- explain the roles played by the Royal Australian Air Force (RAAF) and the Royal Australian Navy (RAN) during the war.

21.10.1 Papua and New Guinea and the 'unnecessary campaigns'

During the remainder of the war Australian soldiers fought the Japanese in several parts of the south-west Pacific. The Royal Australian Navy (RAN) and RAAF played a wider role, being involved in both theatres of the war.

While the Kokoda campaign was being fought, 9000 Australian and US troops stopped the Japanese force that landed at Milne Bay on the night of 25/26 August 1942. RAAF Kittyhawk fighter planes destroyed many Japanese landing barges, and by 6 September the outnumbered survivors were defeated. During December and January, Australian and US troops defeated the Japanese in their well-prepared positions at Gona, Buna and Sanananda. The fighting and tropical diseases took a heavy toll on both armies. The Papuan campaign ended on 22 January 1943 with the surrender of those Japanese who had not fought to the death.

Australia's next and biggest campaigns were in the soaking jungles of New Guinea. In March 1943, in the Battle of the Bismarck Sea, the Japanese lost eight troop transports and four destroyers, so only 850 Japanese reinforcements were able to land at Lae. From then on they received few supplies. By September 1943 the Australians had captured Lae and Salamaua, and by April 1944 they had defeated most of the Japanese in New Guinea.

bunker a fortified underground shelter, usually with openings from which to fire at enemies

foxhole a concealed dugout or pit used by one person to shelter from and shoot at the enemy

SOURCE 1 This painting shows Australian infantry, supported by tanks, breaking through Japanese **bunkers** and **foxholes** at Buna.



Source: Mainwaring, Geoffrey, *Australian Action at Buna* (1932)
Oil on canvas, 274 × 137 cm,
Australian War Memorial ART27547.

DID YOU KNOW?

The casualty rate in the RAAF was higher than in the Army or Navy. Of more than 10 500 Australian airmen who lost their lives, three-quarters were killed in Europe fighting against Germany and Italy.

'Unnecessary campaigns'

After 1944 Australia expected that its troops would join with US forces in recapturing the Philippines. Instead they were used in wasteful campaigns against isolated Japanese garrisons in New Guinea, New Britain, Bougainville and Borneo. The 6th Division fought to clear the remaining Japanese from New Guinea. On New Britain, where the Japanese had 90 000 troops around their base at Rabaul, militia divisions recaptured three-quarters of the island. On Bougainville the militia fought a Japanese garrison of 40 000 troops. Three campaigns in Borneo were fought by the AIF 7th and 9th Divisions. These six campaigns cost more than 1000 Australian lives but had no influence on the outcome of the war.

21.10.2 The RAAF and RAN

The RAAF

During the war the RAAF grew from 3500 personnel to a peak of 184 000, including 18 000 women. In the war's early stages, the RAAF trained Australians to serve in Britain's RAF. About 100 Australian airmen fought with the RAF in the Battle of Britain. Australian airmen fought in the Middle East, India, Burma and Italy and in the strategic bombing offensive over German-occupied Europe. Throughout 1943 and 1944, RAAF squadrons raided Japanese positions and helped to destroy Japanese air and sea power at Rabaul. They also helped to protect the US Army during its drive into the Philippines.

The RAN

When Japan entered the war the Royal Australian Navy was fighting in the Mediterranean. Its ships were ordered back home to face the threat, and several were sunk fighting the Japanese. By 1942 the RAN had 68 ships and nearly 20 000 men. It supported US landings in the Solomon Islands and helped the Royal Navy against the Germans and Italians, and against the Japanese in Burma and Japan's home islands in the final months of the war.

SOURCE 3 HMAS *Sydney* is shown steaming past the crippled Italian cruiser *Bartolomeo Colleoni*, which sank in the Mediterranean on 19 July 1940. The *Sydney* sank with no survivors during an encounter with the German raider *Kormoran* off Western Australia on 19 November 1941.



Source: Norton, Frank *HMAS Sydney in action against Italian cruisers* (1941) Oil on artist's board, 30.5 × 37.4 cm Australian War Memorial ART30095.

DID YOU KNOW?

Despite official discrimination against them at the point of enlistment, Aboriginal and Torres Strait Islanders served in both theatres of the war and some rose through the military ranks. The best known is Sergeant Reg Saunders, who was commissioned lieutenant after serving in North Africa and Greece. There were several Indigenous airmen in the RAAF, including Flight Sergeant Arnold Lockyer, who was shot down over the Celebes (in what is now Indonesia) and killed by his Japanese captors just days after the Japanese surrender.

21.10 ACTIVITY

Use the internet to locate at least two other photographs depicting Australian experiences during campaigns in 1944–45. Frame a series of questions to investigate what these photographs reveal about the nature of these campaigns.

HASS skills: Analysing
History concepts: Source, Evidence

21.10 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 5, 8	Questions 3, 7, 9	Questions 6, 10, 11

Check your understanding

1. List the places where Australians fought the Japanese between late August 1942 and April 1944.
2. Describe the outcomes of those battles and the reasons for those outcomes.
3. Why have the campaigns against isolated Japanese garrisons in the closing stage of the war been called the 'unnecessary campaigns'?
4. Describe some of the work of the RAN in World War II.
5. Recount some achievements of the RAAF in World War II.
6. Study **SOURCE 3**. What does it reveal about the specific types of dangers faced by sailors?

Apply your understanding

7. Examine **SOURCE 1**.
   a. Describe the details you can see in this painting.
   b. Explain what the painting reveals about tactics on both sides.
   c. Why would it be almost impossible for a war photographer to have taken a photograph of this event?
   d. List the types of primary sources that the artist would have had to use to ensure the painting's accuracy.
   e. Identify types of sources that could be used to corroborate the accuracy of the painting.
8. Do you think **SOURCE 2** would have been effective in recruiting for the RAAF? In your answer, consider whether this poster conveys a sense of glamour and excitement.
9. Identify the ways in which Australia's armed services changed due to the demands of the war.
10. Evaluate the contribution of Australia's three armed services to the war effort in both theatres of the war.
11. Propaganda was used during World War 1 and World War II to shape public opinion and unify the country behind the war effort. Appealing to fear and racial stereotyping were common tools of propaganda. Consider the sources in this subtopic and then write your own analysis describing war art and what you consider the purpose of using posters was in wartime Australia.

For sample responses to every question, go to www.jacplus.com.au.

21.11 Australian prisoners of war

LEARNING INTENTION

By the end of this subtopic you will be able to:

- describe how Australian troops were treated as prisoners of the Germans and of the Japanese
- explain why they were treated diffidently by Japan and Germany and how many Australians died
- describe how others survived terrible ordeals over almost four years in Japanese POW camps.

21.11.1 Contrasting motives for treatment of POWs

Among the most appalling atrocities of the war was the brutal treatment inflicted upon many prisoners. Over 30 000 Australians became POWs. Of the 8591 Australians captured by the Germans, 97 per cent survived the war, despite inadequate food and illness. A total of 21 467 Australians, over two-thirds of all Australian POWs, were taken prisoner by the Japanese, mostly in Singapore and the Dutch East Indies at the beginning of 1942. Almost 8000 of those prisoners died in captivity due to disease, malnutrition and mistreatment. Historians view the fact that the remaining Australian POWs survived as an achievement that owed much to their tradition of mateship and sharing what little they had.

Why were Australian POWs generally treated so much worse by Japanese captors compared with German captors? Much can be explained by differing ideas about race, about conquered peoples and about soldiers who surrendered. Small numbers of Australian POWs were placed in Nazi slave labour camps and those prisoners suffered terrible conditions. However, because of Nazi racial ideas, the vast majority of Australian POWs, like British, American and Western European POWs, rarely suffered the kinds of brutalities, including genocide, that the Germans inflicted on Jews and Slavs (see subtopic 21.16).

The main victims of Japanese racism were the Chinese, who were slaughtered in their millions. But the Imperial Japanese Army had little respect for the rights of conquered peoples generally. Some South-East Asian nationalists at first looked upon the Japanese as liberators from colonial rule, but they soon found that the Japanese treated them with brutality as conquered subjects. Soldiers of the Japanese army were told to fight to the death and had contempt for soldiers who surrendered. Most POWs suffered years of starvation, disease, brutal treatment and forced labour.

21.11.2 Experiences of Australian prisoners of the Japanese

Nearly all Australian prisoners of the Japanese spent the remainder of the war as slave labourers in camps in Singapore, Malaya, Borneo, Timor, Burma, the Dutch East Indies, Thailand, the Philippines, China, Korea and Japan. All suffered but not all in the same ways.

SOURCE 1 From John Robertson, *Australia Goes to War 1939–1945*, Doubleday Australia, Lane Cove, 1984, p. 206

Hundreds of Australians, including some women, were massacred by the Japanese upon capture. Thousands more endured forced labour, brutality and near starvation. They had grossly inadequate medical facilities to treat their diseases. They were virtually denied mailing rights and the Japanese also refused to distribute supplies from Allied Red Cross societies …

Germany and Italy informed the Allies of the names of their prisoners of war, who were allowed some meagre correspondence with their relatives. Photographs were published in Australia of groups of Australians in German prison camps …

Prisoners of the Japanese just disappeared … For long periods, families in Australia had no knowledge of [their] fate or whereabouts.

During the war, the Japanese executed some 600 Australian POWs. About another 1500 died when the US Navy sank ships transporting them to Japan. Many thousands of POWs were used along with many more conscripted Asians to build the Burma–Thailand railway. Here, men who looked like living skeletons were forced to work in the jungles for 12 hours a day and sometimes longer. Many suffered severely from tropical diseases, such as dysentery, malaria and cholera, as well as tropical ulcers and malnutrition. Often, terribly sick men went out to do hard labour in the place of others who were even sicker. For POWS who tried to escape, there was the Japanese prison at Outram Road in Singapore that was run by the dreaded *Kempeitai*. POWs held there were not even allowed to move about or talk in their tiny cells and were sometimes brutally beaten.

The Sandakan death marches

The worst single atrocity against Australian POWs took place in North Borneo. In 1942 and 1943, the Japanese shipped almost 3000 POWs, of whom almost two-thirds were Australians, to North Borneo to construct an airfield at Sandakan. There they were beaten, starved and overworked. Ten men died under torture when they were caught stealing food. On 2 March 1944, Captain Lionel Matthews and eight other men, including six Chinese, were executed following the discovery of two secret radios.

SOURCE 2 An RAAF recruiting poster, from 1940



Source: RAAF (publisher)
Coming? Then hurry! (1940)
Photolithograph, 100.5 × 73.2 cm
Australian War Memorial ARTV04297.

During the Allied offensive in January 1945, a group of 470 of the Sandakan POWs were marched 260 kilometres west to Ranau but only 350 survived the ordeal. At the end of May, a second death march was ordered for the remainder of the surviving POWs at Sandakan. These POWs had almost no food and those who collapsed with exhaustion were shot. On 26 June, the survivors arrived at their destination. From the 500 who began the second march, only 142 Australian and 61 British POWs reached Ranau. There they met five Australians and one British POW, the only men remaining alive from the 350 survivors of the first death march. At the end of July, only 30 POWs survived at Ranau. Those who remained were shot on 1 August.

Only six of the original Sandakan POWs survived. Two had escaped into the jungle during the second march and been cared for by villagers. Five others had escaped from Ranau and had hidden in the jungle, but one died before they were rescued by Australian guerrilla units. The survivors included Warrant Officer William Sticpewich, who was warned by a sympathetic Japanese guard to get away or be shot.

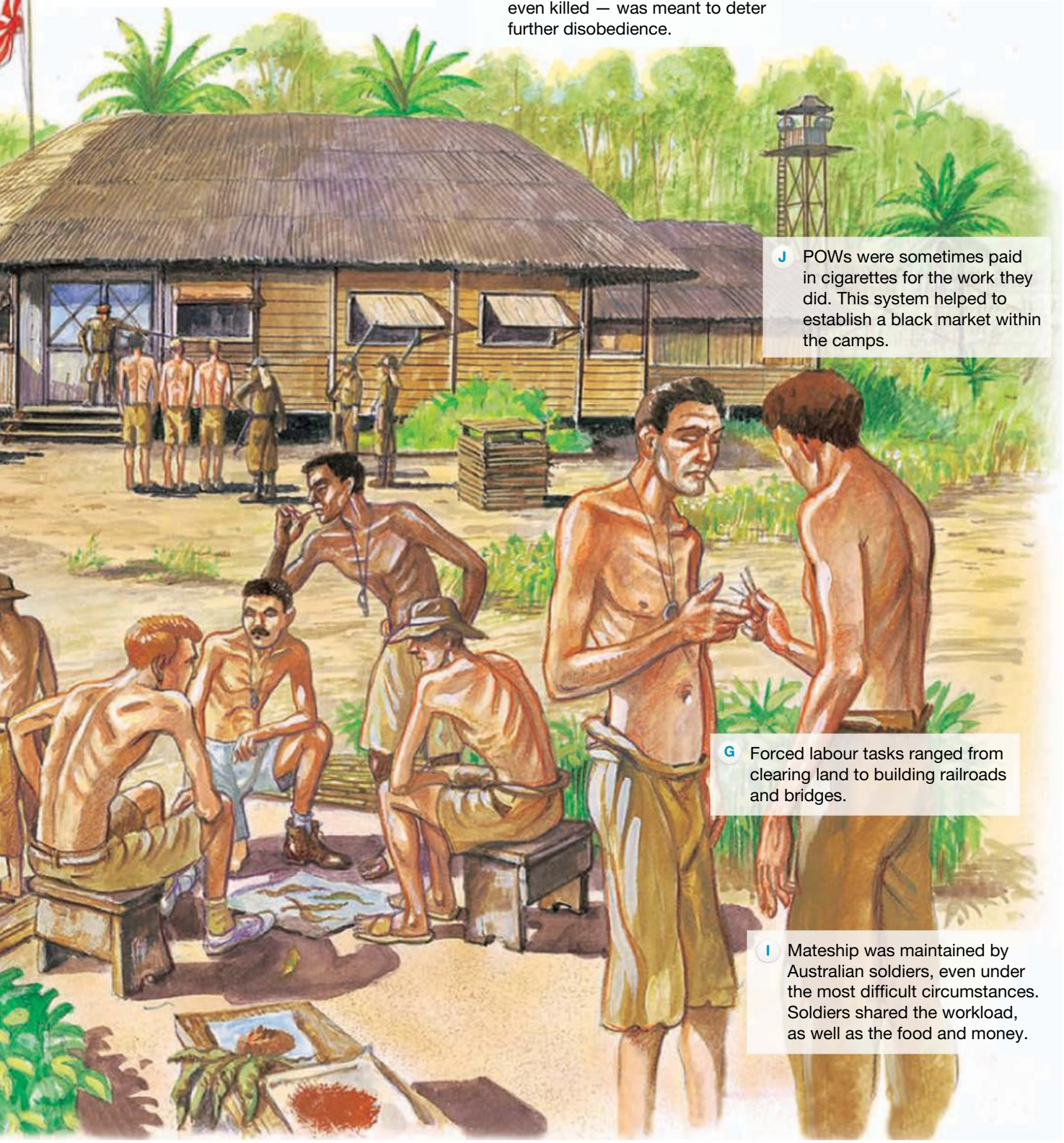
SOURCE 3 From the memoirs of former POW and Labor Member of Parliament, Tom Uren, in *Straight Left*, Random House, Sydney, 1994, p. 40

Japanese military discipline was sadistic … This was also carried out on their own troops, but when it was administered to prisoners it was particularly vicious and brutal … Whilst I was in Fukuoka camp I met a young Aboriginal who had no legs. He had been punished [by the Japanese] by being made to kneel on a piece of bamboo for several days. The bamboo cut into his knees and gangrene set in. In the end they had to amputate both his legs.

int-6698

SOURCE 4 A modern artist's impression of life in a Japanese POW camp in South-East Asia





A Japanese officers believed in the bushido code of the Japanese warrior, which states that prisoners are disgraced persons. Hence, there was seldom any compassion shown for the lot of the prisoners.

H Punishment — in the form of withdrawing food, forcing the sick or injured to work, being locked in a bamboo box placed in the sun, being beaten, or even killed — was meant to deter further disobedience.

F Escape was difficult, but not impossible. Any escapee who was recaptured was usually executed.

J POWs were sometimes paid in cigarettes for the work they did. This system helped to establish a black market within the camps.

G Forced labour tasks ranged from clearing land to building railroads and bridges.

I Mateship was maintained by Australian soldiers, even under the most difficult circumstances. Soldiers shared the workload, as well as the food and money.

SOURCE 5 From an interview with Sylvia McGregor, a former member of the Australian Army Nursing Service who became a POW when Singapore fell to the Japanese

You cannot explain to anybody what it is to be hungry and there is nothing to eat and no way of getting any … some of the Indonesian women showed us what plants you could eat … In some camps they would bring you in food and put it outside the barbed wire. Now, if you went out, there were guards there all the time and you were shot …

DID YOU KNOW?

Thousands of civilians — men, women and children — also became prisoners of the Japanese. By the war's end, some young children had spent almost their entire lives in prison camps.

21.11 ACTIVITY

Research at least two accounts by Australia prisoners of war in Japanese POW camps during the Pacific War. To what extent do they support the sources in this subtopic?

History concepts: Source
History concepts: Source, Evidence

21.11 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 4, 5, 9	Questions 2, 3, 7, 8	Questions 6, 10, 11

Check your understanding

1. Approximately how many Australians were POWs during World War II?
2. Explain how German treatment of different groups of prisoners was influenced by Nazi racial ideas.
3. Explain how Japanese treatment of prisoners was influenced by racial ideas and beliefs about the rights of those who surrendered.
4. How do historians believe POWs managed to survive imprisonment?
5. Describe conditions for prisoners working on the Burma–Thailand railway and in the Outram Road prison in Singapore.
6. Explain why the Sandakan death marches are considered the single worst atrocity committed by the Japanese Imperial Army against Australian POWs.

Apply your understanding

7. Read **SOURCE 1**.
   a. John Robertson was an Associate Professor of History in the Faculty of Military Studies at the Royal Military College, Duntroon. In your view, should this make his account a reliable source? Why?

b. Describe the examples that Robertson gives of contrasting German and Japanese treatment of Australian POWs.
c. Explain what difference it might have made to POWs and their families to have at least some contact by mail.

8. Study **SOURCES 2**, **3** and **4**.
   a. How reliable would you judge each of these sources to be? Justify your opinions.
   b. Explain what you can learn about the experiences of Australian POWs from each of these sources.
   c. Identify evidence in each of these sources to explain why so many Australian prisoners of the Japanese died.
9. Explain how the experiences of Australian POWs would have affected attitudes of many Australians to Japan after the war.
10. Find evidence in **SOURCES 1** and **2** to support the accepted belief that Australian prisoners of the Japanese were often starving.
11. Several Australian historians have attributed the survival of almost two-thirds of Australian POWs under such terrible conditions to Australian traditions of mateship and sharing. Explain why you would agree or disagree with this view and the reasons for your opinion.

For sample responses to every question, go to **w**ww.jacplus.com.au.

21.12 The Australian home front

LEARNING INTENTION

By the end of this subtopic you will be able to describe how World War II changed Australian life on the home front including through homeland defence initiatives and increased government powers.

21.12.1 Homeland defence

Thanks to the efforts of Australia and the United States in the Pacific, the Japanese launched very few attacks against the Australian mainland. However, the war caused changes politically, financially and socially, the effects of which we still feel today.

While Australian forces were fighting in Pacific battles, thoughts of those at home turned to defending Australia itself, including its thousands of kilometres of vulnerable coastline. Protecting vital infrastructure such as public utilities also became a priority for citizen volunteers.

Coastwatchers

When an invasion of Australia by the Japanese seemed likely, it was decided to station small groups of highly trained soldiers, called coastwatchers, at key points along the coast. If the Japanese invaded, their task was to travel alongside the enemy, undetected, and monitor their movements. They would then report back to the army, who would arrive and, it was hoped, repel the invasion.

Most coastwatchers never saw the Japanese. Their enemy, instead, was loneliness. One of Morrie Vane's fellow 'knackeroos' (as they were known) cracked under the strain of having to remain constantly alert in case of invasion. He kept a rifle under his bed just in case, and started firing it one night, shouting, 'They're here!'

SOURCE 1 Morrie Vane was a signaller in north-west Western Australia. His group of coastwatchers was taught to live off the land with the help of local Aboriginal people. From D. Connell, *The War at Home*, ABC, Crows Nest, NSW, 1988, p. 69.

If the Japanese had been there, we wouldn't have been able to light a fire and cook the food. That meant we had to be able to eat the food raw … to eat a bird raw is quite an experience. I think you've got to be very hungry, and you need to be physically tired. When it comes to eating the whole lot — I mean the gizzards and things like that — you've got to be out in the bush with ants, snakes and mosquitoes and nothing else in your pack except salt. We used salt a lot … when we looked like cracking up, after two or three days on raw animals, the Aborigines produced these tins [of canned meat]. We opened them and ate the meat and that gave us enough energy to ride back.

The Volunteer Defence Corps

As the war continued, many citizens, including World War I veterans, became increasingly anxious about the idea of sabotage from within Australia. They wanted to do something to protect public utilities such as water, energy and public transport systems. These citizens met publicly, giving speeches, running drills and taking oaths of allegiance. The government quickly realised that it was not good for public law and order to have citizens taking things into their own hands, and so the Volunteer Defence Corps was established. Its responsibilities were to 'preserve law and order, protect public utilities and prevent subversive activities by **aliens** or disaffected persons'. This charter effectively restricted what the volunteers could do, while still encouraging their contributions. Many became air-raid wardens, teaching others what to do in case Australian cities were bombed.

SOURCE 2 Australian air-raid wardens practise bomb removal in 1940. Other precautionary measures taken included installing air-raid sirens and distributing tin helmets and respirators.



Source: AWM 027451.

Before the Japanese threat to Australia, during the period of 'business as usual', many Australians felt the war, although serious, had no direct impact on them. For many this was entirely the case. But the situation changed with the attack on Pearl Harbor and, particularly, with the fall of Singapore. People started digging air-raid trenches and building shelters. They filled sandbags to help brace buildings in an air attack, blackened or bricked up windows to dim lights, and removed any public signs or street names that might help an enemy.

21.12.2 Government powers for the war effort

As the war effort increased after the Pacific War began, supplying both troops abroad and citizens at home placed an ever-increasing burden on the government. At a security level, peacetime laws would not suffice in a time of war. The government of Australia needed increased powers.

Rationing

In order to maintain supplies for the people at home and for the troops, **rationing** was introduced in 1942. Ration tickets were issued to every household, but they were useless without money; just as money was useless without the tickets. Because supply of so many items was restricted, people had to put their name down on a list if they wanted common household goods such as lamps, irons and radios. Petrol was also rationed. People learned to go without, or to use their imaginations. Garments were cut down to make other clothes, women drew lines up the backs of their calves to look like stocking seams, and plants such as the maidenhair fern were used to make tea.

Internment

The slogans 'loose lips sink ships' and 'even the walls have ears' were devised to make ordinary people careful about what they said and what they wrote in letters. However, this campaign also made many Australians suspicious of their neighbours.

For the second time in 25 years, recent immigrants to Australia (and even some Australian citizens of foreign origin) were locked up in **internment** camps. These people, often respected members of the community, were targeted because they were of German, Italian or Japanese descent. People with particular political or religious beliefs

alien a person born in another country who is not yet a citizen of the country in which they live

rationing controlling the distribution of something when supplies are low

internment to be put in prison for political or military reasons, either real or perceived

were also interned. The Australian Communist Party was banned, and many of its members were locked up. The Jehovah's Witnesses were targeted because their refusal to bear arms was seen as a show of support for the Nazis.

Widening powers

The dangers and hardships of World War II generally helped to unite Australians. The Curtin government convinced the people to accept a war effort that affected the lives of almost everyone. During World War I the burdens had been borne mainly by the workers, so Curtin wanted to ensure that this time there would be equality of sacrifice. To achieve that aim, the government introduced controls over wages, profits, rents and prices. Besides rationing essentials, interning 'enemy aliens' and banning organisations that might hinder the war effort, the Commonwealth Government assumed wide powers to:

- declare any goods to be essential for the war effort
- require factories to manufacture war materials
- compel people to work in jobs necessary for the war effort
- control banks and shipping
- increase taxation on high incomes
- censor newspapers
- ban public meetings and acts that might hinder the war effort
- restrict sporting events and non-essential travel
- extend conscription to include overseas service.

SOURCE 3 Every effort was made to conserve resources, recycling wherever possible. This photograph shows scouts collecting tyres and hoses for recycling.



SOURCE 4 Australians at home were encouraged to support the war effort.



Source: AWM 027451.

DID YOU KNOW?

John Curtin led Australia through its time of greatest danger, but from mid-1944 his health was failing under the strain of work. He died on 5 July 1945, two months before the final Allied victory, and his death was mourned by the nation.

Conscription

Introducing limited conscription for overseas service was one of the government's most difficult decisions. Curtin himself had been imprisoned for opposing conscription during World War I, but he recognised that defending Australia against Japan meant fighting outside Australian territory (then defined as Australia and Papua). The conscription issue had torn Labor apart during World War I, and Curtin had a hard task convincing many Labor Party members that it was now necessary. The Militia Bill that was passed on 3 February 1943 enabled the government to send conscripts to any area within the **South-West Pacific Zone**.

South-West Pacific Zone area, including New Guinea and what is now Indonesia, within which Australian conscripts could be sent to fight after February 1943

21.12.3 The effects of the war on children

The war was a tough time for all family members, but it was particularly tough for children. It was confusing for them to deal with the fact that their father (and possibly one or more of their brothers) was, perhaps, many thousands of kilometres away fighting a war, and it would have been hard for them to see family members being constantly unhappy and worried. Some children had to cope with their pets being put down, rather than allowing them to starve to death because of the severe rationing. For Christmas 1942, wording such as 'Christmas', 'yuletide' and 'festive season' was forbidden in advertising, to discourage people from purchasing non-essential items such as toys, dolls, sporting goods and musical instruments.

SOURCE 5 John Spencer recalls his schooldays during the war. From D. Connell, *The War at Home*, ABC, Crows Nest, NSW, 1988, p. 35.

Every child had to carry across his or her shoulder a small calico bag, usually made by the mother, in which had to be a set of ear-plugs, a clothes peg, a number of bandages and some dehydrated food, usually in Aspro-sized pellets. These bags were not to be opened except during the regular drills, which we had every day. A particular type of bell ring meant that everyone should evacuate the building. Each class would evacuate in order [to the air-raid trenches] … We used to practise this and it was considered deadly serious. What they didn't do, of course, was put in a drainage system, so when we had the normal Sydney rain the trenches were about three feet deep in water. We just had to wait till it drained away before we could have air-raid drill again.

SOURCE 6 Children during these times had to do more than just schoolwork. They had to know how to move into the trenches dug on school grounds (in the event of an air raid). Some even dug trenches at home. Wastage of almost anything was severely frowned on. Children also helped the war effort by collecting small metal items (such as tins and saucepans) as scrap.



Source: AWM 045120.

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- World War Two > **World War II at home**

21.12 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 4, 8	Questions 5, 6, 9, 10, 11	Questions 7, 12, 13, 14

Check your understanding

1. Describe the purpose and role of coastwatchers.
2. Explain what motivated members of the Volunteer Defence Corps.
3. Give three examples of ways in which people learned to go without items that were restricted by rationing.
4. List the groups who fell victim to the policy of internment.
5. Explain why the Australian government assumed wider powers, including limited conscription for overseas service.
6. Make a list of examples of ways in which the war was a tough time for children.
7. Which of these examples do you think would have been toughest to deal with as a child?

Apply your understanding

8. Using **SOURCE 1**, describe the hardships faced by coastwatchers in remote areas.
9. Look at the details in **SOURCE 2**.
   a. Describe what is being done.
   b. Explain why this practice would have been undertaken even though no bombs had fallen on Australia by 1940.
10. Using **SOURCES 3** and **4** as evidence, describe ways in which civilians helped the war effort while helping themselves to cope with wartime shortages.
11. Compare **SOURCES 5** and **6**. Describe the activities in these sources and explain why children might have seen such activities as adventures as well as hardships.
12. Evaluate the extent to which the activities shown or described in **SOURCES 2**, **3**, **4**, **5** and **6** might have helped in maintaining morale on the home front.
13. The policy of interning 'enemy aliens' was a continuation of the policy that had been adopted in Australia during World War I. However, during World War II, the 'enemy aliens' who were interned included anti-fascists, including several who had struggled against fascism in Europe and who had come to Australia to escape fascist rule. Discuss whether the government could have recognised such changes and distinguished between supporters and opponents of fascism.
14. Does the evidence presented in this subtopic support the statement 'The dangers and hardships of World War II generally helped to unite Australians'? Explain your view.

For sample responses to every question, go to www.jacplus.com.au.

21.13 Australian women at war

LEARNING INTENTION

By the end of this subtopic you will be able to explain how World War II brought about changes in the roles for Australian women, and identify women's contribution to the war effort in industry, the armed services and nursing services.

21.13.1 The role of women at home

Most Australian women wanted to do whatever they could to help the war effort. When war was declared in September 1939, few people could have predicted its effects on the roles of women. During World War I traditional roles hardly changed at all in Australia. Some women had entered the paid workforce for the first time during World War I, but the activities of most women were confined to charity work and fund raising. During World War II many women demanded to be much more directly involved.

Women eagerly joined voluntary organisations in which they learned new skills that would be valuable if the war reached Australia. Some voluntary war work followed traditional patterns, but new organisations also trained women in air-raid precautions, first aid, military drill and skills such as shooting, signalling, driving and mechanical work.

Women in industry

A significant social change brought by World War II was the huge increase in the paid employment of women. In munitions and other war materials production, the number of men employed rose from 11 000 in 1939 to 459 000 in 1943. During the same period the number of women employed in such work jumped from 1000 to 145 000.

SOURCE 1 Women loading bullets at the government munitions factory in Footscray, Victoria, in 1940



SOURCE 2 Despite the crucial role women played during the war, they were sometimes ridiculed by newspaper cartoonists.



Increasingly women were needed in traditionally male jobs because of increased wartime production and the need to replace men who had enlisted. Women worked in jobs as varied as aircraft maintenance, truck and bus driving, and bread and postal deliveries. Yet, for doing the same work as men, women were paid much less. Despite this, women in cities were soon found in factories and steel mills. In rural areas they took on shearing, dairying, crop planting and harvesting.

Opposition

The federal government began an intensive campaign from 1942 to encourage more women to join the workforce, but this change encountered hostility from some sections of society. At first, several newspapers ridiculed women who took on factory work. Sections of the Catholic Church warned against the consequences of such social change. Some trade unions feared that the employment of women would lead to a reduction in men's wages as women took on jobs that had traditionally been for men only.

SOURCE 3 Australian average weekly wages in shillings (s) and pence (d)

Year	Wages	
	Males	Females
1939	95s 3d	52s 8d
1940	98s 1d	54s 3d
1941	104s 3d	58s 2d
1942	115s 8d	64s 4d
1943	119s 5d	68s 4d
1944	119s 6d	71s 11d
1945	120s 4d	72s 0d

Source: S. J. Butlin and C. B. Schedvin, *War Economy 1941–45*, Australian War Memorial, Canberra, 1977, p. 561.

The Women's Land Army

An important part of the war effort was the creation of the Australian Women's Land Army (AWLA). Early in the war, land armies operated in some Australian states. In 1942 the official Women's Land Army was formed under Australian government control. By December 1943 it had almost 3000 members doing the jobs of country men who had joined the services. Frequently these women were sent to work and live in bush camps in remote areas and many farmers developed a strong respect for their achievements. Yet when the war was over the government neglected to provide Land Army members with any ex-service benefits.

21.13.2 Women's war services

During World War I, nurses were the only women permitted to serve with the Australian armed forces. During World War II, prejudice in Australia against women joining the armed services was still strong. However, it was overcome by pressure from the voluntary organisations, the scale of Australia's involvement in the war and the perceived threat of invasion, which forced both government and service chiefs to follow the example of Britain. Around 78 000 Australian women enlisted in the various services, including the AWLA. Almost 4000 of those women served overseas. Yet women were often admitted grudgingly, denied interesting jobs and rewarded with only half to two-thirds the pay of servicemen doing the same jobs.

The AWAS, WAAAF and WRANS

The largest of the women's services was the Australian Women's Army Service (AWAS). It was not an auxiliary but was fully incorporated into the Army. It trained women to take over in transport, communications, maintenance and other areas. It also trained them for combat, in case Australia was invaded. The AWAS had a total enlistment during the war of 31 000.

SOURCE 4 An artist's depiction of women in the Australian Women's Land Army taking a break from farm work.

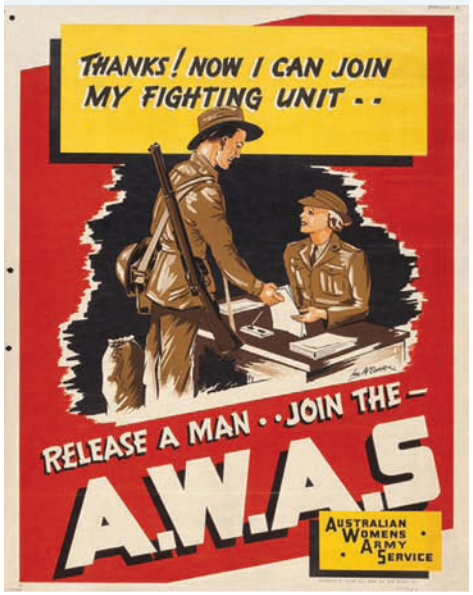


Source: Taylor, Grace
Smoko time with the AWLA (1945)
Oil on hardboard, 45.7 × 55.8 cm
Australian War Memorial ART29758.

Perhaps because it was the newest of the services and therefore less tied to tradition, the RAAF was the first of the Australian services to enlist women. By 1944 there were over 18 000 women in the Women's Auxiliary Australian Air Force (WAAAF).

The Naval Board fought against accepting women and, although as many as 3000 women enlisted in the Women's Royal Australian Naval Service (WRANS), none was allowed to go to sea. WRANS carried out essential work in dozens of areas including education, interpreting, signalling and code work. One of the most outstanding women to wear the WRANS uniform was an honorary WRAN, Ruby Boye, the only woman among the silent army of coastwatchers scattered behind Japanese lines through the islands of the Pacific. She lived in constant danger of capture, reporting enemy movements with her short-wave radio from the Solomon Islands.

SOURCE 5 *Release a Man. Join the A.W.A.S.*, a recruiting poster for the Australian Women's Army Service



Source: AWM ARTV01049.

DID YOU KNOW?

In 1943, Ruby Boye was air-dropped a WRANS uniform by parachute and appointed an honorary third officer. This was so that she would not be executed as a spy if captured. However, she was also given a revolver to take her own life rather than be interrogated by the Japanese. She received several decorations but no payment for her lonely and heroic work.

21.13.3 Women in medical and nursing services

Some 10 000 women served in the Australian Army Medical Women's Service (AAMWS) after it was formed in December 1942. Many of its members had already served as members of the Voluntary Aid Detachments of the Red Cross (VADs). They carried out a vast range of jobs in Army hospitals. Another 3500 women served in the Australian Army Nursing Service (AANS). Nurses served in every theatre of war in which the Australian Army was involved. The Navy and Air Force also formed nursing services, but these were much smaller organisations.

SOURCE 6 Extract from an account by Matron Kathleen Best of the 5th Army General Hospital, staffed by members of the AANS during the ill-fated campaigns in Greece and Crete in 1941. Her account describes the response of her nurses when the hospital had to be evacuated but 39 of the nurses were needed to stay with those of the wounded who could not be moved.

I told the Sisters … that those who volunteered would stay behind with the Hospital and that they would in all probability be captured [by the Germans]. I asked them to write, on a slip of paper, their names and either 'stay' or 'go' and hand them in to me … not one sister wrote 'go' on her paper. I then selected thirty-nine Sisters to remain. The task was an extremely difficult one … I suggested that if anyone wished to change her mind that both myself and everybody else would understand and that I would be in my room for about ten minutes if anyone wished to come and discuss the situation with me. No one came.

As the account by Matron Kathleen Best of the 5th Army General Hospital (**SOURCE 6**) shows, for nurses serving overseas, conditions could be as dangerous as for many servicemen. When the tiny ship *Vyner Brooke* fled Singapore early in February 1942, its passengers included 65 members of the AANS. Fifty-three managed to swim ashore when Japanese bombers sank the ship. Twenty-two were machine-gunned on the beach after surrendering to the Japanese. The remainder became POWs but only 24 survived the war.

SOURCE 7 Memorial plaque in St Andrew's Cathedral, Singapore, for Australian nurses killed in and following the sinking of the *Vyner Brooke*



on Resources

Weblink Australia's war

21.13 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 3, 6, 8, 10	Questions 2, 4, 9, 11, 12	Questions 5, 7, 13, 14, 15

Check your understanding

1. Describe the new types of voluntary work and paid work undertaken by Australian women during World War II.
2. Explain the reasons for the formation of the AWLA.
3. What were the AWAS, WAAAF and WRANS?
4. Explain the probable reasons for the willingness of the RAAF to enlist women and the reluctance of the RAN to do the same.
5. Explain what was outstanding about the wartime service of Ruby Boye.
6. Describe the roles undertaken by the Australian Army Medical Women's Service (AAMWS), the Voluntary Aid Detachments of the Red Cross (VADs) and the Australian Army Nursing Service (AANS).
7. Explain what the fate of the nurses on the *Vyner Brooke* shows about the dangers for nurses who served overseas.

Apply your understanding

8. Explain what evidence **SOURCES 1** and **4** provide for a study of women's contributions to the war effort.
9. Analyse **SOURCE 2** using the following questions:
   a. When was this cartoon created?
   b. What was happening at the time?
   c. Who would most likely be its intended audience?
   d. What situation is depicted in the cartoon?
   e. What is its intended message?
   f. Why might some Australians have agreed with that message at the time?
   g. Why might other Australians have been appalled by that message?
10. Using **SOURCE 3** as your evidence, calculate what percentage of average male pay was paid to women in 1939 and 1945.
11. Describe the scene in **SOURCE 5** and explain:
    a. the aim of the poster
    b. what the poster reveals about some types of work given to AWAS recruits and the likely effects on the types of work that could be undertaken by male soldiers.
12. Study **SOURCES 6** and **7**.
    a. What is 'the cause of humanity' referred to in **SOURCE 7**?
    b. Explain what **SOURCES 6** and **7** reveal about the sacrifice and dedication of the nurses.
    c. Write a letter from one of the nurses in **SOURCE 6** to her parents explaining why she chose to stay behind.
13. Using all of the sources in this subtopic, explain why it was necessary to involve Australian women in World War II and in what ways the war changed women's traditional roles.
14. There were no plans to maintain women's services permanently, and the Australian government intended to replace women workers with men as soon as they were available. Towards the end of the war, women were more frequently reminded of their traditional roles by churches and the press. How would women, who had proved what they could do, have felt about being expected to return to those roles, whether they wished to or not?
15. What do you consider were the short-term and long-term effects for Australian society of the involvement of women in World War II?

For sample responses to every question, go to www.jacplus.com.au.

21.14 Australia's relations with the US

LEARNING INTENTION

By the end of this subtopic you will be able to explain how World War II brought about an alliance between Australia and the United States.

21.14.1 The US alliance

Prime Minister Curtin's 'call to America' on 27 December 1941 (see **SOURCE 1** in subtopic 21.8) is often seen as a turning point in Australia's foreign relations. This was partly because Australia did not have an independent foreign policy until the Curtin Labor government asserted that right. It is also because Australia worked closely with the United States through most of the remainder of the war and because the United States, rather than Britain, became Australia's closest ally after the war. Many Australians believed the United States had saved Australia from a Japanese invasion. However, Australia's wartime relationship with the United States was more complicated than that and it did not always run smoothly.

US forces needed a base from which to direct operations against the Japanese in the south-west Pacific. The Curtin government was grateful that Australia was to become that base because it assured Australia's security at a time when Britain could not do so. When Britain agreed, in March 1942, that Allied operations against Japan should be under US direction, Curtin accepted US General Douglas McArthur as commander of all Allied troops in the south-west Pacific. However, the Australian government retained the right to decide where Australian troops could serve and the right to refuse to have them used in operations it regarded as unwise.

Image and reality

MacArthur and Curtin respected each other. Unlike his own government and the British government, MacArthur shared Curtin's view of the importance of defeating Japan before Germany. Publicly, the US–Australia relationship was warm. But there were underlying tensions: racism was strong in the United States and its segregated army meant African Americans could not serve alongside Caucasian Americans. While this appalled some Australians, others were grateful for the US policy of stationing black soldiers away from cities. Tensions between Australian and US troops led to several riots because US soldiers were boastful, had more money and attracted Australian girls.

SOURCE 1 Prime Minister Curtin (far right) introducing US General Douglas MacArthur to Robert Menzies, the leader of the Opposition in federal parliament, at a dinner given in MacArthur's honour on 18 March 1943



Source: AWM 140631.

DID YOU KNOW?

In Brisbane on the night of 26 November 1942, in the most violent of many clashes, one Australian was killed and eight were wounded when an American opened fire during a brawl between Australian and US troops. On the following night, bands of Australians hit Brisbane's streets seeking revenge.

21.14.2 Growing tensions in the alliance

Australian and American priorities were not always the same, and the Australian government soon found it had very little influence on MacArthur's decisions. Although Australian troops did most of the fighting in the Papua and New Guinea campaigns, MacArthur used his censorship powers to glorify his own achievements and to deny credit to Australian soldiers. MacArthur also excluded Australian troops from his campaign to free the Philippines. That was why the AIF and militia spent the war's closing stages fighting unnecessary battles in Borneo, New Guinea, New Britain and Bougainville. Curtin knew the US wanted to dominate the Pacific after the war, and from 1944 he was calling for closer relations between the countries of the British Commonwealth.

SOURCE 2 A military historian's view of what Curtin thought of the US alliance. From Michael McKernan, *All In! Australia During the Second World War*, 1983.

Curtin acted because Australia was at risk … Curtin turned increasingly to America to convince Australia's newest ally [the US] that Australia must be preserved if the Japanese were to be driven back from territory already won … Australian priorities centred on Australia … therefore Australian and British priorities were in conflict.

SOURCE 3 A different view of what Curtin thought of the US alliance. From Clem Lloyd and Richard Hall, *Background Briefings, John Curtin's War*, National Library of Australia, 1997, pp. 32, 35.

Curtin may have looked to America without inhibition, but there is no evidence that he did so with any enthusiasm … Twice in his final briefings, Curtin went out of his way to insist that Australia would not be pushed around by America in negotiations over a post-war civil aviation scheme … Clearly, Curtin resented the manner in which he had been made to sweat it out at the height of the war.

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- World War Two > **World War II in the Pacific**

21.14 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 7	Questions 5, 4, 8, 9	Questions 6, 10, 11

Check your understanding

1. Explain the reasons Australia and the United States agreed that US troops should be based in Australia.
2. While agreeing to place Australian troops under US direction, what rights did Australia retain regarding troop deployment?
3. Identify the priority that was shared by Curtin and MacArthur.
4. Describe the reasons for tensions between US troops and Australians.
5. Explain why Australia would have had very little power to influence MacArthur's decisions.
6. Identify three reasons for growing tensions between MacArthur and the Australian government.

Apply your understanding

7. Look closely at **SOURCE 1**.
   a. Describe what this photograph indicates about the relationship between Curtin and MacArthur.
   b. Explain why the value of such photographs might be limited as historical evidence.

8. Analyse **SOURCES 2** and **3**, identifying:
   a. the main point of the historian's argument
   b. the details used to support the argument.
9. Explain how the two arguments in **SOURCES 2** and **3** differ in relation to Australia's wartime relationship with the United States.
10. Using all three sources in this subtopic, explain what factors strengthened the Australia–US alliance from 1942 to 1945 and what factors weakened it.
11. Discuss whether or not the Australia–US alliance would have been formed had it not been for Britain's inability to help Australia when it was most at risk.

For sample responses to every question, go to www.jacplus.com.au.

21.15 The end of the war

LEARNING INTENTION

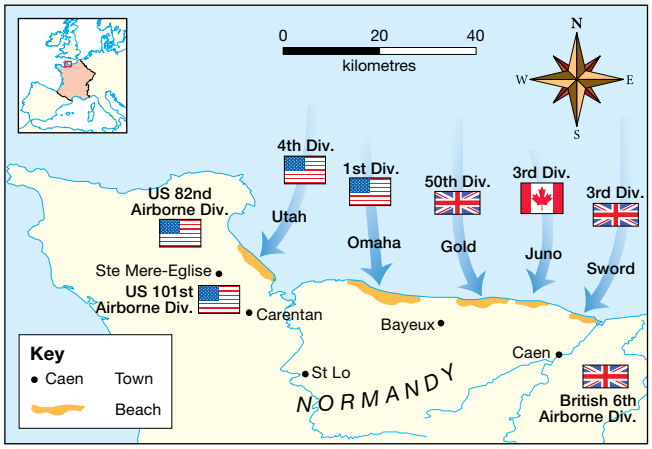
By the end of this subtopic you will be able to describe how victory in Europe in May 1945 and victory in the Pacific in August 1945 were achieved, bringing about the end of World War II.

21.15.1 Victory in Europe

The last year of the war, in both Europe and the Pacific, saw some of the most desperate and vicious fighting of the entire conflict. For the first time both Germany and Japan were now fighting in the defence of their very homelands. Neither would capitulate easily.

Since mid-1943 the Axis powers had been steadily in retreat. Italy had surrendered and the German army had been turned back at Stalingrad, in Russia.

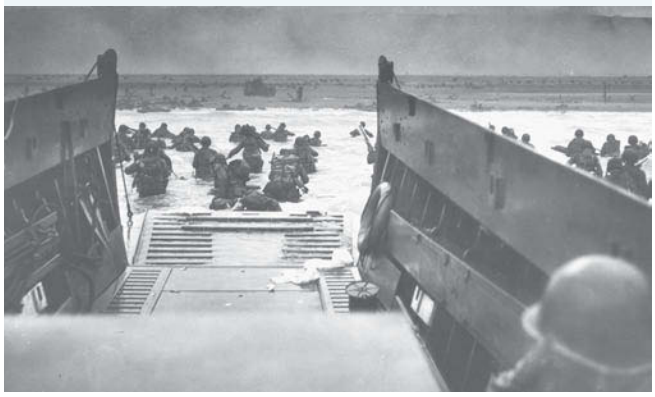
SOURCE 1 The D-Day beaches on the coast of Normandy, in France



Source: Map by Spatial Vision.

The Allies realised that the key to success was to open a second front in western Europe, but invading Hitler's '**Fortress Europa**' would be no easy task. On 6 June 1944 the largest invasion fleet of all time set sail from the southern coast of England to land an invasion force on the coast of **Normandy**. Codenamed Operation Overlord, the 'D-Day' landings took place on five key beaches along the French coast — codenamed Gold, Juno, Sword, Omaha and Utah. Despite American losses at Omaha being heavy, the majority of troops from Britain, Canada and the United States managed to establish a foothold in Europe and began to drive the Germans back. Paris was liberated on 25 August and the Allied commanders were eager to maintain the momentum.

SOURCE 2 US soldiers wading ashore on Omaha Beach



Hoping to capitalise on the success of the D-Day landings, another massive operation was launched over the Netherlands, named Operation Market Garden. Unfortunately it did not meet with the same

Fortress Europa the term used by Hitler to describe the defences along the coastline of Europe from Denmark to southern France

Normandy a region of France on the Atlantic coast

success as Operation Overlord, as there was fierce German resistance, particularly in the Dutch town of Arnhem. In December 1944 the Germans launched their last major offensive of the war through the Ardennes Forest in Belgium. The American soldiers were caught by such surprise that maps of the front line positions showed a massive bulge where the Germans had broken through. The ensuing battle became known as the Battle of the Bulge.

The year 1945 saw the Allies regain the initiative; they crossed the border into Germany and began the advance on Berlin. With the Soviets advancing from the east it was only a matter of time before the capital would fall, and fall it did, with Soviet troops capturing the Reichstag on 30 April 1945, the same day that Hitler committed suicide in his underground bunker. One week later, on 7 May, Germany signed an unconditional surrender. After six years of bloody conflict, the war in Europe was over.

SOURCE 3 Soviet soldiers raising the flag over the Reichstag in Berlin



21.15.2 Victory in the Pacific

From late 1943 the United States adopted a two-pronged strategy in the Pacific. While MacArthur's forces advanced to the Philippines, Admiral Nimitz's forces fought their way towards Japan in an 'island-hopping' campaign. Isolated Japanese garrisons that were unable to contribute to resisting the Allied advance were bypassed.

However, on islands that had to be captured, such as Saipan, Iwo Jima and Okinawa, most Japanese troops fought to the death and US Marines paid a high price for each victory.

The island-hopping campaigns gave the United States island bases from which it could bomb Japan. From October 1944 the Japanese adopted a last desperate tactic as kamikaze pilots sacrificed their own lives to crash their planes into US warships.

Between November 1944 and August 1945 the Allies flew over 30 000 bombing raids on Japan, causing more than 660 000 civilian deaths. Japan's government opposed acceptance of the Allies' demand for Japan's

unconditional surrender. US forces suffered very heavy losses capturing Okinawa and it was clear that enormous casualties would be suffered in any invasion of Japan. However, there was another option to force the Japanese to surrender.

Nuclear bombs

In the top secret 'Manhattan Project', scientists in the United States had been racing to develop a nuclear weapon, fearing that Nazi Germany might beat them to it. The first US test of a nuclear weapon on 16 July 1945 marked the beginning of the nuclear age. Several US scientists and political and military leaders recommended that the power of nuclear bombs be demonstrated to Japan rather than used on people without warning. However, the US government decided that its two remaining nuclear bombs would be used. On 6 August the first atomic bomb was dropped on the city of Hiroshima and the United States warned Japan of 'ruin from the air' if it did not surrender. On 9 August the second atomic bomb was dropped on Nagasaki. Japan accepted unconditional surrender on 14 August and signed the formal surrender on 2 September. Close to 115 000 Japanese were killed by the initial blasts of the two bombs, and years later many more were still dying from radiation sickness. Other victims included children who were born with terrible deformities because their parents had been exposed to radiation.

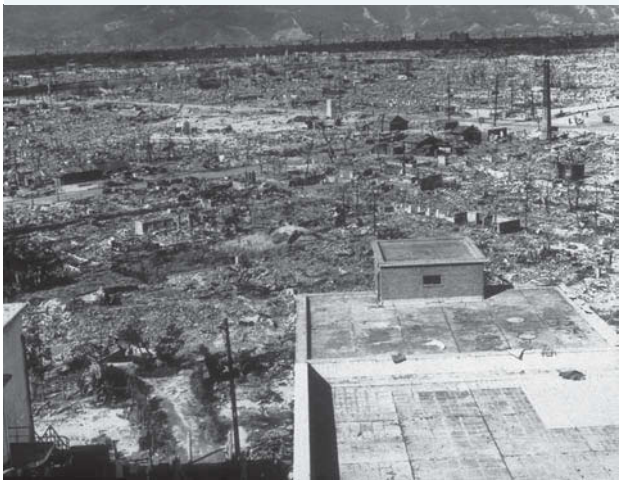
There is little doubt that the Allies would have suffered enormous casualties in an invasion of Japan or that in such an invasion Japan's losses would have been greater than those in Hiroshima and Nagasaki. However, many historians argue that the use of nuclear bombs was unnecessary because the Japanese were already seeking ways to negotiate for peace, and a demonstration of the power of nuclear bombs would have convinced them to surrender. In any case, the Japanese were given little time to reach a decision before the second bomb was dropped on the city of Nagasaki.

But using the bomb also served another purpose. World War II changed the old balance of world power. Just two great powers emerged from the conflict: the United States and the Soviet Union. World War II had made them temporary allies, but even before its end tensions were rising over which power would be the dominant influence. Bombing Hiroshima and Nagasaki was one way of demonstrating US power to the Soviets, at least until they too acquired nuclear weapons.

SOURCE 4 US Marines inch their way up the beach at Iwo Jima.



SOURCE 5 The remains of Hiroshima after the bombing in 1945



SOURCE 6 The Japanese surrender on board the USS *Missouri*



DISCUSS

Hold a class discussion on the significance of the use of atomic bombs in 1945 in ending World War II and ushering in the nuclear age. **General capability: Ethical understanding**

21.15 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 6	Questions 4, 7, 8	Questions 5, 9, 10

Check your understanding

1. Describe the role played by the D-Day landings in ending the war in Europe.
2. Describe the role played by the Soviet advance on the eastern front in ending the war in Europe.
3. Describe the two-pronged strategy used by the US in the Pacific.
4. Explain possible reasons for the US decision to use atomic bombs in Japan.
5. How many Japanese died in the initial blasts of the atomic bombs dropped on Hiroshima and Nagasaki? Why did many more die later?

Apply your understanding

For help with analysing sources, go to the SkillBuilder in topic 19 History concepts and skills. For help with the skill of Evaluating see topic 1 HASS skills.

6. Study **SOURCES 1** and **2**.
   a. Describe the scene in **SOURCE 2** and explain why soldiers in such a landing would suffer very high casualties.
   b. Explain why the D-Day landings had to involve several beach landings as well as airborne divisions landing behind German lines.
7. The Soviet forces had turned retreat into attack from the Battle of Stalingrad in 1942–43. Evaluate the importance of the scene in **SOURCE 3** in ending Germany's will to continue fighting.
8. Look closely at **SOURCE 4**. Explain why US forces paid a high price for their victories in the islands of the Pacific.
9. Study **SOURCES 5** and **6** and explain how the destruction shown in **SOURCE 5** contributed to the Japanese surrender in **SOURCE 6**.
10. Imagine that you are a newspaper reporter writing an article in 1945. Choose two of the photographs in this subtopic and write captions and a short news article to accompany your chosen images.

For sample responses to every question, go to www.jacplus.com.au.

21.16 War crimes and retribution

LEARNING INTENTION

By the end of this subtopic you will be able to describe the horrific crimes that were committed against civilians and prisoners of war, mostly by the German Nazis and Japanese military, and explain the victorious Allies' attempts to punish those responsible for these atrocities.

21.16.1 Japanese war crimes

In almost every armed conflict throughout history, terrible things have been done. There have been times in most wars when soldiers on both sides killed enemy troops when they could have taken prisoners. Civilians have always been among war's victims. But from the late nineteenth century, attempts were made to reduce suffering by putting legal limits on what could be done during wars. The Geneva Conventions of 1864, 1906 and 1929 attempted to frame rules to protect civilians and prisoners of war. Despite this, during World War II many atrocities were committed. The overwhelming majority and the most cruel and horrific of these were the deliberate work of the Japanese military and the German Nazis. The Geneva Conventions made it possible for at least some of the perpetrators to be tried and punished for war crimes.

SOURCE 1 At Rabaul, New Britain, on 15 November 1945, Japanese POWs were paraded to enable victims to identify suspected war criminals.



Source: AWM 098776.

In earlier subtopics you learned about horrific Japanese atrocities in China and the brutal Japanese treatment of POWs, including many Australians. Throughout occupied China and in South-East Asia, the Japanese military killed millions of civilians. Millions more died as a result of exhausting slave labour or starvation as their food was confiscated to supply the Japanese. Most victims were Chinese. Among the vast numbers of Chinese whom the Japanese killed, many were executed, tortured to death or deliberately infected with diseases.

The Allies determined that those responsible for Japanese war crimes would be punished. The trials were overseen by the newly formed International Military Tribunal for the Far East. They were conducted in Japan and throughout South-East Asia and the Pacific. Of 25 Japanese wartime leaders who were tried and found guilty, seven were condemned to death and executed. Approximately 5700 Japanese, including many military officers, were tried for committing atrocities against civilians and POWs. Nine hundred were convicted. Many were executed and the others received prison sentences.

21.16.2 Nazi and other fascist war crimes

During the war's closing stages, the Allied leaders agreed to replace the failed League of Nations with a new world body, the United Nations (UN), to settle disputes between countries and to work towards the kind of freedom and prosperity that might prevent future wars. In 1945 the UN Charter asserted its determination 'to save succeeding generations from the scourge of war'. The UN supported the Allies' decision in August 1945 to put leading Nazis and others on trial for war crimes, crimes against humanity, crimes against peace and conspiracy to commit these crimes.

How the Germans and their European fascist allies treated conquered peoples and POWs was largely determined by Nazi ideas about race. In most cases, western European, British and American POWs were treated reasonably well, unless they tried to escape. However, racism always played a role. When France

surrendered, the Germans shot North African troops serving in the French military. In western Europe, acts of resistance also brought savage reprisals. For example, if even one German soldier was killed by partisans, ten or more civilians would be executed.

German forces were completely ruthless towards the peoples of eastern Europe, who were described in Nazi ideology as 'racial inferiors'. When the Axis invaded the Soviet Union, Hitler demanded total brutality towards the Slavic 'sub-humans' and their 'Jewish-Bolshevik' leaders. Special SS task forces called *Einsatzgruppen* were ordered to kill all Jews, communists and partisans. Around nine million Soviet soldiers and twice as many Soviet civilians died during the war, and many of these were killed deliberately. Of the 5.7 million Soviet POWs in Nazi hands, almost two-thirds were murdered, starved or worked to death in concentration camps. Where Soviet or other Slavic civilians resisted, the populations of entire towns and villages were massacred.

SOURCE 2 Members of a British Parliamentary delegation view piles of bodies at Buchenwald concentration camp, near Weimar, in Germany, in July 1945.



Source: AWM P02018.390.

SOURCE 3 This carriage is a replica of one used by prisoners to haul stone at Buchenwald. The surrounding ground marks the site of demolished prisoners' barracks. Buchenwald was established in 1937. Over the next eight years it held over 250 000 inmates, including communists and socialists, Jews, Jehovah's Witnesses, mentally ill people, homosexuals, gypsies, and Polish and Soviet POWs. From 1958 much of the site was preserved as a memorial to remind people of the horrors of Nazism.

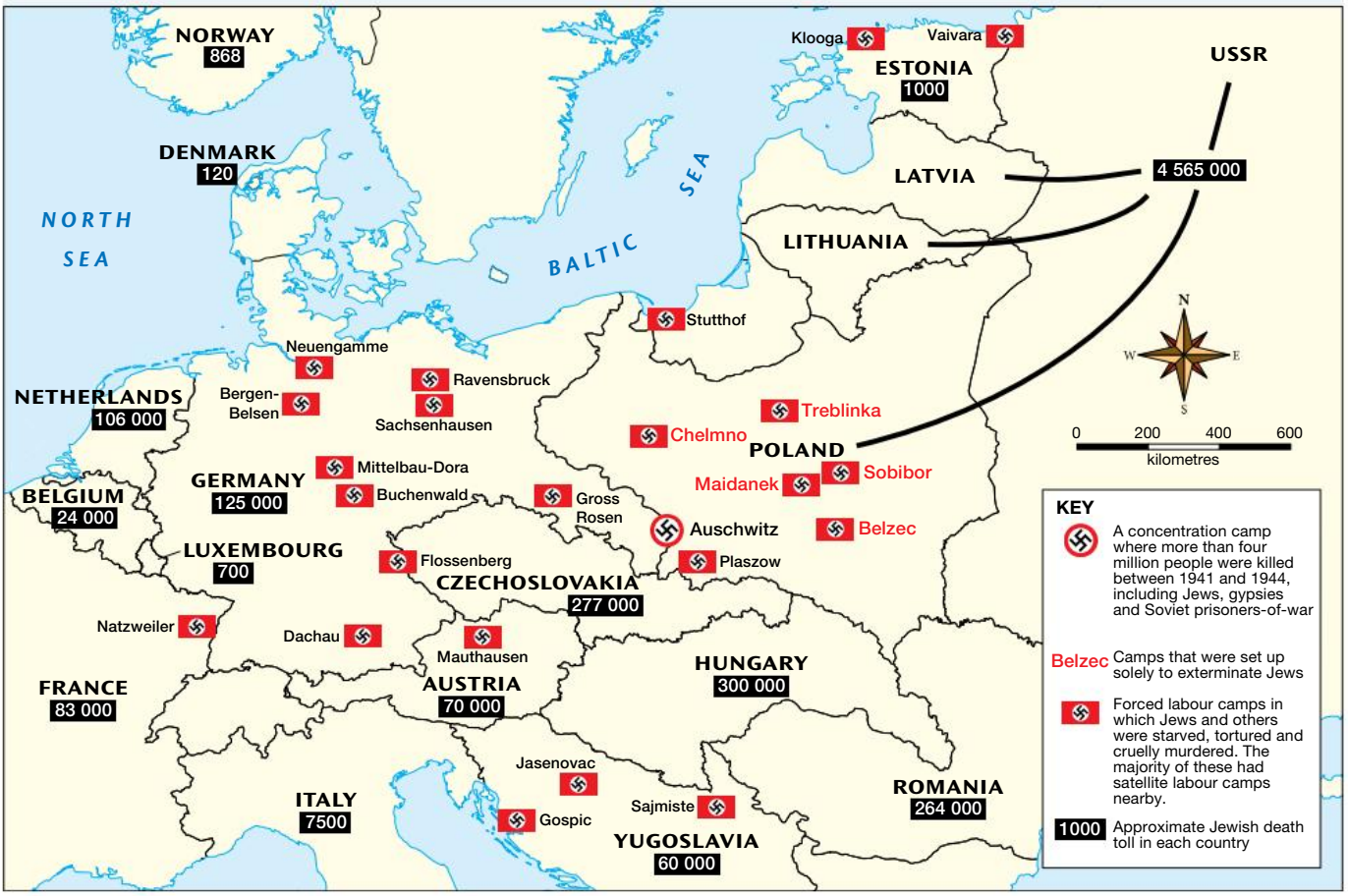


SOURCE 4 These gas ovens at Buchenwald were used to burn bodies. Buchenwald was not a planned extermination camp like Auschwitz. Its prisoners were used as slave labour in the camp and surrounding armaments factories. Nevertheless, there were mass killings of prisoners, especially Soviet and Polish POWs. Many inmates died during Nazi medical experiments and others were sent on from Buchenwald to be killed at Auschwitz.



int-6699

SOURCE 5 Concentration camps and Jewish deaths in Europe during World War II



Source: Map by Spatial Vision.

The Holocaust

The Holocaust was the most systematic of all Nazi war crimes. It was an act of genocide intended to wipe out European Jews. Nazi persecution of Jews intensified after the outbreak of the war and the mass murder of Jews began in 1941. When the Nazis invaded Poland and the Soviet Union they killed anyone who might resist, but all Jews were singled out for destruction. Poland's Jews were forced into enclosed ghettoes where survival was a struggle. During the invasion of the Soviet Union, the Germans carried out mass shootings of communists and Jews. In Latvia in 1941, 327 000 Jewish men, women and children were murdered in two mass shootings. The SS also conducted experimental gassings of Jews and Soviet POWs in specially converted vans.

In 1941 Hitler decided that the 'final solution to the Jewish problem' would be mass extermination in SS-run concentration camps. Auschwitz concentration camp was ordered to prepare for mass gassings. On 20 January 1942 an SS document called *Final Solution to the European Jewish Question* stated that healthy Jews would be exterminated through slave labour. Throughout the remainder of the war, Jews from all over Nazi-controlled Europe were transported to death camps. The sick, young children and elderly people were immediately forced into gas chambers disguised as showers. There they were gassed to death and their bodies were then incinerated in gas ovens. Others who were fit were selected for slave labour and killed later when they became too weak to work. In the largest camps thousands of prisoners could be gassed in a day. Altogether, around six million Jews were murdered.

The Nuremberg war crimes trials

At the war's end, the Allies put the leading Nazis and concentration camp commandants on trial. To conduct trials of the surviving Nazi leaders, the International Military Tribunal was formed with judges from Britain, France, the United States and the Soviet Union. Hitler and several other Nazi leaders had already committed suicide. Among leading Nazis who received death sentences were Joachim von Ribbentrop, Hitler's Foreign Minister; Alfred Rosenberg, Minister for Occupied Territories; and Hermann Goering, Luftwaffe Commander-in-Chief from 1936 and Economics Minister from 1937. Goering committed suicide the day before he was to be hanged.

SOURCE 6 A twisted pile of corpses lies in a burial pit at Bergen-Belsen concentration camp. When British troops liberated the camp on 15 April 1945 they found 10 000 dead inmates, mainly Jews, who needed to be buried quickly to stop the spread of typhus and other deadly diseases. The camp's former SS guards were forced to bury them. This photograph was taken by Alan Moore, an official Australian war artist.



Source: AWM P03007.015.

A significant number of Nazi war criminals, along with many Nazi collaborators who committed war crimes in occupied countries and in Axis satellite states such as Croatia, managed to avoid arrest. Some adopted new identities and escaped from Europe. Martin Bormann, Hitler's secretary and the second most powerful person in Nazi Germany, vanished; he was **tried in absentia** and sentenced to death. Adolf Eichmann, who played a leading role in the Holocaust, was captured by Israeli agents in Argentina in 1960, tried in Israel and hanged in 1962.

tried in absentia tried even though the accused is not present in court

SOURCE 7 *SS guards burying dead, Belsen*, painted in 1947 by Australian official war artist Alan Moore, who witnessed the liberation of Belsen



Source: Moore, Alan, *SS guards burying dead, Belsen* (1947)
Oil on canvas, 46.2 × 61.4 cm, Australian War Memorial ART27621.

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- World War Two > **World War II in Europe**

on Resources

Weblink Interactive map of Auschwitz

21.16 ACTIVITIES

1. Conduct a 'four corners' activity on the following statement: 'Those who committed war crimes during World War II were only following orders'.

   First of all divide into four groups according to whether you strongly agree, agree, disagree or strongly disagree with the statement. In your group, discuss your perspectives on the issue to discover why you hold this view. Now swap with someone in an opposing corner (e.g. strongly agree with strongly disagree) and discuss your differing perspectives. Try to discover why you hold opposing views.

Then answer these questions:

a. How did it feel to discuss the issue with someone who held the same view as you?
b. How did it feel to discuss the issue with someone who held the opposing view?
c. How well were you able to understand and appreciate the opposing view?

General capability: Critical and creative thinking

2. Many people regard the war crimes trials at the end of World War II as inadequate because many fascist war criminals escaped justice and only totally defeated powers could be held to account for war crimes. Conduct research to find out what steps have been taken since World War II to punish war crimes and how successful such measures have been.

History concept: Continuity and change
HASS skills: Questioning and researching

21.16 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 6	Questions 3, 7, 8	Questions 5, 9, 10

Check your understanding

1. Describe the nature of Japanese war crimes.
2. What was the role of the International Military Tribunal for the Far East?
3. Explain how Nazi racism influenced the way that the German military and SS treated different groups of POWs and civilians.
4. Describe the consequences of Nazi policies for Soviet POWs and Soviet and other Slavic civilians.
5. Describe Nazi policies towards Jews and explain the consequences of the Holocaust.

Apply your understanding

6. Imagine you are one of the POWs called on to identify the suspected Japanese war criminal in **SOURCE 1**.
   a. Describe how you would feel if you recognised the suspect.
   b. Describe how the suspect would be feeling.
7. Examine **SOURCE 5**.
   a. List, in descending order, the countries in which there were the most concentration camps.
   b. Explain why Auschwitz was the most notorious of all concentration camps.
8. Frame at least three questions you would ask about each of **SOURCES 2**, **3**, **4**, **6** and **7** in an investigation of Nazi atrocities.

For help with the skill of Evaluating see topic 1 HASS skills.

9. Evaluate the significance of the war crimes trials following World War II as a turning point in attitudes to wartime atrocities.
10. Explain why it can be soundly argued that the extent of the Holocaust, for which evidence is provided in **SOURCES 2**, **3**, **4**, **5**, **6** and **7**, was directly caused by the policies of Hitler and the leading Nazis.

For sample responses to every question, go to www.jacplus.com.au.

21.17 Changing international relations

LEARNING INTENTION

By the end of this subtopic you will be able to describe the progressive policies adopted by the Australian Labor Government regarding international relations following World War II.

21.17.1 Australia and the United Nations

The end of World War II was not to bring lasting peace. Instead it ushered in the era of the Cold War, which was to last until the late 1980s. This was an age of tension and sometimes of confrontation between blocs of countries led by the Soviet Union (USSR) and the United States, the two world powers that had contributed most to winning World War II. It was also an age of wars in developing countries in which opposing sides were backed by the communist and anti-communist blocs. How would Australia shape its international relationships in this new and hazardous world?

SOURCE 1 Dr H.V. Evatt (second from left) was Minister for External Affairs and Attorney-General in the Curtin Labor government. Here Evatt is receiving a vote of thanks as 'the champion of small nations' at the 1945 conference which established the United Nations and framed its charter.



Because of the horrors of World War II, the United Nations Organization (UN) was formed in 1945 to replace the failed League of Nations in the quest for world peace, freedom and prosperity. Australia's Labor government strongly supported the UN. As leader of Australia's delegation to the San Francisco Conference in April–June 1945, Dr H.V. Evatt, known to his friends as 'Doc Evatt', gave Australia its first progressive voice in world affairs (see **SOURCE 1**). Evatt clashed with the big powers when he spoke on behalf of the world's small nations, the poor and the oppressed. He played a leading role in shaping the Charter of the United Nations. The charter was endorsed by the UN's original 51 member states in October.

The UN had (and still has) three main organisations: the Secretariat, which handles its administration, the Security Council, which acts to preserve international peace and security, and the General Assembly, in which all member states vote. Evatt was elected President of the General Assembly in 1948 and in that year he presided over the UN's adoption of the Universal Declaration of Human Rights. Evatt's influence is evident in the opening statement of the Declaration, which states that recognition of equal and inalienable human rights is 'the foundation of freedom, justice and peace in the world'.

SOURCE 2 An Indonesian family crowds into the one remaining room of their bullet-riddled home in 1945



SOURCE 3 Australia's Ambassador J. Hood handing his credentials to Indonesian President Sukarno on 19 February 1950



21.17.2 Australia and Asia

Australia's relations with Asian countries were influenced by the emergence of Asian movements for independence from colonial rule. When World War II ended, European colonial powers tried to resume ruling their Asian colonies as if nothing had been changed by the war. Such attempts conflicted with the hopes of Asian independence movements. In Singapore, where Britain's Asian subjects had witnessed the humiliating spectacle of a huge British army surrendering to a smaller force of Japanese, the British assumed that they could return and rule as before the war. While some Asian leaders had collaborated with the Japanese, others, particularly those led by communists, had helped the Allies by waging guerrilla warfare behind Japanese lines. In Vietnam, for example, communist guerrillas had fought the Japanese. But, when the war ended, the French returned, and Britain supported their return. This caused the Indochina War, which ended with French defeat in 1954.

Australia and Indonesia

In the Australian labour movement there was strong support for Asian independence and for the Australian Labor government's independent foreign policy. On 17 August 1945, in the Japanese-occupied Dutch East Indies, Indonesian nationalists clashed with the Japanese and declared their country's independence. From late 1945, after Japan's surrender, Indonesians resisted Dutch attempts to regain their former colony. The Australian government supported Indonesian independence and recognised the newly proclaimed Republic of Indonesia on 9 July 1947. But on 20 July the Dutch launched a major offensive so Australia called on the UN Security Council, which ordered a cease-fire. Australia served on the UN committee that worked for a negotiated peace. Despite further clashes, Indonesian independence was granted in August 1949. Australia appointed its first ambassador to Indonesia and sponsored Indonesian membership of the UN in 1950.

21.17.3 Relations with Britain and the United States

Australians had fought in Britain's colonial wars and in World War I out of loyalty and because they believed that if they defended the Empire, then Britain would always protect Australia from any invasion from Asia. However, when the Japanese swept south in 1942, Britain was struggling for its own survival. As you learned in earlier subtopics, Australia turned to the United States, and this has often been seen as a turning point in Australia's foreign relations.

Although Japan did not have plans to invade Australia and, after May 1942, it lacked the capacity to invade, a majority of Australians believed that the United States had saved Australia from invasion, and so they came to believe that Australia must give the same loyalty to its new powerful friend as it had previously given to Britain. Thus, along with a short-term legacy of hatred towards Japan, the war left a longer legacy of trust in the United States.

Cold War tensions increased after China's communists won power in 1949. Under the conservative governments that ruled Australia from December 1949, Australia recognised that Britain's power was declining. Despite this, Australia retained ties, sending troops to Malaya from 1955 to 1958 to help the British suppress a communist uprising. Increasingly, however, Australia looked to the US as its new protector.

SOURCE 4 From the late 1950s, Australian–Indonesian relations deteriorated, and from 1963 to 1965 Australia sent troops to Borneo to help stop a small-scale Indonesian invasion of Malayan territory. In this 1964 photograph, Australian troops are holding weapons captured from Indonesians.



Fears and treaties

Although it had made some moves towards close relations with Asia under the Labor government, Australia retained the White Australia policy, which excluded Asians from migrating to Australia. If anything the wartime experience had increased fears of Asia in the minds of many Australians. During the 1950s, fear of the 'Yellow peril' would merge with fear of communism, the 'Red peril'. Such thinking would lead Australia into the ANZUS pact in 1951 (a military alliance of Australia, New Zealand and the United States) and into the South-East Asian Treaty Organization (SEATO) in 1954. Despite its title, SEATO's only Asian members were dictatorial governments in Pakistan, Thailand and the Philippines. Both treaties were anti-communist, not pro-democratic. Tragically, such fear also led Australia into the Vietnam War in the 1960s. Until the 1970s, only a small minority warned that fighting America's wars in return for protection could be just as misguided as the much older faith in the British Empire.

21.17 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 4, 6, 7	Questions 3, 8, 9, 10	Questions 5, 11, 12

Check your understanding

1. Explain why the United Nations was formed.
2. Describe Australia's role in the formation of the United Nations.
3. Compare and contrast the differing attitudes of the Australian post-war Labor government and the colonial powers (Britain, France and the Netherlands) to Asian independence movements.
4. Identify crucial steps in Australia's support for Indonesian independence.
5. Identify reasons why trust in the United States was a legacy of World War II for many Australians.
6. Explain why Cold War tensions increased from 1949.

Apply your understanding

7. Explain what evidence **SOURCE 1** provides for Dr H. V. Evatt's leading role and influence in shaping the United Nations.
8. Explain what evidence **SOURCE 2** provides for hardships experienced by ordinary Indonesians in their struggle for independence.
9. Describe **SOURCE 3** and explain what it reveals about Australian–Indonesian relations in 1950.
10. Explain what evidence **SOURCE 4** provides for the roles of Australian troops in Malaya/Borneo.
11. Using **SOURCES 2**, **3** and **4** as supporting evidence, explain how events changed Australia's relationship with Indonesia between 1945 and 1964.
12. Explain Australia's changing relationships with Britain and the United States during and after World War II.

For sample responses to every question, go to www.jacplus.com.au.

21.18 Commemoration and contested debates

LEARNING INTENTION

By the end of this subtopic you will be able to describe the ways in which Australia has commemorated World War II, and identify some of the history of World War II that continues to be debated by historians.

21.18.1 Commemorating World War II

On 14 August 1945, Japan accepted US terms for unconditional surrender. The following day was called VP Day (Victory in the Pacific). On that day, 15 August, Australians celebrated wildly. The fear of a future under tyranny was now just a memory and so, they hoped, were the long years of hardship. But almost 40 000 Australians had given their lives in this brutal conflict and, as in World War I, Australians were determined that their sacrifice would not be forgotten. Historians were also determined to understand what had happened. How have Australians commemorated World War II and what aspects of the war have been the subject of contested debates?

After World War I, Anzac Day had been adopted as the national day for remembrance of those who served and, particularly, those who died in the Great War. Rather than have a separate day of remembrance, Anzac Day also became the day for remembering those who fought and died in World War II. Veterans marched with their World War II units each Anzac Day in Australian cities and towns, and Anzac Day speeches paid tribute to them along with Great War veterans. As the numbers of surviving World War I veterans dwindled over the later decades of the twentieth century, Anzac Day marchers were then mostly from World War II until their ranks too were thinned by age and death.

After World War II, new memorials were not constructed in Australian cities and towns as they had been after World War I. Rather, new sections were added to existing memorials with the names of local people who had lost their lives in World War II. The Australian War Memorial in Canberra developed a new section dedicated to World War II. It commemorates the sacrifices of all branches of World War II services. As the casualty rate in the RAAF was the highest of the three services, it is fitting that the Australian War Memorial has paid a special tribute to the RAAF in its displays (see **SOURCE 1**).

DISCUSS

Hold a class discussion on the question of why 'Battle for Australia Day' has failed to capture the public imagination in anything like the way that Anzac Day has done. **General capability: Critical and creative thinking**

SOURCE 1 Avro Lancaster Mk I bomber 'G for George', 460 Squadron, RAAF on display at the Australian War Memorial. This plane flew 90 operations over occupied Europe with 27 crews, mostly Australians, between December 1940 and April 1944. During these operations, the aircraft was damaged by enemy fire more than 20 times.



Battle for Australia Day

It was not until the 1990s that any significant movement began for a specific day to commemorate Australia's role in World War II. In 2008 the RSL finally achieved success in a decade-long campaign to commemorate the 'Battle for Australia', a series of separate battles in 1942 that included the Battle of the Coral Sea, the Battle of Milne Bay and the Kokoda Track. The Australian government proclaimed in 2008 that 'Battle for Australia Day' would be observed each year on the first Wednesday in September. However, several historians were critical of the idea that there ever was a battle for Australia. They argued that these were separate battles and there was no co-ordinated Japanese campaign to invade Australia.

21.18.2 Contested debates about World War II

Many aspects of World War II have been the subject of ongoing debates between historians. As you have seen, historians have given conflicting interpretations of the meaning and significance of Prime Minister John Curtin's 'call to America', and the concept of a 'Battle for Australia' has also been contested.

Historical debate over the European theatre of the war

Controversy has surrounded several aspects of the war in Europe, including the reasons for early Axis successes, the collapse of the French Republic in 1940, the significance of various battles and the decision making that shaped the course of the war. Some historians have argued that the conflict did not become a world war until Germany invaded the Soviet Union in June 1941 and Japan bombed Pearl Harbor in December 1941. There has also been debate about the responsibility of different factors in the European war — the Treaty of Versailles, fascism, appeasement and the extent to which the war was caused by Nazi plans for conquest or by miscalculation.

Controversy over the Holocaust

There is probably no modern historical issue that has created more controversy than the Holocaust. Issues include how far most of the German people supported Nazi policies and to what extent ordinary Germans knew what went on in the concentration camps and death camps. Most historians distinguish between Nazis who supported the crimes committed during the Holocaust, including those who actually took part in them, and the great majority of Germans who took no part in such atrocities or were not aware that they were taking place. Historians have pointed out that major death camps like Auschwitz were outside Germany, while others have stressed that, due to the involvement of police, soldiers, guards, railway staff and bureaucrats, there had to be widespread knowledge of atrocities.

Debates about the Pacific theatre of the war

There has been ongoing historical debate about many aspects of the Pacific War. Controversial topics include the quality of military leaders, especially MacArthur; the decisions of political leaders, including Churchill, Curtin, Roosevelt and his successor Truman; and the conduct of specific campaigns and battles. Here we will look at two debates that are ongoing or current.

The debate on whether Australian troops were outnumbered on the Kokoda Track

Until very recently, Australian historians and Australians generally believed that the men of the 39th Battalion and the Papuan infantry were vastly outnumbered by Japanese troops along the Kokoda Track from July to September 1942. However, in 2012 that assumption was challenged when the book *The Kokoda Campaign 1942: Myth and Reality*, by Peter Williams, was published following extensive research using Japanese sources. Williams conducted extensive research in the records of the Japanese units of the *Nankai Shitai* (South Seas Detachment). What he found was that the Australian forces were never outnumbered by as much as they believed and from mid-September the Australians outnumbered the Japanese.

SOURCE 2 From *Inside History Magazine* blog, Author Q & A: *The Kokoda Campaign 1942* by Peter Williams

IHM: What resources did you come across when researching your book that have not been widely used by others?

Peter: I went to Tokyo and spent a month in their military archives looking at Imperial Japanese Army documents from 1942. I don't know of any other Kokoda author who has done that, which is possibly why other books on Kokoda have got much of the story wrong.

Debates over the use of atomic bombs to force Japan's surrender

Probably no issue has been more controversial than the use of atomic bombs to force Japan's surrender. Here are three examples of historians arguing that it was not necessary to use those horrific weapons to end the war.

SOURCE 3 A sculpture depicting the horrors of the atomic bomb in Nagasaki Peace Park



In *Japan's Decision to Surrender* (1954), the US historian Robert J. Butow argued that the United States made it impossible for Japan to surrender without losing face. He argued that the Japanese would have been much more willing to surrender if the Allied terms had been transmitted to them without publicity.

In *Brighter than a Thousand Suns* (1965), Robert Jungk pointed out that the Japanese were attempting to have the Soviet Union help them in negotiating peace. Jungk argued that, as it had captured all vital islands near the Japanese home islands, the United States could have maintained the blockade of Japan and used diplomatic pressure to end the war without the need for more casualties.

In *A History of Modern Japan* (1976), the British historian Richard Storry argued that the Japanese leaders could have been persuaded to surrender had the United States demonstrated its power by dropping the bomb on open country. Storry argues that the US knew that the Japanese were trying to seek peace and that the entry of the Soviet Union into the Asia–Pacific War with an attack on Japan on 8 August was just as important a factor in leading to the Japanese surrender as was the atomic bomb.

Other historians have argued that any alternative to the atomic bombs would have caused even more suffering (see **SOURCE 4**).

SOURCE 4 From 'Nightmares beyond Atomic Bombs', in *Wartime*, the official magazine of the Australian War Memorial, Winter 2015, by Richard Frank

The advent of the reality of nuclear weapons will continue to focus the attention of later generations on the end of the Asia–Pacific War. Yet … With the evidence now available, the nightmare recognised at the time — that an invasion of the Japanese home islands would produce stupendous casualties on both sides — is more than validated.

21.18 ACTIVITY

Research the Battle of Isurava, its course and its outcome. Consider why it has been described by some commentators as 'Australia's Thermopylae' as well as the statement by some veterans of the battle that its importance was second only to Gallipoli in 1915 in Australian military history. Evaluate the validity of such claims. For help with the skill of Evaluating see topic 1 HASS skills.

History concepts: Significance, Contestability

21.18 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 5, 9	Questions 3, 6, 7, 8	Questions 4, 10, 11, 12

Check your understanding

1. Identify the main day of the year on which Australians who served in World War II are remembered.
2. Describe other ways in which Australians commemorate World War II.
3. Explain why the idea of 'Battle for Australia Day' has been controversial.
4. Explain why 'G for George' is considered a fitting memorial for Australian participation in World War II.
5. Identify two aspects of the war in Europe that have been the subject of historical debates.
6. Describe two opposing arguments in debates on the war in Europe.

Apply your understanding

7. Explain how *The Kokoda Campaign 1942: Myth and Reality* by Peter Williams has challenged long-accepted interpretations of the Kokoda campaign.
8. Read **SOURCE 2** and explain what new evidence Peter Williams used in his analysis of the Kokoda campaign.
9. Look closely at **SOURCE 3** and identify features of this sculpture that express the horrors inflicted by the atomic bombs.
10. Explain the main arguments used by Butow, Jungk and Storry against the idea that the use of atomic bombs was necessary to force Japan to surrender.
11. Read **SOURCE 4** and identify the main point of Richard Frank's argument.

For help with the concept of Contestability see topic 19 History concepts and skills.

12. Using sources in this subtopic identify one example where a contested debate has sprung from research that has produced new evidence and another example where a contested debate is based on conflicting interpretations of the same evidence.

For sample responses to every question, go to www.jacplus.com.au.

21.19 Thinking Big research project — Honouring Indigenous Australians' service

Scenario

You have been asked to deliver a speech at your school's Anzac Day commemoration. As Anzac Day commemorates not only World War I but all wars in which Australians have served, you have been asked to focus on World War II, and particularly on a service contribution that has only recently been given the attention it deserves – that of Aboriginal and Torres Strait Islander peoples.

Task

You are to research, write and deliver a speech describing and honouring the contributions of Aboriginal and Torres Strait Islander peoples to Australia's war effort during World War II. Your speech should take approximately ten minutes to deliver. You may present images, diagrams and maps as part of your speech if you wish.



Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group so you can work collaboratively. Working in groups of two will enable you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish.
- Conduct research to find information and make notes about the contributions of Indigenous people to Australia's war effort during World War II. The weblinks in the **Media centre** will provide a useful starting point. Remember to record details of your sources so you can create a bibliography to submit with your printed speech.
- Add your research notes and source details to the relevant topic pages in the Research forum. You can view, share and comment on research findings with your partner. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.
- Organise your notes by dividing the speech into headings for general information and subheadings for examples of individual experiences.
- Write your speech and, with your partner, decide how you will share the presentation. Practise and then deliver your speech in class for assessment. Print out your completed speech and submit to your teacher, along with your bibliography.

on Resources

ProjectsPLUS Thinking Big research project — Honouring Indigenous Australians' service (pro-0205)

21.20 Review

21.20.1 Key knowledge summary

21.2 Examining the evidence

- We have enormous amounts of written primary sources and artefacts from World War II in museums and archives.
- World War II was the first major conflict in which movie cameras were used extensively and there are many visual sources that were created for propaganda or to document events.

21.3 The Nazis take power in Germany

- The rise to power of the German fascists, the Nazis, was aided by the Great Depression and middle-class fears of communism.
- Hitler consolidated Nazi power through violence and propaganda.
- From 1934, the Nazi regime controlled all aspects of German political, economic, social and cultural life.

21.4 Japanese militarism

- Extreme nationalists in Japan shared most traits with European fascists.
- The Japanese military used terror against their opponents at home and committed aggression in Manchuria from 1932.
- From 1937, Japan launched a full-scale invasion of China and committed terrible atrocities.

21.5 The road to war in Europe

- During the 1930s, Italy and Germany committed acts of aggression in Europe and Africa.
- The Western powers adopted policies of appeasement, which only encouraged further fascist aggression.
- The West finally took a stand over threats to Poland.
- After Germany invaded Poland on 1 September 1939, Britain and France declared war on Germany.

21.6 Overview of World War II to 1944

- Nazi Germany quickly overran Western Europe in 1940, leaving the British Empire standing alone.
- The Axis invasion of the USSR gave Britain a powerful new ally.
- The beginning of the Pacific War brought the war close to Australia, but it also brought the United States into the conflict.
- There were several turning points in the war in Europe and the Pacific in 1942.
- From 1943, the Axis powers were losing the war.

21.7 Australians at war: enlistment and the Mediterranean battles

- Australia was unprepared for war and, unlike in World War I, there was no enthusiastic rush to enlist.
- Australians achieved victories in the Middle East and suffered defeat in Greece and Crete in 1941.
- After Japan entered the war in December 1941, only the 9th Division of the AIF was kept in the Middle East.

21.8 Australia under threat

- In December 1941, Curtin issued his ‘call to America’.
- ‘Fortress Singapore’ fell to the Japanese in February 1942 and soldiers of the 8th Division AIF became POWs.
- Japanese bombing raids took place over northern Australia.
- Curtin clashed with the British over deployment of the Australian 7th Division.

21.9 Australians in the Pacific War: Kokoda

- Australians feared invasion in 1942, although it later became known that Japan had no plans nor the capability to invade Australia.
- Australian militia and Papuan infantry struggled to hold the Japanese on the Kokoda Track until they were reinforced.
- Lack of supplies forced a Japanese retreat from late September.

21.10 Australians in the Pacific War: beyond Kokoda

- Australians fought the Japanese in Papua and New Guinea from 1942 to 1944.
- In the closing stages of the war, Australians were deployed in 'unnecessary campaigns' in New Guinea, New Britain, Bougainville and Borneo.
- The RAAF and RAN both played wider roles in the war in Europe, Asia and the Pacific.

21.11 Australian prisoners of war

- Australians experienced different kinds of treatment in the hands of the Germans and Japanese.
- More than two-thirds of Australian POWs were prisoners of the Japanese and more than one-third of those prisoners died due to brutal treatment, overwork, starvation and diseases.
- Conquered Asians, especially Chinese, suffered terribly at the hands of the Japanese.

21.12 The Australian home front

- The Australian government assumed sweeping powers in order to direct the war effort, including limited conscription.
- Civilians were heavily involved in the war effort through war work and volunteer activities.

21.13 Australian women at war

- Australian women helped the war effort through voluntary work, taking jobs in munitions and replacing men who had enlisted in the services.
- The Women's Land Army had around 3000 members who carried out rural jobs in place of men who had enlisted.
- Tens of thousands of women served in the AWAS, WAAAF and WRANS and the medical and nursing services.

21.14 Australia's relations with the US

- The alliance between Australia and the US has been seen as a turning point in Australia's foreign relations.
- It was convenient in 1942 for both countries.
- There were underlying tensions and conflicting priorities.

21.15 The end of the war

- In 1944 the Allies opened a new front with the D-Day landings in France while the Red Army advanced against Germany along the eastern front.
- Soviet troops captured Berlin in 1945.
- Hitler committed suicide and one week later, on 7 May 1945, Germany surrendered, ending the war in Europe.
- The Pacific War ended in August 1945 following the dropping by the United States of two atomic bombs on Japanese cities.

21.16 War crimes and retribution

- The decision of the Allies to put Nazi and Japanese war criminals on trial was supported by the newly formed United Nations Organization (UN).
- Japanese war criminals were prosecuted though the International Military Tribunal for the Far East.
- Nazi war criminals were prosecuted through the International Military Tribunal at the Nuremburg War Crimes trials.

21.17 Changing international relations

- Australia's Labor government was a strong supporter of the UN.
- Dr H.V. Evatt played a leading role in shaping the UN Charter.
- Under Labor, Australia supported Indonesia's quest for independence.
- Australia realised that it could not depend on British protection and it moved closer to the US, expecting it to take the place of Britain as Australia's new protector.

21.18 Commemoration and contested debates

- Anzac Day became a day for the remembrance of sacrifice in World War II as well as World War I.
- The concept of a 'Battle for Australia Day' was advanced in the 1990s and adopted in 2008, but it was and is still controversial.
- There have been many contested debates about crucial aspects of World War II and they are ongoing.

21.20.2 Key terms

Abyssinia the only independent African state in 1935; now called Ethiopia
alien a person born in another country who is not yet a citizen of the country in which they live
Aryan term used by the Nazis to describe 'pure-blooded' Germanic peoples
bunker a fortified underground shelter, usually with openings from which to fire at enemies
concentration camps prison camps where people were beaten, tortured, starved and used as slave labour
dominions the British Empire's self-governing settler colonies
Fortress Europa the term used by Hitler to describe the defences along the coastline of Europe from Denmark to southern France
foxhole a concealed dugout or pit used by one person to shelter from and shoot at the enemy
hyperinflation such an extreme rise in prices that a currency loses any real value
isolationist foreign policy based on avoiding involvement in the affairs of other countries
ideologies sets of ideas or beliefs that guide an individual, group, society or nation and provide the basis of political systems
internment to be put in prison for political or military reasons, either real or perceived
left-wing support for progressive beliefs, such as the intervention of government in society to create greater equality
Luftwaffe the German air force during World War II
militia a body of men called up for military service only in emergencies
militarism excessive influence of military values and pro-war ideas
Normandy a region of France on the Atlantic coast
paramilitary armed forces outside the official military
partisans irregular fighters using guerrilla tactics behind enemy lines
rationing controlling the distribution of something when supplies are low
rearguard action direct engagement with the enemy by troops protecting a retreating force
Reichstag the German Parliament
right-wingers supporters of conservative beliefs, such as individual enterprise, and the belief that government should not intervene in the economy
Royal Air Force (RAF) Britain's Royal Air Force
'scorched earth' military strategy of destroying or removing everything that could be used by an advancing enemy
spearhead to lead an attack
South-West Pacific Zone area, including New Guinea and what is now Indonesia, within which Australian conscripts could be sent to fight after February 1943
Third Reich the Nazi name for their regime in Germany. Reich means empire.
tried in absentia tried even though the accused is not present in court
United Fronts policy of communist parties forming alliances with other parties to combat fascism
Weimar Republic the democratic system of government in Germany from 1919 to early 1933, so called because its constitution was written in the city of Weimar

21.20.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

What was Australia's role in the deadliest conflict in human history? Why did we join the fight?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6351)
Reflection (ewbk-6350)
Crossword (ewbk-6349)
Word search (ewbk-6348)
Student Learning Matrix (ewbk-6340)

Interactivity The course and consequences of World War II crossword (int-7662)

21.20 Review exercise

Multiple choice

1. In May 1940, German *blitzkrieg* tactics were used to overrun which countries?
   - **A.** Austria, Russia and Greece
   - **B.** The Netherlands, Belgium and France
   - **C.** Somaliland, Egypt and Syria
   - **D.** Britain, Russia and the USA

2. In its invasion of the Soviet Union, Germany was assisted by troops from which countries?
   - **A.** Hungary, Romania and Finland
   - **B.** Portugal, Ireland and Turkey
   - **C.** Japan, Korea and China
   - **D.** Sweden, Denmark and Norway

3. Where did three AIF divisions fight in 1940 and 1941?
   - **A.** Turkey, Greece and Spain
   - **B.** France, Belgium and the Netherlands
   - **C.** Russia, Japan and Singapore
   - **D.** Libya, Greece and Syria

4. Where were most Australian prisoners of the Japanese captured?
   - **A.** At sea
   - **B.** Papua and New Guinea
   - **C.** Singapore and the Dutch East Indies
   - **D.** Malaya and Burma

5. When John Curtin insisted that the 7th Division AIF be returned to Australia, where did the British want them to be sent?
   - **A.** The Middle East
   - **B.** Europe
   - **C.** India
   - **D.** Burma

6. Why did the Japanese Imperial Army attempt to take Port Moresby?
   - **A.** They planned to invade Australia.
   - **B.** They needed Port Moresby as a base for their Pacific operations.
   - **C.** They wanted to strengthen their hold on their fortress at Rabaul.
   - **D.** They could use it for submarine attacks on Sydney.

7. What is regarded as the single worst Japanese atrocity against Australian POWs?
   - **A.** The Sandakan death marches
   - **B.** The Burma–Thailand Railway
   - **C.** The Outram Road prison
   - **D.** The use of POWs as slave labour in Japan

8. Jobs performed by members of the Women's Land Army included which of the following?
   - **A.** Aircraft maintenance and signalling
   - **B.** Munitions work and postal deliveries
   - **C.** Factory work and mining
   - **D.** Shearing, dairying and crop harvesting

9. What was the largest of the women's war services?
   - **A.** The Women's Royal Australian Naval Service
   - **B.** The Voluntary Aid Detachments
   - **C.** The Australian Women's Army Service
   - **D.** The Australian Army Nursing Service

10. Who was the US officer in charge of Allied troops in the south-west Pacific?
    - **A.** Colonel Sanders
    - **B.** General Paton
    - **C.** General MacArthur
    - **D.** General Montgomery

11. Why was the Battle of Kursk a significant turning point in 1943?
    - **A.** The Germans won the battle.
    - **B.** The Soviet Red Army almost completely destroyed Germany's tank force.
    - **C.** The US Army entered the battle.
    - **D.** The Japanese Imperial Army took part in it.

12. Which of these South-East Asian countries did Australia assist in gaining its independence?
    - **A.** Indonesia
    - **B.** Vietnam
    - **C.** Malaya
    - **D.** The Philippines

Short answer

13. Compare **SOURCES 1** and **2**.

SOURCE 1 An Australian soldier's description of the conditions faced by soldiers fighting at Tobruk in Libya during the war against Germany published in *The Age*, 24 November 1941

Dust storms, heat, fleas, flies, sleepless nights, when the earth shook with the roar of the enemy's fury, daring raids into no man's land through mine fields and barbed wire, scorching day after day in the front line, where no man dared stand upright, but crouched behind a knee high protection of rocks — all these things had been the lot of the defenders of Tobruk.

SOURCE 2 Australian soldiers on sentry duty near Tobruk in September 1941

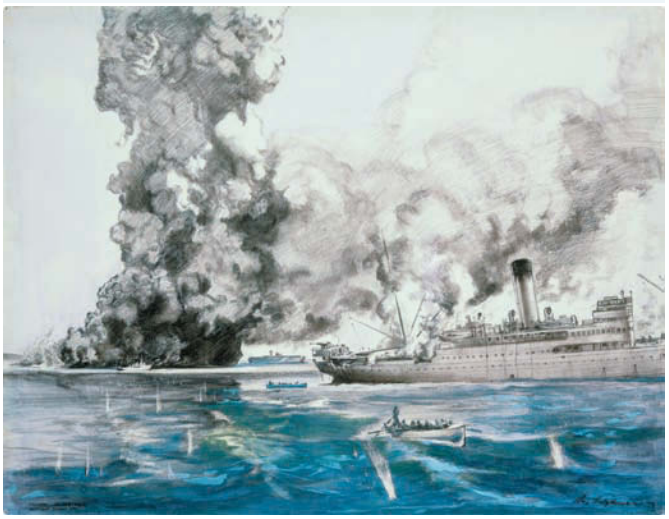


Australian War Memorial 020623.

a. How do they differ in the evidence they provide about conditions during the siege of Tobruk?
b. How might this difference be explained?
c. How would a historian further investigate conditions at Tobruk?

14. Look closely at **SOURCE 3**. In this attack on 19 February 1942, nine of thirteen ships in Darwin Harbour were sunk, there was widespread panic in Darwin and 243 people were killed. The Australian government used censorship to prevent the public from knowing the extent of the disaster.
    a. Identify reasons why the painting might or might not be reliable as a historical source.
    b. Explain why the government would have thought it necessary to censor reporting of such an event.
    c. Discuss whether censoring the true story of the event would really have prevented Australians from finding out about it.

SOURCE 3 This source was painted in 1942 by Roy Hodgkinson from photographs taken by an Australian seaman. The painting depicts Australian ships under attack in the first of 62 Japanese air raids on Darwin. There were also raids on Townsville, Broome, Port Hedland and Wyndham.



15. Read **SOURCE 4**. Write a short essay, commenting on what Paul Keating is saying about the significance of Australia's campaigns in Papua New Guinea during World War II. What arguments does he present here? Based on what you have studied in this subtopic, do you agree or disagree with his assessment? If you have recently studied World War I, you may be able to compare Australia's involvement in that war with its involvement in World War II.

SOURCE 4 An extract from a speech by Prime Minister Paul Keating in Port Moresby on Anzac Day 1992

The Australians who served here in Papua New Guinea fought and died, not in the defence of the old world, but the new world. Their world.

They died in defence of Australia and the civilisation and values which had grown up there.

That is why it might be said that, for Australians, the battles in Papua New Guinea were the most important ever fought.

They were fought in the most terrible circumstances. One correspondent wrote: 'Surely no war was ever fought under worse conditions than these. Surely no war has ever demanded more of a man in fortitude.'

They were fought by young men with no experience of jungle warfare. By the very young men of the militia with no experience of war at all.

They were fought by airmen of outstanding courage, skill and dedication.

They were fought against a seasoned, skilful and fanatical enemy.

At Milne Bay the Australians inflicted on the Japanese their first defeat on land.

Sir William Slim, who was then commanding the 14th Army in Burma, wrote: 'It was Australian soldiers who first broke the spell of invincibility of the Japanese army: those of us who were in Burma have cause to remember.'

On the Kokoda Trail it was again the young and inexperienced militia men — this time of the 39th and 53rd battalions — later reinforced with soldiers of the 7th Division, who fought gallantly — and eventually won.

When it seemed that Papua New Guinea would fall, when it seemed it would be another Singapore, another Rabaul, these troops gallantly held out and finally drove the enemy back to the sea.

These were the heroic days of Australia's history.

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 21 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

21.1 Overview

Video eLesson
- World War II (eles-2600)

21.2 Examining the evidence

eWorkbook
- Analysing a political cartoon (ewbk-6346)
- Analysing a propaganda poster (ewbk-6347)

Video eLesson
- The Blitz in Britain (eles-2601)

21.3 The Nazis take power in Germany

Interactivities
- Numbers of seats won by parties in the Reichstag in 1928 and 1932 (int-6690)
- A modern artist's impression of a Nazi rally (int-6691)

MyWorld History Atlas
- Causes of World War II

21.5 The road to war in Europe

Video eLesson
- Hitler at the Nuremburg rally (eles-2599)

MyWorld History Atlas
- Causes of World War II

21.6 Overview of World War II to 1944

Interactivities
- Europe at the beginning of 1942 (int-6694)
- The extent of the Asia–Pacific region controlled by Japan by July 1942 (int-6695)

MyWorld History Atlas
- World War II in Europe
- World War II in the Pacific

21.7 Australians at war: enlistment and the Mediterranean battles

Interactivity
- Theatres of war involving Australian forces in North Africa, the Middle East and Greece, 1941–42 (int-6696)

eWorkbook
- Australia — ready for war? (ewbk-6341))

21.8 Australia under threat

MyWorld History Atlas
- World War II in the Pacific
- World War II at home

21.9 Australians in the Pacific War: Kokoda

eWorkbook
- Australians in the Pacific War (ewbk-6342)

Interactivity
- Map and cross-section of the Kokoda Track (int-6697)

Weblink
- The Kokoda Track

MyWorld History Atlas
- World War II in the Pacific

21.11 Australian prisoners of war

eWorkbook
- Life as a POW (ewbk-6343)

Interactivity
- A modern artist's impression of life in a Japanese POW camp in South-East Asia (int-6698)

21.12 The Australian home front

eWorkbook
- The home front (ewbk-6344)

MyWorld History Atlas
- World War II at home

21.13 Australian women at war

Weblink
- Australia's war

21.15 The end of the war

eWorkbook
- War's end (ewbk-6345)

21.16 War crimes and retribution

Interactivity
- Concentration camps and Jewish deaths in Europe during World War II (int-6699)

Weblink
- Interactive map of Auschwitz

MyWorld History Atlas
- World War II in Europe

21.19 Thinking Big research project — Honouring Indigenous Australians' service

ProjectsPLUS
- Thinking Big research project — Honouring Indigenous Australians' service (pro-0205)

21.20 Review

eWorkbook
- Reflection (ewbk-6350)
- Crossword (ewbk-6349)
- Word search (ewbk-6348)
- Student Learning Matrix (ewbk-6340)

Interactivity
- The course and consequences of World War II crossword (int-7662)

To access these online resources, log on to **www.jacplus.com.au**.

22 Rights and freedoms (1945 to present)

22.1 Overview

Numerous **videos** and **interactivities** are embedded just where you need them, at the point of learning, in your learnON title at www.jacplus.com.au. They will help you to learn the content and concepts covered in this topic.

Aboriginal and Torres Strait Islander readers are advised that this topic may contain images of and references to people who have died.

What does it take to change the hearts and minds of a nation, so they don't just tolerate the First Nations population but respect and value them?

22.1.1 Links with our times

It was 1971 — 70 years after Federation — before Australia elected its first Aboriginal parliamentarian, Neville Bonner. After the 2019 federal election, a small group of Aboriginal and Torres Strait Islander representatives, which included Linda Burney, the first ATSI woman to win a House of Representatives seat, and Senators Ken Wyatt, Pat Dodson and Malarndirri McCarthy, took their place in Australia's forty-sixth parliament.

Some states have either begun to or have already enacted their own forms of treaties or settlements with Aboriginal and Torres Strait Islander peoples, but discussions on a federal level stalled considerably in the early twenty-first century.

SOURCE 1 Linda Burney, the first Aboriginal woman to win a House of Representatives seat, lays a wreath at Redfern Park honouring First Nations servicemen and women.



Resources

eWorkbook Customisable worksheets for this topic (ewbk-6373)

Video eLesson Rights and freedoms (eles-2605)

int-6707

SOURCE 2 A timeline of the struggle for rights and freedoms (1945–present)

CE

1925

1924
Fred Maynard founds the Australian Aboriginal Progressive Association (AAPA).



1930

1935

1938
Aboriginal and Torres Strait Islander peoples proclaim the 150th anniversary of settlement a 'Day of Mourning'.



1939
Aboriginal and Torres Strait Islander men enlist for World War II.

1940

1939
The *Torres Strait Islander Act* recognises Torres Strait Islanders as a separate people.

1945

1948
The UN adopts the Universal Declaration of Human Rights.



1950

1955



1960

1967
In a national referendum, 90 per cent of voters vote for Aboriginal and Torres Strait Islander peoples to be included in the national census.

1965

1966
Aboriginal workers walk off Vestey's cattle station at Wave Hill, demanding better pay and conditions.



1970

1975

1992
In the Mabo case, the High Court of Australia recognises Aboriginal and Torres Strait Islander ownership of the land for the first time.

1980

1988
The ALP federal government, led by Prime Minister Bob Hawke, make support for a treaty part of their government policy.

1985

1997
The *Bringing Them Home* report, tabled in Parliament, outlines the damage done to the Stolen Generations.

1990

1998
Pauline Hanson's One Nation Party, which believes that Aboriginal and Torres Strait Islander peoples are favoured over non-Indigenous Australians, picks up 22 per cent of the vote in the Queensland election.

1995

2002
Historian Keith Windschuttle causes controversy by challenging other historians' accounts of the mass slaughter of First Nations peoples by white settlers.

2000

2007
The Howard government approves an emergency 'Intervention' to protect the children of remote Aboriginal communities in the Northern Territory.



2005

2010
The United Nations Special Rapporteur on the Rights of Indigenous Peoples expresses grave concerns over the continuing Intervention in the Northern Territory.

2010

2008
Prime Minister Kevin Rudd delivers a formal apology to the members of the Stolen Generations.

2015

CE

2015–17
Prime Minister Malcolm Turnbull and leader of the Opposition Bill Shorten appoint the Referendum Council to advise on how to recognise Aboriginal and Torres Strait Islander peoples in the Constitution. The Council completes it report in June 2017, shortly after the Uluru Statement from the Heart.

2018–19
Victoria is the first state to pass legislation as the first step to a formal state-wide treaty. The Victorian First Peoples Assembly is elected to begin the process.

22.2 Examining the evidence

LEARNING INTENTION

By the end of this subtopic you will be able to explain why and how the voices of First Nations peoples in Australia were marginalised, and identify the limitations of viewing history from only one perspective.

22.2.1 How do we know about Aboriginal and Torres Strait Islander peoples' struggle for rights and freedoms?

Until the latter half of the twentieth century the voices of **Australia's First Peoples** were noticeably absent from discussions about Australian history. Today it is possible to access reports, commentary and stories that encompass a wide range of Indigenous experiences. Many of these focus on the struggle for rights and freedoms.

The views of non-Indigenous people about Aboriginal and Torres Strait Islander peoples' experiences can only ever be second-hand. To find primary evidence about what it is like to be a First Nations person in Australia, we must ask and listen to Aboriginal and Torres Strait Islander peoples. Not all Aboriginal and Torres Strait Islander perspectives on the fight for rights and freedoms relate to times past; some fights, such as land rights and the fight for equality, continue to this day. Similarly, not all First Nations peoples had or have the same experiences. The considerable number of cultures, language groups and timelines of colonisation make the discussion of these struggles very complex and often painful. Stories of lived experiences also add to our understanding of this complex issue, and play a significant part in allowing the voices Aboriginal and Torres Strait Islander peoples to be heard.

SOURCE 1 In 1999, at the 50th Anniversary of Australian Citizenship Conference, ATSIC Commissioner Colin Dillon, a Kumbumerri Elder of the Yugambeh Nation, talked about his experience as a police officer during the mid 1960s.

On entering police training in 1965, two years before the referendum, I found it frightening to realise that I was the only Aboriginal person on the police force. The only others were the Black Trackers, universally regarded as inferior with no police powers.

It was conveyed to me — informally but very bluntly — that I had entered the wrong profession, that there was no place for a black man as a sworn officer in an all-white police force. I persevered and endured the **unfettered** racism and hard training and was eventually formally sworn in as a Constable.

Yet even as I stood in the parade that day for the ceremonial swearing in of constables — a moment that should have been the proudest in my life — I remember the Commissioner as he made his inspection. On coming to me he commented to the parade Sergeant 'He's a bit on the dark side'.

My troubles continued — not only was I not wanted within the police force but my chosen profession and its associated tasks **alienated** me from my own people. Even the enactment of the Racial Discrimination Act in 1975 offered no respite, as it would have been sheer **folly** to formally complain in a work environment that quite openly tolerated racial and discriminatory practices.

Popular films

Although Aboriginal and Torres Strait Islander peoples have been depicted in films since the 1920s, many early portrayals were stereotypical and ill-informed. By the mid 1950s a slightly different portrayal emerged in *Jedda*, in which an Aboriginal girl raised by a white family seeks to discover her culture. In the 1970s, films such as *Walkabout* and *Stormboy* depicted Aboriginal people as helpful and knowledgeable about the land. In 1978 Muruwari filmmaker Essie Coffey released *My Life as an Aboriginal*, in which she demonstrated the differences between Aboriginal knowledge and the kind of education that Aboriginal children were getting in school. Coffey's film raised awareness about the number of First Nations children losing touch

Australia's First Peoples (or First Nations peoples) an inclusive term used to refer to groups that make up the Aboriginal and Torres Strait Islander communities

unfettered unrestricted

alienate to cause someone to feel isolated or separated

folly foolishness; lack of good sense

with their **heritage**. Since the 1980s, depictions of Aboriginal and Torres Strait Islander peoples on screen have been somewhat more well rounded, while films such as *Rabbit-Proof Fence* (2002) and documentaries such as *First Australians* (2008) have explored the difficult and often violent struggle for survival that Aboriginal and Torres Strait Islander peoples have endured. The 2006 movie *Ten Canoes* used only Aboriginal languages to tell its story. Providing a valuable reference point to imagine what life may have been like before European colonisation irrevocably changed First Nations cultures.

SOURCE 2 Many First Nations children, particularly those with one European parent, were forcibly removed from their families, and raised in institutions or by white families. The film *Rabbit-Proof Fence* (2002) tells the story of three such children, Mollie, Gracie and Daisy, in Western Australia.



Political and other commentary

Since Australia was colonised, politicians have been involved in designing policies concerning Aboriginal and Torres Strait Islander peoples. The means by which they have justified these policies in parliament and in the press has led to commentary by political insiders, journalists and cartoonists. It is a commentator's job to cut through the **rhetoric**, highlighting important or controversial aspects of the politicians' positions in a way that will be accessible to the public.

Aboriginal and Torres Strait Islander leaders such as Noel Pearson and Pat Dodson, along with educators such as Marcia Langton and Chris Sara, have been influential in contributing to this commentary. Other individuals such as actor Leah Purcell, filmmaker Rachel Perkins and visual artist Vernon Ah Kee present their commentary in artistic forms.

SOURCE 3 Throughout his prime ministership, John Howard adhered to a positive view of Australian history and refused to acknowledge the pain caused to First Nations peoples by previous governments, particularly in relation to the Stolen Generations.



Official documentation

The international fight for rights and freedoms was formalised in 1948 with the signing of the United Nations' Universal Declaration of Human Rights by Australia and many other countries. Today the UN reports on the degree to which countries are adhering to the Declaration. A negative assessment from the United Nations carries great weight within the international community.

heritage important or enduring
rhetoric effective and persuasive language, sometimes used to mislead

SOURCE 4 In 2010 the UN's Special Rapporteur on the Rights of Indigenous Peoples, James Anaya, finished an 11-day tour of Australia. While he praised certain aspects of Australian government policy, he was highly critical of the ongoing intervention (see section 22.12).

During my time in Australia, I have been impressed with demonstrations of strong and vibrant Indigenous cultures and have been inspired by the strength, resilience and vision of Indigenous communities determined to move toward a better future despite having endured tremendous suffering at the hands of historical forces and entrenched racism. It is clear that these historical forces continue to make their presence known today, manifesting themselves in serious disparities between Indigenous and non-Indigenous parts of society, including in terms of life expectancy, basic health, education, unemployment, **incarceration**, children placed under care and protection orders, and access to basic services.

Given these disparities, the Government has developed and implemented a number of important initiatives in order to 'close the gap' of Indigenous disadvantage within a wide range of social and economic areas, with a stated emphasis on women and children, and these programmes must continue to be improved and strengthened ... Aspects of the Government's initiatives to remedy situations of Indigenous disadvantage, however, raise concerns. Of particular concern is the Northern Territory Emergency Response.

incarceration imprisonment

22.2 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways.

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 6	Questions 3, 4, 8, 9	Questions 5, 7, 10

Check your understanding

1. These days, we have access to a range of primary and secondary sources to better understand First Nations experiences. Identify whether the following are primary or secondary sources.
   a. Official reports
   b. Media commentary
   c. Aboriginal and Torres Strait Islander peoples' stories
2. What are the strengths and limitations of the views of non-Indigenous Australians, such as journalists and academics, about the experience of Australia's First Peoples?
3. In what way could the film *Jedda* be seen as a 'turning point' in the depiction of First Nations peoples on screen?
4. Explain the role of a political commentator in your own words.
5. What role does the United Nations play in monitoring the treatment of First Nations peoples?

Apply your understanding

6. **SOURCE 1** presents an Aboriginal perspective on a particular event — the swearing-in ceremony for police constables. Why would you regard **SOURCE 1** as a primary source? What might be its strengths and weaknesses as a historical source?
7. What primary sources do you think the producers of *Rabbit-Proof Fence* (see **SOURCE 2**) would have consulted when making the film? What different biases do you think such filmmakers would need to guard against to ensure their depiction of events was factual?
8. What statement is the cartoonist trying to make in **SOURCE 3**? What images support this message? Is it an effective statement? Why or why not?
9. In **SOURCE 4**, UN representative James Anaya praises certain aspects of Australia's treatment of Aboriginal and Torres Strait Islander peoples and criticises others. What are they?
10. What primary and secondary sources do you imagine that James Anaya, the author of **SOURCE 4**, would have taken into account before making his determination and recommendations to the United Nations?

For sample responses to every question, go to www.jacplus.com.au.

22.3 The beginnings of an Aboriginal protest movement

LEARNING INTENTION

By the end of this subtopic you will be able to identify and explain the similarities and differences in the demands for rights and freedoms made by Aboriginal advocacy groups from 1920 onwards.

22.3.1 Protests during the 1920s

When Captain James Cook claimed Australia's east coast on behalf of Britain in 1770, the principle of ***terra nullius*** that was applied meant that no treaty was ever made with Australia's First Peoples. The arrival of the First Fleet in Sydney Cove on 26 January 1788 marked the beginning of settlement (from a European perspective) or, from a First Nations' perspective, the invasion of a land they had lived in continuously for tens of thousands of years. Early protests in the first century and a half of European control were suppressed by the Europeans' legal and social systems, which recognised neither First Nations laws and customs nor their custodianship of the land.

The first Aboriginal political organisations were formed in the 1920s. Foremost among these was the Australian Aboriginal Progressive Association (AAPA) formed by Fred Maynard in New South Wales in 1924. Maynard had been inspired by black activists in the United States. At the forefront of the Association's goals was the right for Aboriginal self-determination, including a right to land and an end to children being forcibly removed from their families. Street rallies, well publicised meetings, letter writing campaigns and petitions gained public attention. Jane Duren, a member of the Association, wrote a letter to King George V about conditions for Aboriginal people. In 1927, Fred Maynard wrote a letter of protest to the Premier of New South Wales, Jack Lang, calling for the restitution of Aboriginal land (see **SOURCE 1**). By late 1927, the Association had disbanded after a concerted campaign against Maynard and the Association by the New South Wales Aboriginal Protection Board, which administered the *Aborigines Protection Act 1909*.

SOURCE 1 Fred Maynard's letter of protest to the New South Wales Premier in 1927

I wish to make it perfectly clear on behalf of our people, that we accept no condition of inferiority as compared with European people. Two distinct civilisations are represented by the respective races ... That the European people by the arts of war destroyed our more ancient civilisation is freely admitted, and that by their vices and diseases our people have been decimated is also patent. But neither of these facts are evidence of superiority. Quite the contrary is the case. Furthermore, I may refer in passing, to the fact that your present scheme of old age pensions was obtained from our more ancient code, as likewise your child endowment scheme and widows pensions. Our divorce laws may yet find a place on the Statute Book. The members of the Board [the AAPA] have also noticed the strenuous efforts of the trade union leaders to attain the conditions which existed in our country at the time of the invasion by Europeans — the men only worked when necessary, we called no man 'master' and we had no king. We are therefore, striving to obtain full recognition of our citizen rights on terms of absolute equality with all other people in our land. The request made by this Association for sufficient land for each eligible family is justly based. The Australian people are the original owners of this land and have a prior right over all other people in this respect. Our request to supervise our own affairs is no innovation. The Catholic people in our country possess the right to control their own schools and homes, and take pride in the fact that they possess this privilege. The Chinese, Greeks, Jews and Lutherans are similarly favoured and our people are entitled to precisely the same conditions.

22.3.2 A day of mourning

In an echo of the earlier AAPA, in 1937 the Aborigines Progressive Association (APA) was formed in New South Wales with three main aims: full citizenship rights for Aboriginal and Torres Strait Islander peoples, representation in parliament

terra nullius ('land belonging to no-one') in Australia, the legal idea that since no-one was 'using' the land when the first Europeans arrived, it could be claimed by the British Crown

and abolition of the New South Wales Aboriginal Protection Board. For the newly formed Association, Australia Day 1938 became a focus for action. The 150th anniversary of the day Captain Arthur Phillip planted the British flag at Port Jackson was 26 January 1938. All six state premiers had arrived in Sydney; the finishing touches were being put on 120 street floats and the crowds were gathering as the city prepared for a spectacular show. Having been denied access to Sydney Town Hall, activists and community members, led by William Cooper and Jack Patten, walked in silent protest to Australia Hall, which they had to enter via the back door. So began Australia Day 1938: for the country's white population, this was a day to celebrate; for Australia's First Peoples it was a day of mourning.

SOURCE 2 As dignitaries watched on, people, brought to Sydney especially for the event, re-enacted the landing of the First Fleet at Farm Cove in 1938.



Source: Mitchell Library, State Library of NSW. Call no. Home & Away – 17963.

SOURCE 3 The Day of Mourning: two of the day's organisers, William Ferguson and Jack Patten, are pictured at far left and right, respectively.



News Ltd / Newspix.

DID YOU KNOW?

The First Nations peoples brought by the federal government from country New South Wales as forced participants in a re-enactment ceremony were kept locked in the stables at the Redfern police station until the ceremony.

Building a movement

In the months leading up to January 1938, Jack Patten, the first president of the APA, and William Cooper, secretary for the Australian Aborigines League, had visited missions and reserves to gain support for the Day of Mourning protest. Patten had also worked with William Ferguson, founder of the APA, to put together a 12-page document entitled 'Aborigines claim citizenship rights', which ran in many national newspapers. Despite widespread support for the event within the Aboriginal community, only about 100 people attended because Australian law forbade Aboriginal people from gathering to protest. Despite the printed warning that 'Aborigines and persons of Aboriginal blood only are invited to attend', four non-Aboriginal people attended the gathering. Two were police officers; the others were representatives from *Man Magazine*, who would document the day's events for a story entitled 'Aborigines meet, mourn while white-man nation celebrates'.

22.3.3 Results of the Day of Mourning

As the Day of Mourning protest began, telegrams of support from around Australia were read out. Then Jack Patten read the following resolution (see **SOURCE 4**):

> We, representing the Aborigines of Australia ... on the ... 150th anniversary of the whitemen's seizure of our country, hereby make protest against the callous treatment of our people ... and we appeal to the Australia nation of today ... for ... full citizen status and equality within the community.

SOURCE 4 APA President Jack Patten (right) reads the resolution.



Source: Mitchell Library, State Library of NSW. Call no. MLQ 059/9.

During the protest, the group discussed the brutal treatment of Aboriginal people by the Aboriginal Protection Board and the unfair removal of children from reserves, as well as the need for equal rights. The protest culminated in the formation and approval of a ten-point plan for equality. The plan outlined the importance of giving Aboriginal and Torres Strait Islander peoples full citizenship status, as well as access to education, health services and employment. The plan also demanded that Aboriginal and Torres Strait Islander peoples be allowed to own property, possess a bank account and receive a pension — rights automatically granted to Australian citizens. The day ended with members of the protest walking to La Perouse, one of the original landing spots for the First Fleet, where they released funeral wreaths into the sea.

Following the success of the Day of Mourning protest, a delegation of 20 people led by Jack Patten and William Ferguson presented the Australian Prime Minister, Joseph Lyons, with the ten-point plan for equality. Despite the prime minister's willingness to listen to the delegation, it would take another 30 years and another generation of activists before First Nations peoples would even be counted in the national census.

SOURCE 5 Following the Day of Mourning, Australia's Indigenous community began publishing its first newspaper, *Abo Call*, edited by Jack Patten.

To all Aborigines!

'The Abo Call' is our own paper.

It has been established to present the case for Aborigines, from the point of view of the Aborigines themselves.

This paper has nothing to do with missionaries, or anthropologists, or with anybody who looks down on Aborigines as an 'inferior' race.

We are NOT an inferior race, we have merely been refused the chance of education that whites receive. 'The Abo Call' will show that we do not want to go back to the Stone Age.

Representing 60 000 Full Bloods and 20 000 Halfcastes in Australia, we raise our voice to ask for Education, Equal Opportunity, and Full Citizen Rights.

'The Abo Call' will be published once a month. Price 3d [3 pence].

The Editor asks all Aborigines and Halfcastes to support the paper, by buying it and also by acting as agents for sale to white friends and supporters.

22.3 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 4, 7, 10, 14	Questions 2, 5, 8, 11, 12, 13, 15	Questions 3, 6, 9, 16, 17

Check your understanding

1. When was the Australian Aboriginal Progressive Association formed and by whom?
2. List the goals of the AAPA.
3. How did the AAPA attempt to achieve these goals?
4. How did the leaders of the Day of Mourning Protest build up support in the months leading up to January 1938?
5. How many people attended the Day of Mourning and why were the numbers low?
6. What examples of inequality between white Australians and Aboriginal Australians could be seen on Australia Day 1938?
7. Name three things that Aboriginal activists wanted the government to change in 1938.
8. What was the ten-point plan?
9. Why did Aboriginal activists release funeral wreaths into the sea following their protest?

Apply your understanding

10. Study **SOURCE 1** and answer the following questions.
    a. What does Fred Maynard suggest is contrary evidence to the superiority of European people?
    b. Who are the 'Australian people' referred to in this letter? How do you know this?
    c. What arguments are presented for the rights of Aboriginal peoples to supervise their own affairs?
    d. What assumptions might you make about the writer of this letter? Justify these.
11. Based on **SOURCES 2** and **3**, how did white Australia view Aboriginal Torres Strait Islander peoples in 1938? How did each group view themselves?
12. Examine the introduction to the *Abo Call* (see **SOURCE 5**) and answer the following questions.
    a. What was the purpose of the paper? How can you tell?
    b. In what ways did the *Abo Call* seek to challenge white preconceptions about Aboriginal and Torres Strait Islander peoples?
    c. In what ways did it encourage Aboriginal and Torres Strait Islander peoples to think for themselves?
13. **SOURCES 2** and **4** show contrasting depictions of Aboriginal peoples. Comment on this contrast.
14. Examine **SOURCES 4** and **5**. Analyse what the main grievances (complaints) are that were felt by Jack Patten and his supporters and list them in dot points.
15. Describe why you think Aboriginal activists such as William Ferguson, William Cooper and Jack Patten decided to use the theme of 'mourning' for 26 January 1938. How else could they have presented their protest to create a different effect? Do you think this would have been more or less effective than the protest they made?
16. Identify what changes in politics and society you think would need to have taken place before Aboriginal and Torres Strait Islander peoples would be given citizenship. Are you surprised that gaining citizenship took almost 30 years after the Day of Mourning?
17. Based on what you have read in this subtopic, explore whether you consider the Day of Mourning a turning point for Aboriginal Australia. Write 150 words explaining your position.

For sample responses to every question, go to www.jacplus.com.au.

22.4 The Stolen Generations

LEARNING INTENTION

By the end of this subtopic you will be able to describe the hardships faced by members of the Stolen Generations, and explain the ways that these hardships continue to affect Aboriginal and Torres Strait Islander communities today.

22.4.1 Government policy: from 'protection' to assimilation

During the 1800s the colonial authorities argued that a protection system was the best way to look after Aboriginal peoples. This often meant setting up special communities for them where they could farm the land and live off the produce. However, this forced change was completely foreign and did not fit Aboriginal culture or practices; it involved moving people from their Country, way of life and often their families.

After Federation in 1901, each state government was responsible for the Aboriginal and Torres Strait peoples within that state. In Western Australia, the *Aborigines Act 1905* was intended for 'the provision for the better protection and care of the Aboriginal inhabitants of Western Australia'. Under this legislation, the Minister for the Aborigines Department could force 'any aboriginal to be removed to and kept within the boundaries of a reserve, or to be removed from one reserve or district to another reserve or district, and kept therein'.

The Aborigines Department was established to provide food, clothing and medicine for Aboriginal peoples in Western Australia. This department was headed by the Chief Protector of Aborigines. The Chief Protector was also the legal guardian of every Aboriginal and mixed-race child under the age of 16 in Western Australia. Enforcing this legislation was left to 'protectors' who were usually police officers. Those children who were taken from their families are known as the 'Stolen Generations'.

SOURCE 1 Extract from the Western Australian *Aborigines Act 1905*

WESTERN AUSTRALIA.

ANNO QUINTO

EDWARDI SEPTIMI REGIS,

XIV.

No. 14 of 1905.

AN ACT to make provision for the better protection and care of the Aboriginal inhabitants of Western Australia.

[*Reserved, 23rd December*, 1905.]

BE it enacted by the King's Most Excellent Majesty; by and with the advice and consent of the Legislative Council and Legislative Assembly of Western Australia, in this present Parliament assembled, and by the authority of the same, as follows :—

1. This Act may be cited as the *Aborigines Act*, 1905, and shall come into operation on a day to be fixed by proclamation. Short title.

2. In this Act, unless the context otherwise requires,— Interpretation.

"Aboriginal institution" means and includes any mission, reformatory, orphanage, school, home, station, reserve, or other institution for the benefit, protection, or care of the aboriginal or half-caste inhabitants of the State, and in receipt of any annual or other subsidy or grant from the Government.

"Chief Protector" means the Chief Protector of Aborigines appointed under this Act.

"Department" means the Aborigines Department.

"District"

Source: Sourced from the Western Australian Legislation website on 22 July 2020. For the latest information on Western Australian legislation, visit www.legislation.wa.gov.au.

Governments believed the best way to ensure that First Nations children (especially those of mixed descent) were **assimilated** into European society was to remove them — forcibly, if necessary — from their families and raise them in institutions or foster homes. Paul Hasluck, who was appointed Federal Minister for Territories in 1951, articulated the thinking behind this strategy: 'Assimilation means, in practical terms, that, in the course of time, it is expected that all persons of aboriginal blood or mixed blood in Australia will live like other white Australians do'.

The NSW *Child Welfare Act 1939* had provided parents with the right to contest the removal of their children. However, with many Children's Courts located far from the Indigenous communities from which the children had been taken, and with no legal assistance provided for parents, it was extremely difficult for parents to get their children back. Once they had been removed, many Aboriginal and Torres Strait Islander children were exploited or abused, and were denied any contact with their families, Countries, cultures or languages. Between 1910 and 1970 it is estimated that 10–30 per cent of First Nations children were forcibly removed from their families in the name of assimilation. This means that many Aboriginal and Torres Strait Islander families, from every state and territory, were directly affected by the forced removal of one or more children.

SOURCE 2 An extract from the 1989 book *Wanamurraganya: The Story of Jack McPhee*. The narrator is being shown around a compound for Aboriginal children.

'This part is called the compound,' he told me, 'there's the church, sewing room, dormitories where they keep all the kids, store, you've seen the office and the hospital.'

'Whose kids are they?'

'Anybody's. Some got their names changed. You know whitefellas, if they can't get their tongue around your name they call you something else. No one be able to find these kids now.'

I was thinking to myself, to take a child from its mother is a cruel thing. The mother has given the life, suffered for it, it's not right that life is taken from her.

'When a family comes in,' said Jack, 'the kids live in dormitories, others down in the camp.' ...

'Jeez, Jack, is this a prison?'

He laughed. 'Trackers here too. Bring you back if you run away.'

'Can't you do something?'

'Who will listen, brother? Boss reads all the mail that goes out and comes in.'

22.4.2 Case study: Life in the Homes

At Kinchela Boys Home on the mid-north coast of New South Wales, Aboriginal boys were taught to farm the land and operate heavy machinery such as tractors. Between 1924 and 1970, 600 boys were taken to Kinchela, where they were stripped of their names and given numbers instead, were forbidden from speaking their own language and were severely punished by the staff for disobedience. According to Cecil Bowden, a former resident, the most brutal punishment was being sent 'down the line': 'They'd have to walk the line and 60 or 70 boys would have to punch them, punch that person as hard as they could, just to satisfy those people who were running the home'.

The Cootamundra Domestic Training Home for Aboriginal Girls was the destination for generations of Aboriginal girls removed from their families between 1911 and 1969. The girls would stay at Cootamundra in the South West Slopes region of New South Wales until the age of 14, when they would be sent to work as domestic servants in the homes and farms of New South Wales' middle class. Once in domestic service, many girls became pregnant, only to have their own children removed and placed with white families.

assimilation the process by which a minority group gives up its own customs and traditions and adopts those of the dominant culture

SOURCE 3 An extract from the *Bringing Them Home* report. Rose lost contact with her brothers and sisters in 1958, when she was 9 years old.

The kids was glad to see Mum and Dad at court. They were jumping all over them. Glad to see them. When the Welfare took the kids off Mum and Dad they were holding out their arms trying to stay with Mum and Dad. Everyone was crying sad. Sad. Sad.

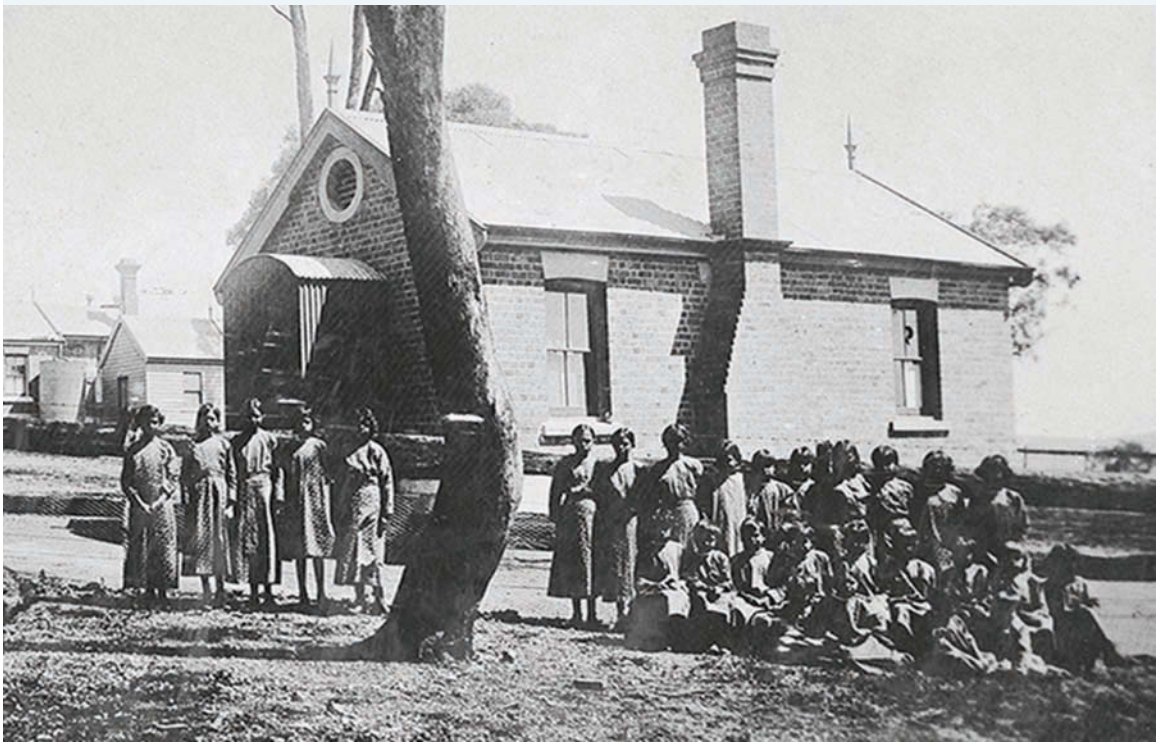
After the kids had gone to the home Mum and Dad hit the grog hard as they had done everything in their power and in their hearts to keep us away from the (predators) the Welfare. But they sniffed us out of the bush like dogs.

My parents couldn't handle the trauma of not having the closest warmth loving caring family we were. They separated. My Mum went one way; my Dad went his way.

And I was 9 years of age left to go my way. I didn't know anyone. So I lived with Koori families who took me in. And in return I would look after their kids while they went picking just so I had some sort of family caring. I done this for years. Still not knowing where my brothers and sisters were. I tried hard to find them but couldn't.

The families that took me in I have a lot of respect for them because they tried to mend a 9 year old's broken heart ...

SOURCE 4 Residents of the Cootamundra Domestic Training Home for Aboriginal Girls



on Resources

Weblink Archival copy of the Aborigines Act 1905 (WA)
Stolen Generations (South West Aboriginal Land & Sea Council)

22.4 ACTIVITY

You have been asked to design a museum exhibit about the Stolen Generations in Western Australia. What objects will you include? Using your library and the internet for reference, either draw or collect pictures of your selected objects, together with a descriptive label explaining why each is significant.

HASS skills: Questioning and researching
History concepts: Significance, Sources

22.4 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 8, 9, 10	Questions 4, 5, 11, 12, 13	Questions 6, 7, 14, 15, 16

Check your understanding

1. What power did the Minister for the Aborigines Department have in WA?
2. Explain the concept of assimilation, in your own words.
3. What was the purpose of the assimilation strategy?
4. Why were Aboriginal children taken from their families? Give as many reasons as you can.
5. Why was it so difficult for Aboriginal parents to contest the removal of their children?
6. Using the information in this section, describe how boys and girls were treated once they were removed from their families.
7. Why do you think the estimated numbers of children removed from their families varies so markedly between one in three and one in ten?

Apply your understanding

8. **SOURCE 1** is the beginning of the Western Australia *Aborigines Act 1905* After reading it carefully, what do you think the purpose of the Act was? What beliefs about Aboriginal peoples do you think the people who wrote the Act held?
9. It is the morning after four Aboriginal children have escaped from the compound described in **SOURCE 2**. What do you think might happen to the children still in the compound?
10. Study **SOURCE 3** and answer the following questions.
    a. From the clues provided in Rose's story, why do you believe her brothers and sisters were removed?
    b. Why do you think Rose may have been left behind?
    c. Which people were directly or indirectly affected in a negative way by the welfare workers' decision to remove Rose's brothers and sisters from the family?
11. The girls pictured in **SOURCE 4** were being prepared specifically for domestic work. What does this suggest about the sorts of jobs that the Aboriginal Protection Board believed Aboriginal children were best suited for?
12. Evaluate the usefulness of using individual stories such as **SOURCE 2** and **SOURCE 3** as evidence to assist our understanding of the impact of the government policy of child removal on Indigenous peoples.
13. Do **SOURCES 2**, **3** and **4** offer support for each other? Explain your answer fully.
14. Use a fishbone diagram to identify the causes of why children were 'stolen' and the consequent effects.
15. Identify who you think were more fortunate, the girls in Cootamundra or the girls left behind, such as Rose **(SOURCE 3)**? Explain your view, using information and quotes from this subtopic.
16. Imagine you are a 9-year-old Aboriginal or Torres Strait Islander girl or boy and have just been taken into the custody of the state. Which would be hardest to leave behind: your family, your language or your culture? Explain your choice.

For sample responses to every question, go to www.jacplus.com.au.

22.5 Influence on Australia of civil rights movements abroad

LEARNING INTENTION

By the end of this subtopic you will be able to:

- identify some of the major figures in the world's civil rights movements during the early to mid twentieth century
- identify explain the term 'non-violent protest'
- outline why this form of protest was so successful for activists.

22.5.1 International call for civil rights

In the 1940s, many of the rights and freedoms enjoyed by white people in settler nations such as the United States and Australia were not shared by the nations' minorities. To many people this seemed wrong, but it would be the mid 1950s before leaders would emerge to challenge this widespread inequity and mistreatment. They were part of the civil rights movement. This movement would build during the 1960s, generating a worldwide demand for change.

SOURCE 1 A photograph of Eleanor Roosevelt holding the Universal Declaration of Human Rights



On 10 December 1948 the United Nations General Assembly adopted the Universal Declaration of Human Rights (UDHR), an international agreement that outlined the rights and freedoms that should be accorded to all people. As a founding member of the UN, Australia played a prominent role in establishing the Declaration under the guidance of Dr Herbert Vere Evatt, who became the president of the United Nations General Assembly in 1948. Dr Evatt, a former High Court judge, Attorney General and Minister for External Affairs, was known for defending civil liberties. The Declaration began by recognising that 'the inherent dignity and the equal and **inalienable** rights of all members of the human family is the foundation of freedom, justice and peace in the world'. Although it was not a **treaty**, the Declaration was seen as an international call for civil rights.

SOURCE 2 Eleanor Roosevelt became the First Lady of the United States when her husband, Franklin Delano Roosevelt, was elected president in 1933. An author and activist in her own right, Eleanor Roosevelt was a US delegate to the United Nations General Assembly from 1945 to 1952. One of the UN's most highly regarded statespeople, she played a crucial role in developing the Universal Declaration of Human Rights.

Where, after all, do human rights begin? In small places — close to home — so close and so small that they cannot be seen on any maps of the world. Such are the places where every man, woman and child seeks equal justice, equal opportunity, and equal dignity, without discrimination. Unless these rights have meaning there, they have little meaning anywhere.

inalienable belonging to a thing by its nature; not able to be taken away

treaty an agreement between two or more sovereign states (countries) to undertake a particular course of action. It usually involves matters such as human rights, the environment or trade.

22.5.2 Civil rights in America — desegregation

On 1 December 1955 an African-American seamstress named Rosa Parks sat halfway down a bus in Montgomery, Alabama, just behind the section reserved for white passengers (see **SOURCE 3**). When a white man got on the bus, the driver asked her to stand to make room for him, but Rosa Parks politely refused. 'When I made that decision,' she said later, 'I knew that I had the strength of my ancestors with me.'

For her refusal to give up her seat, Rosa Parks was arrested and charged with breaking the segregation laws. At the time, the African-American community made up the majority of Montgomery's bus passengers. Sparked by Rosa Parks's defiance, they began to refuse to take the bus. The boycott lasted 381 days until the politicians caved in and abolished the bus segregation laws.

SOURCE 3 This excerpt from the Montgomery City Code refers to segregation of black and white people on the buses, which was the basis of Rosa Parks's protest.

Sec. 10. Separation of races — Required.

Every person operating a bus line in the city shall provide equal but separate accommodations for white people and negroes on his buses, by requiring the employees in charge thereof to assign passengers seats on the vehicle under their charge in such manner as to separate the white people from the negroes, where there are both white and negroes on the same car; provided, however, that negro nurses having in charge white children or sick or infirm white persons, may be assigned seats among white people.

Nothing in this section shall be construed as prohibiting the operators of such bus lines from separating the races by means of separate vehicles if they see fit.

DID YOU KNOW?

Racism is based on the belief that a person's race determines their ability and attributes, and that some people are inherently inferior to others. In the 1930s Hitler invoked racist theories to justify his persecution of the Jewish people. The same theories were used to justify racial segregation in the United States, South Africa and Australia.

SOURCE 4 On 4 September 1957 the Little Rock Nine attended their first day of school. This simple act would change the United States forever.



Little Rock, Arkansas

On 17 May 1954 the US Supreme Court ruled that segregation of public schools was **unconstitutional**. Later that year the Little Rock, Arkansas, school board had agreed to gradually desegregate its schools. Desegregation began on the first day of the school year, 1957. That morning, the nine African-American students enrolled at Little Rock Central High, thereafter known as the 'Little Rock Nine', were met by an angry mob, 1200 soldiers sent to the school for their protection and the world's media.

During the year she attended Little Rock Central High, Minnijean Brown-Trickey was verbally abused, pushed down the stairs

unconstitutional not in accord with the principles set forth in the Constitution

and spat on. Not all the white students were hostile towards the new arrivals, but those who showed them kindness were liable to be beaten up themselves. Later she would recall, 'There were 100 bad kids and 1900 silent witnesses'. Her story, and those of the other eight students, would go on to inspire a generation of African-Americans.

Looking back on her year at Little Rock Central High, Minnijean Brown-Trickey said, 'History holds up a mirror showing the good things about us and the bad things about us. We have to choose. Do we want to be part of the mob attacking children or the children walking with dignity?'

22.5.3 Protests in the United States gain momentum

As the civil rights movement in the United States grew, particularly in the southern states where segregation was worse, there was great potential for violence. Although violence did erupt in states like Alabama, there were other voices preaching another way.

Martin Luther King

The Montgomery bus boycott had been organised by the Montgomery Improvement Association. Made up of religious ministers and activists, the group was led by a charismatic young civil rights campaigner named Martin Luther King Jr. His philosophy was simple: anything could be achieved by using non-violent resistance, so long as you could convince enough people to join the cause.

SOURCE 5 Dr Martin Luther King Jr (centre) in the March on Washington for Jobs and Freedom, August 1963



This philosophy was based on both his training as a minister and his interest in the work of Mohandas (Mahatma) Gandhi, whose non-violent protests had successfully challenged the British and won independence in India. Dr King summed up his philosophy by suggesting that 'the Christian doctrine of love operating through the Gandhian method of non-violence was one of the most potent weapons available to oppressed people in their struggle for freedom'. One of Dr King's most well known actions was the March on Washington for Jobs and Freedom (1963), where he delivered his most famous speech, remembered by the words, 'I have a dream ...'

on Resources

Video eLesson Martin Luther King at the Washington civil rights rally (eles-2606)

22.5.4 Freedom Rides in the United States

The Freedom Rides in the United States began in May 1961. The riders were volunteers — 13 activists from the Congress of Racial Equality (CORE) and Student Nonviolent Coordinating Committee (SNCC). The activists set out from Washington DC to journey through the southern states of Virginia, North and South Carolina, Georgia, Alabama and Missouri to a planned rally in Louisiana. The white response in the states through which the two buses journeyed was often violent and full of hate. White mobs wielded baseball bats, bicycle chains and iron bars. Near Anniston, Alabama, on 14 May 1961, a white mob smashed the bus

windows, slashed the tyres and later firebombed the bus. Several Freedom Riders were badly injured. Violence continued over subsequent rides with state authorities doing little to intervene.

Although Martin Luther King never joined the Freedom Riders' campaign, he became one of their major spokespeople. When a 3000-strong mob blockaded the First Baptist Church in Montgomery, Alabama, where King was rallying support for the campaign, authorities responded only when US Attorney-General, Robert Kennedy, mobilised the National Guard who dispersed the mob with tear gas.

SOURCE 6 Freedom Riders sit beside their burned out bus near Anniston, Alabama, 14 May 1961



int-6708

SOURCE 7 Map showing the routes taken by the Freedom Riders



Source: Spatial Vision.

Results of the Freedom Rides

The Freedom Rides and the violent responses to them resulted in international media attention, embarrassing the US government. Although federal laws existed that ruled segregation illegal, state administrations,

particularly in the south, ignored them. The Freedom Rides continued until the Interstate Commerce Commission (ICC) forced bus companies to introduce desegregation. The goals of the campaign — to create headline news internationally and to gain publicity for the civil rights movement — were in large part achieved. Civil disobedience had proved a powerful way to protest against racist policies and effect change.

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- Rights and freedoms > **Civil rights movements**

on Resources

Video eLesson Lyndon B. Johnson announces the passing of the Civil Rights Act (eles-2607)

22.5 ACTIVITY

Imagine you are one of the Little Rock Nine or one of their classmates. Write 500 words describing your first day at school and the responses of those people you see around you. You may need to conduct more research about the event before you begin.

HASS skills: Communicating and reflecting
History concepts: Sources, Evidence

22.5 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions	Questions	Questions
2, 4, 7, 10, 15, 16	1, 3, 5, 6, 11, 12, 13, 14	8, 9, 17, 18, 19

Check your understanding

1. When did the United Nations General Assembly adopt the UDHR? Use your general knowledge to explain what previous event had led to this point.
2. Who was Dr Evatt and what was his contribution to the history of civil rights? Why do some argue that he should be more widely recognised in Australia?
3. What is the difference between a declaration and a treaty? Do you think that the UDHR should have been a treaty? Would it have made any difference?
4. Why was Rosa Parks arrested in 1955? What resulted from her arrest and the subsequent boycott?
5. Why was the first day of school in 1957 such an important day for Little Rock, Arkansas?
6. What was Martin Luther King Junior's resistance philosophy?
7. Explain the two main influences on Dr King's viewpoints.
8. Consider the Freedom Rides in the United States.
   a. Who were the Freedom Riders?
   b. What was the response of some white Americans to the Freedom Rides?
   c. Identify the outcome of the Freedom Rides.
9. Explain what the term 'civil disobedience' means.

Apply your understanding

10. Read the Eleanor Roosevelt quote in **SOURCE 2**.
    a. What does this quote mean?
    b. Who does it seem to be aimed at?
    c. In what way could its message be seen to be reflected in the UDHR?
11. The Montgomery City Code (see **SOURCE 3**) claimed to offer 'separate but equal' treatment to white and black passengers. Identify words and phrases in the source that might be said to contradict this claim.
12. Use **SOURCE 4** and the text to explain the motivations behind the Little Rock Nine's actions.
13. Examine **SOURCE 5** and answer the following.
    a. What were these protesters aiming to achieve?
    b. What examples of non-violent protest are evident?
    c. What role do white people appear to be playing in the protest?
14. Martin Luther King never participated in a Freedom Ride. Based on **SOURCE 6**, why might he have made a conscious decision not to participate?
15. What does **SOURCE 6** tell you about the risks undertaken by a Freedom Rider?
16. From a study of **SOURCE 7**, what factual statements could you make about the Freedom Rides?
17. Using the sources in this subtopic, write a paragraph about why you think some white Americans resisted the civil rights campaigns so violently.
18. Using **SOURCES 1**, **4**, **5** and **6**, explain the power of photography as a source of historical evidence.
19. Identify the significant events mentioned in this subtopic and rank them in order of their impact on bringing about change. Be prepared to justify your ranking.

For sample responses to every question, go to www.jacplus.com.au.

22.6 The Freedom Ride in Australia

LEARNING INTENTION

By the end of this subtopic you will be able to describe the role of Charles Perkins in Aboriginal and Torres Strait Islander peoples' fight for civil rights.

22.6.1 Charles Perkins — activist

Aboriginal and Torres Strait Islander peoples won the right to vote in federal elections in 1962; but even then they were not counted in the census and their affairs were still managed by the state governments. But growing awareness of human rights issues, specifically relating to racial discrimination, was beginning to turn the tide for First Nations peoples in Australia.

Charles Perkins was born in 1936 in the Alice Springs Telegraph Station Aboriginal Reserve. When he was 10, his mother arranged for him to be taken to an Anglican Boys' Hostel in Adelaide to have, in his words, 'the colour washed out of him'. His sporting talent as a soccer player opened doors of opportunity for him: in 1965 he became the first Aboriginal person to graduate from university. By then he was already a strong campaigner for Aboriginal and Torres Strait Islander rights.

Inspired by a similar civil rights action in the United States, Perkins organised the Freedom Ride of 1965, in which a group of 30 white university students from Student Action for Aborigines (SAFA) would take a bus tour of outback New South Wales. The journey was intended to be a 'study tour' of race relations in Australia.

As the bus readied to leave on 12 February 1965, the Reverend Ted Noffs said a prayer: 'Almighty God ... we ask now that Thy blessing will rest upon these Australians as they journey out and endeavour to bring reconciliation and healing among people who have been divided because of the colour of their skin'. Over the following two weeks, the group saw the desperate poverty and often unsanitary living conditions experienced by Aboriginal peoples and witnessed the racial discrimination directed against them. In the town of Moree Aboriginal children were banned from using the public swimming pool. In Bowraville the cinema was partitioned. And in Walgett Aboriginal veterans were allowed into the Returned Soldiers' League only on Anzac Day.

SOURCE 1 As a young man, Charles Perkins regularly took the bus from Sydney University to his home in Bondi. Photojournalist Robert McFarlane captured this image in 1961, when Perkins was just beginning to gain attention for his activism.



SOURCE 2 The Freedom Riders prepare to set out in 1965, unsure of what awaits them.



DISCUSS

The image of Charles Perkins in **SOURCE 1** has been described as '**iconic**'. In what ways is it iconic?

General capability: Critical and creative thinking

int-6709

SOURCE 3 The route the Freedom Riders followed



Source: Spatial Vision.

A hostile reception

As they drove 2300 kilometres around New South Wales, the Freedom Riders were subjected to a number of attacks. In Moree white women jeered and spat at the female students, while Jim Spiegelman was hit by a local. Perkins was threatened, punched in the back of the head and had an egg thrown down the back of his shirt. On a lonely country road, late at night, the students' bus was rammed by a farmer. Despite the physical toll taken on many Freedom Riders, the trip was an enormous success, attracting national and international media attention, and forcing Australians to confront the racial tensions and inequity that were still rife in many parts of the country. Perkins would later write, 'What we gave Aboriginal people in the towns we visited was hope. We stirred their imagination, their desire for human rights'.

iconic important or enduring

SOURCE 4 Diary entry from the Freedom Ride, Wellington

Went to settlement outside reserve. Police warned us not to go into reserve. Interviewed about ten tin shacks of people. Most of us found the questionnaires unsuitable. Houses of tin, mud floors, very overcrowded, kids had eye diseases, had to cart water (very unhealthy) from river. People fairly easy to talk to, kids quite friendly. General picture of extreme poverty but not a great deal of social discrimination. Got seven interviews on the settlement just outside the reserve, and two in the town. General picture of scarcity of jobs. Mainly garden work, which is very seasonal. Average of three months for year out of work. Some working on a dam nearby. Some did shearing jobs. Did not encounter or hear of any women with jobs at all. Did not seem to know much about social services etc.

Lunch 1.30. Apparently Jim S and a few others came across some discrimination in a pub. An aboriginal was allowed in only because he was with us. The publican said he only prevented aborigines from coming in 'if they were disorderly'. Charlie went in and there was some discussion between the barmaid and the publican before they served him. Some aborigines told us they had been kicked out of this pub, the 'Courthouse'. Left Wellington and arrived in Dubbo about 6.30 pm. Had tea, went for a swim, then to the Dubbo hotel. We noticed a sign above the doorway of the halfway hotel — 'Aborigines not allowed in the Lounge without the Licensee's permission'. We didn't do anything. Slept in the Methodist Church ...

22.6.2 The legacy of the Freedom Ride

Newspaper and television coverage of the Freedom Ride created awareness and discussion in Australia about the racist injustices faced by Australia's First Peoples. This media attention and debate aided the campaign for removal of discrimination in the Australian Constitution, with the referendum in 1967 being carried. Charles Perkins emerged as a national leader for Aboriginal and Torres Strait Islander peoples, and a role model for prosecuting a cause using non-violent means.

Charles Perkins's commitment to the Australian community was recognised at various points in his life. He became the Jaycees Young Man of the Year in 1966 and Aboriginal of the Year in 1993; he was awarded the Order of Australia in 1987. He was elected to the Aboriginal and Torres Strait Islander Commission (ATSIC), serving as its deputy chairman in 1994 and 1995, and remained committed to activism until his death in October 2000.

Perkins was not the only Freedom Rider whose life was dedicated to social justice. Jim Spiegelman later became Chief Justice of the NSW Supreme Court. For his contribution to bringing about a fairer and more equitable society he was appointed a Companion of the Order of Australia. Former medical student Andrew Refshauge became the Minister for Aboriginal Affairs. The Freedom Ride itself was an important event in the fight for Indigenous rights and freedoms and inspired a number of further 'freedom rides'.

SOURCE 5 In 2005, on the fortieth anniversary of Perkins's Freedom Ride, the bus set out again, filled with around 30 students and supported by the group reconciliACTION, who hoped to investigate how far country Australia had come in improving race relations since 1965.



22.6 ACTIVITIES

1. Using your local library or the internet, find out as much as you can about one of the towns visited by the Freedom Riders, including information about the demographics of the population at the time of their visit.
   a. Based on what you have learned, why do you think the group might have chosen to visit this town?
   b. What do you think their impressions of the town would have been?
   c. How might the locals have responded to them?
   Justify your claims using evidence such as facts, figures and photographs.

   HASS skills: Questioning and researching
   History concepts: Sources, Evidence
2. One of the significant elements of the Freedom Ride was that much of it was captured on film. What role do you think this played in the campaign? Research the incident in Walgett, NSW, where the vice-president of the Walgett Returned Service League Club was captured making racist comments on film.

   HASS skills: Analysing
   History concepts: Sources, Evidence

22.6 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions	Questions	Questions
1, 2, 3, 8, 10	4, 5, 7, 9, 12	6, 11, 13, 14, 15

Check your understanding

1. What was Charles Perkins's background?
2. What inspired Perkins to organise the bus ride in 1965?
3. In what ways was the Freedom Ride about 'freedom'?
4. What was the trip about other than freedom? How can you tell?
5. What forms of resistance did the Freedom Riders encounter, and how did they combat them?
6. Use evidence from this section to support the statement that Charles Perkins devoted his life to social justice for Aboriginal and Torres Strait Islander peoples.

Apply your understanding

7. What aspects of **SOURCE 1** might have led to its becoming an iconic image of Charles Perkins?
8. Based on the body language and clothing worn by the students in **SOURCE 2**, what words would you use to describe them? Do you think they were prepared for what they would find on their Freedom Ride? Explain your answer.
9. Use **SOURCE 3** to work out on average, the amount of time the Freedom Riders spent in each location.
10. Using the same diary format as **SOURCE 4**, write a short entry from the perspective of a Freedom Rider after visiting the town of Moree. Your diary entry should include events, thoughts and feelings.
11. How do the people shown in **SOURCE 5** appear to be paying respect to Charles Perkins and his role in the Freedom Rides of the 1960s?
12. What improvements to race relations do you think that the 2005 Freedom Ride from **SOURCE 5** would have discovered?
13. Identify both the short-term and long-term effects of the Freedom Ride of 1965. Display these in diagrammatic form.
14. Do you think controversy and civil disturbance are good ways to attract media publicity to a cause? Why or why not?
15. Can you think of any other ways in which the plight of Aboriginal peoples could have been publicised in 1965? Think creatively and take risks in offering possible solutions.

For sample responses to every question, go to www.jacplus.com.au.

22.7 Being counted

LEARNING INTENTION

By the end of this subtopic you will be able to explain why and the ways in which the 1967 Referendum was such a significant event and identify the ways in which this 'yes' vote did and did not change life for Aboriginal and Torres Strait Islander peoples.

22.7.1 The right to vote

In the early 1960s, following challenges to racial segregation overseas, many Australians were becoming increasingly uncomfortable with the unfair treatment of Australia's Indigenous peoples. The government was also under international pressure to make their policies more inclusive.

SOURCE 1 People exercise their democratic right to vote at a polling booth in Bagot Settlement, Northern Territory, in 1962. Prior to this, all Aboriginal and Torres Strait Islander peoples in the Northern Territory had been deemed wards of the state and therefore denied the right to vote.



In 1961 a parliamentary panel recommended that Indigenous peoples be allowed to vote in federal elections. In March 1962 the Commonwealth Electoral Act was amended to provide that Indigenous peoples could enrol to vote in federal elections. While it was compulsory for other Australians to enrol, this was not the case for Aboriginal and Torres Strait Islander peoples. It was an offence for anyone to use undue influence or pressure to induce them to enrol. Once enrolled, however, voting was compulsory. It was not until 1971 that voting in state elections was made compulsory for Aboriginal and Torres Strait Islander peoples.

In 1962 the right to vote in state/territory elections was also extended to Aboriginal and Torres Strait Islander peoples in the Northern Territory and Western Australia. It would take another three years before Queensland would join other states in permitting Aboriginal and Torres Strait Islander peoples to vote in state elections.

22.7.2 The 1967 Referendum

In 1967 there remained one area in which Aboriginal and Torres Strait Islander peoples were treated very differently from every other member of the Australian population: they were not counted in the national **census**. The census is a tool used by the government to count its citizens and extract important demographic information, such as their age, gender and where they live. This information can then be used to make appropriate plans for providing community services such as schooling, healthcare and housing.

The Australian Constitution stated, 'In reckoning the numbers of the people of the Commonwealth, or of a State or other part of the Commonwealth, aboriginal natives shall not be counted'. To Aboriginal activist Chicka Dixon, the message the Constitution conveyed was quite clear: 'It said the Australian Commonwealth

census an official, usually periodic count of a population

Government would recognise all races of people other than Aboriginal — in other words, we didn't exist …'

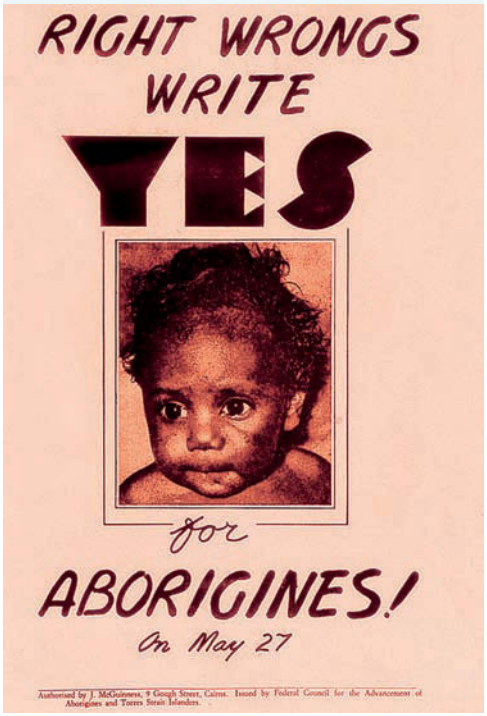
The only way to change the Constitution is to hold a **referendum**. Before 1967 there had been 26 referenda in Australia, only four of which had been carried (approved). For a proposal to succeed, a majority of voters must say 'yes'; also, the majority 'yes' vote must occur in a majority of states (that is, at least four).

The referendum planned for 27 May 1967 would put two proposals to the Australian people:

- that Aboriginal people should be counted in the census
- that Aboriginal people should be placed under the jurisdiction of the Commonwealth, not state governments, so that laws affecting them could be implemented consistently and fairly across Australia.

Before the vote a publicity campaign was organised and all eligible voters were sent a booklet spelling out the 'yes' and 'no' cases. Both proposals received overwhelming **bipartisan** support, with a staggering 90.7 per cent of votes in favour, the highest 'yes' vote ever recorded in a referendum in Australia.

SOURCE 2 A poster for the 'yes' vote



int-6710

SOURCE 3 This table was featured in an informative pamphlet provided to voters by the Federal Council for the Advancement of Aborigines (FCAA) prior to the referendum. It summarises the rights that First Nations peoples had in different states at the time.

Right	NSW	VIC	SA	WA	NT	QLD
Voting rights (state)	Yes	Yes	Yes	No	Yes	No
Marry freely	Yes	Yes	Yes	No	No	No
Control own children	Yes	Yes	No	No	No	No
Move freely	Yes	No	No	No	No	No
Own property freely	Yes	No	Yes	No	No	No
Receive award wages	Yes	No	No	No	No	No
Alcohol allowed	No	No	No	No	No	No

If you are the owner of this work, please come forth and contact us.
© Federal Council for the Advancement of Aborigines (FCAA)

22.7.3 From assimilation to integration

After Aboriginal and Torres Strait Islander peoples had gained the rights to vote in federal elections and to be counted in the census, institutional discrimination began to soften. But the shift in policy from 'assimilation' to 'integration' was due, in large part, to the hundreds of thousands of new migrants who had entered the country since the end of World War II and were trying to find the balance between honouring their traditional beliefs, language and culture, and adopting the Australian way of life.

referendum a ballot in which people decide on an important political issue
bipartisan supported by the two major political parties

Unlike assimilation, **integration** policy did not require a person to deny their cultural background, including their language, in order to become a valuable member of society. Yet while integration was a step in the right direction, it fell short of recognising the true value of other cultures. Integration policy, like assimilation before it, still expected citizens to adapt to the needs of the country, rather than the other way around.

integration policy requiring immigrants to publicly adopt the new country's culture while still being able to celebrate their own culture privately; a policy that recognised the value of Aboriginal and Torres Strait Islander cultures and the right to retain their languages and customs and maintain their own distinctive communities

SOURCE 4 Pat O'Shane's reaction to the result of the 1967 referendum. From Pat O'Shane, 'Aboriginal People and Political Power', quoted in C. Cunneen and T. Libesman 1995, *Indigenous People and the Law in Australia*, Butterworth, Sydney, pp. 214–5.

My reaction to the referendum result was one of exhilaration. I thought that it was really going to sweep away the past, I suppose. I think probably to one degree or another we all felt that. I think those who had been really active in the campaign — certainly Aborigines and Islanders in the north, where I came from — felt that this was our liberation. Of course, it wasn't; it didn't work like that at all. The Queensland Act stayed there and the change to the Constitution didn't do anything to alter that situation. But it was liberating to this extent: the people actually knew, felt, believed that they were citizens of Australia. I think that made a very significant psychological difference to how we operated, because then it wasn't a question of our campaigns being directed at being recognised as Australian citizens but being able to fight other fights, wage other campaigns. So, it was an exhilarating experience for me and certainly for a lot of people that I worked with at that time.

22.7 ACTIVITY

Using your local library or the internet, learn more about the activists Chicka Dixon or Faith Bandler and their role in convincing Australians to vote 'yes' in 1967. Concentrate your research on your chosen activist's background and what might have motivated them to fight for this cause.

HASS skills: Analysing
History concepts: Sources, Evidence

22.7 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 7, 9, 12	Questions 3, 4, 8, 10, 11	Questions 5, 6, 13, 14, 15

Check your understanding

1. Indicate whether each of the following statements is true or false.
   a. The 1962 Electoral Act amendment was responsible for giving Aboriginal and Torres Strait Islander peoples the right to vote in state elections.
   b. Queensland extended the right to vote in state elections to its Aboriginal and Torres Strait Islander population in 1965.
   c. Under the *Electoral Amendment Act 1962*, Aboriginal and Torres Strait Islander peoples were compelled to enrol to vote.

d. The census is an important tool in understanding the needs of a population.
e. The referendum of 1967 made Aboriginal and Torres Strait Islander peoples Australian citizens.
f. The proposals in the 1967 referendum were agreed to by the two major political parties.

2. Construct a timeline to show all the dates and events outlined in section 22.7.1.
3. What result is required for a referendum proposal to be successful?
4. In what way was the Australian Constitution amended as a result of the 1967 referendum? Why was this important?
5. As an official policy, do you think that integration was an improvement on assimilation? Explain your answer.
6. Why was the integration policy still not ideal?

Apply your understanding

7. Is **SOURCE 1** a primary or secondary source? Explain your choice.
8. Study **SOURCE 2**.
   a. What 'play on words' is used in the poster in **SOURCE 2**? Do you consider it an effective way of getting the message across?
   b. Who authorised this poster? Would you regard this as a reliable source based on this authorisation?
   c. What do you think the message on a poster in favour of a 'no' vote might be?
9. After reading **SOURCE 4** about Pat O'Shane's recollections of the time around the referendum, explain what her reaction to the referendum result was. What were they celebrating?
10. Do you believe that Chicka Dixon was justified in his comments about the Australian Constitution? Why or why not?
11. Using **SOURCE 3**, rank the states from best to worst in terms of providing rights to Aboriginal and Torres Strait Islander peoples. Give reasons for your choice.
12. Explain any differences between the two policies of assimilation and integration.
13. Why did the shift from assimilation to integration happen?
14. What was the impact of the shift?
15. Evaluate the impact of the referendum on the move towards equal rights for Aboriginal and Torres Strait Islander peoples. For help in Evaluating see topic 1 HASS skills.

For sample responses to every question, go to www.jacplus.com.au.

22.8 Torres Strait Islander rights and freedoms

LEARNING INTENTION

By the end of this subtopic you will be able to describe some of the similarities and differences in the treatment of and fight for freedom by Torres Strait Islander and Aboriginal peoples.

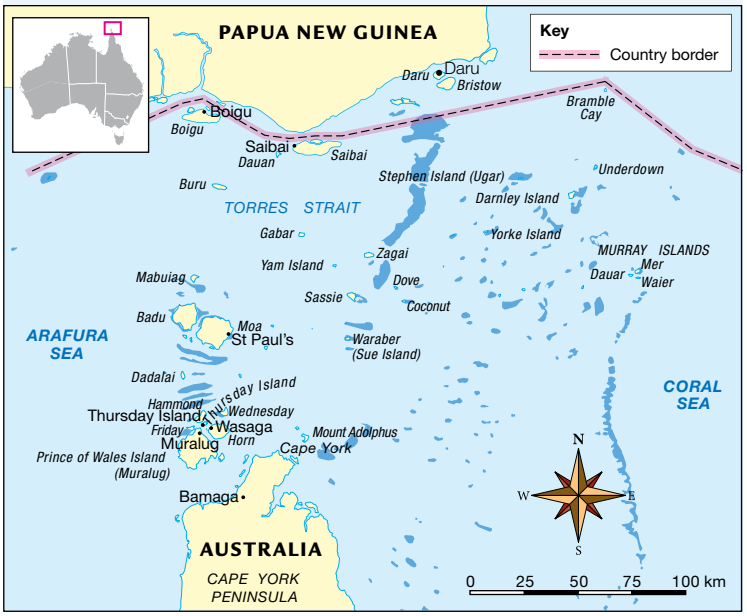
22.8.1 The Torres Strait Islander community today

Torres Strait Islander peoples are a separate people in origin, history and culture from Australia's Aboriginal peoples. Traditionally, they lived on over 100 islands of the Torres Strait, close to the larger island of New Guinea. The islands became part of the state of Queensland in 1879.

The 2016 Census recorded Australia's Aboriginal and Torres Strait Islander population at 649 200, comprising 2.8 per cent of Australia's total population. Of these 649 200 citizens, 4.1 per cent (26 600) reported being of both Aboriginal and Torres Strait Islander origin, and 5 per cent (32 400) were of Torres Strait Islander origin only. Thus, they can be regarded as a minority within a minority. Approximately 4000 of those 32 400 live in the Torres Strait Islands, with the remainder of the population living in mainland Australia, predominantly in Queensland.

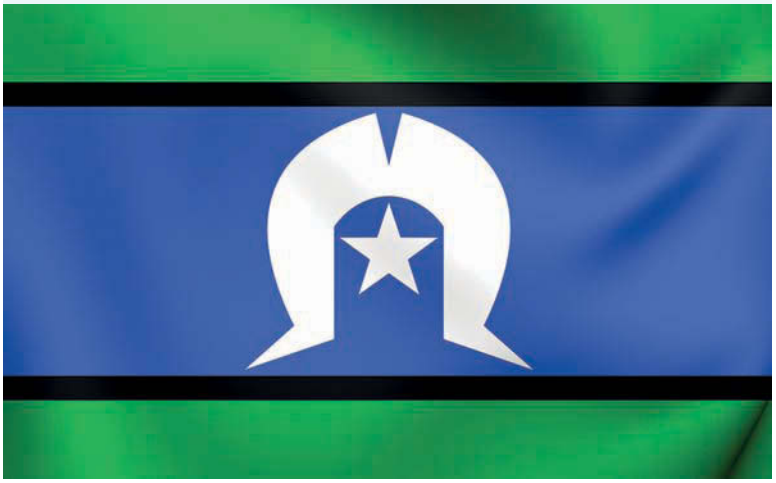
SOURCE 2 shows the flag of the Torres Strait Islands. It portrays a white headdress (Dari), which is a symbol of the peoples who identify as Torres Strait Islanders. The five-pointed star symbolises the five major island groups. The green stripes represent the land, the black stripes the people and the blue the sea. In 1995, the federal government proclaimed the flag as a 'Flag of Australia', giving it legal recognition. While many of the struggles for equal rights and freedoms faced by Aboriginal Australians historically and today are also relevant to Torres Strait Islanders peoples there are also specific issues that affect Torres Strait Islander peoples' unique geographical and historical context.

SOURCE 1 A map showing the location of the Torres Strait Islands. Australia's border is shown by the pink dotted line. The administrative centre is Thursday Island.



Source: MAPgraphics Pty Ltd, Brisbane.

SOURCE 2 The flag of the Torres Strait Islands



22.8.2 Struggles for recognition and rights

From 1897, the Torres Strait Islander peoples were subject to the Queensland Aboriginals Protection Act and Restriction of the Sale of Opium Act. Reserves were established from 1912 and a curfew and pass system controlled the lives of the people.

The *Torres Strait Islanders Act 1939* recognised people from the Torres Strait Islands as a separate people after a maritime strike that protested for Islanders' rights to control wages and their own affairs under the Protection Acts. However, the Department of Native Affairs established under the Queensland Department of Health and Home Affairs continued to control many aspects of island life.

World War II discrimination

During World War II, more than 700 Torres Strait Islanders served in the Torres Strait Light Infantry Battalion. Others served in support roles in the defence forces, although none were initially permitted to advance beyond the rank of corporal. They were paid only one-third the European rate and were given no family allowance. Torres Strait Islander soldiers staged sit-down strikes in 1943 and 1944, resulting in army authorities raising their pay rate to two-thirds the European rate, but lowering what had been full **repatriation** benefits by a third. It was not until 1983 that the federal government repaid the full amount to those who had served. In 2015, Australia's prime minister at the time, Tony Abbott, awarded medals to three surviving Torres Strait Islander war veterans (see **SOURCE 4**).

SOURCE 3 An extract from the Torres Strait Islanders Act 1939, which recognised, in its definitions, the separate status of Torres Strait Islander peoples

Definitions.

3. In this Act, unless the context otherwise indicates, the following terms have the meanings set against them respectively, that is to say :—

Council. "Council"—The island council constituted under this Act ;

Director. "Director"—The Director of Native Affairs appointed under †"*The Aboriginals Preservation and Protection Act of* 1939" and charged with the administration of this Act : the term also includes the Deputy Director of Native Affairs or any officer who may be appointed as Assistant Director of Native Affairs ;

Islander. "Islander"—Any person who is—

(*a*) One of the native race of the Torres Strait islands,

(*b*) A descendant of the native race of the Torres Strait islands and is habitually associating with islanders as defined in paragraph (*a*) of this definition, or

(*c*) A person other than an islander as defined in paragraph (*a*) or (*b*) of this definition who is living on a reserve with an islander as so defined as wife or husband or any such person other than an official or person authorised by the protector who habitually associates on a reserve with islanders as so defined ;

Minister. "Minister"—The Secretary for Health and Home Affairs or other Minister of the Crown charged for the time being with the administration of this Act ;

Prescribed. "Prescribed"—Prescribed by this Act ;

Protector. "Protector"—The Protector of Islanders : the term shall also include the Deputy Protector of Islanders ;

Regulations. "Regulations"—Regulations made under this Act ;

Reserve. "Reserve"—Any Torres Strait island or part of a Torres Strait island heretofore or hereafter granted in trust or reserved from sale or lease by the Governor in Council for the benefit of islanders under the provision of any law in force in Queensland relating to Crown lands ;

This Act. "This Act"—This Act and all Proclamations, Orders in Council, regulations and by-laws thereunder ;

Torres Strait island. "Torres Strait island"—Any island north of eleven degrees south latitude which is part of the State of Queensland.

PART II.—

SOURCE 4 Former Prime Minister Tony Abbott awards a medal to Bamia Mast, a veteran of World War II service in the Torres Strait Light Infantry Battalion.



Gaining the vote

As was the case for Aboriginal Australians, Torres Strait Islander peoples were not able to vote in federal elections until the passing of the Commonwealth Electoral Amendment Act in 1962. They were denied the right to vote in state elections irrespective of whether they lived on island reserves in the Torres Strait or on the Queensland mainland. On 17 December 1965, the state legislation was passed, extending voting rights to all Aboriginal and Torres Strait Islander peoples resident in Queensland. The first state election in which they were able to vote was held on 28 May 1966.

National organisations

People from the Torres Strait Islands played an active role in national campaigns and organisations, particularly in the lead-up to the 1967 Referendum. The Federal Council for Aboriginal Advancement became the Federal Council for the Advancement of Aborigines and Torres Strait Islanders (FCAATSI) in 1964 as a result of the work of Islander people such as Dulcie Flowers and Elia Ware. Elia Ware, from Moa, had served in the Torres Strait Light Infantry Battalion and became a foundation member of the Cairns Advancement League after moving there in the late 1950s. He was also active in the ongoing campaign to redress the discrimination against the Torres Strait Islander men who had served in the Light Infantry Batallion.

The Torres Strait Regional Authority

The Torres Strait Regional Authority (TSRA) was established on 1 July 1994 in response to local demands for greater autonomy. It is a Commonwealth statutory authority governed by the *Aboriginal and Torres Strait Islander Act 2005*. Torres Strait Islander peoples felt that they needed a separate organisation to deal with issues specifically relevant to their culture and their region (**ailan kastom**).

ailan kastom (island custom) the body of customs, traditions, observances and beliefs of some or all of the Torres Strait Islanders peoples living in the Torres Strait area

Today, the Authority has a Board consisting of 20 elected members who are all Torres Strait Islander or Aboriginal persons living in the region. They are elected every four years by their individual communities. The TSRA administers a Torres Strait Development Plan, which contributes to closing the gap between Torres Strait Islander and Aboriginal peoples in the Torres Strait region and non-Indigenous people in mainland Australia.

SOURCE 5 An extract from the *Aboriginal and Torres Strait Islander Act 2005*

142A Functions of TSRA

Functions

1. The TSRA has the following functions:
- a. to recognise and maintain the special and unique Ailan Kastom of Torres Strait Islanders living in the Torres Strait area;
- b. to formulate and implement programs for Torres Strait Islanders, and Aboriginal persons, living in the Torres Strait area;
- c. to monitor the effectiveness of programs for Torres Strait Islanders, and Aboriginal persons, living in the Torres Strait area, including programs conducted by other bodies;
- d. to develop policy proposals to meet national, State and regional needs and priorities of Torres Strait Islanders, and Aboriginal persons, living in the Torres Strait area;
- e. to assist, advise and co-operate with Torres Strait Islander and Aboriginal communities, organisations and individuals at national, State, Territory and regional levels;
- f. to advise the Minister on:
  - i. matters relating to Torres Strait Islander affairs, and Aboriginal affairs, in the Torres Strait area, including the administration of legislation;
  - ii. the co-ordination of the activities of other Commonwealth bodies that affect Torres Strait Islanders, or Aboriginal persons, living in the Torres Strait area;
- g. when requested by the Minister, to provide information or advice to the Minister on any matter specified by the Minister;
- h. to take such reasonable action as it considers necessary to protect Torres Strait Islander and Aboriginal cultural material and information relating to the Torres Strait area if the material or information is considered sacred or otherwise significant by Torres Strait Islanders or Aboriginal persons; ...

22.8 ACTIVITY

Undertake some research into the current issues that are of importance to Torres Strait Islander peoples. Do they have any similarities with the issues of importance to Aboriginal Australians?

HASS skills: Questioning and researching
History concept: Continuity and change

22.8 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 10, 12, 13	Questions 4, 5, 6, 9, 11	Questions 7, 8, 14, 15, 16

Check your understanding

1. Why can Torres Strait Islander peoples be described as 'a minority within a minority'?
2. Do all Torres Strait Islander peoples live in the Torres Strait Islands? Explain.

3. Do Torres Strait Islander peoples share a common origin and culture with Aboriginal peoples on the Australian mainland? Explain.
4. What was the outcome of the *Torres Strait Islanders Act 1939*?
5. Identify examples of discrimination against Torres Strait Islander men who served in World War II.
6. When did Torres Strait Islander peoples gain the right to vote in:
   a. federal elections
   b. state elections?
7. Who was Elia Ware and what were his achievements?
8. Explain *ailan kastom.*

Apply your understanding

9. Study the map in **SOURCE 1**. How does this map show how geography might have influenced the identity, history and culture of Torres Strait Islander peoples?
10. How could the Torres Strait Island flag shown in **SOURCE 2** be considered a historical source?
11. According to the extract from the *Torres Strait Islanders Act 1939* (**SOURCE 3**), what was the definition of an Islander? Why was this definition of legal and historical significance?
12. Study **SOURCE 4** and describe what is taking place. Why was this of historical significance to Torres Strait Islander peoples?
13. Is **SOURCE 5** a primary or secondary source? How does it provide evidence for the recognition of *ailan kastom* in the Torres Strait Islands?
14. Consider whether the sources in this subtopic support or deny a claim that Torres Strait Islander peoples have the right to be recognised as different from Aboriginal Australian peoples. What might be the advantages and disadvantages of such separateness?
15. Create a timeline to show the significant milestones covered in this subtopic in the history of Torres Strait Islander peoples' journey towards rights and freedoms.
16. In the light of Australia's honouring of non-Indigenous men and women who served in World War II, how significant is it for Torres Strait Islander peoples' service to be recognised? Write a paragraph expressing your view.

For sample responses to every question, go to www.jacplus.com.au.

22.9 The Aboriginal Tent Embassy

LEARNING INTENTION

By the end of this subtopic you will be able to:
- explain some of the issues in the fight for land rights
- describe how these have intersected with the broader fight for recognition by Aboriginal and Torres Strait Islander peoples
- identify why the Aboriginal Tent Embassy became such a potent symbol of this fight.

22.9.1 The Yirrkala petition

In the late eighteenth century, proof of sovereignty (exclusive rights) over land, under European law, required evidence of fencing, farming or settlement. Captain James Cook saw no such evidence when exploring the east coast of Australia and proclaimed the country *terra nullius*. Believing that the land belonged to no-one, he legally claimed it for the British Crown in 1770. It would be almost 200 years before this claim would be challenged in Australia's courts.

The **land rights** movement began in 1963 when the Yolngu people from Yirrkala (in the Northern Territory) sent a bark petition to federal parliament. Signed by 17 Aboriginal leaders, it protested the government's decision to allow a mining company to mine bauxite on their traditional lands. Encouraged by the support they received for this action, the Yolngu lodged a challenge in the Northern Territory Supreme Court in 1968. Three years later, Justice Blackburn ruled that, while the Yolngu system of law and the people's longstanding association with the land were recognised, British law had replaced these after 1788.

land rights the rights of Indigenous peoples to possess land they traditionally owned and occupied

This decision angered many Indigenous people, whose expectations had been raised by the outcome of the 1967 referendum. On Australia Day 1972, Prime Minister William McMahon proclaimed that 'land rights would threaten the **tenure** of every Australian'.

SOURCE 1 The Yirrkala bark petition, sent to federal parliament in 1963. A transcript of the text is shown in **SOURCE 2**.



SOURCE 2 Transcript of the text of the Yirrkala petition

TO THE HONOURABLE SPEAKER AND MEMBERS OF THE HOUSE OF REPRESENTATIVES IN PARLIAMENT ASSEMBLED.

The Humble Petition of the Undersigned aboriginal people of Yirrkala, being members of the Balamumu, Narrkala, Gapiny, Miliwurrwurr people and Djapu, Mangalili, Madarrpa, Magarrwanalmirri, Djambarrpuynu, Gumaitj, Marrakulu, Galpu, Dhaluangu, Wangurri, Warramirri, Naymil, Riritjingu, tribes respectfully showeth.

1. That nearly 500 people of the above tribes are residents of the land excised from the Aboriginal Reserve in Arnhem Land.
2. That the procedures of the excision of this land and the fate of the people on it were never explained to them beforehand, and were kept secret from them.
3. That when Welfare Officers and Government officials came to inform them of decisions taken without them and against them, they did not undertake to convey to the Government in Canberra the views and feelings of the Yirrkala Aboriginal people.
4. That the land in question has been hunting and food gathering land for the Yirrkala tribes from time immemorial: we were all born here.
5. That places sacred to the Yirrkala people, as well as vital to their livelihood are in the excised land, especially Melville Bay.
6. That the people of this area fear that their needs and interests will be completely ignored as they have been ignored in the past, and they fear that the fate which has overtaken the Larrakeah tribe will overtake them.
7. And they humbly pray that the Honourable the House of Representatives will appoint a Committee, accompanied by competent interpreters, to hear the views of the people of Yirrkala before permitting the excision of this land.
8. They humbly pray that no arrangements be entered into with any company which will destroy the livelihood and independence of the Yirrkala people.

And your petitioners as in duty bound will ever pray God to help you and us.

22.9.2 The Aboriginal Tent Embassy

On the day of Prime Minister McMahon's announcement in 1972, Aboriginal activists erected a beach umbrella on the lawn outside Parliament House. The umbrella was accompanied by a sign that read 'Aboriginal **Embassy**'. Soon the grounds were filled with tents and activists as Aboriginal and Torres Strait Islander peoples asserted their right to occupy their traditional lands. The Aboriginal Tent Embassy, as it became known, quickly drew media attention along with further support and controversy. It was a visible demonstration of Aboriginal and Torres Strait Islander peoples' desire to move beyond the policies of assimilation and integration, towards an official recognition of their right to determine their own future.

tenure a system by which particular individuals or groups are given a legally recognised right to occupy a defined area of land

embassy the residence or place of official business of an ambassador, who represents a foreign country

int-6711

SOURCE 3 An artist's impression of the Aboriginal Tent Embassy, 1972



A The Embassy flew the Aboriginal flag, which had recently been designed by Luritja man and artist Harold Thomas.

B While most of the 2000 supporters demonstrated peacefully, throughout 1972 some protesters scuffled with police, leading to a number of arrests.

C In 1972, members of the national and international press began to take notice. Their coverage helped to make the Tent Embassy a symbol of the worldwide struggle for civil rights.

D Placards were a constant reminder of what the group was fighting for.

22.9 ACTIVITIES

1. Discuss the following with a classmate.
   a. Why might the activists have chosen to call their camp an 'embassy'?
   b. How might events have turned out differently if they had not placed that sign above their tents?

   History concept: Cause and effect
2. Using **SOURCE 3** and your own research, write a newspaper article that could have been written in 1972 explaining the purpose of the Aboriginal Tent Embassy and the public response to it. In your article, engage the reader by making them feel as if they're there with you. **HASS skills: Communicating and reflecting**
   History concepts: Sources, Evidence

22.9 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 7, 8	Questions 3, 6, 9	Questions 4, 5, 10

Check your understanding

1. Why did Captain Cook believe Australia belonged to no-one?
2. Why did the Yolngu people want to control their own land?
3. What, according to Prime Minister McMahon, was the major reason for not granting the Yolngu people rights over their land?
4. What did the Aboriginal Tent Embassy represent?
5. What was controversial about it?

Apply your understanding

For help with the History concepts of Perspective and Significance, see topic 19 History concepts andskills and concepts.

6. What does the Yirrkala petition (see **SOURCES 1** and **2**) represent about the Yolngu people, and Aboriginal Australians more generally? In your answer, refer to what you know of the content of the document, as well as its physical form.
7. Study **SOURCE 3**.
   a. How useful is a source like this? Evaluate its importance.
   b. Would a photograph be more or less useful in its place? Explain your answer.
8. Create a timeline titled 'The struggle for land rights' that begins in 1770 and ends in the present. Include all the important dates from this subtopic on your timeline. Make sure to annotate them so you will remember why these dates are important.
9. The Aboriginal Tent Embassy has been removed and rebuilt several times, but still exists on the lawns of Old Parliament House. Some people believe it is a cultural icon and should be preserved, while others view it as an eyesore and believe it should be removed. Which perspective do you agree with, and why? What other perspectives might be relevant to this discussion?
10. The Aboriginal Tent Embassy flew the Aboriginal flag. What was so significant about flying this flag at the time? Does it still have the same significance today?

For sample responses to every question, go to www.jacplus.com.au.

22.10 Land rights and protests

LEARNING INTENTION

By the end of this subtopic you will be able to explain how land rights are central to the struggle for rights and freedoms, and describe some of the major events related to land rights.

22.10.1 The Gurindji Strike

After the Yolngu people's unsuccessful bid to regain their land in 1963, it seemed to many that Aboriginal and Torres Strait Islander peoples' land rights might never be recognised by the government. Then in 1966, fed up with their poor treatment, a group of Gurindji, Mudburra and Warlpiri workers walked off the Wave Hill cattle

station, owned by the British aristocrat Lord Vestey. This simple act of defiance, which began as a strike, would eventually become the first successful land rights case in Australia, setting the **precedent** for many others.

Since 1914 the Vestey family had owned the Wave Hill cattle station, which covered the traditional lands of the Gurindji people. Working conditions on the station were hard. Aboriginal workers complained of low pay, disrespectful treatment by white workers and poor living conditions — claims that had been confirmed by official reports. Dissatisfaction with these conditions had already led to at least three strikes or protests on the property — in 1949, 1952 and 1955.

On 23 August 1966 about 200 Aboriginal stockmen, domestic servants and their families walked off the property. Under the leadership of a Gurindji Elder named Vincent Lingiari, the group moved to Wattie Creek (known as Daguragu to the Gurindji people), an area also officially owned by Lord Vestey. Daguragu was chosen as a suitable place to camp both because it contained a number of sacred Gurindji sites and because it provided a reliable source of fresh drinking water.

Vestey sent a member of the Anti-Slavery Society in London to visit Wave Hill and assess the situation. On recommendation, the Vestey company volunteered to surrender half the Wave Hill lease area. However, the government did not allow the transfer because Indigenous land rights were not recognised at that time. Instead, the government offered the workers a raise in wages and new houses that would be built at Wave Hill. The protesters refused, insisting that they should be given the same wages as white employees. As the 'Wave Hill mob' set up camp, it became clear that this would be a struggle not only for better working conditions, but for ownership of their traditional lands.

precedent an action or decision on which later actions or decisions might be based; a law made by a superior court that must be applied by lower courts in future cases with the same or similar facts

SOURCE 1 Ted Egan was a supporter of the Gurindji people's battle to take ownership of their traditional lands. During the Wave Hill walk-off, he interviewed Gurindji leader Vincent Lingiari and told his story through the song 'Gurindji Blues', which was recorded in 1969. The sales of the single helped finance the Aboriginal Tent Embassy for its first six months.

Gurindji Blues
My name is Vincent Lingiari, came
from Daguragu, Wattie Creek Station.
Poor bugger me Gurindji
Me bin sit down this country
Long time before the Lord Vestey
Allabout land belongin' to We
Oh poor bugger me, Gurindji.
Poor bugger blackfeller; Gurindji
Long time work no wages, we,
Work for the good old Lord Vestey
Little bit flour; sugar and tea
For the Gurindji, from Lord Vestey
Oh poor bugger me.
Poor bugger me, Gurindji,
Man called Vincent Lingiari
Talk long allabout Gurindji
'Daguragu place for we,
Home for we, Gurindji:
But poor bugger blackfeller, Gurindji
Government boss him talk long we
'We'll build you house with electricity
But at Wave Hill, for can't you see
Wattie Creek belong to Lord Vestey'
Oh poor bugger me.
Poor bugger me, Gurindji
Up come Mr. Frank Hardy
ABSCHOL too and talk long we
Givit hand long Gurindji
Buildim house and plantim tree
Longa Wattie Creek for Gurindji
But poor bugger blackfeller Gurindji
Government Law him talk long we
'Can't givit land long blackfeller, see
Only spoilim Gurindji'
Oh poor bugger me.
Poor bugger me, Gurindji
Peter Nixon talk long we:
'Buy you own land, Gurindji
Buyim back from the Lord Vestey'
Oh poor bugger me, Gurindji.
Poor bugger blackfeller Gurindji
Suppose we buyim back country
What you reckon proper fee?
Might be flour, sugar and tea
From the Gurindji to Lord Vestey?
Oh poor bugger me.
Oh ngaiyu luyurr ngura-u
Sorry my country, Gurindji.

From little things, big things grow

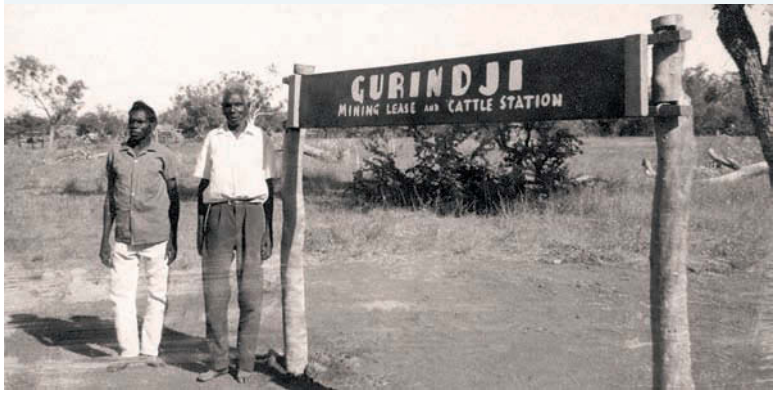
Within the Aboriginal community, word of the walk-off spread quickly. In 1966 and 1967 strikes and protests sprung up at stations across the Northern Territory, led in part by organisers of the Wave Hill protest.

Australian author Frank Hardy had left Sydney in 1967 to find the 'real Australia' — the Australia celebrated in the poetry of earlier writers such as Banjo Paterson. Instead, he found Indigenous people being mistreated and living in what he referred to as an 'unofficial apartheid'. After spending time with the organisers of the Wave Hill walk-off, he went back to the city, where he arranged press conferences and lobbied politicians in an attempt to bring the plight of the Gurindji people to their attention.

As the national press picked up the story, the broader Australian community began to support the action, some even making the journey to Wave Hill to offer their support to the strikers. Finally the Gurindji people were no longer alone in their cry to take back their land.

On 16 August 1975 Prime Minister Gough Whitlam 'handed back' 300 000 square kilometres of the Gurindji people's traditional lands, declaring, 'I want to acknowledge that we Australians have still much to do to redress the injustice and oppression that has for so long been the lot of Black Australians'. As a symbolic gesture, he poured sand from the river bank at Daguragu into Vincent Lingiari's hands.

SOURCE 2 Protesters Vincent Lingiari (right) and Mick Rangiari (left) stand beside a sign made for them by the author Frank Hardy.



SOURCE 3 In this photograph, captured by Australia's first Aboriginal press photographer, Mervyn Bishop, Prime Minister Gough Whitlam pours sand into the hands of Vincent Lingiari to mark the return of the Gurindji people's traditional lands.



22.10.2 Moves towards land rights and native title

The most significant decision on land rights and native title came from the Torres Strait Islands. Throughout the 1970s, the Queensland Government, which administered the Torres Strait Islands, had indicated to Islander peoples that although they occupied their traditional lands, they were not the legal owners of them.

The Mabo decision

In 1982 a group of people from Mer Island, in the eastern part of the Torres Strait, challenged the right of the government to prevent them from using their lands. They took their case to

the Queensland Supreme Court. The group was led by Eddie Koiki Mabo. After the court ruled against them, the Meriam Islanders appealed to the High Court of Australia. On 3 June 1992 the High Court made a historic ruling: the Meriam people of the Torres Strait *did* have **native title** over their traditional lands. The 'Mabo decision', as it became known, was important for all Australian Aboriginal and Torres Strait Islander peoples because it recognised under law that European settlement of Australia did not automatically wipe out native title. At the same time, it created some confusion as to how decisions on native title should be made.

SOURCE 4 Mer Island, the traditional land of the Meriam people, and subject of the Mabo case, was known as Murray Island to white settlers.



Who was Eddie Mabo?

The man who led the Meriam Islanders to victory was born on Mer Island in 1936 and had no formal education beyond primary school. He had become politically active in the 1970s, but his views on the importance of native title only became clear during a conference he attended at James Cook University in 1981. At this conference, titled Land Rights and the Future of Australian Race Relations, Mabo was exposed to some of the leading minds dealing with the complexities of native title, many of whom would become his supporters after he launched his landmark case in 1982. He would continue fighting for land rights until his death a decade later.

native title a 'bundle of rights' of First Nations people to possess land they traditionally owned and continue to occupy

SOURCE 5 In this 'manifesto', Eddie Mabo states some of his aims in launching a native title case against the Queensland Government in 1981.

My name is Edward Mabo, but my island name is Koiki. My family has occupied the land here for hundreds of years before Captain Cook was born. They are now trying to say I cannot own it. The present Queensland Government is a friendly enemy of the black people as they like to give you the bible and take away your land. We should stop calling them boss. We must be proud to live in our own palm leaf houses like our fathers before us.

DID YOU KNOW?

The Mabo decision meant that the High Court recognised that native title existed under Aboriginal and Torres Strait Islander peoples' customary law that had existed in Australia prior to 1788.

Native title

The *Native Title Act 1993* was the federal government's way of clarifying the law relating to the Mabo case and providing the legal means to deal with future land rights claims. To succeed in a claim, Aboriginal and Torres Strait Islander peoples had to prove they have had a 'traditional connection' with the land since 1788,

and that their interests had not been 'extinguished' (overridden) by the granting of other rights. According to the Act, those who believed they had a valid claim must apply to the Native Title Tribunal, which would work with Aboriginal representative bodies, as well as land councils, mining companies and other interested parties, to negotiate claims under the direction of the Federal Court.

DID YOU KNOW?

To date, around 15 per cent of Australia has been legally recognised as belonging to Aboriginal or Torres Strait Islander peoples under native title claims.

The Wik case

Since settlement, the Australian government had granted leases to **pastoralists** so they could raise herds of cattle or sheep on large tracts of land. These leases meant that the pastoralists could use the land but they did not, in many cases, stop other people, many of them Indigenous, from using the land as well.

In *Wik Peoples vs Queensland*, the High Court ruled that a pastoral lease did not necessarily extinguish native title. Rather, native title rights could coexist with pastoral leases but, if First Nations rights conflicted with pastoralists' activities, these pastoralists' rights would prevail. This was a major blow to the Wik people, and to other Aboriginal and Torres Strait Islander groups seeking land rights. However, it was a coup for many politicians, who had been voted in by non-Indigenous Australians concerned that they might lose their land through native title claims.

SOURCE 6 Conservative politician Pauline Hanson was voted into the Queensland seat of Oxley in the 1996 federal election. She was one of the leading voices calling for land rights to be repealed following the Wik decision. In this excerpt from her first speech to Parliament in 1996, she focuses on what she saw as an unfair granting of land to people under native title.

... This nation is being divided into black and white, and the present system encourages this. I am fed up with being told, 'This is our land.' Well, where the hell do I go? I was born here, and so were my parents and children. I will work beside anyone and they will be my equal but I draw the line when told I must pay and continue paying for something that happened over 200 years ago. Like most Australians, I worked for my land; no-one gave it to me.

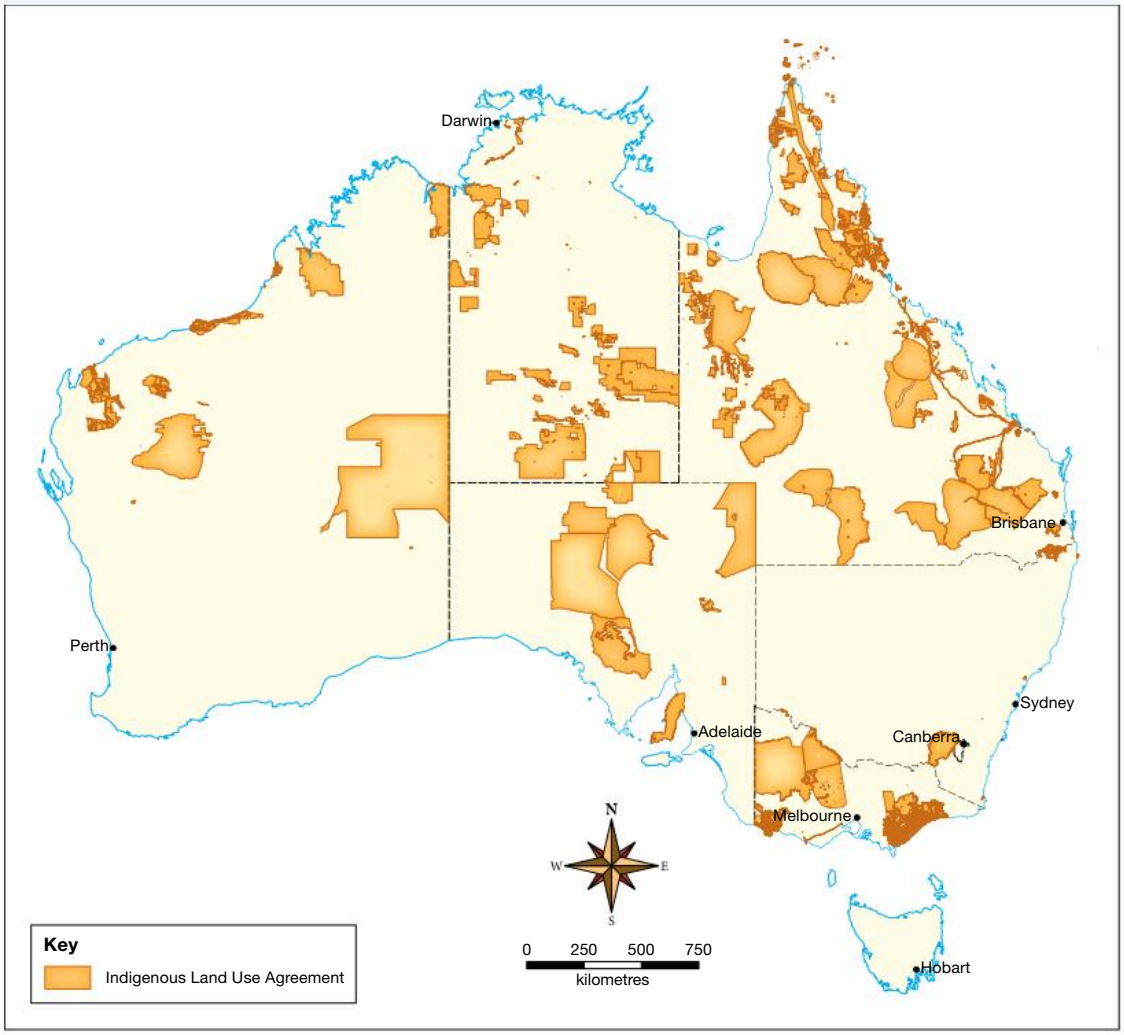
Prime Minister John Howard, declaring that 'the pendulum has swung too far the way of Aborigines in the argument', was ready to deliver a ten-point plan to alter the Native Title Act that would see a greater number of native title claims extinguished. Labor, the Greens and the Democrats argued that the plan needed to be softened. Both sides needed the support of Independent Senator Brian Harradine. Finally, after one of the longest debates federal parliament has ever seen, the senator threw his support behind Labor, the Greens and the Democrats. The plan was passed, but with a number of conditions, including that it would be subject to the Racial Discrimination Act, Australia's protection against racist legislation.

Beginning in 1998, the Native Title Tribunal was given responsibility for working with native title holders and other interested parties to negotiate Indigenous Land Use Agreements (ILUAs). These agreements would allow use of the land based on terms that suited both parties. From a slow start, with only six ILUAs registered up to 2000, by 2011 more than 500 had been put in place across the country.

The distribution of these first agreements is shown in **SOURCE 7**. Since 2011, agreement numbers have increased significantly. In 2020, there were over 1300 registered agreements, covering almost one-third of the country.

pastoralist a person who runs sheep or cattle on a property

SOURCE 7 Distribution of Indigenous Land Use Agreements established from 1998 to 2020. Since 2011, the number of agreements has more than doubled, with over 2.5 million square kilometres of land and over 40 500 square kilometres of sea area registered under an agreement of some kind.



Source: © Geospatial Services, National Native Title Tribunal 14/07/2020. Reproduced with permission under Creative Commons Attribution 4.0 International license: https://creativecommons.org/licenses/by/4.0.

DISCUSS

Which of the events in this subtopic do you think was most significant to the land rights movement? Why do you think this is so? Do other people in your class have different opinions?

General capability: Personal and social capability

Explore more with myWorldHistoryAtlas

Deepen and check your understanding of this topic with related case studies and auto-marked questions.

- Rights and freedoms > **Indigenous rights**

22.10 ACTIVITIES

1. Many Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander artists and writers have supported the land rights movement. Using research, find a variety of these texts and explain how they persuade their audience to agree with their point of view. **History concepts: Sources, Evidence**
2. Write your own narrative poem or song, based on 'Gurindji Blues', that tells the story of one of the other struggles for land rights mentioned in this subtopic. You may need to conduct further research to develop your ideas more fully. **HASS skills: Communicating and reflecting**
History concept: Continuity and change

22.10 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 6, 10, 14	Questions 2, 5, 8, 11, 12, 13	Questions 3, 4, 7, 9, 15, 16, 17

Check your understanding

1. Why did the Gurindji people walk off the Wave Hill cattle station in 1966?
2. Who was Vincent Lingiari? Why is he considered a significant person in the struggle for Aboriginal rights?
3. Why did the government refuse to allow the land transfer that the Vestey family offered?
4. What did the protesters do as a result?
5. What was the 'Mabo Decision'?
6. Who was Eddie Mabo?
7. In what way might it be ironic that Eddie Mabo decided to launch his native title claim at a university named after the explorer James Cook?
8. What was the importance of the *Native Title Act 1993*?
9. What was the finding of the *Wik Peoples vs Queensland* case in the High Court? How was this finding a blow to Aboriginal and Torres Strait Islander peoples?

Apply your understanding

10. **SOURCE 1** is a ballad written by Ted Egan. It tells the story of the reasons behind the Wave Hill walk-off.
    a. What were the main problems that the Gurindji had with their treatment at Wave Hill?
    b. Why do you think the artist suggests buying back Gurindji land with 'flour, sugar and tea'?
    c. Do you think this is a useful source for historians studying the Wave Hill walk-off? Explain.
11. Explain the symbolism inherent in **SOURCES 2** and **3**. How could both acts be said to represent the changing perceptions of white Australia towards the rights of Aboriginal and Torres Strait Islander peoples in the late 1960s?
12. What do the two names of Mer/Murray Island in **SOURCE 4** symbolise?
13. **SOURCES 5** and **6** express contrasting views of Aboriginal and Torres Strait Islander peoples' struggle for native title. Based on these sources, who do you believe makes a stronger case? Explain your view.
14. **SOURCE 7** depicts the Indigenous Land Use Agreements across Australia as of July 2020. Where are the greatest number of ILUAs situated? Where are the fewest? What might this suggest about First Nations peoples in these areas? Discuss with a classmate.
15. The Mabo case is considered a turning point in the struggle by Aboriginal and Torres Strait Islander peoples to secure land rights. Explain why it was so significant.
16. Why might it be difficult for Aboriginal and Torres Strait Islander peoples to show they have a 'traditional connection' to the land? Think of the type of evidence usually required to prove a case in court. Why might Aboriginal and Torres Strait Islander peoples not have this type of evidence?
17. Examine all the sources in this subtopic. Which one do you think is the most effective in conveying its message? Explain why.

For sample responses to every question, go to www.jacplus.com.au.

22.11 Reconciliation

LEARNING INTENTION

By the end of this subtopic you will able to describe some of the political, social and moral complexities of the journey to reconciliation.

22.11.1 Perspectives on the road to reconciliation

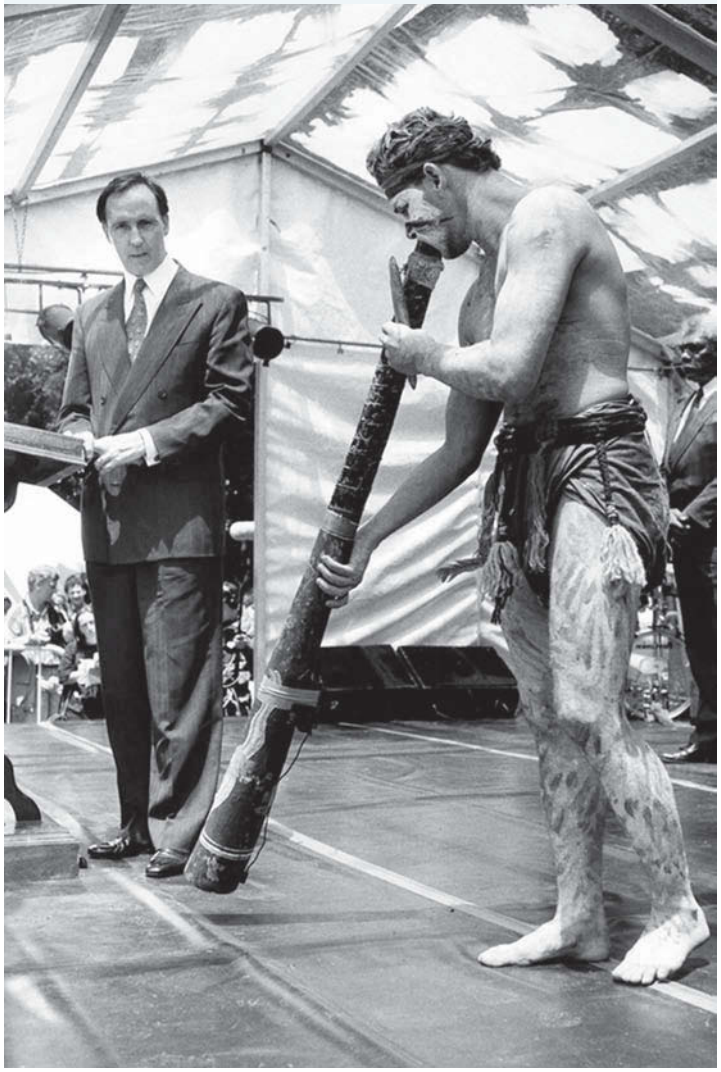
Reconciliation — the coming together of parties divided by difference — is rarely a single event; rather, it is based on the sum of many special moments that together heal the hurt. This is particularly so when the reconciliation involves two groups of citizens separated by a long history of injustice, misunderstanding and resentment, as has been the case for Australia's Aboriginal and Torres Strait Islander peoples and those who came here after 1788.

In 1991, the federal parliament passed the Council for Reconciliation Act. As a result, the Council for Aboriginal Reconciliation was formed with representatives from Aboriginal and Torres Strait Islander groups.

The Redfern Speech

Labor Prime Minister Paul Keating was known for his skill as a public speaker. In 1992, at the Australian launch of the International Year of the World's Indigenous People in Redfern, a Sydney suburb that was home to a large Aboriginal and Torres Strait Islander community, he made one of the greatest speeches of his career. In this speech, he spoke of the need for the nation to acknowledge the harm caused to Aboriginal and Torres Strait Islander peoples through the policies of previous governments. He said that there was nothing to fear or lose by recognising 'historical truth' and that social democracy should be extended to Aboriginal and Torres Strait Islander Australians. The Redfern Speech, as it was known, would be — for many — the first step in the long road to reconciliation between Australia's Aboriginal and Torres Strait Islander peoples and non-Aboriginal and Torres Strait Islander peoples.

SOURCE 1 Prime Minister Paul Keating delivers the Redfern Speech on 10 December 1992, to mark the beginning of the International Year of the World's Indigenous People.



Bringing Them Home

In 1995 Prime Minister Keating commissioned a report into Australia's Stolen Generations. Titled *Bringing Them Home*, the Report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from Their Families (1997) outlined the process by which Indigenous children were taken from their families in the name of protection. These

children would become known as the Stolen Generations (see subtopic 22.4). Through the voices of those who had experienced separation, and the organisations established to represent Australia's Aboriginal and Torres Strait Islander peoples, the report painted a stark picture of the mistreatment of Aboriginal and Torres Strait Islander children and their families by the Aborigines Welfare Board. The report also revealed the ongoing effects of forced removal on the Stolen Generations and their families. These included a higher incidence of depression, poverty and crime, and a lower level of education. A lack of role models had also made it difficult for many members of the Stolen Generations to raise their own families. On the first anniversary of the day the report was tabled, 26 May was declared National Sorry Day.

Refusing to say sorry

While all state and territory governments and the churches publicly apologised to the Stolen Generations following the release of *Bringing Them Home*, the federal government — then led by Prime Minister John Howard — refused to apologise. This could, in part, be explained by the government's fear that admitting **culpability** would lead to a landslide of claims for compensation. But it also reflected the reluctance of many Australians to accept **moral** responsibility for the acts of previous generations. This view was shared by Howard, who claimed to support reconciliation but 'not of the apologetic, shame-laden, guilt-ridden type'. He said that millions of Australians would never entertain the notion of apologising to Australia's Aboriginal and Torres Strait Islander peoples because they would refuse to accept responsibility for past events.

SOURCE 2 Sir William Deane, a former High Court judge who had presided over the Mabo case, was appointed to the office of governor-general in 1996. In August the same year he made a passionate plea to the Australian people. It forms part of the introduction to the *Bringing Them Home* report.

> It should, I think, be apparent to all well-meaning people that true reconciliation between the Australian nation and its Indigenous peoples is not achievable in the absence of acknowledgement by the nation of the wrongfulness of the past dispossession, oppression and degradation of the Aboriginal peoples. That is not to say that individual Australians who had no part in what was done in the past should feel or acknowledge personal guilt. It is simply to assert our identity as a nation and the basic fact that national shame, as well as national pride, can and should exist in relation to past acts and omissions, at least when done or made in the name of the community or with the authority of government ...

One key difference between those who were prepared to say sorry to Australia's Aboriginal and Torres Strait Islander peoples and those who were not was the way in which they viewed Australia's past. Some people believed that the arrival of white people in Australia symbolised the beginning of civilisation and progress in Australia (known as the 'three cheers' view of history), while others viewed it as the start of a brutal invasion (the 'black armband' view of history). In relation to the Stolen Generations, the former believed that the government had removed Aboriginal and Torres Strait Islander children from their homes for their own good, while the latter often claimed that this was another attempt to **eradicate** Aboriginal and Torres Strait Islander Australians, and their cultures and languages.

culpability state of guilt; being responsible or blameworthy
moral relating to right and wrong behaviour
eradicate wipe out, obliterate

SOURCE 3 John Howard presented his views on Australian history in parliament, under a motion on the topic of racial tolerance, on 30 October 1996. He would reiterate these views over the months that followed.

> I profoundly reject ... what others have described, and I have adopted the description, as the black armband view of Australian history. I believe the balance sheet of Australian history is a very generous and benign one. I believe that, like any other nation, we have black marks upon our history but amongst the nations of the world we have a remarkably positive history. I think there is a yearning in the Australian community right across the political divide for its leaders to enunciate more pride and sense of achievement in what has gone before us. I think we have been too apologetic about our history in the past. I think we have been far too self-conscious about what this country has achieved and I believe it is tremendously important that we understand, particularly as we approach the centenary of the Federation of Australia, that the Australian achievement has been a heroic one, a courageous one and a humanitarian one.

22.11.2 Positive moves forward

The United Nations' Convention on the Rights of the Child was designed to legally protect the rights of all children. Australia signed the Convention in 1990. The Convention granted Indigenous children the right to life, health and education (including education about the child's own cultural identity, language and values), and the right to family. The Convention also prohibited discrimination against Indigenous children, and granted them protection from physical or mental violence, injury, abuse, maltreatment or exploitation. In 2005, the UN Committee on the Rights of the Child congratulated the authors of *Bringing Them Home* for illuminating the hardships faced by members of the Stolen Generations, but made a number of recommendations for continuing to improve life for Aboriginal and Torres Strait Islander children. The Committee also recommended that the nation address issues including the disproportionately high number of Aboriginal and Torres Strait Islander children in out of home care (such as orphanages and foster homes) and in juvenile detention centres.

Australia offers an apology

In 2007 the federal Labor Party gained power under the leadership of Kevin Rudd. In his acceptance speech, he vowed to be a 'prime minister for all Australians'. Immediately, plans were made to offer the nation's Aboriginal and Torres Strait Islander peoples a formal apology. The parliamentary year began with politicians being treated to a 'Welcome to Country' ceremony, the first ever held at Parliament House. As the sounds of a didgeridoo echoed through the halls of Parliament House, Matilda House-Williams, a Ngambri Elder, welcomed both the prime minister and the Opposition leader to her traditional lands.

SOURCE 4 Ngambri Elder Matilda House-Williams welcomes Prime Minister Rudd and Opposition leader Brendan Nelson to parliament.



On 13 February 2008, in front of parliamentarians as well as members of the public, including members of the Stolen Generations, the prime minister acknowledged the harm caused to Aboriginal and Torres Strait Islander peoples and the unfairness of past government policies. He pledged that Australia would never again allow such injustice to occur. Then he encouraged both sides of the house to work together to 'close the gap' between Aboriginal and Torres Strait Islander peoples and non-Indigenous Australians. The speech received a standing ovation, both from those within the parliament, and from the crowds watching the broadcast on large screens in every capital city. Rudd's speech was regarded by many as a great step towards achieving reconciliation. Of the 360 words that made up his apology that day, however, the crowds had come to hear only one — 'Sorry'.

Following the prime minister's speech, Dr Brendan Nelson, the Opposition leader, reiterated his party's position, stating, 'Our generation does not own these actions, nor should it feel guilt for what was done in many, but certainly not all cases, with the best intentions'. In many of the nation's capital cities, his words were drowned out by boos and hisses from the crowd.

Aboriginal leader Pat Dodson, regarded by many as the father of reconciliation, described the apology as 'a **seminal** moment in the nation's history'. While many Aboriginal and Torres Strait Islander peoples welcomed the apology, there were those who felt that the prime minister hadn't gone far enough. John Moriarty, a successful businessman who has held positions in Aboriginal Affairs departments at state and federal levels, said, 'It doesn't get down to the real crux of the issue, in my view, that people like me were taken away from their full-blooded mothers to breed out the culture. It doesn't come to that. It doesn't hit home with me'.

seminal original and influential

SOURCE 5 Prime Minister Kevin Rudd's formal apology to members of the Stolen Generations in February 2008. This speech is viewed as a key moment in the struggle for reconciliation.

Today we honour the Indigenous peoples of this land, the oldest continuing cultures in human history.

We reflect on their past mistreatment.

We reflect in particular on the mistreatment of those who were Stolen Generations — this blemished chapter in our nation's history.

The time has now come for the nation to turn a new page in Australia's history by righting the wrongs of the past and so moving forward with confidence to the future.

We apologise for the laws and policies of successive Parliaments and governments that have inflicted profound grief, suffering and loss on these our fellow Australians.

We apologise especially for the removal of Aboriginal and Torres Strait Islander children from their families, their communities and their country.

For the pain, suffering and hurt of these Stolen Generations, their descendants and for their families left behind, we say sorry.

To the mothers and the fathers, the brothers and the sisters, for the breaking up of families and communities, we say sorry.

And for the indignity and degradation thus inflicted on a proud people and a proud culture, we say sorry.

We the Parliament of Australia respectfully request that this apology be received in the spirit in which it is offered as part of the healing of the nation.

For the future we take heart; resolving that this new page in the history of our great continent can now be written.

We today take this first step by acknowledging the past and laying claim to a future that embraces all Australians.

A future where this Parliament resolves that the injustices of the past must never, never happen again.

A future where we harness the determination of all Australians, Indigenous and non-Indigenous, to close the gap that lies between us in life expectancy, educational achievement and economic opportunity.

A future where we embrace the possibility of new solutions to enduring problems where old approaches have failed.

A future based on mutual respect, mutual resolve and mutual responsibility.

A future where all Australians, whatever their origins, are truly equal partners, with equal opportunities and with an equal stake in shaping the next chapter in the history of this great country, Australia.

While much is still to be done to achieve lasting reconciliation, gestures such as the federal government's willingness to say sorry symbolise Australians' growing appreciation of this country's checkered past and their acknowledgement of the rich culture of its First Peoples.

SOURCE 6 Tom Calma, Aboriginal and Torres Strait Islander Social Justice Commissioner at the Human Rights and Equal Opportunity Commission, responds to the apology on behalf of the National Sorry Day Committee and the Stolen Generations Alliance, the two national bodies representing the Stolen Generations and their families.

Let me tell you what this apology means to me. For many years, my family has been searching in vain to find information about my great-grandmother on my father's side, who was taken at the turn of the twentieth century.

Recently, Link Up in Darwin located some information in the Archives. In a document titled 'list of half-castes in the NT' dated 2 December 1899, a government official named George Thompson wrote the following about my great-grandmother:

Half caste May is a well grown girl, is living with her mother in the black's camp at Woolwonga, her mother will not part with her, she mixes up a great deal with the Chinamen ...

My great-grandmother's ordeal was not uncommon and nor was the chilling account — 'her mother will not part with her'.

This is not about black armbands and guilt. It never was.

It is about belonging.

SOURCE 7 Prime Minister Kevin Rudd's formal apology to members of the Stolen Generations in February 2008



SOURCE 8 In Melbourne, angry crowd members turn their backs on the Opposition leader in silent protest at his refusal to say sorry.



22.11 ACTIVITY

Using all the sources in this subtopic and the information given, develop a reconciliation chronology. You can represent it as creatively as you like, but make sure you provide dates and clear annotations for the major events on the journey towards reconciliation.

HASS skills: Analysing
History concepts: Sources, Evidence

22.11 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 11, 13, 14	Questions 3, 4, 5, 6, 9, 10, 12, 15, 16	Questions 7, 8, 17, 18, 19, 20

Check your understanding

1. What was the importance of Paul Keating's Redfern Speech in 1992?
2. Why was it significant that it was made in Redfern?
3. What did the 1997 *Bringing Them Home* report reveal?
4. Explain the significance of 26 May 1996.
5. Why did the federal government, led by John Howard, refuse to apologise to the Stolen Generations?
6. What legal impact did 'The United Nations' Convention on the Rights of the Child have on Aboriginal and Torres Strait Islander children?
7. What recommendations did the Committee on the Rights of the Child make regarding Aboriginal and Torres Strait Islander children in Australia?
8. a. What great step towards reconciliation did Kevin Rudd take in 2008 while prime minister?
   b. Did everyone agree with his position? How do you explain a divergence of views?

Apply your understanding

9. What evidence in **SOURCE 1** indicates Prime Minister Paul Keating's commitment to the reconciliation process?
10. Based on the excerpt from *Bringing Them Home* provided in **SOURCE 2**, do you consider it is important for a country such as Australia to acknowledge its past wrongdoings? Explain your view.
11. In your own words, and using the text in section 22.11.1 and **SOURCE 3**, define the 'three cheers' and 'black armband' views of history.
12. Using **SOURCE 4**, explain the symbolic significance of beginning the parliamentary year with a 'Welcome to Country'.
13. Read **SOURCE 5** carefully. Explain what Kevin Rudd is apologising for and who he is representing when he says 'we'.
14. Why did those watching Kevin Rudd's apology turn their backs when Brendan Nelson spoke (**SOURCE 8**)?
15. What does the fact that the Sorry speech was broadcast in many public spaces in all capital cities demonstrate about its significance? (See **SOURCES 7** and **8**.)
16. Analyse the apology (see **SOURCE 5**). Using one colour, write down the *people* he apologises to. In another colour, write down the *actions* he apologises for. In a third colour, write down any words or phrases relating to the *reasons* behind the apology. And in a fourth colour, outline *recommendations* for moving forward. Having completed this activity, decide whether, in your view, this represented a full apology, or whether there were other issues you believe Prime Minister Rudd should have addressed. Explain your opinion using some of the words you have highlighted.
17. Tom Calma's response to the apology (see **SOURCE 6**) was delivered on behalf of the Stolen Generations.
    a. Who do you think his comments were aimed at?
    b. Which lines were particularly significant? Explain your answers.
18. Do you think Kevin Rudd's apology is the sort of thing Paul Keating had in mind when he gave his speech at Redfern more than a decade earlier? Explain your view.
19. Write a journal article expressing your own views about the reconciliation issue. Respond to the following prompts, explaining each of your answers in detail.
    a. Do you think the Australian government owed Aboriginal and Torres Strait Islander peoples an apology?
    b. Was the Howard government's refusal to apologise the right decision or the wrong decision?
    c. Did Kevin Rudd's apology go far enough? Did it go too far?
    d. What barriers need to be broken down before reconciliation can truly be said to have been achieved?
20. Using evidence from a range of sources in this subtopic, construct a case that argues that the road to reconciliation has not been not an easy one.

For sample responses to every question, go to www.jacplus.com.au.

22.12 Fighting for equity

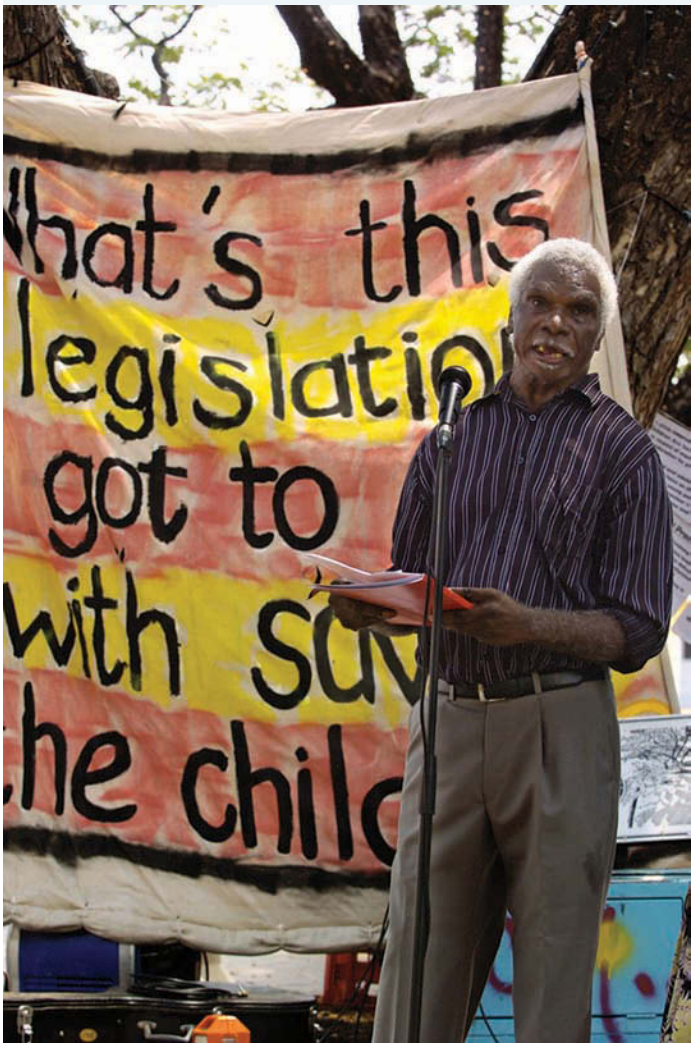
LEARNING INTENTION

By the end of this subtopic you will be able to explain the ways in which life for Aboriginal and Torres Strait Islander peoples has improved, and identify the ways it still lags behind expectations targets.

22.12.1 The Northern Territory National Emergency Response

Australia's Aboriginal and Torres Strait Islander peoples lost much of what was theirs from the arrival of European settlers in 1788. Over the next 150 or so years, Aboriginal and Torres Strait Islander peoples experienced injustice, even racist hostility, from those who had taken their land, removed them from their cultures and languages, and denied them their civil and human rights. While federal government policies such as Closing the Gap aim to redress many inequities, legislation such as the Northern Territory Emergency Response in 2007 intervened in Aboriginal peoples' lives and placed restrictions on their rights and freedoms.

SOURCE 1 The government's intervention in the Northern Territory: a necessary step to protect children or racial discrimination? This photograph, taken in 2007, shows Bagot (Darwin) council chairman James Gaykamangu speaking against the policy at the National Day of Action.



On 15 June 2007 the Board of Inquiry into the Protection of Aboriginal Children from Sexual Abuse released a report titled *Little Children Are Sacred*, which indicated that child sexual abuse was rampant in many remote Indigenous communities. The Howard government responded by suspending the Racial Discrimination Act in relation to these communities and announcing emergency measures designed to protect Indigenous children. The Northern Territory Emergency Response (NTER) included sending soldiers and police into the Northern Territory, banning alcohol and restricting the ways in which community members could spend their welfare cheques (a practice known as income management). The 'intervention', as it came to be known, was supported by the Australian Labor Party but caused controversy within the wider Australian community. Supporters claimed that such strict measures were required to protect children within remote communities while others claimed that it was a racist policy and another invasion of Indigenous lands.

The complexities of this issue highlight many of the difficulties that still accompany decisions made by the Australian government in relation to Aboriginal and Torres Strait Islander peoples' rights.

Opinions on the worth of the intervention remain divided. As shown in **SOURCE 2**, many Aboriginal Elders and other Australians abhorred the lack of consultation with Aboriginal people, especially those directly affected.

SOURCE 2 A statement by Aboriginal Elders to the people of Australia on 7 February 2011

TO THE PEOPLE OF AUSTRALIA 7 FEBRUARY 2011

We are the people of the land. The land is our mother. For more than 40 000 years we have been caring for this land. We are its natural farmers.

Now, after so many years of dispossession, we find once again we are being thrust towards a new dispossession. Our pain and our fear are real. Our people are again being shamed.

Under the intervention we lost our rights as human beings, as Australians citizens, as the First People of the Land. We feel very deeply the threat to our languages, our culture and our heritage. Through harsh changes we have had removed from us all control over our communities and our lives. Our lands have been compulsorily taken from us. We have been left with nothing.

The legislation under which we now live does not comply with international law. It is discriminatory. We are no longer equal to other Australians. We are no longer equal to you.

As people in our own land, we are shocked by the failure of democratic processes, of the failure to consult with us and of the total disregard for us as human beings. We demand the return of our rights, our freedom to live our traditional lives, support to develop our economic enterprises to develop jobs and to work towards a better future for all our peoples.

So extreme have been the actions against our people that we must appeal to all people of Australia to walk with us in true equality. Speak out and help to put an end to the nightmare that Northern Territory Aboriginal people are experiencing on a daily basis.

Some Aboriginal commentators and activists gave their conditional support to the policy, citing its benefits for women and children against a 'wrong-headed Aboriginal male ideology'. In 2011, after more than three years of the intervention, Central Australian Aboriginal leader Bess Price told ABC television:

> I am for the intervention because I've seen progress. I've seen women who now have voices. They can speak for themselves and they are standing up for their rights. Children are being fed and young people more or less know how to manage their lives. That's what's happened since the intervention.

Cape York Aboriginal leader Noel Pearson said:

> I'm in agreement with the emphasis on grog and policing. I'm in agreement with attaching conditions to welfare payments. But the difference between the proposals that we've put forward to the government and the proposals announced by Minister Brough … a difference in that we would be concerned that those people who are acting responsibly in relation to the payments they receive, should continue to exercise their freedoms and their decisions … we should only target cases of responsibility failure.

In terms of human rights, Australian organisations such as Australians for Native Title and Reconciliation (ANTaR) criticised the suspension of the Racial Discrimination Act, arguing the protection of children could have been achieved without its suspension. Despite some amendments made in 2010, concerns remained about the implementation of 'special measures' taken by the government to 'protect' communities at the heart of the intervention. A delegation of Northern Territory Aboriginal leaders met with the United Nations High Commissioner for Human Rights in 2011 to express their view on the discrimination that had ensued under the implementation of the intervention, and found a sympathetic ear. Despite this, the Rudd and Gillard governments continued much of the work done in the Howard government years when they introduced the *Stronger Futures in the Northern Territory Act 2012*. This Act was designed to maintain tight controls over Aboriginal peoples' use of alcohol and money. Like its predecessor, it has been criticised for not taking into account the principles of the Declaration on the Rights of Indigenous Peoples, particularly the principle of self-determination. The Stronger Futures Act will remain in force until 2022.

22.12.2 Closing the gap

In March 2008, the then Australian government and Opposition signed the Close the Gap Statement of Intent, committing to closing the health and life expectancy gap between Aboriginal and Torres Strait Islander peoples

and non-Indigenous Australians by 2030. The 2019 Closing the Gap report, like those before it, revealed a mixed bag in terms of progress towards the targets set in 2008. While gains had been made in the life expectancy for both men and women over this period, the goal of 'closing the gap' between Indigenous and non-Indigenous Australians was not on track, with Indigenous Australians living in remote and very remote parts of the country showing the poorest health outcomes.

In March 2019, the Council of Australian Governments (GOAG) entered into a formal partnership with the Aboriginal and Torres Strait Islander Peak Organisations and agreed to form the Joint Council on Closing the Gap. It is hoped that this council will be able to more effectively develop solutions for closing the gap by better understanding the needs of Indigenous communities.

SOURCE 3 Extract from Close the Gap statement 2008

Our challenge for the future is to embrace a new partnership between Indigenous and non-Indigenous Australians. The core of this partnership for the future is closing the gap between Indigenous and non-Indigenous Australians on life expectancy, educational achievement and employment opportunities. This new partnership on closing the gap will set concrete targets for the future: within a decade, to halve the widening gap in literacy, numeracy and employment outcomes and opportunities for Indigenous children; within a decade, to halve the appalling gap in infant mortality rates between Indigenous and non-Indigenous children; and within a generation, to close the equally appalling 17-year life gap between Indigenous and non-Indigenous when it comes to overall life expectancy.

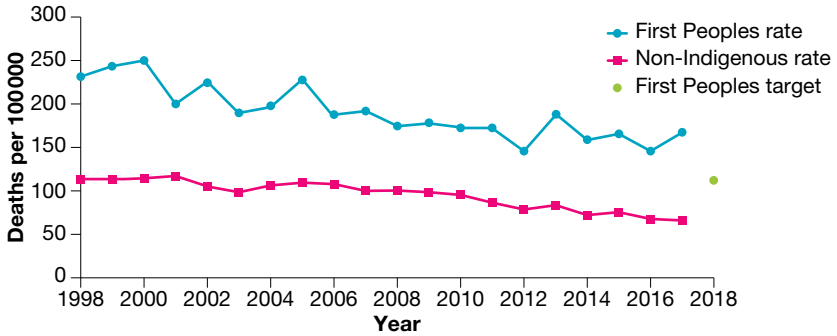
Life expectancy and child mortality

The target to close the gap in life expectancy between Aboriginal and Torres Strait Islander peoples and other Australians by 2030 is not on track. Life expectancy for First Nations men born between 2015 and 2017 is estimated to be 71.6 years, 8.6 years less than non-Indigenous men. For First Nations women, life expectancy is 75.6, 7.8 years less than non-Indigenous women. On a positive note, mortality rates from chronic and circulatory diseases have declined significantly in the Aboriginal and Torres Strait Islander population since 1998, but cancer mortality rates are rising; between 2006 and 2017, there was a 25 per cent increase in cancer death rates for Aboriginal and Torres Strait Islander patients, with deaths from cancer exceeding those for circulatory diseases within this population for the first time in 2017.

The target to halve the gap in the infant mortality rate among the Aboriginal and Torres Strait Islander population by 2018 was not achieved. While the rate of infant mortality within this population has declined by 10 per cent since 2008, it has declined at a slower rate than within the non-Indigenous population. However, as a result of health campaigns, immunisation rates for Aboriginal and Torres Strait Islander children by the age of five have continued to rise, and in 2018 were higher than rates of immunisation of non-Indigenous children.

int-6712

SOURCE 4 Child mortality rates by First Peoples status: NSW, Qld, WA, SA and the NT combined, 1998–2017. This graph shows the decline in Aboriginal and Torres Strait Islander infant mortality since 1998.



Source: ABS and AIHW analysis of National Mortality Database.

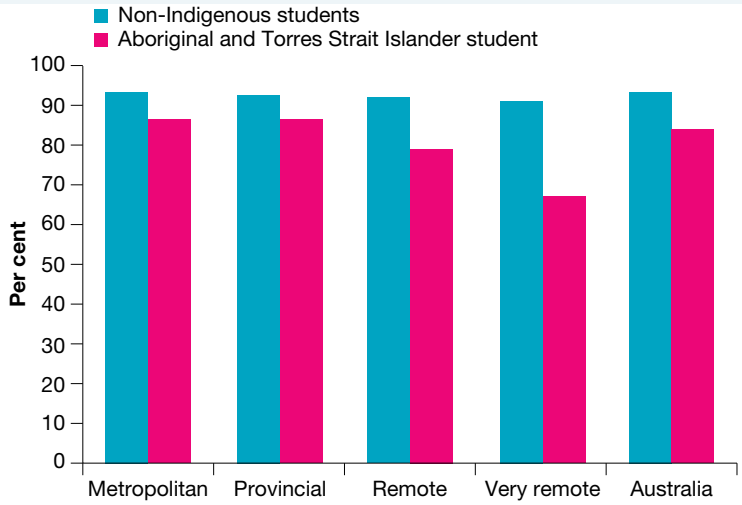
Education and employment

Progress is mixed in the key target areas of education and employment. The share of Indigenous children at or above minimum standards in reading at Years 3 and 5, and in numeracy at Years 7 and 9, has improved and

the gap has narrowed between 2008 and 2017, although the target of halving the gap was not met. Attendance at school is also lower than expected, with the attendance of First Nations students in Year 10 at 73 per cent, compared with 90 per cent attendance for non-Indigenous students at the same year level. However, an increasing proportion of Aboriginal and Torres Strait Islander students are completing Year 12 or its equivalent across all states and territories, up by 15 per cent in major cities to 74 per cent in 2016, with the largest gains seen in remote and very remote areas. In very remote areas, Aboriginal and Torres Strait Islander peoples' rate of attainment increased from just 23 per cent in 2006 to 43 per cent in 2016. The overall retention rate was 59.8 per cent, compared with 85.5 per cent for non-Indigenous Australians. In 2017, this increased again to 62.4 per cent for Aboriginal and Torres Strait Islander peoples, compared with 86 per cent for the non-Indigenous population. This success in completion rates means that the target to halve the gap by 2020 is on track. However, the target to halve the gap in employment by 2018 was not met, with the employment rate showing no improvement, and the gap between Indigenous and non-Indigenous Australians widening by 1.5 per cent between 2008 and 2018.

int-6713

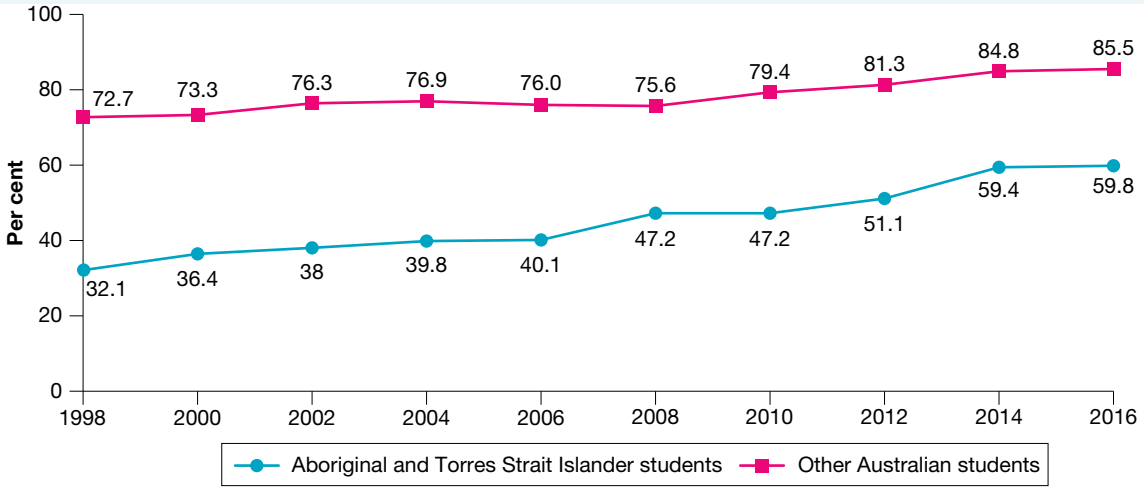
SOURCE 5 Graph showing student attendance rates of Aboriginal and Torres Strait Islander peoples compared to non-Indigenous Australians



Source: Australian Curriculum, Assessment and Reporting Authority.

int-6714

SOURCE 6 Graph of retention rates of Aboriginal and Torres Strait Islander students for Year 7 to Year 12



Source: ABS Schools, 2018.

22.12.3 Responding to inequity

It can be demonstrated from the Closing the Gap reports since 2008 that Aboriginal and Torres Strait Islander peoples' quality of life lags behind that of non-Indigenous Australians. The interrelated elements of health, education and employment have an impact on the cultural, physical and social wellbeing of Australia's First

Peoples and thus their rights and freedoms. The federal and state governments of Australia must work in partnership with Aboriginal and Torres Strait Islander bodies and other organisations to effect change. The federal government cites its Indigenous Advancement Strategy, its Better Start to Life approach, its Remote School Attendance Strategy and its Community Development Programme as positive strategies and programs for improvement. Other government-funded schemes and not-for-profit organisations can all play a role.

SOURCE 7 The Australian government's Visiting Optometrist Scheme (VOS) works in remote communities in the Northern Territory performing eye checks. While Indigenous children are five times less likely to have eye problems than non-Indigenous children, by the time they reach adulthood, Indigenous people are six times more likely to have vision problems than other Australians.



SOURCE 8 Programs such as the NT School Nutrition Program seen in action here at Papunya School in the Northern Territory aim to improve both the nutritional health and the school attendance rate of Aboriginal children.



22.12 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 2, 3, 4, 11, 12, 13	Questions 5, 6, 7, 8, 14, 15, 16, 18	Questions 9, 10, 19, 20, 21, 22

Check your understanding

1. What was the initial trigger for the 2007 government intervention?
2. Which part of Australia did the intervention affect?
3. Which existing legislation had to be suspended in order for the intervention to proceed?
4. What were some of the provisions of the new legislation?
5. Who supported the intervention?
6. When was the Close the Gap Statement of Intent signed and what commitment did it make?
7. What is the 'gap' that must be closed?
8. Indicate whether each of the following statements is true or false.
   a. Aboriginal and Torres Strait Islander peoples' life expectancy is lower than that of non-Indigenous Australians.
   b. The target to halve the infant mortality rate of Aboriginal and Torres Strait Islander infants by 2018 was met.
   c. The proportion of Aboriginal and Torres Strait Islander people students completing year 12 is decreasing.
9. What interrelated elements have an impact on the cultural, physical and social wellbeing of Australia's First Peoples?
10. List some of the different government strategies and programs that form part of the Australian government's response to reducing inequities for Aboriginal and Torres Strait Islander peoples.

Apply your understanding

11. A criticism was made that the Northern Territory National Emergency Response Bill contained over 200 pages but did not mention the word 'child' or 'children' once. How does **SOURCE 1** relate to this fact?
12. What arguments are put in **SOURCE 2** against the intervention?
13. What other evidence would you need to gain a balanced view of the intervention?
14. Study **SOURCE 3**. Which parties were involved in the Closing the Gap Statement of Intent?
15. Which state of Australia is not captured in the data in **SOURCE 4**? How might this affect its validity in terms of the representative nature of its data?
16. What are three statements you could justify making based on the data shown in **SOURCE 5**?
17. What trend is visible in the graph shown in **SOURCE 6**?
18. The images in **SOURCES 7** and **8** show different aspects of health inequity that relate to Aboriginal and Torres Strait Islander groups.
    a. What are these aspects?
    b. What impact might these images have on non-Aboriginal and Torres Strait Islander peoples who view them?
    c. What impact do they have on you?
19. To what extent do you believe that the Northern Territory intervention represents a continuation of the restriction of Aboriginal peoples' rights and freedoms?
20. Using what you have learned in this subtopic, create a mind map that shows the challenges faced by Aboriginal and Torres Strait Islander peoples today. Consider aspects such as health, education and employment and show how they are interrelated.
21. Based on continuing increased rates of Aboriginal and Torres Strait Islander students completing year 12, what are some of the possible effects for the future of Aboriginal and Torres Strait Islander peoples?
22. Using the information and sources in this subtopic, write 400 words on the trends and patterns that are evident in the Closing the Gap initiative.

For sample responses to every question, go to www.jacplus.com.au.

22.13 The struggle continues

LEARNING INTENTION

By the end of this subtopic you will be able to identify how the achievements of Australia's Aboriginal and Torres Strait Islander peoples relate to changes in recognition for indigenous peoples around the world.

22.13.1 Aboriginal and Torres Strait Islander peoples in the twenty-first century

The struggle for Australia's Aboriginal and Torres Strait Islander peoples is far from over. Major inequities still exist between Aboriginal and Torres Strait Islander peoples and non-Indigenous Australians, and the nation continues to debate fundamental issues, from land rights to the treatment of Aboriginal and Torres Strait Islander prisoners and what it means to be Indigenous. In recent years, however, there have been major improvements in the recognition of the rights of Indigenous peoples both in Australia and in the rest of the world. This is thanks to the work of Aboriginal and Torres Strait Islander leaders and activists, past and present, whose words and actions continue to influence policymakers.

Australia's Aboriginal and Torres Strait Islander population is projected to increase by more than one-third to reach between 907 800 and 945 600 people by 2026, according to the Australian Bureau of Statistics. Projected figures are based on assumed higher than average levels of fertility and improvements in life expectancy. This represents a 2.2 per cent projected growth per year compared to a projected annual growth rate of 1.6 per cent for the total Australian population over the same period.

Like the total Australian population, the Aboriginal and Torres Strait Islander population is ageing. The proportion of Aboriginal and Torres Strait Islander children aged 0–14 years is projected to decline from 36 per cent of the population in 2011 to between 31 per cent and 33 per cent in 2026, while the proportion of

persons aged 65 years and over is projected to increase from 3 per cent to between 6 per cent and 7 per cent. These projections will need to be taken into account in future government policies.

What does it mean to be a First Nations person today?

The definition of First Nations Australian has changed over time. Older definitions referred to skin colour or the amount of Aboriginal blood a person was said to have. Today, a person is entitled to be identified as First Nations if they:

- are of Aboriginal or Torres Strait Islander descent
- identify themselves as being of Aboriginal or Torres Strait Islander origin
- are accepted as such by the community with which they associate.

SOURCE 1 Author Nicole Watson describes what it was like to grow up as a light-skinned Indigenous person.

I belong to the Birri Gubba People of central Queensland, even though I live in Sydney. I have blonde hair and blue eyes; characteristics that are irrelevant to my identity as an Aboriginal person. I never chose that identity. Rather, it was a bequest from the people who reared me — my strong-willed European Australian mother and my fiery Aboriginal father ...

... Throughout my teens, more than one observer casually raised the apparent clash between my light features and my Aboriginal identity. Such comments always drew a flash of pain on my father's face. As an adult, I can only imagine how horrible it must have been for Dad to hear the paternity of his child being questioned so audaciously. I still marvel at the incredible privilege that lurked behind those obtuse comments.

When strangers question my identity, they question the adults who grew me. They question the choices that were made for me and perhaps, even the love that my family gave to me, and continue to give. As painful as such interrogations have been, they will never shake my identity. I know who I am. But I do wonder what motivates the likes of Andrew Bolt [a journalist who was found guilty of discrimination for criticising people who appear Caucasian but identify primarily as Indigenous]. What dark insecurities fester in his psyche that he has a desperate need to assault the humanity of strangers?

Between 1991 and 2001 the number of people who identified as Aboriginal or Torres Strait Islander (or both) on the national census rose dramatically — from 351 000 to 517 000. This increase then was due, it is believed, to census officers' increased access to Indigenous communities and to the greater levels of acceptance for people to identify as Indigenous.

Some people view the growing number of people who identify themselves as Aboriginal and Torres Strait Islander as a positive sign. They believe it represents a growing pride in First Nations Australia. However, there are those who have questioned the motives of people who identify as Indigenous when they have a mixed heritage. These critics have implied that identifying as Indigenous may be based on a desire to profit from this identity — a claim that is rejected by Aboriginal and Torres Strait Islander leaders. Articles written by journalist Andrew Bolt, which criticised people who appear white but identify as Aboriginal, were the subject of a racial discrimination trial in 2010, launched by nine prominent Aboriginal people mentioned in the articles.

SOURCE 2 First Nations plaintiffs celebrate victory after journalist Andrew Bolt is found guilty of breaching the Racial Discrimination Act in the articles 'It's so hip to be black' and 'White fellas in the black'.



DID YOU KNOW

According to legal historian John McCorquodale, since the time of white settlement, governments have used 67 classifications, definitions or descriptions to decide who is Aboriginal.

22.13.2 The rights of indigenous peoples

In the twenty-first century the United Nations has taken a more active interest in supporting the rights and freedoms of indigenous peoples around the world. Of particular importance are agreements such as the International Covenant on Civil and Political Rights (ICCPR) and the Committee on the Elimination of Racial Discrimination (CERD), which has made it very clear that a 'hands-off' approach to indigenous rights is no longer enough. In some cases, CERD has used an 'Urgent Action Procedure' to pressure countries, including New Zealand and the United States, to recognise and respect the land rights of their First Nations peoples.

The most decisive action taken by the United Nations in relation to indigenous peoples was the creation of the Declaration of the Rights of Indigenous Peoples in 2007 (see **SOURCE 3**). The Declaration was developed over two decades with the input of indigenous representatives from around the world, and in direct response to requests brought to the UN Working Group on Indigenous Populations (WGIP). It embodies the rights and freedoms fought for by the world's indigenous peoples throughout the twentieth century. Although the articles of the Declaration are not legally binding, the Declaration is a very important symbol, particularly for nations attempting to reconcile with their indigenous peoples.

The right to self-determination

Importantly, the Declaration of the Rights of Indigenous Peoples officially recognised **self-determination** as a basic right for indigenous peoples. Signatories agreed to allow their indigenous communities to govern themselves and take charge of their own economic, social and cultural matters.

self-determination the freedom for a people to determine their own course of action

SOURCE 3 Articles 1–5 of the Declaration of the Rights of Indigenous Peoples, 2007

Article 1

Indigenous peoples have the right to the full enjoyment, as a collective or as individuals, of all human rights and fundamental freedoms as recognized in the Charter of the United Nations, the Universal Declaration of Human Rights and international human rights law.

Article 2

Indigenous peoples and individuals are free and equal to all other peoples and individuals and have the right to be free from any kind of discrimination, in the exercise of their rights, in particular that based on their Indigenous origin or identity.

Article 3

Indigenous peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.

Article 4

Indigenous peoples, in exercising their right to self-determination, have the right to autonomy or self-government in matters relating to their internal and local affairs, as well as ways and means for financing their autonomous functions.

Article 5

Indigenous peoples have the right to maintain and strengthen their distinct political, legal, economic, social and cultural institutions, while retaining their right to participate fully, if they so choose, in the political, economic, social and cultural life of the State.

Only four UN countries voted against the Declaration in 2007. They were the United States, Canada, New Zealand and Australia. Mal Brough, Australia's federal Indigenous Affairs Minister at the time, explained:

> We haven't wiped our hands of it, but as it currently stands at the moment, it would provide rights to a group of people which would be to the exclusion of others ... The best way of putting it is, it's outside what we as Australians believe to be fair.

It would take a change in government before Australia, under the leadership of Kevin Rudd, would sign the Declaration in 2009. This would finally give Aboriginal and Torres Strait Islander peoples the opportunity to determine their own future.

SOURCE 4 Some of the things Indigenous people believe are essential for a national organisation that represents them

'... the National Representative Body should primarily act as an **advocacy** and negotiation body, arguing independently from a considered and well researched base, for the domestic implementation of the Declaration on the Rights of Indigenous Peoples and other relevant and binding human rights provisions ...' (Public Submission 2)

'The outcomes must be our own and we cannot feel like our funding will be cut if we stand up and speak out against a government policy or program.' (Public Submission 8)

'Any national body should collaborate effectively with the Indigenous Dialogue — the Dialogue should be the key vehicle to facilitate constitutional reform and that this process be carried out under the principles of the UN Declaration such as free, prior and informed consent ...' (Public Submission 77)

'We need a balance of young people as representatives on our peak body also. It's always easy to presume we know best for our kids, but don't take the time to ask. I would like to see a balance of 50/50 men and women represented.' (Public Submission 16)

Our future in our hands

Building on the promise of the Declaration of the Rights of Indigenous Peoples, the Australian government supported the establishment of a National Congress of Australia's First Peoples. While this Congress is not the first organisation designed to represent the interests of Aboriginal and Torres Strait Islander peoples, it differs in some key ways. Based on a model proposed in the *Our Future in Our Hands* report (2009), the Congress is made up of Aboriginal and Torres Strait Islander peoples, with equal numbers of men and women, and representation from young people and members of both urban and rural communities. It is a private, not-for-profit company, meaning it does not rely on government funding.

Tom Calma, who chaired the committee charged with designing the Congress, explained, 'It is time for Aboriginal and Torres Strait Islander people to take control and set the agenda'. Establishment of the Congress was praised by national First Nations leaders, as well as international organisations such as the United Nations and Amnesty International.

22.13.3 The next steps — recognition in the Constitution

The Australian government has given a commitment to work towards the recognition of Aboriginal and Torres Strait Islander peoples in the Australian Constitution. This recognition is about acknowledging that an Indigenous culture was flourishing on this continent many thousands of years before Europeans arrived, and continues today.

The journey to constitutional change

An expert panel, which included Indigenous and community leaders, constitutional experts and parliamentarians, consulted extensively across Australia, reporting their recommendations to the prime minister in January 2012. In 2015, a Referendum

advocacy active support

Council was established to lead a national discussion on how this might be achieved. Consultations were undertaken with both Aboriginal and Torres Strait Islander peoples and non-Indigenous groups to ensure community engagement. Partners in the campaign included diverse groups in Australian society such as the Australian Broadcasting Commission, the Commonwealth Bank, BHP, Uniting Church of Australia, Amnesty International, and Carlton and Richmond Football Clubs.

In May 2017, on the 50th anniversary of the 1967 Referendum, representatives of First Nations peoples from around the country met in central Australia. The discussions that ensued resulted in the Uluru Statement from the Heart, a historic statement that proposed a way forward to Constitutional change. In June 2017, the Reconciliation Council completed its report. Federal government committees and advisory groups have since been established, but the rise of the COVID-19 pandemic halted work in early 2020. At the time of writing, the final form of the referendums that would be needed to add this recognition to the Constitution and a date for it to be put to the Australian people has not been finalised.

SOURCE 5 On 19 April 2010, at the ninth session of the United Nations' Permanent Forum on Indigenous Issues, the New Zealand government announced its support for the Declaration of the Rights of Indigenous Peoples and received a chorus of cheers from 2000 indigenous delegates in response. The announcement was followed by a traditional Māori song of thanks.



SOURCE 6 A summary of the recommendations made by the expert panel in their report of 2012

- **Remove Section 25** — which says the States can ban people from voting based on their race;
- **Remove section 51**(xxvi) — which can be used to pass laws that discriminate against people based on their race;
- **Insert** a new section 51A — to recognise Aboriginal and Torres Strait Islander peoples and to preserve the Australian Government's ability to pass laws for the benefit of Aboriginal and Torres Strait Islander peoples;
- **Insert** a new section 116A, banning racial discrimination by government; and
- **Insert** a new section 127A, recognising Aboriginal and Torres Strait Islander languages were this country's first tongues, while confirming that English is Australia's national language.

SOURCE 7 A quote from Noel Pearson, member of the expert panel and a descendant of the Bagaarrmugu and Guggu Yalani peoples. He is a key advocate for constitutional recognition.

The original Constitution of 1901 established a negative citizenship of the country's original peoples. The reforms undertaken in 1967, which resulted in the counting of Indigenous Australians in the national census and the extension of the races power to Indigenous Australians, can be viewed as providing a neutral citizenship for the original Australians. What is still needed is a positive recognition of our status as the country's Indigenous peoples, and yet sharing a common citizenship with all other Australians.

SOURCE 8 Sydney Swans AFL team Indigenous players Lance Franklin, Adam Goodes and Lewis Jetta stand in the centre circle next to the letter 'R' for Recognise at the Sydney Cricket Ground ahead of the Indigenous Round in 2014.



22.13 EXERCISE

To answer questions online and to receive **immediate feedback** and **sample responses** for every question, go to your learnON title at www.jacplus.com.au.

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions 1, 4, 7, 10, 18	Questions 2, 5, 8, 11, 12, 13, 17, 19	Questions 3, 6, 9, 14, 15, 16, 20, 21, 22

Check your understanding

1. What is the projected population of Aboriginal and Torres Strait Islander peoples by 2026? What are the likely causes of this increase?
2. For a person to be considered as Indigenous, they have to meet three criteria. What are these?
3. What crime was journalist Andrew Bolt accused and found guilty of in 2010? By whom was he accused?
4. Who created the Declaration of the Rights of Indigenous Peoples 2007 and what is its purpose?

5. In your own words, explain why the Minister for Indigenous Affairs, Mal Brough, believed that Australia should not sign the Declaration of the Rights of Indigenous Peoples in 2007.
6. Did Australia eventually sign the Declaration of the Rights of Indigenous Peoples? If so, what made the difference?
7. Explain why the National Congress of Australia's First Peoples was created.
8. Why is it important that the National Congress is not government funded?
9. Explain the constitutional recognition journey in your own words.

Apply your understanding

For help determining Significance, see topic 19 History concepts and skills.

10. In **SOURCE 1**, author Nicole Watson reflects upon the experience of being a light-skinned Aboriginal Australian.
    a. In what ways was this experience difficult for her and for her parents?
    b. Why do you think she chose to begin this piece with the words, 'I belong to the Birri Gubba People of central Queensland, even though I live in Sydney'?
11. **SOURCE 2** depicts some of the prominent Aboriginal Australians who filed charges against journalist Andrew Bolt. Their case was ultimately successful.
    a. How might this photograph have looked if a similar case — in which Aboriginal Australians challenged the words of a white journalist — had been held in the 1950s or 1960s?
    b. List some of the social changes that have occurred over the past 50 years that might have contributed to the ultimate success of the case.
12. Evaluate what points in **SOURCE 3** could have given people like Mal Brough enough concern to cause him to be against signing the Declaration.
13. After reading **SOURCE 4**, make a list of ideas that Aboriginal and Torres Strait Islander peoples wanted to come out of the creation of a body that represents them as a people.
14. What is the significance of the inclusion of **SOURCE 5** in this subtopic?
15. Study **SOURCE 6**. What key words emerge and how do they sum up the movement for recognition?
16. According to Noel Pearson (**SOURCE 7**) what would be the difference between the 1967 reform to the Constitution and the proposed recognition reform?
17. Analyse **SOURCES 3** and **4** and select the sections that relate to self-determination. If these recommendations were followed, how might the lives of Aboriginal and Torres Strait Islander peoples change over the next decade?
18. Study **SOURCE 8**.
    a. How effective is the choice of an 'R' as a symbol for the recognition campaign?
    b. What might be the advantages and disadvantages of displaying it in this way at a popular sporting event, accompanied by Indigenous sporting stars?
19. As the Declaration of the Rights of Indigenous Peoples 2007 is not legally binding, do you think that it has any value? Explain your view.
20. Imagine you are the new chairman of the Board of the National Congress of Australia's First People. Write the speech that you would give in the opening meeting. It will include your motivations and set the agenda for your leadership.
21. Write a 250-word report that explores the significance of Australia's signing the Declaration of the Rights of Indigenous Peoples and how the Declaration relates to the rights and freedoms strived for by at least one Indigenous activist, such as Charles Perkins (subtopic 22.6), Faith Bandler or Eddie Mabo.
22. Rank all the sources presented in this subtopic in order of what you consider to be their historical significance in the struggle of Aboriginal and Torres Strait Islanders for rights and freedoms in the twenty-first century.

For sample responses to every question, go to www.jacplus.com.au.

22.14 Thinking Big research project — Needed: Social media guru!

Scenario

In this topic, you have seen how the internet has allowed ideas to spread quickly, with grassroots protests going national, or even global, very rapidly. We can only imagine how some of the movements for rights and freedoms of the past might have benefited from this sort of widespread, rapid promotion online.

You have been given a once-in-a-lifetime opportunity, and all the technology you require, to change history. Selecting a protest movement of the past and using what you know about grassroots activism today, you will develop the first protest movement ever to go online.



Task

Your task is to build a website for one of the following pre-internet (i.e. pre-1991) protest movements:

- the struggle of Aboriginal and Torres Strait Islander peoples for rights and freedoms before 1962, as considered in this topic
- the 1962 right to vote federally
- the 1967 Referendum.

You will need to learn enough about this protest movement to be able to develop a website that is both informative and engaging for would-be protesters. This means that you must also understand who these would-be protesters could be, and what would interest and motivate them to get involved.



Process

- Open the ProjectsPLUS application in the Resources for this topic. Click on the **Start new project** button to enter the project due date and set up your project group so you can work collaboratively. Working in groups of two or three will enable you to swap ideas and share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish.
- Conduct research to find information and make notes to answer the following questions:
  - What was this protest movement designed to change?
  - Who were its leaders/instigators?
  - Who were its most enthusiastic followers?
  - What motivated people to join the movement?
  - What debates surround the movement, and what does this tell you about those who choose one side of the debate over the other?
  - What techniques have you used to try to corroborate your information and ensure that it is valid? The weblinks in the **Media centre** will provide a useful starting point. Remember to record details of your sources so you can create a bibliography.
- Add your research notes and source details to the relevant topic pages in the Research forum. You can view, share and comment on research findings with your group members. You can print out the **Research report** in the Research forum to easily view all the information you have gathered, if you wish.

- When you have completed your research, study some current protest websites aimed at the same target audience, and consider how they use the following elements to engage and influence the potential supporter:
  - words
  - pictures
  - colour
  - blank space
  - any other design elements you can see.
- Now design your own protest movement website, using any available web design software. Use creative design elements to create interest on your pages and ensure that information is clear and easy to follow. Your site should contain at least six pages:
  - *Home*. This is the site's landing page. It should be designed to appeal to your target demographic (that is, future protesters).
  - *Background*. This is where you need to give the potential protester a sense of when and why the protest movement began.
  - *Actions so far*. Here you should outline anything that has been fought for, and achieved, as well as other things protesters should know, such as how many people have been arrested.
  - *Future actions*. This is what the protest movement hopes to achieve in future, particularly if it grows at a rapid rate. This page gives you another chance to talk about the aims of the protest movement.
  - *Get involved*. Now that you've got your potential protesters interested, you need to give them a way to get involved. This might include sending them to a particular venue, telling them about upcoming events, or putting them in touch with the protest movement's leaders.
  - *Bibliography*. Create a reference page to detail all your source material used for the project.
- Share your completed website with your classmates and explore their websites in turn.

on Resources

ProjectsPLUS Thinking Big research project — Needed: Social media guru! (pro-0206)

22.15 Review

22.15.1 Key knowledge summary

22.2 Examining the evidence

- Until the latter half of the twentieth century the voices of Aboriginal and Torres Strait Islander peoples were largely absent from discussions about Australian history.
- Attempts have been made to address this through the inclusion of a wide range of Aboriginal and Torres Strait Islander voices from a range of sources, including oral histories and accounts, reports, commentaries and stories, as well as many other sources.
- Aboriginal and Torres Strait Islander peoples as well as non-Indigenous people have contributed to the range of resources used to examine the struggle for rights and freedoms.
- Primary and secondary sources such as films, documentaries, political commentary and official documentation are all rich sources of information to examine and interrogate.

22.3 The beginnings of an Aboriginal protest movement

- During the nineteenth and most of the twentieth centuries, Australia's Aboriginal and Torres Strait Islander peoples struggled to gain rights.
- From the early twentieth century protest movements became more organised with the first Aboriginal political organisations formed in the 1920s.
- The AAPA was formed by Fred Maynard to campaign for the right for Aboriginal self-determination.
- By 1937 the Aborigines Progressive Association was formed with the intention of pushing for full citizenship and parliamentary representation. It set 26 January 1938 as the Day of Mourning protest to focus concerns about the treatment of Aboriginal peoples and to set the agenda for change for the future through a ten-point plan. This was successfully received by the prime minister, although it would be a long time before the points were turned into action.

22.4 The Stolen Generations

- During the 1800s the government believed that Aboriginal and Torres Strait Islander peoples needed to be 'protected' and the policies of this time reflected this attitude.
- The *Aborigines Protection Act 1909* gave legal control of Aboriginal and Torres Strait Islander peoples to the Boards of Protection around the country, including legal guardianship over the children.
- This policy became one of assimilation, where the government believed that the best way for Aboriginal and Torres Strait Islander peoples to assimilate, or become more like other Australians, was to remove children, sometimes forcibly, from their families and raise them in institutions or foster families. This practice continued from 1910 to 1970 and adversely affected a large number of Aboriginal and Torres Strait Islander peoples, now called the Stolen Generations.

22.5 Influence on Australia of civil rights movements abroad

- The United Nations General Assembly adopted the Universal Declaration of Human Rights (UDHR) in 1948, outlining the rights and freedoms that should be enjoyed by all people. Civil libertarian and president of the United Nations General Assembly, Australian Dr Herbert Vere Evatt, was instrumental in contributing to the UDHR.
- This declaration established the international call for universal civil rights.
- The Civil Rights Movement of the 1950s and 1960s in the United States was a program of protest against racist policies that denied African-Americans their civil rights.
- Aboriginal and Torres Strait Islander peoples found much in this movement to support and inspire them, especially non-violent methods of protest.
- Significant individuals such as Martin Luther King provided a role model for Aboriginal and Torres Strait Islander activists.
- Campaigns such as the Freedom Rides in the 1960s in the United States were adopted by people fighting for civil rights in Australia.

22.6 The Freedom Ride in Australia

- In 1965 Charles Perkins led a Freedom Ride in rural New South Wales where issues of racial discrimination had been identified.
- The media coverage of this event stimulated national and international pressure for reform, as well as launching Perkins and his colleagues as significant civil rights campaigners.

22.7 Being counted

- In 1962, due to continued pressure from civil rights campaigners and a growing awareness from the general population, a parliamentary amendment to the Electoral Act allowed Aboriginal and Torres Strait Islander peoples to vote, although it was three more years before Queensland put this into practice.
- The final area for constitutional discrimination was that Aboriginal and Torres Strait Islander peoples were still not counted in the national census and the only way to make constitutional change was to hold a referendum. In 1967 a referendum was held and there was overwhelming support for Aboriginal and Torres Strait Islander peoples to be counted in the census.

22.8 Torres Strait Islander rights and freedoms

- Torres Strait Islander people were recognised as a separate people after the *Torres Strait Islanders Act 1939*.
- Like the Aboriginal peoples, Torres Strait Islander peoples were not able to vote in federal elections until the passing of the *Electoral Amendment Act 1962* and not able to vote in state elections until 17 December 1965, when the Elections Amendment Act was passed, extending voting rights to all Aboriginal and Torres Strait Islander peoples resident in Queensland.
- Discrimination in rates of pay for Torres Strait Islanders who had served in World War II was finally redressed in 1983.
- The Torres Strait Regional Authority, established in 1994, deals with issues of special relevance to Torres Strait Islander culture and heritage, as well as the administration of a Torres Strait Development Plan.

22.9 The Aboriginal Tent Embassy

- In 1963 the Yolngu people from Yirrkala in the Northern Territory sent a bark petition to the federal parliament, starting the land rights movement which fought for the rights of Indigenous peoples to possess the traditional lands they had owned and occupied.
- Initially the Yolngu people received support for their claim protesting the government's decision to allow a mining company to mine on their traditional lands; however, a few years later they had their challenge turned down, a decision supported by the then prime minister. This angered many Aboriginal and Torres Strait Islander peoples.
- Aboriginal and Torres Strait Islander activists set up an umbrella outside parliament house in Canberra, with a sign labelling it the 'Aboriginal Embassy'.
- It was soon followed by a number of tents and came to represent Aboriginal and Torres Strait Islander peoples' desire to have the rights to determine their own futures.

22.10 Land rights and protests

- Despite the lack of success by the Yolngu people, a group of Gurindji workers from the Wave Hill cattle station went on strike to protest their working and living conditions. Led by Vincent Lingari, a Gurindji Elder, they pushed for the return of the land to their ownership.
- This picked up public support and in 1975, Prime Minister Gough Whitlam handed back 300 000 km^2 of the Gurindji's peoples traditional lands.
- In 1982 a group of Mer Island people from the Torres Strait, led by Eddie Mabo, challenged the right of the government to prevent islanders from using their own lands. In 1992, the Australian High Court made a historic ruling that the Meriam people of the Torres Strait did have native title. This 'Mabo decision' was extremely significant for all Aboriginal and Torres Strait Islander peoples because it recognised that European settlement did not automatically wipe out native title.
- The *Native Title Act 1993* clarified any confusion following this. It was later challenged by the Wik case and the subsequent attempt by Prime Minister John Howard to alter the Native Title Act, but this was only passed with the proviso that it is subject to the Racial Discrimination Act.

22.11 Reconciliation

- In 1992 Prime Minister Paul Keating gave what is known as the 'Redfern Speech' launching the International Year of the World's Indigenous People in Redfern, Sydney. He pledged to recognise the harm caused to Aboriginal and Torres Strait Islander peoples by previous governments and to extend them social democracy.
- In 1995 Keating commissioned a report into the Stolen Generations called *Bringing Them Home* (1997), which outlined the damage done to individuals, families and communities because of the so-called protection policies.
- Despite the creation of National Sorry Day, 26 May, and the apologies of the state governments and churches, the federal government, led by John Howard at that time, refused to apologise.
- It was not until 2008 that the federal Labor Party Prime Minister Kevin Rudd made a formal apology in Parliament House in Canberra, acknowledging the harm caused to Aboriginal and Torres Strait Islander peoples because of past government's policies and pledged for Australia to ensure that such injustices would not happen again.

22.12 Fighting for equity

- The struggle for equity continues for Aboriginal and Torres Strait Islander peoples.
- In 2007 the Howard government suspended the Racial Discrimination Act in the Northern Territory in response to a report indicating that child sexual abuse was rampant in many remote communities. Alcohol was banned from these communities and the spending of welfare cheques was restricted.
- The 'intervention' received mixed support, with some saying that it was a racist policy and others saying that it was needed.
- Other studies and reports, such as Closing the Gap, show that Aboriginal and Torres Strait Islander peoples are still far behind other Australians in lifestyle issues, such as life expectancy, drug and alcohol abuse, infant mortality and imprisonment rates. There have been some improvements but they are still behind the hoped-for outcomes. Education and employment data show similar gaps.
- While there have been some improvements, such as increased high school retention rates, these are still significantly behind those of non-Indigenous Australians. The government is still working to address these longstanding inequities in Aboriginal and Torres Strait Islander peoples.

22.13 The struggle continues

- The number of Aboriginal and Torres Strait Islander peoples is increasing due to higher than average fertility rates and improvements in life expectancy.
- In 2007 the United Nations created the Declaration of the Rights of Indigenous Peoples, which embodies the rights and freedoms fought for by indigenous peoples throughout the world in the twentieth century. Significantly it recognises the right to self-determination. Initially Australia refused to sign this Declaration but eventually signed in 2009.
- Currently the Australian government is working towards a referendum on changing the Constitution to recognise that an Indigenous culture was flourishing on this continent many thousands of years before Europeans arrived and that culture continues today, as opposed to *terra nullius*. This will be another step forward in the struggle for the rights and freedoms of Aboriginal and Torres Strait Islander peoples.

22.15.2 Key terms

advocacy active support

ailan kastom (island custom) the body of customs, traditions, observances and beliefs of some or all of the Torres Strait Islander peoples living in the Torres Strait area

alienate to cause someone to feel isolated or separated

assimilation the process by which a minority group gives up its own customs and traditions and adopts those of the dominant culture

Australia's First Peoples (or First Nation peoples) an inclusive term used to refer to groups that make up the Aboriginal and Torres Strait Islander communities

bipartisan supported by the two major political parties

census an official, usually periodic count of a population

culpability state of guilt; being responsible or blameworthy

embassy the residence or place of official business of an ambassador, who represents a foreign country

eradicate wipe out, obliterate

folly foolishness; lack of good sense

heritage important or enduring

iconic cultural traditions

inalienable belonging to a thing by its nature; not able to be taken away

incarceration imprisonment

integration policy requiring immigrants to publicly adopt the new country's culture while still being able to celebrate their own culture privately; a policy that recognised the value of Aboriginal and Torres Strait cultures and the right of Aboriginal and Torres Strait Islander peoples to retain their languages and customs and maintain their own distinctive communities

land rights the rights of First Nations peoples to possess land they traditionally owned and occupied

moral relating to right and wrong behaviour

native title a 'bundle of rights' of Indigenous people to possess land they traditionally owned and continue to occupy

pastoralist a person who runs sheep or cattle on a property

precedent an action or decision on which later actions or decisions might be based; a law made by a superior court that must be applied by lower courts in future cases with the same or similar facts

referendum a ballot in which people decide on an important political issue

repatriation assistance given to ex-service men and women returning to a civilian way of life

rhetoric effective and persuasive language, sometimes used to mislead

self-determination the freedom for a people to determine their own course of action

seminal original and influential

tenure the right to hold land or property

terra nullius ('land belonging to no-one') in Australia, the legal idea that since no-one was 'using' the land when the first Europeans arrived, it could be claimed by the British Crown

treaty an agreement between two or more sovereign states (countries) to undertake a particular course of action. It usually involves matters such as human rights, the environment or trade.

unconstitutional not in accord with the principles set forth in the Constitution

unfettered unrestricted

22.15.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

What does it take to change the hearts and minds of a nation, so they don't just tolerate the First Nations population but respect and value them?

1. Now that you have completed this topic, what is your view on the question? Discuss with a partner. Has your learning in this topic changed your view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6373)
Reflection (ewbk-6372)
Crossword (ewbk-6371)
Student Learning Matrix (ewbk-6362)

Interactivity Rights and freedoms crossword (int-7663)

22.15 Review exercise

Multiple choice

1. Which of the following is correct regarding the 1962 amendment to the Electoral Act?
   - A. It allowed Aboriginal and Torres Strait Islander peoples to be counted in the census.
   - B. It allowed Aboriginal and Torres Strait Islander peoples to enrol to vote if they wished.
   - C. It allowed Aboriginal and Torres Strait Islander peoples to vote straight away.
   - D. It allowed Aboriginal and Torres Strait Islander peoples in Queensland the rights of every other state.

2. What was the reason that the government claimed that Aboriginal and Torres Strait Islander children were taken from their parents?
   - A. Because their parents could not look after them properly
   - B. To give the children a better life
   - C. To punish the children for being bad
   - D. To help the children better fit into Australian society

3. Consider the following two statements about reconciliation.
   i. Paul Keating's Redfern speech refused to recognise the harm caused to Aboriginal and Torres Strait Islander peoples by previous governments.
   ii. John Howard and his government refused to make an official apology to the Stolen Generations and families.
   - A. Statement (i) is true and statement (ii) is false.
   - B. Statement (i) is false and statement (ii) is true.
   - C. Both statements are true.
   - D. Bother statements are false.

4. What was the goal of the Freedom Ride of 1965?
   - A. A study tour of race relations
   - B. To address the discriminatory laws in country New South Wales
   - C. To introduce some Aboriginal and Torres Strait Islander peoples to other country Australians
   - D. To help Charles Perkins make a big name for himself

Read the **SOURCE 1** an extract from Jack McGinness's speech to the Trade Union Congress 1951 on discriminatory laws in the Northern Territory, and answer the questions that follow.

SOURCE 1 Jack McGinness's speech to the Trade Union Congress, 1951 on discriminatory laws in the Northern Territory

My Union felt the best way in which this particular question could be presented to you for your support would be the personal attendance of a part-Aborigine. unaccompanied by any other delegate, so that you could readily see there was no justification for the withholding from us of what should be our inalienable right, the right to live as ordinary people, without segregation from the rest of the community. We are educated at the same schools, take our part in every sporting and industrial sphere on an equal footing with other peoples of the Territory, but because the pigmentation of our skin is dark, and we have original Australians as part of our ancestry, we are classed as something that is tainted and must be kept apart. What reason or justification is there for such an attitude on the part of the Government of this country?

I will be speaking about how the Aboriginal Ordinance affects me personally, but this effect applies to all others in the same category as myself. Possibly some of you know that because we are of Aboriginal extraction we are subject to, or come under, the Aboriginal Ordinance, which states 'That an aboriginal or half-caste cannot remain in a town or prohibited area between the hours of 6 pm and 8 am each day without a written permit issued by the Director of Native Affairs'. It rests with that individual whether you are entitled to a permit or not.

5. Which of the following is *not* the purpose of Jack McGinness's speech?
   - **A.** To request equal rights
   - **B.** To point out injustices
   - **C.** To request a permit to be out during the hours of 6 pm to 8 am
   - **D.** To discuss his personal perspective

6. Which policy most accurately reflects the attitudes behind the Aboriginal Ordinance Act?
   - **A.** Assimilation
   - **B.** Protection
   - **C.** Self-determination
   - **D.** Integration

7. Why would **SOURCE 1** be regarded as a primary source on Aboriginal and Torres Strait Islanders' rights and freedoms?
   - **A.** Jack McGinness identifies as an Aboriginal person.
   - **B.** It is from the time period studied.
   - **C.** It is about the Aboriginal Ordinance Act.
   - **D.** It is a speech.

8. Which of the following statements about the Aboriginal Tent Embassy is false?
   - **A.** The Prime Minister at the time was Paul Keating.
   - **B.** It started with the 1963 Yirrkala bark petition.
   - **C.** The first Aboriginal tent embassy was an umbrella outside Parliament House.
   - **D.** The Tent Embassy still exists today.

9. Which is the correct order for the broad government attitude reflected in policies regarding Aboriginal and Torres Strait Islander peoples from the oldest to the most recent?
   - **A.** Protection; assimilation; integration; self-determination
   - **B.** Assimilation; integration; self-determination; protection
   - **C.** Integration, assimilation; protection; self-determination
   - **D.** Protection; integration, assimilation; self-determination

10. The government's 'Intervention' in 2007 in the Northern Territory involved which of the following?
    - **A.** Banning alcohol sales in a number of remote Aboriginal communities
    - **B.** Restricting the ways that some Aboriginal and Torres Strait Islander peoples could spend their welfare money
    - **C.** Suspending the Racial Discrimination Act
    - **D.** All of the above
11. According to **SOURCE 2** why should the word 'Indigenous' no longer be used to mean an Aboriginal or Torres Strait Islander person?
    - **A.** It is being used by Aboriginal or Torres Strait Islander peoples.
    - **B.** It is offensive.
    - **C.** It robs Aboriginal and Torres Strait Islander peoples of a specific identity.
    - **D.** They are not indigenous.

SOURCE 2 An extract from *The Age* newspaper 1 May 2008

The use of the word indigenous to describe Australia's traditional owners has robbed them of their identity,

former ATSIC chairwoman Lowitja O'Donoghue says.

Call us Aboriginal, she says.

'I really can't tell you of a time when indigenous became current, but I personally have an objection to it, and so do many other Aboriginal and Torres Strait Islander people', she said.

'This has just really crept up on us … like thieves in the night.'

She says it has become so ingrained in the vernacular that 'our people are using it now as well'.

'We are very happy with our involvement with indigenous people around the world, on the international forum … because they're our brothers and sisters.'

'But we do object to it being used here in Australia.'

Ms O'Donoghue said the term indigenous robbed the traditional owners of Australia of an identity because some non-Aboriginal people now wanted to refer to themselves as indigenous because they were born here.

Source: *The Age*, 2 May 2008 (www.theage.com.au/national/dont-call-me-indigenous-lowitja-20080502-ge7125.html)

12. What can be concluded from **SOURCE 2** about Lowitja O'Donoghue's racial and/or cultural identity?
    - **A.** You cannot really make a judgement from this article.
    - **B.** She is probably not Aboriginal because she does not have an Aboriginal name.
    - **C.** She does identify as an Aboriginal person as she uses the inclusive pronouns 'us' and 'we'.
    - **D.** You should not jump to conclusions about a racial/cultural identity.

Short answer

13. Michael Long, an Aboriginal AFL player for the Essendon football team between 1989 and 2001, is also known for his stand against racism in the AFL, helping create the football league's anti-racism code of ethics. After his retirement, in 2001 he marched from Melbourne to Canberra in the Long Walk to highlight the inequities faced by Aboriginal and Torres Strait Islander peoples, receiving wide support from many sections of both the Indigenous and non-Indigenous communities. Despite the success of his efforts, AFL players like Adam Goodes have had to continue the fight against racism.

    How could you find out more about the Long Walk? Construct some questions you could use in your inquiry.

14. As part of the Freedom Ride of 1965, the riders stopped at Moree, NSW, where they made a significant impact. Charles Perkins, who was one of the leaders of the Freedom Ride, wrote about the events at the Moree swimming pool where they stood up to laws discriminating against Aboriginal and Torres Strait Islanders peoples.
    a. What was the purpose of the Freedom Ride's visit to Moree?
    b. What, according to Perkins, was the biggest point of discrimination in Moree?
    c. Describe how they addressed it.

SOURCE 3 Showdown at Moree

The next day [17 February] we began to fully investigate what was going on in Moree. We found out the Council had discriminatory laws against Aborigines who were not allowed to go inside the Council chambers, nor use the toilets. A number of hotels were not serving Aborigines.

The biggest point of discrimination was the local swimming pool. Aboriginal adults were not allowed to swim there at all. Aboriginal children were let in on a Wednesday afternoon during school hours betweeen one and three. But then, after the school hours finished, the whistle blew and all the Aboriginal kids had to get out and only the white kids were allowed to stay. The swimming pool was the one point we thought we would hit at first ...

When we got down to the pool I said. 'I want a ticket for myself and these ten Aboriginal kids behind me. Here's the money.'

'Sony, darkies not allowed in.' replied the baths manager. The manager was a real tough looking bloke too. He frightened me.

We decided to block up the gate: 'Nobody gets through unless we get through with all the Aboriginal kids!' And the crowd came, hundreds of them. They were pressing about twenty deep around the gate.

Then the police arrived ...

The mayor ordered the police to have us removed from the gate entrance. They took hold of my arm and the struggle started. There was a lot of pushing and shoving and spitting. Rotten tomatoes, fruit and eggs began to fly, then the stones were coming over and bottles too ...

The crowd got ugly then. One of our students ... was punched to the ground by one of the tough boys who did not like what we were doing.

The mob from the hotel across the road decided that they were going to show these university students and niggers and black so-and-so's whose town this was. They came over and did most of the kicking, throwing and punching, and the spitting ... The situation looked very bad. The police then said. 'Right, we'll let them in.'

They let the kids in for a swim and we went in with them. We had broken the ban! Everybody came in! We saw the kids into the pool first and we had a swim with them. The Aboriginal kids had broken the ban for the first time in the history of Moree ...

It was a wonderful moment.

Source: Charles Perkins 1975, A Bastard like Me, Sydney: Ure Smith, pp. 87–91

15. **SOURCE 3** is an anecdote in that it relies on Charles Perkins's memories and it shows only his point of view. How could historians substantiate his account of the Moree pool incident?
16. a. In what ways do **SOURCES 2** and **3** support or challenge the view that civil rights resistance strategies have been used effectively in Australia for at least the past 50 years?
    b. In what ways can Charles Perkins be said to have led the way for people like Michael Long?
17. Using the timeline and the information provided in this topic, select what you think are the top five events that have had the most significance in Aboriginal and Torres Strait Islanders' struggle for their rights and freedoms and place them in order from one being the most significant to five being the least. After doing this, write an extended paragraph, explaining your choices.

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 22 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

22.1 Overview

Video eLesson
- Rights and freedoms (eles-2605)

Interactivity
- A timeline of the struggle for rights and freedoms (1945–present) (int-6707)

22.3 The beginnings of an Aboriginal protest movement

eWorkbook
- Australia Day — celebration or mourning? (ewbk-6363)

22.4 The Stolen Generations

Weblink
- Archival copy of the Aborigines Act 1905 (WA)
- Stolen Generations (South West Aboriginal Land & Sea Council)

22.5 Influence on Australia of civil rights movements abroad

eWorkbook
- Civil rights around the world (ewbk-6364))

Video eLessons
- Martin Luther King at the Washington civil rights rally (eles-2606)
- Lyndon B. Johnson announces the passing of the Civil Rights Act (eles-2607)

MyWorld History Atlas
- Civil rights movements

22.6 The Freedom Ride in Australia

eWorkbook
- The Freedom Ride — impact (ewbk-6365)

Interactivity
- The route the Freedom Riders followed (int-6709)

22.7 Being counted

eWorkbook
- Being counted (ewbk-6366)

Interactivity
- The rights of First Nations peoples in different states prior to the 1967 Referendum (int-6710)

22.9 The Aboriginal Tent Embassy

eWorkbook
- An artist's impression (ewbk-6369)

Interactivity
- An artist's impression of the Aboriginal Tent Embassy, 1972 (int-6711)

22.10 Land rights and protests

eWorkbook
- Land rights (ewbk-6367)

MyWorld History Atlas
- Indigenous rights

22.11 Reconciliation

eWorkbook
- Understanding a historical debate (ewbk-6368)

22.12 Fighting for equity

Interactivities
- The decline in Aboriginal and Torres Strait Islander infant mortality since 1998 (int-6712)
- Attendance rates of Aboriginal and Torres Strait Islander students compared to non-Indigenous students (int-6713)
- Retention rates of Aboriginal and Torres Strait Islander students for Year 7 to Year 12 (int-6714)

22.14 Thinking Big research project — Needed: Social media guru!

ProjectsPLUS
- Thinking Big research project: Needed: Social media guru! (pro-0206)

22.15 Review

eWorkbook
- Reflection (ewbk-6372)
- Crossword (ewbk-6371)
- Student Learning Matrix (ewbk-6362)

Interactivity
- Rights and freedoms crossword (int-7663)

To access these online resources, log on to **www.jacplus.com.au**.

GLOSSARY

absolute majority half the number of votes received in an election plus one
absolute monarchy a form of government where the monarch (a king, queen or emperor) wields unrestricted political power over his or her sovereign state and its people
absolute poverty where income levels are inadequate to enjoy a minimum standard of living (also known as extreme poverty)
Abyssinia the only independent African state in 1935, now called Ethiopia
advocacy active support
ageing population an increase in the number and percentage of people in the older age groups (usually 60 years and over)
aid (foreign or international) the voluntary transfer of resources from one country to another, given at least partly with the aim of benefiting the receiving country
ailan kastom (island custom) the body of customs, traditions, observances and beliefs of some or all of the Torres Strait Islander peoples living in the Torres Strait area
algal bloom rapid growth of algae caused by high levels of nutrients (particularly phosphates and nitrates) in water
alien a person born in another country who is not yet a citizen of the country in which they live
alienate to cause someone to feel isolated or separated
Allies Britain, France and the other states on the winning side in World War I
alluvial plain an area where rich sediments are deposited by flooding
alpha world city a city generally considered to be an important part in the global economic system
ambiguities information that has more than one interpretation or is unclear
anarchists revolutionaries who want an equal society based on cooperation rather than government or coercive laws
anomaly something that falls outside expected patterns
aquifers layers of rock that can hold large quantities of water in the pore spaces
arbitration a dispute resolution process with a legally binding decision from a third party rather than as the result of court proceedings
armistice a ceasefire or truce that ends fighting in a conflict, so terms for permanent peace can be discussed
artefact an object made or changed by humans
Aryan term used by the Nazis to describe 'pure-blooded' Germanic peoples
assembly line mass production method in which each worker completes the same operation over and over
assimilation the process by which a minority group gives up its own customs and traditions and adopts those of the dominant culture
asylum seekers people entering another country asking to be assessed and classified as refugees
atoll a coral island that encircles a lagoon
Australia's First Peoples an inclusive term used to refer to groups that make up the Aboriginal and Torres Strait islander community
authoritarian a form of government characterised by absolute obedience to the state, an authority figure or group
base flow water entering a stream from groundwater seepage, usually through the banks and bed of the stream
bias prejudice, leaning towards one view of things; showing favouritism towards one entity over another
bicameral a parliament consisting of two legislative houses, or chambers
bill of rights a formal declaration of the rights of members of a country or area
biocapacity the capacity of a biome or ecosystem to generate a renewable and ongoing supply of resources and to process or absorb its wastes
biodiversity the variety of plant and animal life within an area
biophysical environment all elements or features of the natural or physical and the human or urban environment, including the interaction of these elements
bioremediation the use of biological agents, such as bacteria, to remove or neutralise pollutants

bipartisan supported by the two major political parties
booms floating devices to trap and contain oil
boycotts choosing to avoid the purchase of particular products or brands for ethical, moral or political reasons
brackish (water) water that contains more salt than fresh water but not as much as sea water
budget a plan for the future; in economics it is a plan about the government's financial performance and framework for the coming financial year, and is estimated by calculating its expected revenues and expenditures
budgetary policy a macroeconomic or aggregate demand management strategy involving the government's estimates of the expected value of its receipts and the expected value of its outlays
bunker a fortified underground shelter, usually with openings from which to fire at enemies
business any activity conducted by an individual or individuals to produce and sell goods and services to make a profit
capital physical resources owned by a business and used in production, including factories, machinery and equipment
capitalist economic system based on private ownership of capital, free markets and competition
carbon credit a tradable certificate representing the right of a company to emit one metric tonne of carbon dioxide into the atmosphere
carrying capacity the ability of the land to support livestock
cash rate the official price of borrowing money; the interest rate that applies to the short-term money market
cause and effect the concept that every historical event will have a cause, and every event or action is likely to be the cause of subsequent effects or consequences; an event or action that leads to other events or actions
ceasefire a temporary or permanent suspension of fighting
census an official, usually periodic count of a population
charter an official document describing the goals and principles of an organisation
child soldiers a child who is, or who has been, recruited or used by an armed force or armed group in any capacity, including but not limited to children, boys and girls, used as fighters, cooks, porters, messengers, spies or for sexual purposes. This term does not refer only to a child who is taking or has taken a direct part in hostilities.
chlamydia a sexually transmitted disease infecting koalas
child any person below 18 years of age
climate change any change in climate over time, whether due to natural processes or human activities
coastal dune vegetation succession the process of change in the plant types of a vegetation community over time — moving from pioneering plants in the high-tide zone to fully developed inland area vegetation
colonised describes a country or region whose government has been replaced by one from another country
computer-aided design software that enables a business to create, modify or design product possibilities from a series of input parameters
concentration camps prison camps where people were beaten, tortured, starved and used as slave labour
conciliator a person who acts as an independent third party between two disputing parties, often with specialist technical expertise
conflict of interest a situation where a person takes advantage of circumstances or a piece of information for their own gain rather than for the business's interests
constitution a set of fundamental principles according to which a nation or state is governed
constitutional monarchy a type of government based on a constitution with a queen or king as its head of state
consume to purchase goods and services for direct use or ownership
consumer attitude a person's overall feeling about an object or activity
contestability when particular interpretations of the past are open to debate
context the situation or circumstances (time period, place, writer, purpose etc.) in which a source or data set was created
continuity and change the concept that while many changes occur over time, some things remain constant
conurbations an urban area formed when two or more towns or cities (e.g. Tokyo and Yokohama) spread into and merge with each other

Coriolis force force that results from the Earth's rotation. Moving bodies, such as wind and ocean currents, are deflected to the left in the southern hemisphere and to the right in the northern hemisphere.
cost inflation a sustained increase in the price of goods and services caused by producers passing on increased production costs to consumers
Crown the Queen's authority in the Australian parliament, represented by the governor-general at the federal level and a governor at the state level
cull selective reduction of a species by killing a number of animals
culpability state of guilt; being responsible or blameworthy
culture all the learnt values, beliefs, behaviours and traditions shared by a society
defamation a civil wrong involving a written or verbal communication that lowers a person's reputation in the community
deltaic plain flat area where a river(s) empties into a basin
demand inflation price increases that result from an excess of demand over supply for the economy as a whole
deregulation the removal of unnecessary direct government controls, restrictions and supervision in various areas of the economy
desertification the transformation of land once suitable for agriculture into desert by processes such as climate change or human practices such as deforestation and overgrazing
developing nation a country whose economy is not well developed or diversified, although it may be showing growth in key areas such as agriculture, industries, tourism or telecommunications
development defined as 'to lead long and healthy lives, to be knowledgeable, to have access to the resources needed for a decent standard of living and to be able to participate in the life of the community' by the United Nations
discrimination the unfair, biased or prejudicial treatment of a person based on a personal characteristic such as race, gender, religion, ability or age
dispute resolution a process involving a group of strategies to settle legal issues outside of court
dissidents people who publicly disagree with government policy or actions
dole payments to the unemployed, usually in the form of coupons to exchange for food
dominions the British Empire's self-governing settler colonies
drainage area (or basin) an area drained by a river and its tributaries
dryland ecosystems characterised by a lack of water. They include cultivated lands, scrublands, shrublands, grasslands, savannas and semi-deserts. The lack of water constrains the production of crops, wood and other ecosystem services.
dyke an embankment constructed to prevent flooding by the sea or a river
dynamic equilibrium when the input of a coastal system such as winds and waves moving sediments onshore is equal to the output that moves sediments offshore, the system is said to be in a steady state. It is therefore not unstable and it has a dynamic equilibrium.
ecological footprint a measure of human demand on the Earth's natural systems in general and ecosystems in particular; the amount of productive land required by each person for food, water, transport, housing, waste management and other purposes
ecological service the benefits to humanity from the resources and processes that are supplied by natural ecosystems
ecology the environment as it relates to living organisms
economic downturn a recession or downturn in economic activity that includes increased unemployment and decreased consumer spending
economic growth a measurement of the increase in a country's gross domestic product (GDP)
economic performance the measure of how well an economy is performing based on whether it is achieving its economic objectives
economic system a way of organising the production and distribution of the nation's goods, services and incomes
economics a social science (study of human behaviour) that analyses the decisions made by individuals, businesses and governments about how limited resources are used to satisfy society's unlimited needs and wants

ecosystems systems formed by the interactions between the living organisms (plants, animals, humans) and the physical elements of an environment
embassy the residence or place of official business of an ambassador, who represents a foreign country
embezzlement the theft or misuse of funds belonging to your employer or organisation
empathy the ability to understand and share another person's thoughts and feelings
enhanced greenhouse effect increasing concentrations of greenhouse gases in the Earth's atmosphere, contributing to global warming and climate change
environmental flows the quantity, quality and timing of water flows required to sustain freshwater ecosystems
environmental impact assessment a tool used to identify the environmental, social and economic impacts, both positive and negative, of a project prior to decision-making and construction
environmental world view varying viewpoints, such as Earth-centred as opposed to human-centred, in managing ecological services
ephemeral describes a stream or river that flows only occasionally, usually after heavy rain
eradicate wipe out, obliterate
ethical consumerism making a purchasing decision based on a company's values and behaviours
eutrophication a process where water bodies receive excess nutrients that stimulate excessive plant growth
evidence information that indicates whether something is true or really happened
executive another name for the government
exotic species species introduced from a foreign country
experienced wellbeing an individual's subjective perception of personal wellbeing
extreme poverty a state of living below the poverty line (US$1.90 per day), and lacking resources to meet basic life necessities (also known as absolute poverty)
favela an area of informal housing usually located on the edge of many Brazilian cities. Residents occupy the land illegally and build their own housing. Dwellers often live without basic infrastructure such as running water, sewerage or garbage collection.
federation the joining of the six Australian colonies to establish the federal and state parliaments
female infanticide the killing of female babies, either via abortion or after birth
fertility rate the average number of children born per woman
first-past-the-post a voting system where a candidate wins by receiving more votes than any other candidate
fiscal policy a macroeconomic or aggregate demand management strategy involving the government's estimates of the expected value of its receipts and the expected value of its outlays
flexible working conditions conditions that enable employees to balance work and family responsibilities more effectively
floating settlements anchored buildings that float on water and are able to move up and down with the tides
flood mitigation managing the effects of floods rather than trying to prevent them altogether
folly foolishness; lack of good sense
foment encourage or foster (rebellion)
formal vote a ballot paper that has been filled out correctly
Fortress Europa the term used by Hitler to describe the defences along the coastline of Europe from Denmark to southernFrance
fossil fuels carbon-based fuels formed over millions of years, which include coal, petroleum and natural gas. They are called non-renewable fuels as reserves are being depleted at a faster rate than the process of formation.
foxhole a concealed dugout or pit used by one person to shelter from and shoot at the enemy
geothermal (power) power that is generated from molten magma at the Earth's core and stored in hot rocks under the surface. It is cost-effective, reliable, sustainable and environmentally friendly.
global warming the observable rising trend in the Earth's atmospheric temperatures, generally attributed to the enhanced greenhouse effect
grassroots movements action by ordinary citizens, as compared with the government, aid or a social organisation
green energy sustainable or alternative energy (e.g. wind, solar and tidal)
gross domestic product (GDP) the value of all goods and services produced within a country in a given period, usually discussed in terms of GDP per capita (total GDP divided by the population of the country)

groundwater salinity presence of salty water that has replaced fresh water in the subsurface layers of soil
groundwater water held underground within water-bearing rocks or aquifers
heritage cultural traditions
hinterland the land behind a coast or shoreline extending a few kilometres inland
hire purchase buying and using a product while paying for it in instalments
historical architecture urban environment that has significant value due to its unique form and history of development
Human Development Index (HDI) measures the standard of living and wellbeing by measuring life expectancy, education and income
human resources the area of a business that manages the relationship between the employer and employees, from acquiring to terminating staff
humanitarian concerned with the welfare of a social group
humanitarianism concern for the welfare of other human beings
human–environment systems thinking using thinking skills such as analysis and evaluation to understand the interaction of the human and biophysical or natural parts of the Earth's environment
humus decaying organic matter that is rich in nutrients needed for plant growth
hyperinflation such an extreme rise in prices that a currency loses any real value
hypothesis (plural: hypotheses) a theory or possible explanation
icon sites six sites located in the Murray–Darling Basin that are earmarked for environmental flows. They were chosen for their environmental, cultural and international significance.
iconic important or enduring
ideologies sets of ideas or beliefs that guide an individual, group, society or nation and provide the basis of political systems
impervious a rock layer that does not allow water to move through it due to a lack of cracks and fissures
inalienable belonging to a thing by its nature; not able to be taken away
incarceration imprisonment
inclusive behaviours or policies that include all members of a society
income the reward earned from supplying productive resources. Providing labour earns income in the form of wages or salaries.
indicator a value that informs us of a condition or progress. It can be defined as something that helps us to understand where we are, where we are going and how far we are from the goal.
indoctrinate to teach or instruct in a way that is almost brainwashing
Industrial Revolution the period from the mid 1700s into the 1800s that saw major technological changes in agriculture, manufacturing, mining and transportation, with far-reaching social and economic impacts
industrialised having developed a wide range of industries or having highly developed industries
infer to form a conclusion based on evidence
inflation a general rise in the prices of goods and services within an economy
infrastructure the basic physical and organisational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society
innovation adding a new product (which can be a good or a service) to an existing product line, or significantly improving an existing product or process
input the resources — including materials, equipment and labour — used in the process of production
integrated describes communities that consist of different cultural groups living in unity
integration policy requiring immigrants to publicly adopt the new country's culture while still being able to celebrate their own culture privately; a policy that recognised the value of Aboriginal and Torres Strait cultures and the right of Aboriginal and Torres Strait Islander peoples to retain their languages and customs and maintain their own distinctive communities
interdependence the mutual dependence between participants in an economy; that is, the reliance of consumers, workers, businesses and governments on each other
International Bill of Human Rights the informal name given to the Universal Declaration of Human Rights and the two International Covenants

International Covenants a multilateral treaty adopted by the United Nations General Assembly, in force from 1976; it commits those who have signed the Covenant to respect the civil and political rights of individuals and their economic, social and cultural rights

international sanctions actions or penalties — usually economic but also diplomatic or military — imposed on a country by a group of other countries

internment to be put in prison for political or military reasons, either real or perceived

invasive plant species commonly referred to as weeds; any plant species that dominates an area outside its normal region and requires action to control its spread

invention the development of something new

inventory the goods and materials held as stock by a business

isolationist foreign policy based on avoiding involvement in the affairs of other countries

judiciary the collective name given to the judges who preside over law courts

just-in-time an inventory system that ensures the correct materials arrive just as they are needed in the operations process

Kyoto Protocol an internationally agreed set of rules developed by the United Nations aimed at reducing climate change through the stabilisation of greenhouse gas emissions into the atmosphere

labour market the place, region or institution where buyers and sellers of labour negotiate wages

lagoon a shallow body of water separated from the sea by a sand barrier or coral reef

land rights the rights of Indigenous peoples to possess land they traditionally owned and occupied

left-wing support for progressive beliefs, such as the intervention of government in society to create greater equality

legally binding an agreement that is enforceable by law

life expectancy the number of years a person can expect to live, based on the average living conditions within a country

loan the temporary lending of money, usually by a financial institution

lynching the execution of a person without authority or process of law

macroeconomic the branch of economics that that emphasises the central role played by the level of expenditure or aggregate demand

mandates commission to act on behalf of the League of Nations to govern a people considered not ready to govern themselves

marginalisation a social process by which groups or individuals are pushed to the fringes of society

mark-up a fixed percentage or dollar figure added to the cost price of goods and services to determine the selling price

market capitalist economy an economic system that relies on the market to allocate resources based on the actions of consumers and producers, and where resources are generally owned by private individuals and businesses

market share the proportion of the total market that a business has, calculated by dividing a business's sales (from that market) by the total sales of all businesses in the market and expressing the result as a percentage

market the place where goods, services or resources are exchanged between buyers and sellers

marketing the process of planning and executing the development, pricing, promotion and distribution of products to create exchanges that satisfy individual and organisational objectives

martial law when a country's ruler/s bring in the military to enforce law in a society and suspend normal legal processes

mass wasting the movement of rock and other debris downslope in bulk, due to a destabilising force such as undermining compounded by the pull of gravity

material living standards refers to the number of goods and services we can afford to buy

materials management an operations strategy that manages the use, storage and delivery of materials to ensure the correct number of inputs is available to the operations system when required

maternal mortality the death of a woman while pregnant or within 42 days of termination of pregnancy

mediation a dispute resolution process involving a third party who is trained to promote a mutually agreeable outcome

Mediterranean (climate) characterised by hot, dry summers and cool, wet winters

medium-density housing a form of residential development such as detached, semi-attached and multi-unit housing that can range from about 25 to 80 dwellings per hectare
megacity a settlement with 10 million or more inhabitants
micro hydro-dams dams that produce hydro-electric power on a scale serving a small community (less than 10 MW). They usually require minimal construction and have very little environmental impact.
micro-credit the provision of small loans to borrowers who usually would not be eligible to obtain loans due to having few assets and/or irregular employment
microeconomic the branch of economics that studies the smaller fragments or units making up the whole economy
militarism excessive influence of military values and pro-war ideas
militia a body of men called up for military service only in emergencies
monetary policy a major category of government aggregate demand management or macroeconomic policy. It is implemented by the RBA and is designed to influence the cost, availability and demand for credit and money.
monoculture cultivating a single crop or plant species over a wide area over a prolonged period of time
moral relating to right and wrong behaviour
mortgage a loan used to finance the purchase of a house or property
motives the reasons why individuals do something
mulch organic matter such as grass clippings
multilateral describes a policy or program that involves three or more countries or parties
multinational describes an organisation operating in several countries
national park an area set aside for the purpose of conservation
native title a 'bundle of rights' of First Nations people to possess land they traditionally owned and continue to occupy
natural increase the difference between the birth rate (births per thousand) and the death rate (deaths per thousand). This does not include changes due to migration.
needs goods or services that consumers consider necessary to maintain their standard of living
negative externality a production outcome that was not intended and that negatively affects our economy and/or society
non-government organisation (NGO) a citizen-based association that operates independently of government, usually to deliver resources or serve some social or political purpose
non-material living standards value-based elements of human wellbeing that are not connected to material possessions
Normandy a region of France on the Atlantic coast
operations the area of a business that consists of all the activities engaged in producing goods and services
opportunity cost the next best alternative given up whenever a choice is made
output the end result of a business's efforts; the good or service that is delivered or provided to a consumer
paramilitary armed forces outside the official military
Paris Agreement United Nations Framework Convention on Climate Change (UNFCCC) agreement outlining steps to reduce greenhouse gas emissions and tackle global warming
partisans irregular fighters using guerrilla tactics behind enemy lines
pastoral run an area or tract of land for grazing livestock
pastoralist a person who runs sheep or cattle on a property
peer group a group of people with whom a person closely identifies, adopting their attitudes, values and beliefs
perennial describes a stream or river that flows permanently
personality a collection of all the behaviours and characteristics that make up a person
perspective point of view or attitude
plausible a likely or reasonable statement or argument based on strong, reliable evidence
plebiscite direct vote in which electors give their opinion on an issue
population structure the number or percentage of males and females in a particular age group
poverty cycle circumstances whereby poor families become trapped in poverty from one generation to the next

poverty line an official measure used by governments to define those living below this income level as living in poverty

precedent an action or decision on which later actions or decisions might be based; a law made by a superior court that must be applied by lower courts in future cases with the same or similar facts

preferential system a system in which voters are required to number all candidates on the ballot paper in order of preference. If no candidate wins more than 50 per cent of the vote, the preferences are distributed until one candidate has a majority of votes.

primary sources objects and documents that were created or written in the period that the historian is investigating

productivity a measure of efficiency; the amount of output produced compared to the amount of input required in production

profit what remains after all business expenses have been deducted from the money that has been collected from selling goods and services

prohibition 1920s nationwide ban in the United States on the making, transporting or selling of alcoholic drinks

proportional representation a system where candidates are elected according to the proportion (or quota) of the vote achieved by their party

psychological factors influences within an individual that affect their buying behaviour

Putsch an attempt to seize political power by force

qualitative indicators subjective measures that cannot easily be calculated or measured; e.g. indices that measure a particular aspect of quality of life or that describe living conditions, such as freedom or security

quality the degree of excellence of goods or services and their fitness for a stated purpose

quantitative indicators objective indices that are easily measured and can be stated numerically, such as annual income or the number of doctors in a country

quarterly every three months

quotas quantity limits or targets for production or imports

radicals a person who advocates fundamental or revolutionary changes in current practices, conditions or institutions

rainwater harvesting the accumulation and storage of rainwater for reuse before it soaks into underground aquifers

ratify to formally consent to and agree to be bound by a treaty, contract or agreement

rationing controlling the distribution of something when supplies are low

rearguard action direct engagement with the enemy by troops protecting a retreating force

recession a technical term referring to two consecutive quarters of negative growth in an economy

recharge the process by which groundwater is replenished by the slow movement of water down through soil and rock layers

referendum a ballot in which people decide on an important political issue

regimen a basket of goods and services whose prices are surveyed to calculate inflation

Reichstag the German Parliament

relative poverty where income levels are relatively too low to enjoy a reasonable standard of living in that society

reparations payment of money or materials by a nation defeated in war, as compensation for damage caused

repatriation assistance given to ex-service men and women returning to a civilian way of life

replacement rate the number of children each woman would need to have in order to ensure a stable population level — that is, to 'replace' the children's parents. This fertility rate is 2.1 children.

republic a form of government where supreme power is held by the people and their elected representatives rather than by a monarch

research and development (R&D) activities undertaken to improve existing products or create new products

resource allocation relates to decisions about how scarce resources are distributed among producers, and which types of goods and services will be produced to satisfy wants and needs

resources items of value that we use to produce goods and services to satisfy needs and wants, which include land, labour, capital and enterprise

rhetoric effective and persuasive language, sometimes used to mislead

right-wingers supporters of conservative beliefs, such as individual enterprise, and the belief that government should not intervene in the economy
rights those things that a person is entitled to by virtue of being a member of society
ringbark removing the bark from a tree in a ring that goes all the way around the trunk. The tree usually dies because the nutrient-carrying layer is destroyed in the process.
river delta a landform composed of deposited sediments at the mouth of a river where it flows into the sea
river fragmentation the interruption of a river's natural flow by dams, withdrawals or transfers
river regime the pattern of seasonal variation in the volume of a river
roadworthy certificate official proof that a used car has been properly tested and is safe to operate and drive
robotics highly specialised forms of technology that are capable of complex tasks
Royal Commission a public judicial inquiry into an important issue, with powers to make recommendations to government
rural–urban fringe the transition zone where rural (country) and urban (city) areas meet
Sahel a semi-arid region in sub-Saharan Africa. It is a transition zone between the Sahara Desert to the north and the wetter tropical regions to the south. It stretches across the continent, west from Senegal to Ethiopia in the east, crossing 11 borders.
salinity an excess of salt in soil or water, making it less useful for agriculture
salt scald the visible presence of salt crystals on the surface of the land, giving it a crust-like appearance
sanitation facilities that safely dispose of human waste (urine, faeces and menstrual waste)
scarcity the economic problem of having unlimited needs and wants, but limited resources to satisfy them
'scorched earth' military strategy of destroying or removing everything that could be used by an advancing enemy
secondary sources reconstructions of the past written or created by people living at a time after the period that the historian is studying
self-determination the freedom for a people to determine their own course of action
seminal original and influential
separation of powers the division of government into the legislature (parliament), executive (ministers and the public service) and judiciary with the aim of providing a system of checks and balances that prevents the excessive concentration of power in one group
sex ratio the number of females per 1000 males
significance the importance assigned to particular aspects of the past, for example, events, developments, movements and historical sites
slum rundown area of a city with substandard housing
social cohesion the ties within a diverse community that create a sense of connection
socialist an economic system based on public ownership of industry to create greater equality
socially responsible management managing a business in such a way that the broader social welfare of the community, including its people and the environment, is taken into consideration when making business decisions
sociocultural influences forces exerted by other people that affect customer behaviour
socioeconomic of, relating to or involving a combination of social and economic factors
South-West Pacific Zone area, including New Guinea and what is now Indonesia, within which Australian conscripts could be sent to fight after February 1943
sovereignty of the people the principle that a government's authority resides with its people through their elected representatives
soviets councils, originally elected by workers or peasants
spatial variation difference observed (in a particular measure) over an area of the Earth's surface
spearhead to lead an attack
specialisation a method of production where a worker, business or nation focuses on the production of a limited range of goods or services in order to increase production and make the most efficient use of resources
stamp duty a compulsory fee (a percentage of the total purchase price) charged by state governments

standard of living a level of material comfort in terms of goods and services available. This is often measured on a continuum; for example, a 'high' or 'excellent' standard of living compared to a 'low' or 'poor' standard of living.
stewardship the caring and ethical approach to sustainable management of habitats for the benefit of all life on Earth
STI sexually transmitted infection
stock exchange a place where stocks (shares in companies) are bought and sold
stockbroker someone whose job is to buy and sell shares on behalf of others
storm surge a temporary increase in sea level from storm activity
subsidence the gradual sinking of landforms to a lower level as a result of earth movements, mining operations or over-withdrawal of water
subsidy a cash payment by the government designed to help producers compete by enabling them to sell their product at a lower price than would otherwise occur
Sustainable Development Goals (SDGs) a set of 17 goals established by the United Nations Development Programme, which aim to end poverty, protect the Earth and promote peace, equality and prosperity
sustainable able to last or continue for a long time
taboo a topic or issue that is not usually spoken about in a society
tariffs taxes imposed on imported goods to make them more expensive
taxation a government levy or revenue measure that can be used as part of the budget to affect the level of prices, the growth rate and the distribution of income
technology the use of scientific knowledge to develop machinery, equipment and devices designed to solve business problems
tenure a system by which particular individuals or groups are given a legally recognised right to occupy a defined area of land
terminal lake a lake where the water does not drain into a river or sea. Water can leave only through evaporation, which can increase salt levels in arid regions. Also known as an endorheic lake.
terra nullius ('land belonging to no-one') in Australia, the legal idea that since no-one was 'using' the land when the first Europeans arrived, it could be claimed by the British Crown
thermohaline relating to the combined influence of temperature and salinity
Third Reich the Nazi name for their regime in Germany. Reich means empire.
timeline a diagrammatic tool representing a period of time, on which events are placed in chronological order
topsoil the top layers of soil that contain the nutrients necessary for healthy plant growth
trade the activity of buying, selling or exchanging goods and services between producers and consumers and/or countries
training walls a pair of rock walls built at a river's mouth to force the water into a deeper and more stable channel. The walls improve navigation and reduce sand blockages.
training the process of teaching employees skills, abilities and knowledge
treaty an agreement between two or more sovereign states (countries) to undertake a particular course of action. It usually involves matters such as human rights, the environment or trade.
tried in absentia tried even though the accused is not present in court
triple bottom line the economic, environmental and social performance of a business
turbid water that contains sediment and is cloudy rather than clear
ultra vires acting beyond the power of the law maker. It usually refers to situations where parliaments pass a law that is outside their area of authority.
unconstitutional not in accord with the principles set forth in the Constitution
unfettered unrestricted
unicameral a parliament consisting of one legislative house, or chamber
United Fronts policy of communist parties forming alliances with other parties to combat fascism
Universal Declaration of Human Rights the first specific global expression of rights to which all human beings are inherently entitled
upskilling the provision of training and further education to teach employees additional skills
urban environment the human-made or built structures and spaces in which people live, work and recreate on a day-to-day basis

urban infilling the division of larger house sites into multiple sites for new homes
urban renewal redevelopment of old urban areas including the modernisation of household interiors
urban sprawl the spreading of urban developments into areas on the city boundary
USSR the Union of Soviet Socialist Republics, or Soviet Union, the name of the former Russian Empire from 1922
wants goods or services that are desired in order to provide satisfaction to the user, but which is not necessary for survival or to meet the basic standard of living in a community
water rights refers to the right to use water from a water source such as a river, stream, pond or groundwater source
water security the reliable availability of acceptable quality water to sustain a population
watertable upper level of groundwater; the level below which the earth is saturated with water
weathering the breaking down of rocks
weed any plant species that dominates an area outside its normal region and requires action to control its spread
Weimar Republic the democratic system of government in Germany from 1919 to early 1933, so called because its constitution was written in the city of Weimar
weir wall or dam built across a river channel to raise the level of water behind. This can then be used for gravity-fed irrigation.
welfare government system to provide help to members of society who need support
wellbeing a good or satisfactory condition of existence; a state characterised by health, happiness, prosperity and welfare
Westminster system the democratic parliamentary system based on the British system of parliament
wetland an area covered by water permanently, seasonally or ephemerally. They include fresh, salt and brackish waters such as rivers, lakes, rice paddies and areas of marine water, the depth of which at low tide does not exceed 6 metres.
White Russians those who wanted to crush the revolution and restore the old Russian order
workplace ethics the application of moral standards to practices in the workplace
work–life balance achieving the right amount of time between work and family/personal life

INDEX

A

Aboriginal and Torres Strait Islander 734–737
  official documentation 735
  peoples in twenty-first century 786–790
  political and commentary 735
  popular films 734–735
Aboriginal protest movement
  building movement 738
  day of mourning 737–738, 738–739
  protests during 1920s 737
Aboriginal Tent Embassy 764–767
  Yirrkala petition 764–766
absolute majority 87, 114
absolute monarchy 89, 114
absolute poverty 550, 589
Abyssinia 674, 722
  Italy invades 674
advocacy 786, 796
aerial photographs 311–312
  vs. topographic map 311–312
ageing population 562–563, 589
aggression 665–667
  and appeasement 670–676
  in Manchuria 665–667
aid 580, 580–581, 589
AIDS 558–559, 559–560
ailan kastom 763, 796
algal bloom 378, 426
alien 706, 722
alienate 796
alienated 734
Allied counter-offensives 699–697
Allies 623, 644
alluvial plain 447, 462
alpha world city 478, 495
ambiguities 32–33
anarchists 629, 644
anomaly 36
anti-communism 638–641
anti-discrimination laws 156, 161
ANZUS 140
appeasement 670–676, 674
arbitration 159, 161
arches 437
armistice 622, 644
artefacts 598, 616, 654–655
  World War II 654–655
Aryan 660, 722
Asia 718–719
  atomic bombs 724
  Australia and 718–719
assembly line 644
assembly line 627
assimilated 741
assimilation 796
asylum seekers 574–575, 589
  regional perspective on 577–578
atoll 443, 462
Australia 101, 698–699
  action 359
  and Asia 718–719
  assessment of wellbeing 513–528
  of civil rights movements 745–749
  coastal management in 453
  commitment to global citizenship 137
  and democracy 83
  economy 194–198
  fascism in 641
  'Fortress Singapore' falls 698
  Freedom Ride in 750–753
  Freedom Rides in United States 747–749
  global citizenship 104–105
  Great Depression in 633
  and Indonesia 719
  improving wellbeing 537–545
  inequalities 535–537
  inflation rate 208–210
  international call for civil rights 745
  measure up 241–243
  offers apology 778–779
  in Pacific War 697–699, 699–700
  peacekeeping missions 105
  plans to help crisis 635–638
  population 534–535
  protests in United States gain momentum 747
  recent performance 196
  social cohesion in 151
  turning point in war for 694–699
  United Nations 101
  and United Nations 717–718
  under threat 698–699
  US alliance 710–711
  widening powers 707
Australian Constitution, recognition in 791–792
Australian National Development Index (ANDI) 513
Australian troops 724
Australian women 707–710
  at war 707–710
  AWAS, WAAAF and WRANS 710
  in industry 709
  in medical and nursing services 710
  role at home 707–709
  war services 709–710
  Women's Land Army 709
Australian Women's Army Service (AWAS) 710
Australian Women's Land Army (AWLA) 709
Australia's First Peoples 734, 796
Australia's system of government 85–87
  elections in 87–88
  separation of powers 85
authoritarian 96, 114
Axis 669–671

B

Bangladesh's Sundarbans 447–448
Battle for Australia Day 720–722
Battle of Britain 691
beaches 438
bias 254, 267
bicameral 84, 111
bill of rights 145–148, 155, 161
biocapacity 349–351, 370
biodiversity 414, 426, 476
  loss of 476
bioinvasion 441
biophysical environment 495
  interconnections between urban and 467
bipartisan 756, 796
births 516–518
blowholes 437
boycotts 255, 267
brackish 397, 426
Bringing Them Home 774
Britain and United States relations 719–720
British Empire 690–691
budget 187–190, 225, 244

budgetary policy 225–228, 244
budget outcome 225
  impact of 228
bunker 668, 722
business 171, 191
Business Confidence Index 213
business consumer decisions 250–251
  power of advertising 250–251
  marketing 252
business productivity
  adjusting marketing strategies 287
  capital investment 272
  computer-aided design 274
  customer relationship management 273
  economic conditions 286
  ethical and socially responsible practices 284
  ethical and social responsibility 281
  ethical workplace practices 281–282
  investment in technology applications 272
  just-in-time inventory system 275
  managing operations and improving productivity 272–275
  materials management 275
  office technology 273
  operations 272
  research and development expenditure 286–287
  robotics 273
  social responsibility 282
  through human resource management 277–279
  triple bottom line business planning 283
  upskilling workforce 288–290

C

CAD. *see* computer-aided design (CAD)
capital 272, 290
capital gains tax (CGT) 226
capital investment 272
capitalist 638, 644
carbon credits 358, 370
careers and 302–303
carrying capacity 386, 426
cartogram 319–320
cash rate 229, 244
cause and effect 29–30, 601, 616
  analysis with graphic organisers 605–607
caves 437
ceasefire 105, 115
census 755, 796
CGT. *see* capital gains tax (CGT)
change 304–306
change over time 29
charter 103, 115
child 566, 589
child labour 567
child mortality 515–516, 784
children
  effects of war on 707
  impact on 571
child soldier 589
child soldiers 567
China
  desertification 402–403
  Great Green Wall 403–405
  invasion of 669–671
chlamydia 415, 426
civics and citizenship 56–57
  concepts 55–57
  conducting an interview 59
  debating an issue 65–66
  deconstruct/reconstruct method 58
  inquiry approach 57
  overview 54
  political cartoons 62
  referencing quotes 60
  skills 56
  writing essays 63–64
  writing feature article 63
civil rights in America 745–746
cliffs 436
climate change 354, 370, 441
  Australia 366–370
  fossil fuels 363–366
  future action 366
  global action 358–359
  global warming 354
  greenhouse effect 354–356
  impact of 446
  renewable energy 363–366
Close the Gap Statement of Intent 783–785
coastal change management
  changing coastlines 450–451
  protecting coast 451
coastal dune vegetation succession 438, 462
coastal landforms 433
coastal landscapes
  as natural systems 433
  coastal landforms 433
  coastal zone 432–433
  erosional forms 436–437
  importance of 432
  ocean processes 434–435
coastal management
  challenges to 440–450
  disappearing islands 442–443
  human impacts 440–441
  in Australia 453
  interconnection of coast and inland waters 447–451
  rising sea levels in Maldives 444–447
  rising sea levels in Pacific 443–444
  threat of global warming 442
coastlines 450–451
coastwatchers 705
coast waters 447–451
cohesive society 152
  celebrating diversity 160
  conflict resolution 158
  living 150–151
  overview 149
  protecting social cohesiveness 156
  threats to 152
collusive bidding 235
colonies, unrest in 630–633
colonised 109, 115
Commonwealth v. State of Tasmania 138
communications 6, 227
communism
  and anti-communism 638–641
  drift to dictatorship in Russia 637
  Stalin's dictatorship 637
company tax 226
competency-based training 277
Competition and Consumer Act 2010 235
complex choropleth maps 323
compulsory superannuation 240
computer-aided design (CAD) 274, 291
concentration camps 661, 722
conciliator 158
concurrent powers 120–121, 121
conflict of interest 282, 291
conflict resolution 158
concentration camps 661, 722
Constitution 85, 111
constitutional change 791–792
constitutional monarchy 85, 110
consume 194, 244
consumer attitude 251, 267
consumer influences 255–257
  business decisions 250–253
  businesses 255
  consumer choices 255
  ethical and environment 255
  FIJI water 255
  loans 258
  mobile phone plan 262

multimedia advertising campaign 262
overview 249
right decision 258–259
contestability 603, 616
context 16
continuity and change 600–601, 616
controversy over 722–723
conurbations 471, 495
Costerfield, land degradation 386–388
cost inflation 207, 244
Crete 697
CRM. *see* customer relationship management (CRM)
cruel fate of Singapore people 699
Crown 84, 111
cull 415, 426
culpability 775, 796
culture 251
customer relationship management (CRM) 267, 273
customs duties 226
cyclical unemployment 201–202

D

deaths 516–518
debate 65–66
deconstruct method 58
defamation 131, 148
defence 227
deltaic plain 447, 462
demand inflation 207, 244
demand-side factors 207
democracy 55–56, 596
Australia 83
democratic government, fall of 657–660
depositional forms 438–441
deregulation 234, 244
desertification 399, 426, 481, 495
causes 400
Great Green Wall 403–405
impacts of 401
in China 402–403
deteriorating living standards 204
developing nation 471, 495
development 505, 509–510, 543
Dharavi slum 479
direct government intervention, in market
distribution of income 239–240
reallocation of resources 238–239
reasons for 237–238
stabilisation of economy 238
direct taxes 225–226
dispute resolution 159, 161
dispute resolution 158
dissidents 638, 644
Dolchstosslegende 656
dole 634, 644
dominions 722
drainage area 393, 426
dryland 398, 426
dryland salinity 391–392
dunes 438
dyke 451, 462
dynamic equilibrium 433, 462

E

Earth, careers that help 299
ecological footprint 349–351, 370, 489, 495, 511, 543
ecological services 348–353, 370
ecology 426
economic conditions 286
economic downturn 482, 495
economic growth 244
increased volume of goods and services 194
international comparison 197
limitations of measuring 197–198
living standards and 218–219
measuring 194–195
strong and sustainable 219
economic performance 178–179, 191
Business Confidence Index 213
Liveability Ranking 213
living standards related to 218–220
World Happiness Report 214–215
economics 171, 191
economics and business 176–177
budget 187–190
case study 182–183
decisions 184–186
economic performance 178–179, 180–181
interdependence 177
living standards 178–179
making choices 174
overview 170
scarcity 172–173
skills 179
specialisation 176–177
trade 176–177
economic system 174, 190
economic terms 623
economic woes 656–663
ecosystems 432, 462
education 227, 784–785
El Alamein 698
embassy 766, 796
embezzlement 153, 161
empathy 603, 616
employment 784–785
employment trends
causes of unemployment 201–203
effects of unemployment 203–205
international comparison 201
measuring unemployment 199–200
reducing unemployment 198
enhanced greenhouse effect 354, 370, 442, 462
environment 307
environmental change
Australia's climate change 366–370
climate change 354–358
impacts 368–370
interaction 347–353
overview 346
tackling climate change 358–367
Wacky weather presentation 370–372
environmental factors, urban decline: 481–482
environmental policy 236
environmental world view 347, 370
equity, fighting for 780–786
Close the Gap Statement of Intent 783–785
education and employment 784–785
life expectancy and child mortality 784
Northern Territory National Emergency Response 780–783
responding to inequity 786
eradicate 796
erosional forms 436–437
caves, arches, blowholes and stacks 437
cliffs and platforms 436
depositional forms 438–441
headlands and bays 436
ethical consumerism 267
ethical responsibility 281
ethical responsible practices 284
ethical workplace practices 281–282
Europe
aggression and appeasement 670–676
division in 630
movement of people to 575
Syrian refugees across 575
World War II begins 680–690
European theatre of war 722–723
evaluating 6
evidence 599–600, 616
to form conclusion 32–35
evidence-based discussions 46–49
exchange rate 230
excise duty 226
exclusive dealing 235

executive arm 86, 114
exotic species 406, 426
experienced wellbeing 511, 543
extreme poverty 527, 543

F
factors 250–251
fair behaviour 282
fascism
  in Australia 641
  in Germany and Spain 641–644
  in Italy 640
  nature of 639
favela 527, 543
  improvements to wellbeing in 529–532
favela-living, on wellbeing 529
fascist alliances 668–676
fascists, uniting 674–676
fascist war crimes 716–717
fears 719–720
FBT. *see* fringe benefits tax (FBT)
federal laws, resolving conflicts between state and 121–125
Federation 84, 116
female infanticide 527, 543
fertility rate 518, 543, 561, 589
FIJI water 255
final steps to war 676–694
first-past-the-post 87, 114
fiscal policy 225–228, 244
flexible working conditions 278, 291
flexible workplaces 278–279
floating settlements 451, 462
flooding, impact of 448–454
floods 485–496
folly 734, 796
foment 640, 644
Fortress Europa 712, 722
foreign aid 100–101, 102
  Australian governments 102
formal votes 87, 114
formats 43–46
'Fortress Singapore' falls 698
fossil fuels 363–366, 370
foxhole 722
foxholes 668
Freedom Ride
  assimilation to integration 756–758
  in Australia 750–753
  in United States 747–749
  legacy of 753
  referendum (1967) 755–756
frictional unemployment 203
fringe benefits tax (FBT) 226

G
GDP per capita, as measure of living standards 219–220
General Agreement on Tariffs and Trade (GATT) 139
Genuine Progress Indicator (GPI) 211, 221
Geography 299–303
  change 304–306
  complex choropleth maps 323
  environment 307
  interconnection 304–309
  cartogram 319–320
  careers that help Earth 299
  skills in 299–303
  aerial photograph vs. topographic map 311–312
  multiple data formats 321
  place 303
  scattergraph 316
  skills in studying 302
  space 302–303
  sustainability 308–313
  work experience 300
geothermal 364, 370
Germany 656–663
  fascism in 641–644
  invades Russia 693–694
  Nazification of 661–664
global financial crisis (GFC) 618
global human wellbeing, assistance for 579–583
Global Peace Index 579
global progress 533–534
global warming 354, 370
  threat of 442
Gold Coast, shifting sands on 453–455
good life 505–509
goods and services tax (GST) 226
government budget 205
government budget receipts 225–226
government budget spending 226–228
GPI. *see* Genuine Progress Indicator (GPI)
grassroots movements 554, 589
Greece and Crete, March-May 1941 697
Great Depression
  causes of 606
  coming of 631–634
  dealing with 634
  effects of 607
  in Australia 633
  living through 634–637
  plans to help Australia 635–638
Great Green Wall 403–405
Green Gross Domestic Product (GGDP) 223
greenhouse effect 354–356
gross domestic product (GDP) 197, 197–198, 446, 462, 478, 495, 505, 543
Gross National Happiness 512–513
groundwater 391, 426
groundwater salinity 451, 462
growing tensions in alliance 712
GST. *see* goods and services tax (GST)
gully erosion 385
Gurindji Strike 768–769

H
habitat destruction 441
Happy Planet Index (HPI) 223, 511
HASS 2–4
  analysing primary and secondary sources 18–23
  communicating and reflecting 6
  evaluating 6
  evidence-based discussions and explanations 46–49
  finding and referencing primary and secondary sources 14–18
  formats and language 43–46
  forming strong conclusions based on evidence 32–35
  identifying and comparing perspectives 23–28
  identifying and explaining relationships and patterns 29–31
  identifying knowledge and perspectives 8–11
  possible actions and predicting outcomes 39–42
  proposing plausible explanations for patterns and relationships 35–38
  questioning and researching 5
  reflecting on research techniques and findings 49–50
  skills in 5
  writing and dissecting research questions 11–14
  Year 10 HASS 3–4
HDI. *see* Human Development Index (HDI)
headlands and bays 436
health and wellbeing 227
  HIV and AIDS 558–559
  malaria 555, 556
  SDG targets for 555

heritage 796
High Court of Australia 119
  concurrent powers 121
  disputes between state and federal governments 120–127
  influencing state governments 125–127
  resolving conflicts between state and federal laws 121–125
  specific, residual and concurrent powers 120–121
hinterland 432, 462
hire purchase 628, 644
historian 595
historical architecture 484, 495
historical debate 607–610
history 594
  and democracy 596
  cause and effect 601
  concepts of 597
  contestability 603
  continuity and change 600–601
  evidence 599–600
  historical debate analysis 607–610
  perspective and empathy 603
  political cartoons and propaganda posters analysis 610–616
  present and the future 595
  significance 601–602
  skills in 604–605
  sources 597–599
  study of 595
  value of 595–596
  work and leisure 596
HIV 558–559, 559–560
Holocaust 716, 722–723
homeland defence 705–706
honest 282
hostile reception 751–752
housing and community amenities 227
housing, impact on 570–571
HPI. *see* Happy Planet Index (HPI)
Human Development Index (HDI) 211–212, 221–222, 510, 543
human-environment systems thinking 471, 495
human factors, urban decline 482
humanitarian 100, 114
humanitarian aid 108–111
humanitarianism 580, 589
human resource management 277
  flexible workplaces 278–279
  training 277
human resources 277, 291
human rights
  basis of 564–565
  importance of 564–567
  protecting vulnerable 566–567
  protects 566
  role of United Nations 565
Human Rights (Sexual Conduct) Act 1994 138
human wellbeing
  caring for 580
  European response that affects 576
  international NGOs working for 583
  role of Australian government 581
humus 384, 426
hyperinflation 657, 722
hypothesis 597, 616

I

iconic 796
ideologies 688, 722
image and reality 711
immigration policy 235–236
inalienable 745, 796
incarceration 736, 796
inclusive society 150, 161
income 198, 244
  distribution of 239–240
India
  maternal mortality in 525–527
  population in 523–524
  regional variation in wellbeing 525
  wellbeing in 523–527
India's system of government
  separation of powers 92
India's system of government 92
India’s system of government
  elections in 93–97
indicators 506–509, 543
Indigenous Australian 141–145, 789–790
indigenous communities
  Indonesia 719
  Kakadu wetlands 420–421
  traditional land management 418
Indigenous peoples, rights of 790–791
Indigenous wellbeing 539–540
indirect taxes 226
indoctrinate 640, 644
Indonesia's system of government
  elections in 96
  separation of powers 96
Indonesia's system of government 96
industrialised 510, 543
Industrial Revolution 347, 371, 470, 495
inequity, responding to 786
infer 131, 148
inflation 206, 238, 244
  calculating 216
inflation rates
  causes of 207–208
  effects of 208
  measuring 206
  value for money 205–206
infrastructure 102, 115, 471, 495
inland waters 447–451
innovation 272, 290
input 271, 290
integrated 150, 161
integration 758, 796
interconnection 304–309
interdependence 177, 191
interest rates 229, 229–230
International Bill of Human Rights 565, 589
international call for civil rights 745
International Court of Justice 134–135
International Covenant on Civil and Political Rights 138
International Covenants 565, 589
International Labour Organization (ILO) 140
international law
  enforcing international law 134–135
  Mabo Case 143–145
  racial discrimination 142–143
  standards of acceptable behaviour 132
international relations 717–720
  Australia and United Nations 717–718
  relations with Britain and the United States 719–720
international sanctions 107, 115
international trade 139–140
international treaties
  ANZUS 140
  commitment to global citizenship 137
  Commonwealth v. State of Tasmania 138
  International Labour Organization 140
  international trade 139–140
  reasons for treaties 135
  Universal Declaration of Human Rights 135–137
internment 706–707, 722
interpreting the Constitution
  case study 129–130
  power to 128–129
  question of rights 130–131
  R v. Brislan 129

Theophanous v. Herald and Weekly Times (1994) 131
inter-war years 620–622
invasive plant species 409, 410, 426
invasive species 406–407
animal pests 407–408
control 410–412
plants 409–410
invention 286, 291
inventory 291
irrigation salinity 392–393
isolationist 674, 722
Italy
fascism in 640
invades Abyssinia 674

J

Japanese imperialism 663–667
Japanese militarism 663–669
aggression in Manchuria 665–667
imperialism 663–667
Japanese war crimes 715–716
Japans system of government
elections in 90–91
separation of powers 89
Japans system of government 89
Japan, response to ageing population 562–563
just-in-time (JIT) 275, 291
judiciary 86, 114

K

Kenya, response to youthful population 561–562
King, Martin Luther 747
knowledge, identifying 8–11
Kokoda 699–700
Kokoda battles 696–698
Kokoda Track 699, 724
Koowarta v. Bjelke-Petersen & Ors (1982) 136
Kyoto Protocol 358, 371, 444, 462

L

labour market 233, 244
labour market reforms 233–234
lagoon 484
land degradation
Australian landscape 379–380
causes and impacts 376–382
change and salinity 390–397
Costerfield 386–388
drylands are spreading 398–405
indigenous communities 418–421
invasive species 423–425
management 384–388
native species 414–417
overview 375
species and 406–412
sustainable management 418–421
land rights 766, 796
and native title 769–773
Gurindji Strike 768–769
Land (Titles and Traditional Usages) Act 1993 144
language 43–46
legally binding 155, 162
leisure 596
life expectancy 510, 514–515, 543, 559, 589, 784
left-wing 657, 722
Little Rock, Arkansas 746
Liveability Ranking 213
living standards
and economic growth 218–219
GDP per capita as measure of 219–220
Genuine Progress Indicator 221
Green Gross Domestic Product 223
Happy Planet Index 223
Human Development Index 221–222
measuring 221–223
quality-of-life index 222–223
related to economic performance 218–220
loans 258, 267
Lombadina Aboriginal community program 540–543
lucky country 150
Luftwaffe 691, 722
lynching 644
lynchings 629

M

Mabo Case 143–145
Mabo decision 143
native title legislation 144
Western Australia v. Commonwealth 144
Mabo decision 769–772
Mabo, Eddie 772
macroeconomic 224, 244
macroeconomic policy
bigger picture 224
budgetary/fiscal policy 225–228
exchange rate 230
government budget receipts 225–226
government budget spending 226–228
impact of budget outcome 228
interest rates 229, 229–230
monetary policy 228–230
persuasion 230
malaria 555, 556
control and elimination 556–557
Maldive Islands, sea level rise in 444–447
Manchuria, aggression in 665–667
mandates 623, 644
marginalisation 162
marginalisation 150
marine pollution 440
market 175, 191
market capitalist economy 175, 191
market deregulation 234
marketing 252, 267, 287, 291
marketing strategies 287
market share 287, 291
market zoning 235
mark-up 207, 244
martial law 153
mass media 620–621
mass wasting 436, 462
material living standards 204, 244
materials management 275, 291
maternal mortality 519, 519–524, 543
in India 525–527
mediation 159
Medicare levy 226
mediterranean 386, 426
medium-density housing 495
megacity 471–475, 495
micro-credit 530, 543
microeconomic 231, 244
microeconomic policy
environmental policy 236
immigration policy 235–236
labour market reforms 233–234
market deregulation 234
national reform agenda 235
smaller picture 231–232
trade liberalisation 232–233
militarism 664, 722
militia 699, 722
military terms 623
monetary policy 228–230, 244
monoculture 404, 426
moral 775, 796
mortgage 230, 244
motives 251, 267
mulch 385, 426
multilateral organisation 104, 115
multinational organisations 101, 115
multiple component index 510
multiple data formats 321
Mumbai 481
uncertain future 481

Mumbai, 478
  challenges 478
  Dharavi slum 479
Murray-Darling Basin 393–395

N
national organisations 761–762
national park 414, 426
national production, decreased 204
national reform agenda 235
native species
  biodiversity protection 414
  cull iconic Australian natives 414–415
native title 769–773, 772, 796
Native Title Act 1993 144, 772
natural increase 518, 543
natural systems 433
Nazis 656–663
  1930s depression, impact of 657
  and fascist war crimes 716–717
  consolidating power 660–667
  Dolchstosslegende and economic woes 656–663
  fall of democratic government 657–660
  ideology and tactics 657–660
  Nazification of Germany 661–664
  take power in Germany 656–663
Nazis take power in 656–663
needs, scarcity 172, 191
negative externality 197, 244
negotiation 159
net payments 228
new battlefields after 1940 691–693
New Guard movement 641
NGOs. *see* non-government organisations (NGOs)
non-government organisations 100
  Australia 100
non-government organisations (NGOs) 534, 543, 580, 589
non-material living standards 204, 245
Normandy 712, 722
Northern Territory National Emergency Response 780–783
nuclear bombs 715
Nuremberg war crimes trials 716–717

O
ocean processes 434–435
office technology 273
official sources 620
off-the-job training 277
on-the-job training 277
operations 254, 267, 272, 290
opportunity cost 174, 191
output 271, 290
overfishing 441

P
Pacific Islands
  rising sea levels in 443–444
  victory in 714–715
Pacific theatre of war 724
Pacific War 694–699, 699–700
  beyond Kokoda 700–703
  Kokoda 699–700
  Papua and New Guinea 700
  RAAF 700–701
  RAN 703–705
  unnecessary campaigns 700
Papua and New Guinea 700
Papua New Guinea, AusAID work in 559–560
paramilitary 657, 722
Paris Agreement 444, 462
partisans 688, 722
pastoralist 772, 796
pastoral run 386, 426
patterns
  identifying and explaining 29–31
  proposing plausible explanations for 35–38
peace treaties 622–623
peer group 251, 268
Perkins, Charles 750–752
personal income tax 225
personality 251, 268
personal records 621–622
perspective 603, 616
  identifying 8–11
  identifying and comparing 23–28
persuasion 230
Perth 474
  impacts of urban sprawl 475–478
  moving into future 476–478
petroleum resource rent tax (PRRT) 226
place 303
platforms 436
plausible 35
plausible inferences 36–37
plebiscite 644
plebiscites 623
political cartoons 62, 610–616
population structure 561, 589
poverty 550
  defined as 527
  haves and have-nots of Rio 527–532
  interconnection between poverty, water supply, sanitation 532–535
  sub-Saharan Africa 550
  world hunger 550
poverty cycle 559, 589
poverty line 543, 550, 589
POWs. *see* prisoners of war (POWs)
precedent 127, 148, 768, 796
predatory pricing 235
preferential system 87, 114
price fixing 235
primary sources 597–598, 616
  analysing of 18–23
  finding and referencing 14–18
prisoners of war 704–705
  experiences of Australian prisoners of the Japanese 704–706
  motives for treatment of 704
  Sandakan death marches 705
private international law 132
productivity 271, 290
profit 258, 268
progressive taxes 240
prohibition 628, 644
propaganda posters 610–616
proportional representation 88, 114
protests 768–773
provision of essential services 240
PRRT. *see* petroleum resource rent tax (PRRT)
psychological factors 251, 268
public-debt interest 227
public international law 132
Putsch 642, 644

Q
qualitative indicators 212, 245, 505, 543
quality 251, 268
quality-of-life index 222–223
quantitative indicators 212, 245, 505, 543
quarterly 196, 245
questioning 5
quotas 232, 245

R
RAAF 700–701
racial discrimination 142–143
radicals 629, 644
RAF. *see* Royal Air Force (RAF)
ratified 444
ratify 135, 148, 462
rationing 706, 722
rearguard action 697, 722
recession 202, 245
reconciliation 58
  Australia offers apology 778–779
  Bringing Them Home 774
  perspectives on road to 774–778
  positive moves forward 778–779

reconstruct method 58
Redfern Speech 774
refusing to say sorry 775–778
recruiting Second AIF 697
Reichstag 657, 722
Redfern Speech 774
referendum 755–756, 796
reflecting 6
on research techniques and findings 49–50
refugees 574–575
regimen 206, 245
regional government 89
Australia's system 84–89
foreign aid from 99
India's system 92
Indonesia's system 95–97
Japan's system 89
keeping the peace 106–107
overview 83
UN 101
relationships
identifying and explaining 29–31
proposing plausible explanations for 35–38
relative poverty 550, 589
relations with US 710–712
renewable energy 363–366
reparations 132, 148, 623, 644
repatriation 760, 796
replacement rate 518, 543
republic 92, 114
research and development (R&D) 286–287, 291
researching 5
research questions, writing and dissecting 11–14
residual powers 120–121
resource allocation 174, 191
resources 172, 191, 441
reallocation of 238–239
rhetoric 735, 796
rights 130–131, 148
rights and freedoms
Aboriginal and Torres Strait Islander struggle for 734–737
Aboriginal protest movement 737–739
Aboriginal Tent Embassy 764–767
Australia of civil rights movements 745–749
fighting for equity 780–786
Freedom Ride in Australia 750–753
land rights and protests 768–773
reconciliation 774–779
Stolen Generations 741–744
Torres Strait Islander 758–763
right to vote 754–755
right-wingers 657, 722
rill erosion 385
ringbark 408, 426
Rio de Janeiro
development on wellbeing 528–529
favela-living on wellbeing 529
haves and have-nots of 527–532
improvements to wellbeing in favelas 529–532
river deltas 484, 495
roadworthy certificate 257, 268
`Roaring Twenties'
changing values 627–628
division in Europe 630
intolerance in United States 629
new technologies 627–628
reacting to change 628
unrest in colonies 630–633
robotics 273, 290
Royal Air Force (RAF) 691, 722
Royal Australian Navy (RAN) 703–705
Royal Commission 395, 426
rural-urban fringe 495
Russia
dictatorship in 637
Germany invades 674
R v. Brislan 129

S

Sahel region 403, 426
salinity 390, 426
dryland 391–392
irrigation 392–393
Murray-Darling Basin 393–395
Vietnam 395–397
salt scald 392, 427
Sandakan death marches 705
sanitation 526, 532–535, 543
Sapphire Coast, sustainable development on 455–459
scattergraph 316
scarcity 172–173, 191
scorched earth 699, 722
sea level
rise in Maldives 444–447
rise in Pacific Islands 443–444
seasonal unemployment 202–203
Second AIF 697
goes to war 697–699
recruiting 697
secondary sources 597–598, 616
analysing of 18–23
finding and referencing 14–18
second Sino-Japanese War 668–676
self-determination 790, 796
seminal 779, 796
separation of powers 85, 114
sex ratio 527, 543
sheet erosion 385
significance 601–602, 616
slum 478, 495
social cohesion
Australia 151
social cohesion
corruption 153
defined 150
democratic freedom and rights 156
law-breakers 152
lawlessness 154
legally binding 156
organised crime 153–155
vested interests 153
social cohesion 150
social cohesiveness 156
anti-discrimination laws 156
right to protest 156
unity through values 157–159
socialist 637, 644
socially responsible management 282, 291
socially responsible practices 284
social media 792–794
social responsibility 281, 282
social security and welfare 227
sociocultural influences 251, 268
socioeconomic 535, 543
soil 384
sovereignty of the people 89, 114
soviets 637, 644
South-West Pacific Zone 707, 722
space 302–303
Spain, fascism in 641–644
spatial variation 527, 544
specialisation 176–177, 191
specific powers 120–121
spearhead 722
spearheaded 698
stacks 437
Stalin, Joseph 637
stamp duty 258, 268
standard of living 179, 191, 506, 544
state laws, resolving conflicts between federal and 121–125
stewardship 349, 371
STI 559, 589
stockbroker 632, 645
stock exchange 631, 645
Stolen Generations
from protection to assimilation 741–742
life in the homes 743–744
storm surge 444, 462

structural unemployment 202
sub-Saharan Africa 550
subsidy 232, 245
suburbs, density in 476–477
Sundarbans 447–448
superannuation fund tax 226
supply-side factors 207–208
sustainability 308–313
sustainability indices
  Genuine Progress Indicator 211
  Human Development Index 211–212
  qualitative measures 210–211
sustainable 195, 245
Sustainable Development Goals (SDGs
  targets for health and wellbeing 555
Sustainable Development Goals (SDGs) 519, 544, 552
Syria, impact of conflict on wellbeing 569–573
Syrian Arab Republic 572–573

T

taboo 156, 162
tariffs 139, 149, 208, 232, 245
taxation 225, 245
technology 258, 268, 272, 290
tenure 143, 149, 796
terra nullius 143, 149, 737, 796
territorial losses 623
the League of Nations 624–628
  faith in 625–628
  weaknesses of 624–625
Theophanous v. Herald and Weekly Times (1994) 131
the Treaty of Versailles 622–623
Third Reich 671, 722
Tobruk 698
Tobruk and El Alamein 698
timeline 616
timelines 598
topographic maps
  aerial photograph vs 311–312
topsoil 378, 427
Torres Strait Islander
  community today 758–759
  gaining vote 760–761
  national organisations 761–762
  struggles for recognition and rights 760–763
  Torres Strait Regional Authority 762–763
  World War II discrimination 760
Torres Strait Islanders Act 1939 760
Torres Strait Regional Authority (TSRA) 762–763
trade 139, 149, 176–177, 191
trade liberalisation 232–233
training 277, 291
training walls 454, 462
transport 227
treaty 719–720
treaty 135, 149, 745, 796
tried in absentia 722
Trigwell v. State Government Insurance Commission 126
triple bottom line 283, 291
TSRA. *see* Torres Strait Regional Authority (TSRA)
tunnel erosion 385–386
turbid 386, 427
twenty-first century wellbeing 511

U

ultra vires 131, 149
unconstitutional 746, 796
unemployment 238
  causes of 201–203
  effects of 203–205
  measuring 199–200
  reduction of 198
unfettered 734, 796
unicameral 84, 114
United Fronts 676, 722
United Nations (UN) 103–107
  Australia and 705–706
  Australia's role 103–107
  human rights, role of 565
  peacekeepers 105
uniting fascists 674–676
United States 719–720
  and Britain relations 719–720
  Freedom Rides in 747–749
  gain momentum, protests in 747
  intolerance in 629
Universal Declaration of Human Rights 135–137, 565, 589
unnecessary campaigns 700
UN report 586–588
upskilling 288–290, 291
urban decline 481–485
  environmental factors 481–485
  factors in 481–485
  human factors 482
urban environment 495
  atmosphere effects on 467
  challenges for sustainable 486–489
  expansion of cities 470–474
  hydrosphere effects on 468
  impacts of growth 471–477
  influence of technology 486
  interconnections between biophysical and 467
  lithosphere effects on 469–471
urban growth 474–480
  case studies in 474–480
  Mumbai 478
  Perth 474
urban infilling 476, 477–478, 495
urban renewal 495
urban sprawl 471, 495
USSR 637, 645

V

Venice 484–486
Vietnam, salinity 395–397
visual sources, World War II 655–657
victory in Pacific 714–715
Volunteer Defence Corps 705–706

W

Wacky weather 370–372
wants, scarcity 172, 191
war crimes and retribution 715–717
  Holocaust 716
  Japanese war crimes 715–716
  Nazi and fascist war crimes 716–717
  Nuremberg war crimes trials 716–717
war in Europe and North Africa 688–696
water rights 468, 495
water security 468, 495
water supply 532–535
watertable 379, 427
wealth, and wellbeing 510–513
weathering 384, 427
weed 410, 427
Weimar Republic 657, 722
welfare 634, 645
welfare benefits 240
wellbeing 505, 544
  Australia's assessment of 513–528
  describing development 509–510
  good life 505–509
  Gross National Happiness 512–513
  in Australia 534–540
  in India 523–527
  life expectancy and 514–523
  measures of 511–515
  measuring twenty-first century wellbeing 511
  multiple component index 510
  poverty 527–534
  understanding and measuring 505–510
  using indicators 506–509
  wealth and 510–513

Western Australia v. Commonwealth 144
Westminster system 55, 84, 111
White Russians 637, 645
widening powers 707
Wik case 772–773
wind erosion 386
Wireless Telegraphy Act (1905) 129
withholding tax 226
Women's Auxiliary Australian Air Force (WAAAF) 710
Women's Royal Australian Naval Service (WRANS) 710
work 596
work experience 300
work-life balance 278, 291
workplace ethics 281, 291
World Happiness Report 214–215
World Heritage Properties Conservation Act 1983 138
World War II 680–690
  begining of 680–690
  British Empire stands alone 690–691
  commemorating 720–725
  commemoration and contested debates 720–724
  contested debates about 722–724
  discrimination 760
  end of war 712–715
  Germany invades Russia 693–694
  links with times 650
  nuclear bombs 715
  Pacific War 694–699
  turning points and counter-offensives 699–697
  victory in Europe 712–714
  visual sources 654–655
  war in Europe and North Africa 688–696
writing essays 63–64
written sources 654–655
  World War II 654–655
written sources and artefacts 654–655

Y

Yirrkala petition 764–766