DARLINGTON | MRAZ | PHELAN | RICHARDSON

JACARANDA

HUMANITIES ALIVE

VICTORIAN CURRICULUM v2.0

VICTORIAN CURRICULUM

THIRD EDITION

7

learn on
www.jacplus.com.au

jacaranda
A Wiley Brand

JACARANDA

HUMANITIES ALIVE 7

VICTORIAN CURRICULUM | THIRD EDITION

ROBERT DARLINGTON
JUDY MRAZ
MATTHEW RICHARDSON
CATHY BEDSON
JEANA KRIEWALDT
ANNE LOW
SIMON PHELAN
BENJAMIN ROOD
ALEX SCOTT

CONTRIBUTING AUTHORS
BENJAMIN WHITE

VICTORIAN CURRICULUM v2.0

jacaranda
A Wiley Brand

Third edition published 2025 by
John Wiley & Sons Australia, Ltd
Level 4, 600 Bourke Street, Melbourne, Vic 3000

First edition published 2017
Second edition published 2020

Typeset in 10/13 pt HelveticaNeueLTStd

© John Wiley & Sons Australia, Ltd 2025

The moral rights of the authors have been asserted.

ISBN: 978-1-394-33944-0

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 images: © Peter Ptschelinzew/Alamy Stock Photo

Illustrated by various artists, diacriTech and Wiley Composition Services

Typeset in India by diacriTech

NATIONAL LIBRARY OF AUSTRALIA

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

The Publishers of this series acknowledge and pay their respects to Aboriginal Peoples and Torres Strait Islander Peoples as the traditional custodians of the land on which this resource was produced.

This suite of resources may include references to (including names, images, footage or voices of) people of Aboriginal and/or Torres Strait Islander heritage who are 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.

It is strongly recommended that teachers examine resources on topics related to Aboriginal and/or Torres Strait Islander Cultures and Peoples to assess their suitability for their own specific class and school context. It is also recommended that teachers know and follow the guidelines laid down by the relevant educational authorities and local Elders or community advisors regarding content about all First Nations Peoples.

All activities in this resource have been written with the safety of both teacher and student in mind. Some, however, involve physical activity or the use of equipment or tools. **All due care should be taken when performing such activities.** To the maximum extent permitted by law, the authors and publisher disclaim all responsibility and liability for any injury or loss that may be sustained when completing activities described in this resource.

The publisher acknowledges ongoing discussions related to gender-based population data. At the time of publishing, there was insufficient data available to allow for the meaningful analysis of trends and patterns to broaden our discussion of demographics beyond male and female gender identification.

Contents

Meet our author team vi
About this resource ix
Acknowledgements xvi
Understanding cognitive verbs ..... online only

HISTORY

1 Historical concepts and skills 1

1.1 Overview 2
1.2 Historical concepts and skills 4
1.3 **SkillBuilder: Historical questions** ..... online only
1.4 **SkillBuilder: Chronology** ..... online only
1.5 **SkillBuilder: Using historical sources** ..... online only
1.6 **SkillBuilder: Continuity and change** ..... online only
1.7 **SkillBuilder: Causes and consequences** ..... online only
1.8 **SkillBuilder: Historical significance** ..... online only
1.9 **SkillBuilder: Communicating** ..... online only
1.10 Review 13

2 Deep Time to modern era 17

2.1 Overview 18
2.2 How do we learn about Deep Time in Australia? 20
2.3 What is meant by Country and creation? 24
2.4 How has landscape and life changed? 28
2.5 Living with the megafauna 31
2.6 What is connection to Country and kin? 36
2.7 What beliefs and values shaped everyday life? 40
2.8 How did trade and technology develop in ancient Australia? 45
2.9 How was land managed? 51
2.10 How do we care for Country and Place? 56
2.11 How is connection to culture and Country continuing? 62
2.12 Inquiry: Should we return ancestral remains from museums? 66
2.13 Review 68

3 Ancient Egypt 73

3.1 Overview 74
3.2 How do we know about ancient Egypt? 76
3.3 Why was the River Nile so important? 80
3.4 What was Egyptian society like? 85
3.5 What did ancient Egyptians believe? 92
3.6 What is the truth about the pyramids? 97
3.7 Who were Tutankhamun, Akhenaten and Nefertiti? 102
3.8 What were the effects of war and trade? 106
3.9 Rameses II — Egypt's greatest pharaoh? 110
3.10 What should we thank the Egyptians for? 115
3.11 Inquiry: How have powerful women been recorded and treated in history? 118
3.12 Review 121

4 Ancient Greece online only

4.1 Overview
4.2 How do we know about ancient Greece?
4.3 Who were the Minoans and Mycenaeans?
4.4 What was the Greek 'Dark Age'?
4.5 How were Athens and Sparta governed?
4.6 What was life like in Sparta?
4.7 What was life like in Athens?
4.8 What do we know about Greek laws, myths, gods and oracles?
4.9 What were the Olympic Games?
4.10 How was Greece changed by wars?
4.11 What is the heritage of ancient Greece?
4.12 Inquiry: Did the Spartans really kill their weak babies?
4.13 Review

5 Ancient Rome 127

5.1 Overview 128
5.2 How do we know about ancient Rome? 130
5.3 How did Rome become so powerful? 134
5.4 How did the Roman Empire grow? 138
5.5 Why was the Roman army so successful? 142
5.6 How was Rome ruled? 145
5.7 How brutal was Roman slavery? 150
5.8 What was it like to live in the Roman Empire? 153
5.9 What did ancient Romans believe about death? 158
5.10 How did ancient Roman laws and religion change? 160
5.11 Why did the Roman Empire fall? 165
5.12 What is Rome's heritage? 169
5.13 Inquiry: How bad was Emperor Nero? 173
5.14 Review 176

6 Ancient India

online only

6.1 Overview
6.2 How do we know about ancient India?
6.3 What is the geography of India?
6.4 What are the lost cities of the Indus Valley?
6.5 New people, new ideas
6.6 What was significant about the Mauryan Empire?
6.7 Who was Ashoka the Great?
6.8 What was the social structure of Ancient India?
6.9 Inquiry: What was behind Ashoka the Great's sudden change in leadership style?
6.10 Review

7 Ancient China 183

7.1 Overview ... 184
7.2 How do we know about ancient China? ... 186
7.3 How did China's civilisation begin? ... 189
7.4 What were life and death like in ancient China? ... 193
7.5 How did China's civilisation affect its environment? ... 198
7.6 What were the influences of Confucianism, religions and laws? ... 201
7.7 How did the first emperor change China? ... 205
7.8 Why did the Han dynasty rise and fall? ... 210
7.9 What is the heritage of ancient China? ... 215
7.10 Inquiry: How should we judge the legacy of Qin Shihuang? ... 219
7.11 Review ... 221

GEOGRAPHY

8 Geographical concepts and skills 227

8.1 Overview ... 228
8.2 Geographical concepts and skills ... 230
8.3 **SkillBuilder: Geographical inquiry** ... online only
8.4 **SkillBuilder: Concluding and decision-making** ... online only
8.5 **SkillBuilder: Communicating** ... online only
8.6 **SkillBuilder: Using topographic maps** ... online only
8.7 **SkillBuilder: Interpreting topological maps** ... online only
8.8 **SkillBuilder: Using alphanumeric grid references** ... online only
8.9 **SkillBuilder: Drawing a climate graph** ... online only
8.10 **SkillBuilder: Creating and analysing overlay maps** ... online only
8.11 **SkillBuilder: Annotating a photograph** ... online only
8.12 **SkillBuilder: Interpreting diagrams** ... online only
8.13 **SkillBuilder: Cardinal points — Wind roses** ... online only
8.14 **SkillBuilder: Creating a concept diagram** ... online only
8.15 **SkillBuilder: Understanding satellite images** ... online only
8.16 Review ... 239

9 Water in the world 243

9.1 Overview ... 244
9.2 What type of resource is water? ... 246
9.3 How does groundwater connect people and place? ... 252
9.4 Why is water supply variable? ... 259
9.5 Investigating topographic maps: The value of water in Noosa ... 268
9.6 Does everyone have enough water? ... 271
9.7 How do we overcome water scarcity? ... 279
9.8 What are the causes and impacts of hydrometeorological hazards? ... 291
9.9 What are the causes and impacts of droughts and flooding rain? ... 297
9.10 Why does the wind blow? ... 309
9.11 What are the causes and impacts of extreme weather? ... 316
9.12 What are the causes and impacts of cyclones? ... 323
9.13 Inquiry: What is the water quality of a local waterway? ... 332
9.14 Review ... 334

10 Place and liveability 341

10.1 Overview ... 342
10.2 What is liveability? ... 344
10.3 What makes a place liveable? ... 348
10.4 Where are the most liveable cities? ... 356
10.5 What is it like to live in remote places? ... 360
10.6 Country vs city living ... 369
10.7 What makes a liveable and non-liveable city? ... 377
10.8 What makes communities liveable? ... 385
10.9 What is connection to Country? ... 391
10.10 Investigating topographic maps — Liveability in Badu and Moa ... 399
10.11 How do places change? ... 401
10.12 What is the connection between liveability and sustainable living? ... 409
10.13 How can liveability be improved? ... 413
10.14 Inquiry: What are the characteristics of liveable cities? ... 420
10.15 Review ... 422

CIVICS AND CITIZENSHIP

11 Civics and Citizenship concepts and skills 427

11.1 Overview ... 428
11.2 Civics and Citizenship concepts and skills ... 430
11.3 **SkillBuilder: Investigating contemporary Civics and Citizenship issues** ... online only
11.4 **SkillBuilder: Evaluating democratic institutions and systems** ... online only
11.5 **SkillBuilder: Participating in civic processes** ... online only
11.6 **SkillBuilder: Communicating** ... online only
11.7 Review ... 435

12 Government and democracy 439

12.1 Overview ... 440
12.2 How do political parties shape Australia's democracy? ... 442
12.3 How does Australia's parliamentary system work? ... 446
12.4 How do state and territory parliaments work? ... 450
12.5 Why do we share power between different levels of government? ... 454
12.6 How can citizens participate in Australia's democracy? ... 460
12.7 How do Australia's institutions protect our democratic freedoms? ... 464
12.8 Inquiry: How do we share the power? ... 469
12.9 Review ... 471

13 Laws and citizens 475

13.1 Overview ... 476
13.2 What are the principles of justice? ... 478
13.3 Where did our justice system come from? ... 483
13.4 How do Australian courts work? ... 487
13.5 What is a fair trial? ... 493
13.6 Can everyone access justice? ... 501
13.7 Inquiry: Can community action make a difference? ... 506
13.8 Review ... 507

14 Citizenship, diversity and identity 511

14.1 Overview ... 512
14.2 Australia's diverse society ... 514
14.3 What role does religion play in Australian society? ... 518
14.4 How do we promote cohesion in Australian society? ... 522
14.5 Inquiry: Will the Religious Discrimination Bill protect us? ... 525
14.6 Review ... 527

ECONOMICS AND BUSINESS

15 Economics and Business concepts and skills 531

15.1 Overview ... 532
15.2 Economics and Business concepts and skills ... 534
15.3 **SkillBuilder: Investigating** ... online only
15.4 **SkillBuilder: Interpreting and analysing data and information** ... online only
15.5 **SkillBuilder: Evaluating, concluding and decision-making** ... online only
15.6 **SkillBuilder: Communicating** ... online only
15.7 Review ... 541

16 How markets work 545

16.1 Overview ... 546
16.2 What are our needs and wants? ... 548
16.3 What types of businesses exist? ... 553
16.4 What is economic sustainability? ... 559
16.5 What is meant by demand and supply in the market? ... 562
16.6 What are your rights as a consumer? ... 566
16.7 What responsibilities do businesses, producers and government have to you? ... 572
16.8 Inquiry: How is Aboriginal and Torres Strait Islander Peoples economics sustainable? ... 580
16.9 Review ... 582

17 Working for a living 587

17.1 Overview ... 588
17.2 Why do people work? ... 590
17.3 What types of work are there? ... 594
17.4 How do you earn an income? ... 600
17.5 What is the role of entrepreneurs? ... 605
17.6 What responsibilities come with working? ... 608
17.7 How are Aboriginal and Torres Strait Islander Peoples entrepreneurs? ... 612
17.8 Inquiry: Who are the innovators and entrepreneurs? ... 616
17.9 Review ... 618

Glossary ... 622
Index ... 630

Meet our author team

Robert Darlington

Robert specialises in History and Economic History, serving at several schools as a teacher and Head Teacher of History. Robert is now a highly respected and full-time author and has written History resources for publishers including Kangaroo Press, Heinemann Education, Routledge, Raintree Steck-Vaughn, Harcourt Education, the ABC education website, and Jacaranda.

Judy Mraz

Judy Mraz is a respected Australian Geography educator and author, known for her significant contributions to advancing Geography education. Her work, including authoring for the Jacaranda Humanities Alive series, has had a lasting impact on Geography teaching across Australia.

Matthew Richardson

Matt Richardson is a Humanities and Commerce teacher at Ballarat High School with over 25 years' experience. Matt is the co-author of several Jacaranda textbooks in the areas of Business Management, Legal Studies, Economics and Business, and Civics and Citizenship.

Cathy Bedson

With over 35 years of teaching experience in Humanities and Civics curriculum development, Cathy has also tutored, mentored, assessed, prepared exams, and delivered professional learning for teachers.

Cathy has worked with Jacaranda for over 20 years, authoring and contributing to resources in Civics, Geography, and Legal Studies.

Jeana Kriewaldt

Jeana is a Geography/Humanities educator at the University of Melbourne, focusing on sustainability research. She has held leadership roles in schools and universities and contributed to VCAA exams and curriculum reviews. Jeana has authored textbooks for years 7 to 12.

Anne Low

Anne has taught History and English for over 40 years. Anne is co-author on a range of Jacaranda texts written for the Victorian, New South Wales, Queensland and Western Australian History syllabi. Anne's qualifications include an MA Modern History of the Asia–Pacific region.

Simon Phelan

Simon Phelan has taught at government and independent schools over the past 39 years. He is currently a Senior Commerce teacher and Year 11 Coordinator at Penola Catholic College, and Accounting Coordinator in the Faculty of Education Master of Teaching program at Melbourne University. Simon is an experienced VCAA examination assessor.

Benjamin Rood

Benjamin Rood has been teaching in the Humanities area for 18 years. Specialising in Geography, History and Civics and Citizenship, Benjamin currently teaches at McKinnon Secondary College.

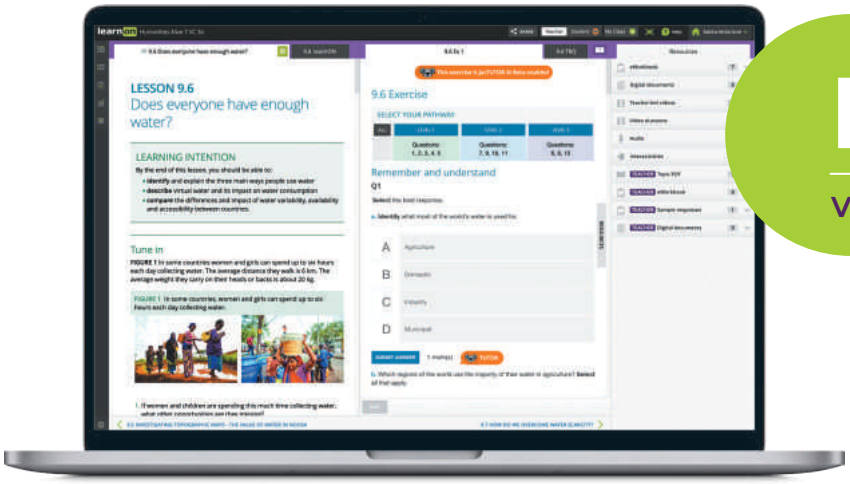
Alex Scott

Alex Scott is currently the Head of Politics at Penleigh and Essendon Grammar School Middle School campuses. He has taught Geography, Politics and History for over 25 years. He is an avid conservationist and has recently appeared on Gardening Australia promoting the Raising Rarity Program with the Victorian Royal Botanic Gardens team.

Benjamin White

Ben is the Director of Learning and Teaching at a regional secondary school in Victoria. Ben is a passionate English, Literature and Humanities teacher who enjoys making complex ideas accessible.

About this resource



NEW FOR

VICTORIAN CURRICULUM v2.0

JACARANDA

HUMANITIES ALIVE 7

VICTORIAN CURRICULUM
THIRD EDITION

Developed by teachers for students

Every lesson in the new *Jacaranda Humanities Alive* series has been carefully designed to support teachers and to help students by sparking curiosity and engagement through discussion and Humanities skills activities

Because both what and how students learn matter

Learning is personal

Students: Access lessons tailored to your needs, with interactive content and support to help you progress confidently.

Teachers: Deliver engaging, differentiated lessons with built-in scaffolding and tools to support every learner.

Learning is effortful

Students: Challenge yourself, build confidence, and grow through purposeful practice on Australia's leading platform.

Teachers: Encourage persistence with tasks that develop resilience and drive meaningful learning outcomes.

Learning is rewarding

Students: See your progress in real time, recognise your strengths, and focus on where to improve.

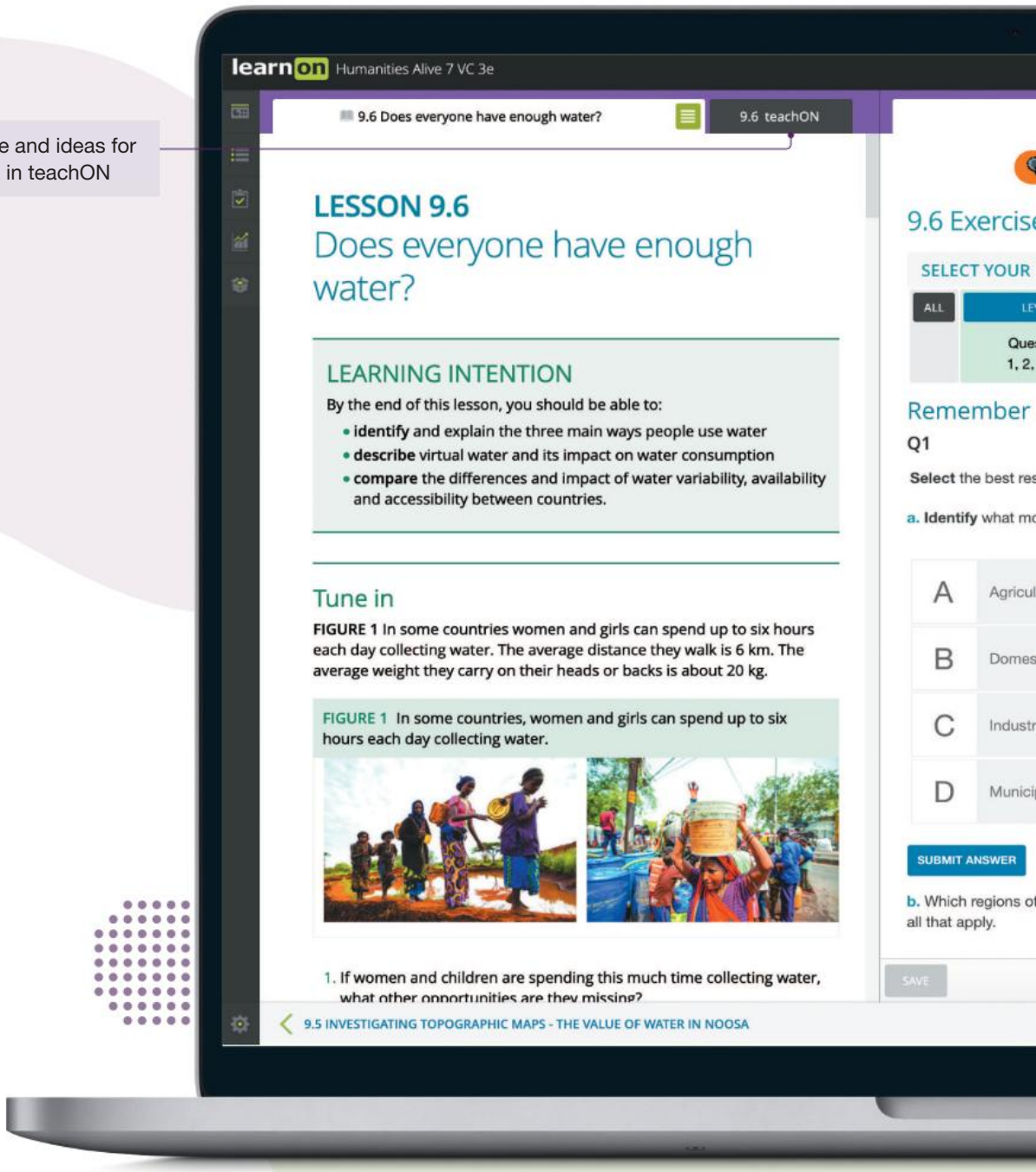
Teachers: Use rich analytics to track growth and target support exactly where and when it's needed.

Learn online with Australia's most

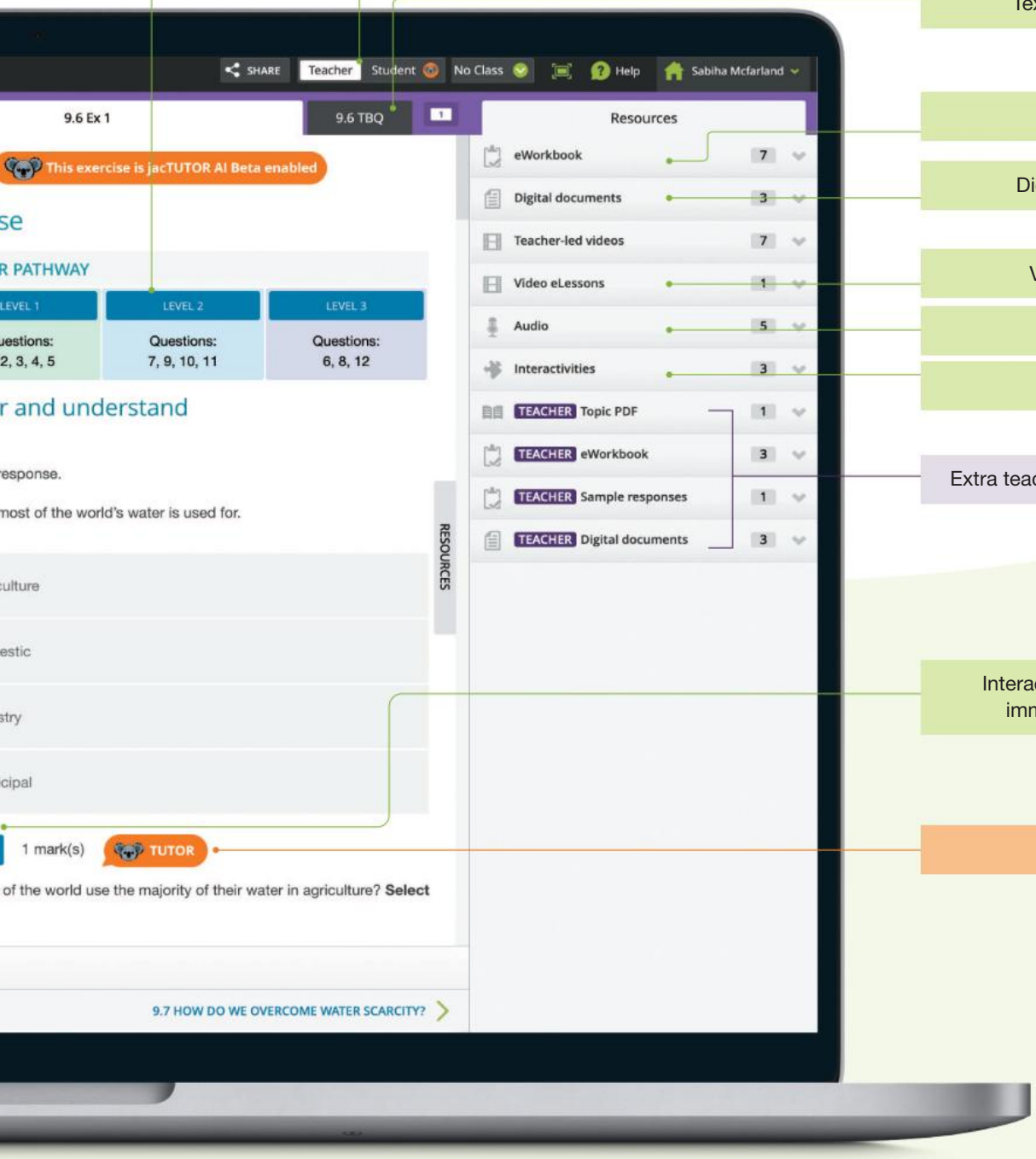
Everything you need for each of your lessons in one simple view

- **New: AI-powered personal tutor, jacTUTOR**
- **Trusted, curriculum-aligned content**
- **Engaging, rich multimedia**
- **Deep insights into progress**
- **Immediate feedback for students**
- **A full suite of lesson resources for teachers**

Practical teaching advice and ideas for each lesson provided in teachON



powerful learning tool, learnON



Differentiated question sets

Teacher and student views

Textbook questions

eWorkbook

Digital documents

Video eLessons

Audio

Interactivities

Extra teaching support resources

Interactive questions with immediate feedback

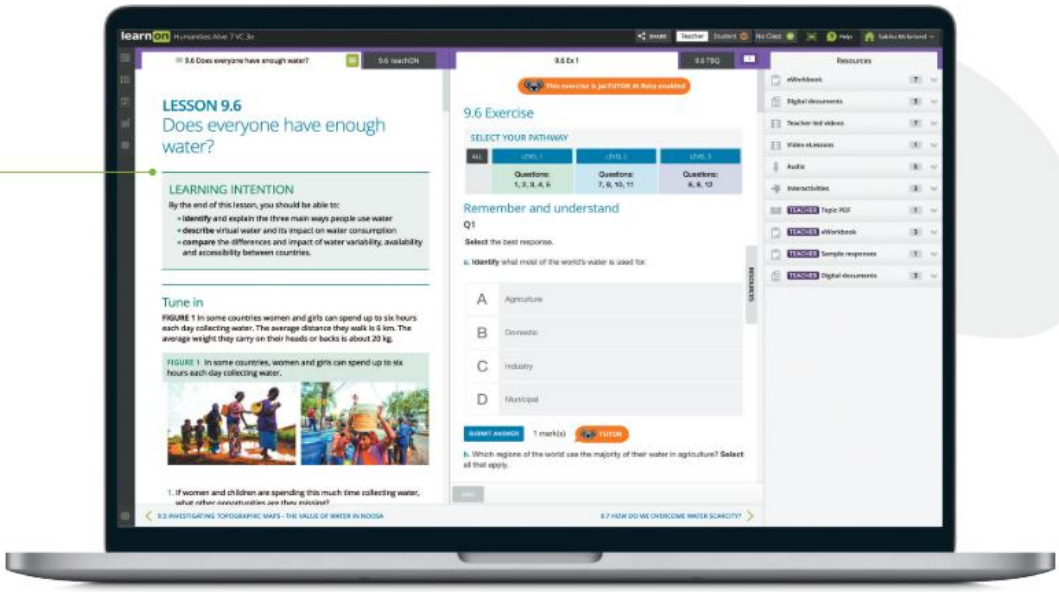
jacTUTOR

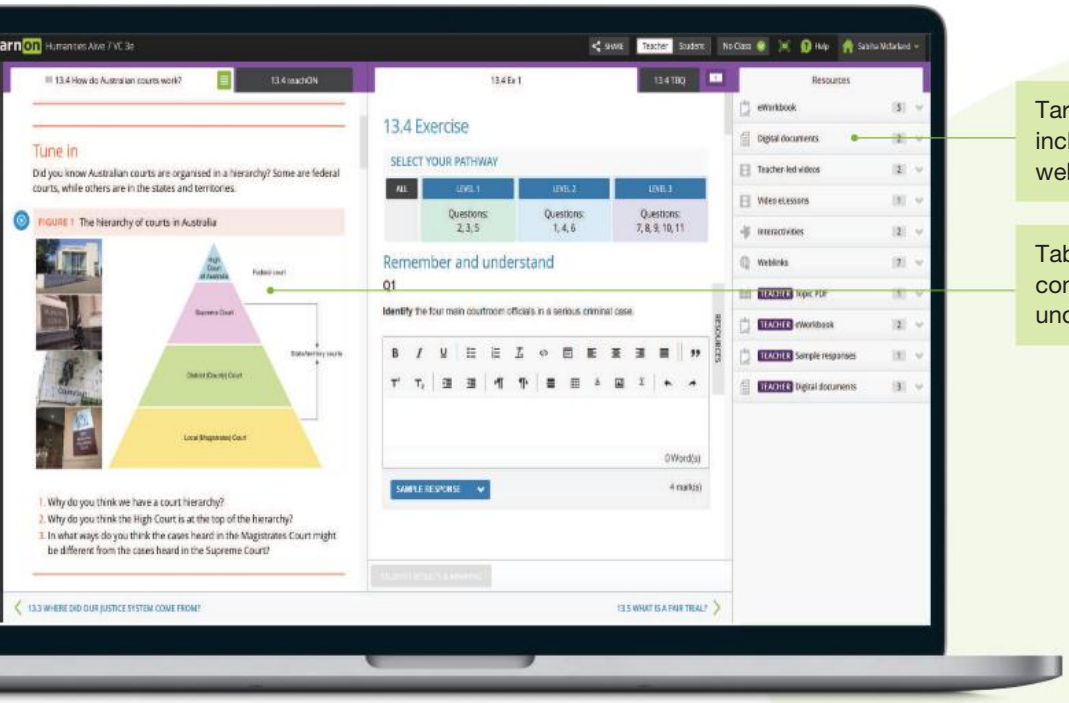
Get the most from your online resources

Online, these new editions are the complete package

Trusted Jacaranda theory, plus tools to support teaching and make learning more engaging, personalised and visible.

Embedded interactivities and videos enable students to explore concepts and learn deeply by 'doing'.

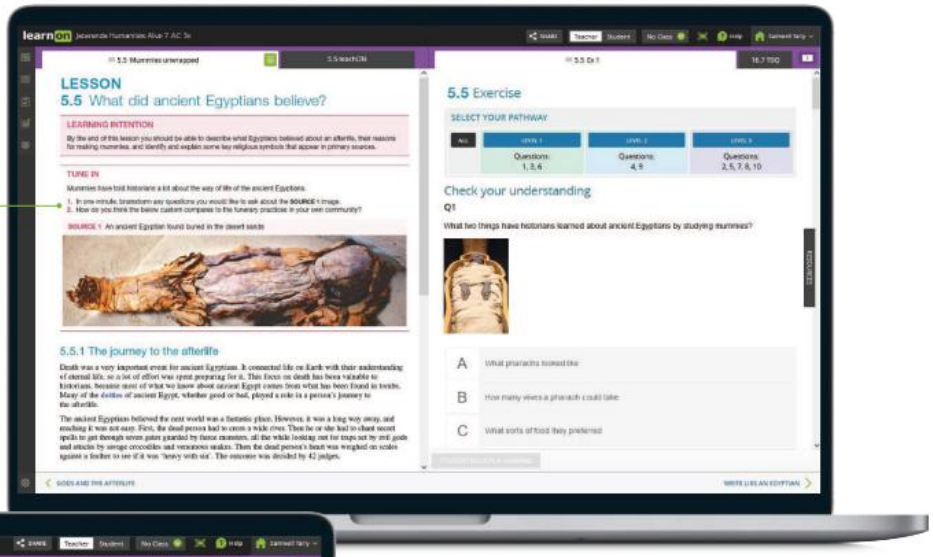


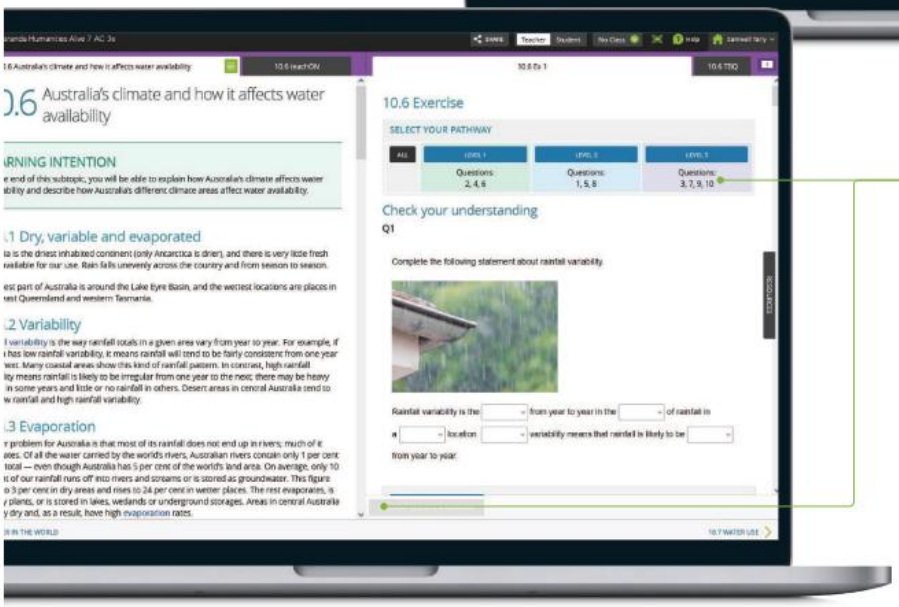


Targeted digital resources include video eLessons and weblinks.

Tables and images break down content, allowing students to understand complex concepts.

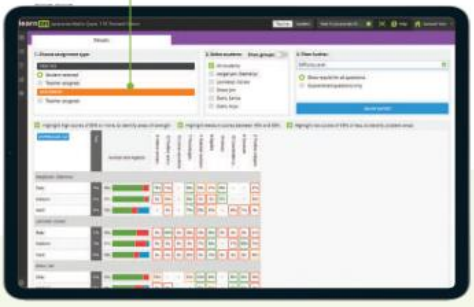
Brand new! Tune in activities to spark interest and kick off every lesson with discussion and source analysis

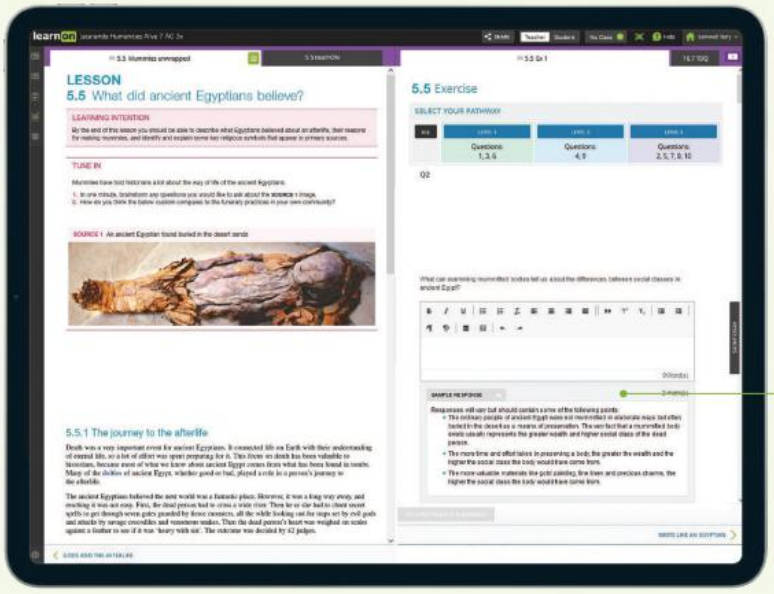




Three differentiated question sets, with immediate feedback in every lesson, enable students to challenge themselves at their own level.

Instant reports give students visibility into progress and performance.





Every question has immediate, corrective feedback to help students overcome misconceptions as they occur and get unstuck as they study independently — in class and at home.

The new jacTUTOR

An AI tutor to build confidence and get unstuck

With jacTUTOR, every student can have the help of a personal tutor when they get stuck, in class or at home. This purpose-built tool sits safely within your favourite Jacaranda resource, so guidance will always be specific to that lesson, question and curriculum.

A personal tutor for every student

Now every student can get the help they need, when they need it. jacTUTOR uses AI to create a fair and level playing field for all students.

Get guidance, not the answer

jacTUTOR doesn't just give the answer away. Students are given prompts to help understand what they should be asking to get to a correct answer.

Combat anxiety

Afraid to raise a hand or ask more questions? With jacTUTOR, students will find a safe space to ask questions, get clarification and try again.

A safe space

To keep students safe, any concerning or inappropriate comments are automatically flagged and sent to their teacher.

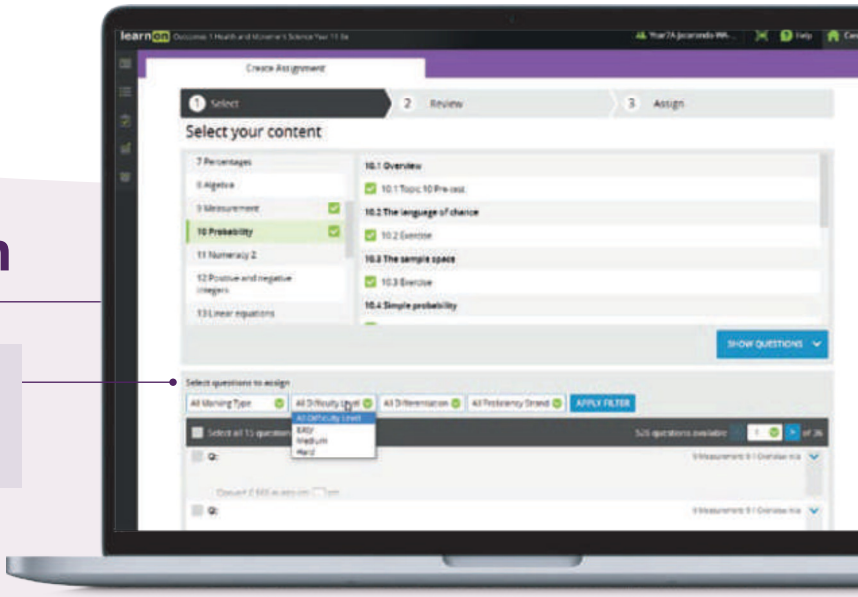
A wealth of teacher resources

A wealth of enhanced teaching-support resources for every lesson, including:

- work programs and curriculum grids
- practical teaching advice
- three levels of differentiated teaching programs
- quarantined topic tests (with solutions)

Customise and assign

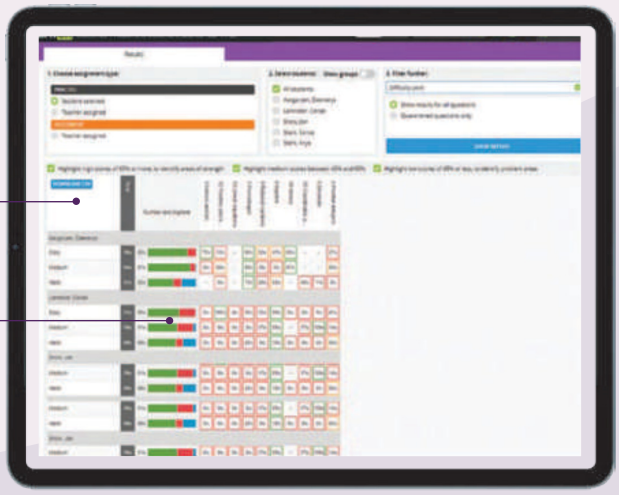
An inbuilt testmaker enables you to create custom assignments and tests from the complete bank of thousands of questions for immediate, spaced and mixed practice.



Reports and results

Data analytics and instant reports provide data-driven insights into progress and performance within each lesson and across the entire course.

Show students (and their parents or carers) their own assessment data in fine detail. You can filter their results to identify areas of strength and weakness.



Acknowledgements

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.

The full list of acknowledgements can be found here:
www.jacaranda.com.au/acknowledgements/#2025

1 Historical concepts and skills

LESSON SEQUENCE

1.1 Overview 2
1.2 Historical concepts and skills 4
1.3 SkillBuilder: Historical questions ..... online only
1.4 SkillBuilder: Chronology ..... online only
1.5 SkillBuilder: Using historical sources ..... online only
1.6 SkillBuilder: Continuity and change ..... online only
1.7 SkillBuilder: Causes and consequences ..... online only
1.8 SkillBuilder: Historical significance ..... online only
1.9 SkillBuilder: Communicating ..... online only
1.10 Review 13

LESSON 1.1 Overview

INQUIRY QUESTION

Why is the ancient world important to study, and what skills do I need to understand History?

Our study starts in a period called the Old Stone Age, when the ancestors of every modern human on our planet lived in Africa. We then follow the path of these human-like species, who migrated out of Africa less than 100 000 years ago. Most archaeologists believe that Aboriginal and Torres Strait Islander Australians arrived in Australia between 50 000 and 65 000 years ago and possibly much earlier, spreading throughout the land over many thousands of years. Approximately 11 000 years ago, people in the Middle East changed from hunting and gathering to a way of life based on farming. Gradually, farming spread, enabling people to live in settled communities from times around 3000 and 2000 BCE.

learnon

- **eWorkbook**
  Customisable worksheets for this topic
- **Digital document**
  Key terms glossary
- **Video eLesson**
  History concepts and skills

This timeline is divided into 1000-year sections.

Key dates and brief descriptions of events are given.

The timeline is broken to show a break in the time scale.

c. 2900 BCE Earliest known writing recorded in Mesopotamia.

c. 2550 BCE Great Pyramid built at Giza in Egypt.

2000 BCE Knossos palace built on Crete.

1279 BCE Rameses the Great becomes pharaoh of Egypt.

1100 BCE Decline of Mycenaean civilisation on Greek mainland

776 BCE First known Olympic Games

356 BCE Alexander the Great is born.

BCE 3000 2000 1000

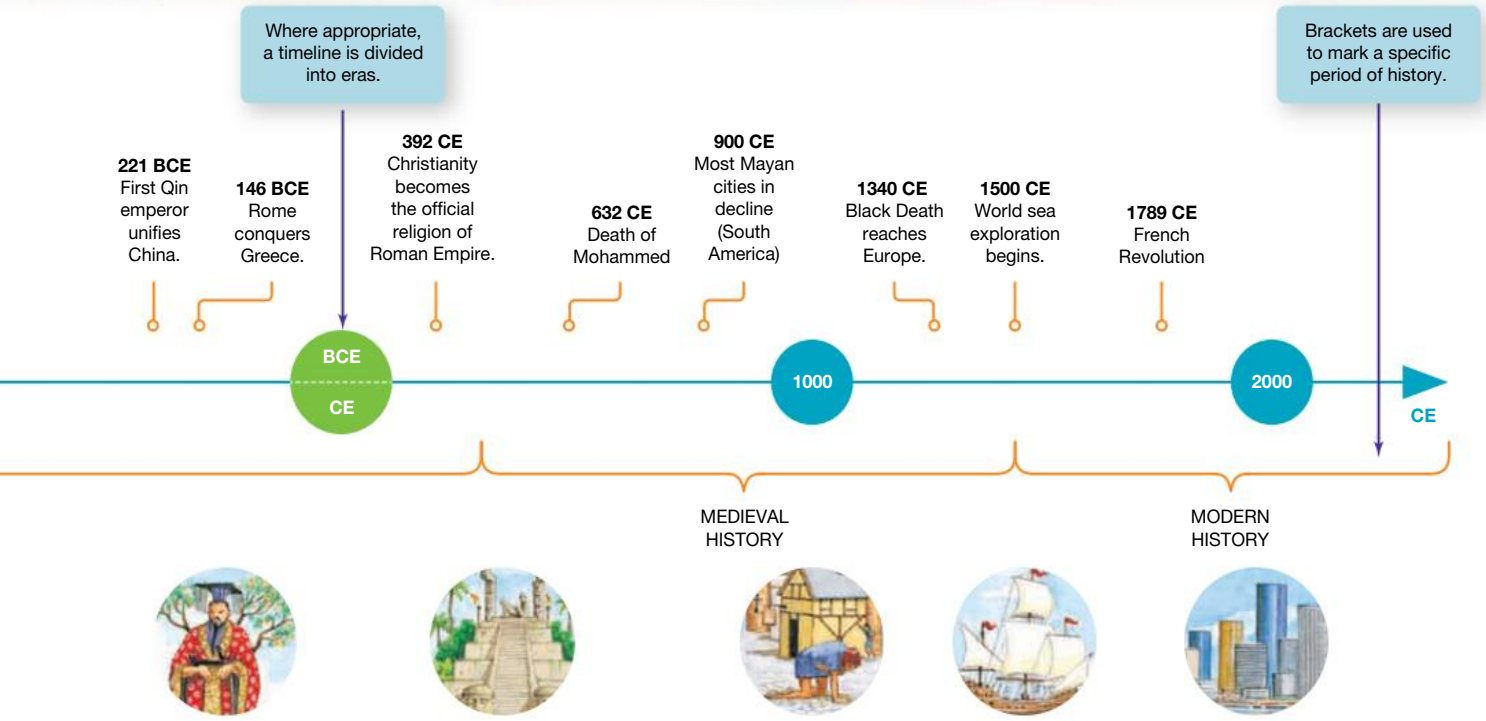
PREHISTORY

ANCIENT HISTORY

SkillBuilder

Use the SkillBuilder activities to develop these Historical concepts and skills:

- HISTORICAL QUESTIONS
- CHRONOLOGY
- USING HISTORICAL SOURCES
- CONTINUITY AND CHANGE
- CAUSES AND CONSEQUENCES
- HISTORICAL SIGNIFICANCE
- COMMUNICATING



LESSON 1.2 Historical concepts and skills

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** the historical concepts and skills
- **explain** why they are important.

1.2.1 Introduction

Although the ancient **civilisations** disappeared a long time ago, much **evidence** of the ancient past has been left behind. Our modern society can trace aspects of its origins back to people or civilisations that existed thousands of years ago.

We can thank the ancient Egyptians for some aspects of modern architecture and the art of writing; the ancient Greeks for developments in medicine, mathematics, science and philosophy; the ancient Romans for their influence on art and architecture and our modern political and legal system; and the ancient Chinese for many technologies, including the compass, paper and printing, and gunpowder.

Our societies operate in many ways that are similar to those that existed thousands of years ago. We, as historians, can study similarities from the evidence that these societies left behind, examining such things as art and religion, currency, laws and regulations, trade routes, writing and language.

1.2.2 Historical concepts and skills

Historians study past civilisations, cultures and societies to understand how people lived, their ideas, customs, rulers and livelihoods. They examine sources to explain how lives were shaped by others and events. This topic covers concepts and skills related to discovering **ancient history** in Australia and worldwide, exploring the development of early societies. You will become proficient in these concepts through future lessons.

TABLE 1 The concepts and skills that you will use in History.

Concepts and skills	Description
Asking historical questions	Shaping our understanding of the past by the questions we ask and the responses we receive.
Sequencing chronology	Arranging historical events in order of time.
Using historical sources as evidence	Investigating written and non-written materials (sources) that can give us information about the past; evidence is the information we get from sources that is useful to our investigations.
Identifying continuity and change	Considering the parts of life or society that have stayed the same and those that have changed over a period of time.
Analysing cause and consequence	Looking at the relationship between historical events or actions; e.g. when one event or action happens because of the other.
Determining historical significance	Considering the importance given to events of the past.
Communicating	Being able to express our interpretations of the past by constructing a historical argument using knowledge and evidence.

SOURCE 1 We can also view the concepts and skills diagrammatically.

The concepts and skills you will learn while studying History are also important in many careers. These skills will help you to:

- carry out research
- draw conclusions and make decisions based on evidence
- recognise the difference between fact and opinion
- understand that more than one way of thinking about any problem is usually possible
- think critically
- communicate effectively.

A knowledge of history is important in our everyday lives too. And history gives many people great personal pleasure. How much more enjoyment do people derive from travel, books and movies when they know about the history that shaped the places they visit, or the stories they read or watch on a screen?

1.2.3 Historical questions

When studying History, our investigation of the past is guided and shaped by the questions we ask. We can ask a range of different questions to find the desired information we seek. Knowing how to phrase these questions assists our research of the past.

Questions can be developed using the historical concepts and skills listed in this topic, such as **cause and consequence**, **continuity and change**, **significance** and evidence.

TABLE 2 Questions that could be commonly asked in the History classroom.

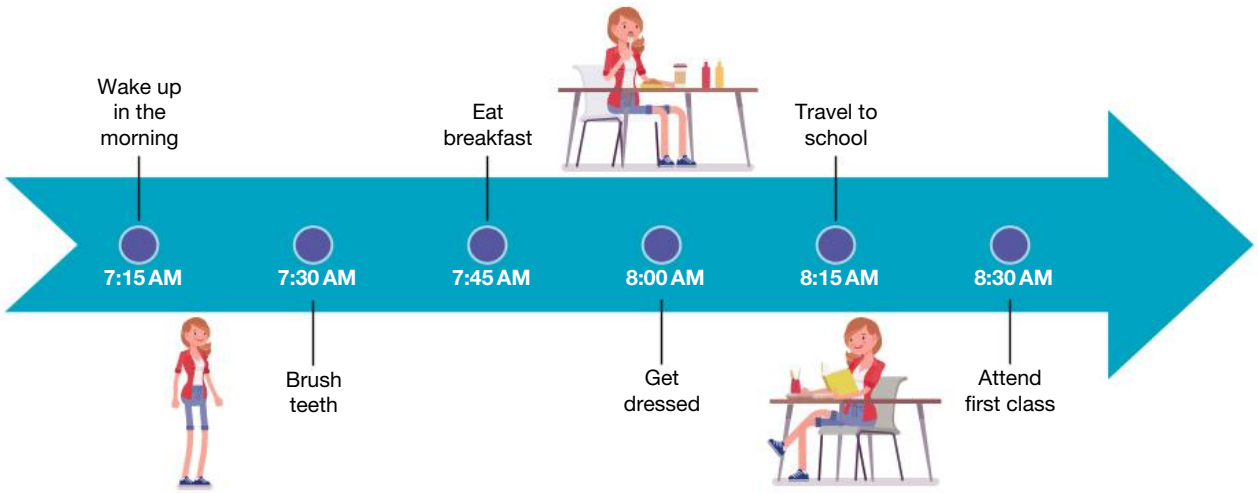
Historical thinking concepts and skills	Example of questions
Sequencing chronology	When does my timeline of events begin and when does it end? What event appears before ... and what happened after? What event caused ... to occur?
Using historical sources as evidence	Who wrote this source? Why did they write this source? What does this source tell me about the historical period I am studying, and what does it not tell me?
Identifying continuity and change	At the beginning of the historical period I am studying, what was life like in regard to … (power structures/economy/people/ideas/technology)? By the end of the historical period I am studying, what changed in regard to … (power structures/economy/people/ideas/technology)? What/who caused these changes to occur? How quickly did these changes occur? What remained the same? What/who stopped these things from changing?
Analysing causes and consequences	What were the short-term causes of …? What were the long-term causes of …? What were the political/economic/environmental causes of …? What were the immediate consequences of ...? What were the long-term consequences of …? What were the political/economic/environmental consequences of …?
Determining historical significance	Why is this person/event/idea/movement important? How important was this person/event/idea/movement to those living during the historical period? How many people were affected by this person/event/idea/movement? How is this person/event/idea/movement remembered today?

1.2.4 Chronology

Chronology involves recording events in order of time. It is an important skill because historians need to know the order in which events occurred so they can get a sense of what happened. A story will make more sense if we start at the beginning and work towards the end. Historians also sequence events chronologically to track changes that have happened over time and the causes of these changes.

A historian will use a **timeline** to see how one event might have contributed to another. A timeline representing the sequence of events in your morning can be seen in **SOURCE 2**.

SOURCE 2 A simple timeline representing the sequence of events during a typical morning



1.2.5 Using historical sources

Evidence refers to the facts that indicate whether something is true or really happened. Sources are needed to prove or disprove events from the past.

Sources

Sources are any written or non-written materials that can be used to investigate and provide information about the past. We can use sources from the time we are studying, and after the time, to explore the different points of view, or **perspectives**, of people from the past.

Primary and secondary sources

Historians can use two types of sources to investigate events from the past.

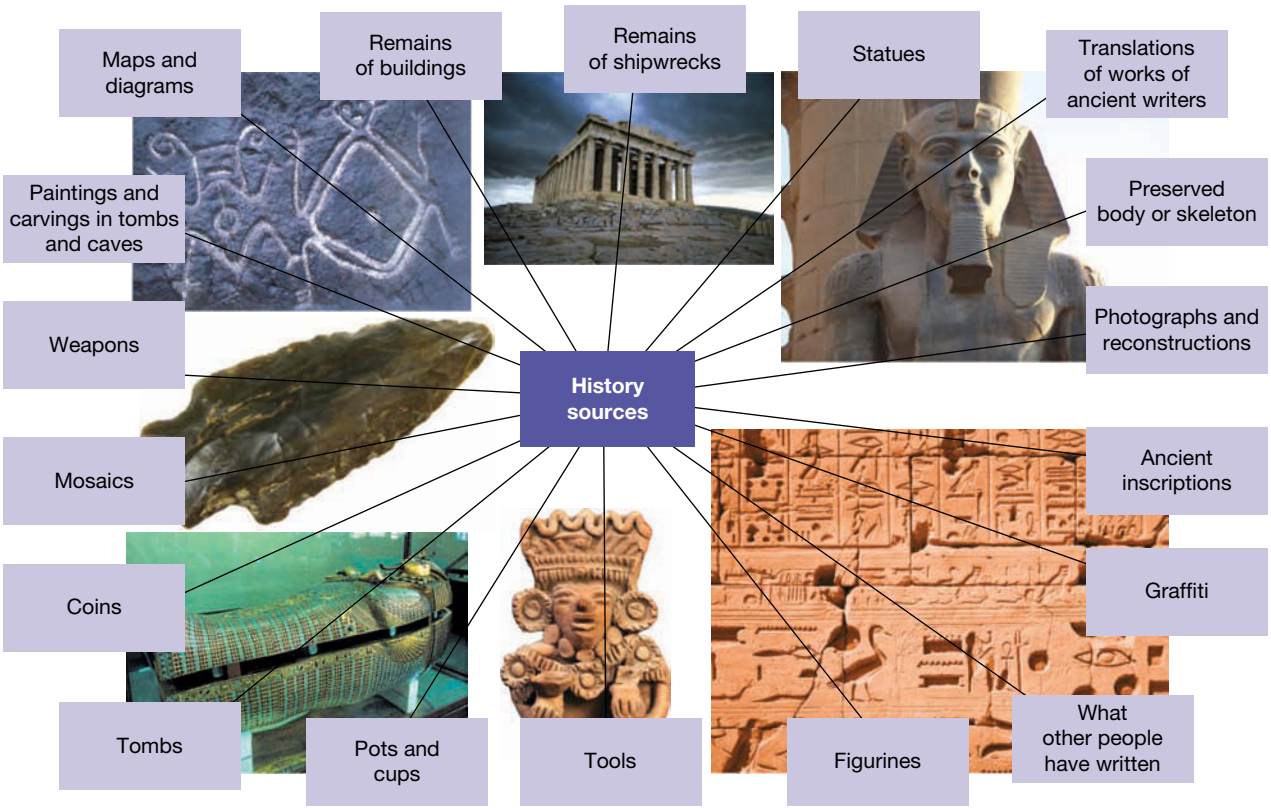
- **Primary sources** were created or written in the period that the historian is investigating.
- **Secondary sources** are written or created by people living after the period that the historian is studying.

Primary sources might include bones, stone tools, art, photographs or many other traces. Written primary sources can include such things as poems, songs, letters, newspapers, speeches, myths and legends.

Secondary sources can include books, articles, websites, models, timelines, computer software and documentary films. To create secondary sources, historians often:

- locate information in primary sources
- interpret that information
- use it to explain what happened.

SOURCE 3 The many different types of primary source



Analysing evidence

When using historical sources as evidence, historians need to ask questions of each source, such as: Where did the source come from (origin)? Why was it created (purpose)? A source may be a fact or someone's opinion — that is, it could be **biased**. One way to test sources for reliability is to compare them with other sources. If this evidence leads to the same conclusion, we call it 'supporting evidence'. If it leads to different conclusions, we have 'contradictory evidence'.

When we use sources to try to find out about the past, we must ask some questions. For example:

- What type of source is this?
- Who wrote or created this source and when was it written or created?
- Why was this source written or created?
- What evidence does the source provide?
- What was happening at the time the source was written or created?
- Can I trust the source?

1.2.6 Continuity and change

When studying different societies, historians can see that some aspects of life have remained the same over time, while other aspects of life have changed dramatically. This concept is known as 'identifying continuity and change'.

Change refers to something that is different from what has occurred in the past. It may occur over a long period of time or may occur dramatically and suddenly.

Continuity refers to the things that endure, relatively unchanged, over time. You will find that many things remain the same across long periods in history. Sometimes these continuities have lasted into modern times.

SOURCE 4 The ruins of an ancient house at Sardis, located in present-day Türkiye (formally Turkey)

SkillBuilder discussion

Continuity and change

1. Consider house building. Look at the images — what are the main changes in construction?
2. What remains the same?

SOURCE 5 A modern suburban house in Western Australia

1.2.7 Causes and consequences

Once historical events have been placed into chronological order, investigating how one event has caused another event and how events are connected becomes easier. We can also look at the developments that have happened in both the short term and over a longer period of time.

In history, events do not occur without reason. Every event will have a cause and is likely to result in several effects or consequences. Identifying patterns of cause and effect is an essential skill for historians that allows them to explain how and why things happened in the past.

Causes may include people, societies, politics, beliefs, economics or any other historical factor. Likewise, effects can include impacts on people, societies, politics, beliefs, economics or any other historical factor. Not all causes leading to a specific event are equally significant — some causes may have more influence than others.

Some causes occur immediately before an event begins, while others may have existed for several years, decades or centuries before the event. Some effects occur immediately after an event or action, while others may occur years, decades or centuries following the event or action.

1.2.8 Historical significance

Historical significance relates to the importance of particular aspects of the past such as events, individuals or groups, developments, ideas or movements, and historical sites. We need to make judgements about what is important and what is less important.

When we try to establish the significance of an aspect of the past, we must consider a number of questions. For example:

- How relevant was it to people living at that time?
- How many people were affected?
- How did it change people's lives?
- How long were people's lives affected?
- How important and long lasting were the consequences?
- How relevant is it to the contemporary world?

SkillBuilder discussion

Historical significance

What aspects of your life as a student do you consider to be significant? For example, consider access to technology, the physical state of the space you use, the resources you can access or the subjects that you are studying.

Do you think that the things you consider to be significant were important 10, 50 or 100 years ago? Do you think they will be significant 50 years from now?

1.2.9 Communicating

As a result of our investigations, we can apply our new knowledge of a historical period and communicate it, using facts and evidence. We can present our interpretations of the past in a variety of ways including written and multimodal presentations, oral presentations and other methods. Use an appropriate and clear format to communicate historical findings, including subheadings, guiding questions and formal language.

Furthermore, as historians, we must acknowledge the sources we use and the interpretations of other historians in our work. This is called referencing. There are several guidelines to follow when referencing. Often, your school or teacher will have you follow a particular reference guide, which explains how to create a reference list.

1.2 SkillBuilder activity COMMUNICATING

1. In small groups, **construct** a list of ten events, places or people that you consider to be the most significant in world history. Rank them in order of historical significance and then share your responses with your classmates.
2. After you have shared your responses, **discuss** some of the reasons each of the lists is unique and what would cause the lists to be similar or different.

1.2 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 8	4, 5, 6, 9	7, 10, 11

REMEMBER AND UNDERSTAND

1. What is heritage?
   - A. A record of past events in order of time
   - B. Information that has been passed from one person to another
   - C. Everything that has come down to us from the past
   - D. Information that indicates whether something is true or really happened
2. **Describe** the difference between primary sources and secondary sources.
3. Complete the following sentences by choosing words from the box.

Contestability	theory	debate	contradict	evidence

   - a. A hypothesis is a _____ or possible explanation that has to be tested by looking for _____ that might support it and other evidence that might _____ it.
   - b. _____ is the situation when particular interpretations of the past are open to _____.
4. **Describe** a way to test primary sources for reliability.
5. **Explain** what the term 'bias' means and why we might not be able to trust a primary source.
6. a. What does it mean to empathise with the people you study?
   b. Identify the questions you might consider when trying to understand the perspectives of people in the past.

ANALYSE AND APPLY

7. Each year, many countries donate money for conservation work to preserve historical sites. Why do you think so much effort goes into conserving traces of the past?
8. Look at the mind map in **SOURCE 3** and describe each of the types of sources pictured around the mind map.

EVALUATE AND COMMUNICATE

9. Suggest what we might learn about the past from old graffiti or one of the other types of primary sources listed in the **SOURCE 3** mind map.
10. **Explain** why it might be wrong to think that primary sources are more reliable than secondary sources.
11. Today we live in a world where people are sometimes killed over differences in religion. How might a knowledge of history help bring understanding between different religions?

Answers and sample responses for this topic are available online.

LESSON 1.3 SkillBuilder: Historical questions

online only

What are historical questions?

Historical questions may be asked to evaluate historical sources, examine cause and consequence, or how or why something happened.

LESSON 1.4 SkillBuilder: Chronology

online only

What is a timeline?

A timeline is a tool that arranges events in the order they occurred. It typically includes dates and descriptive labels. Timelines can span short periods or many centuries. They may be simple lines or visually detailed with colours and images.

LESSON 1.5 SkillBuilder: Using historical sources

online only

Why is it important to use historical sources?

Almost all our knowledge of Ancient Rome comes from primary sources. Works of art and writings tell us much about ancient Roman culture. Buildings and sculptures tell us about entertainment, technology, skills, religious ideas and values. Written records tell us about Roman ideas about politics, history, law and a vast range of other subjects.

LESSON 1.6 SkillBuilder: Continuity and change

online only

What are broad patterns of change?

During any period of history, some changes happen quickly and others occur slowly. Some changes affect only limited numbers of people, while others are widespread. Broad patterns of change are patterns of change that are extensive and widespread.

LESSON 1.7 SkillBuilder: Causes and consequences

online only

How do we analyse cause and consequence?

Analysing cause and consequence involves examining why certain events happened and understanding the impact they had.

This process requires identifying the different factors that contributed to an event and evaluating their relative importance. It also involves looking at the immediate and long-term effects of the event on people, communities and broader historical developments.

LESSON 1.8 SkillBuilder: Historical significance

online only

How do we analyse the historical significance of an event or person?

Historical significance is a decision that modern people make about what is important from our past. In deciding whether something has historical significance, we can consider specific events, people, locations and ideas as being particularly important to us.

Since significance is a decision that we make, it means that different people can decide that different things are significant, or that they can disagree about the reasons a particular person, event, place or idea is important.

LESSON 1.9 SkillBuilder: Communicating

online only

How do we communicate our historical interpretations, based on evidence from sources, with the right concepts, knowledge and terms?

Communicating involves using the correct terminology and metalanguage in a sentence to discuss sources or historical skills and concepts. It is essential to developing a coherent argument about the historical event, movement or figure being discussed.

LESSON 1.10 Review

1.10.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

1.2 History concepts and skills

- Historians investigate and interpret the past.
- History helps us to understand the present and what the future may hold.
- History provides us with essential skills.
- The seven Historical concepts and skills that you will develop throughout your course are:
  - *Asking historical questions:* This involves asking questions in a way that helps to shape our understanding of the past.
  - *Sequencing chronology:* This involves understanding the sequence of historical events and placing them in a timeline. It helps you to comprehend the order in which events occurred and how they relate to each other over time. This skill is essential for constructing a coherent narrative of the past and understanding the progression of historical developments.
  - *Using historical sources as evidence:* This skill focuses on the ability to locate, analyse and interpret various types of historical sources, such as documents, artefacts and oral histories. You learn to evaluate the reliability and perspective of sources, which is crucial for constructing accurate historical accounts and understanding different viewpoints.
  - *Identifying continuity and change:* This involves identifying what has stayed the same and what has evolved over time. This skill helps you to recognise patterns and trends in history, understand the reasons behind changes, and appreciate the persistence of certain elements across different periods.
  - *Analysing causes and consequences:* This involves analysing the reasons behind historical events and their outcomes. You learn to identify and evaluate the factors that led to specific events and the short-term and long-term effects of these events. Understanding causes and consequences is key to comprehending the complexities of historical processes.
  - *Determining historical significance:* This refers to the importance of certain events, individuals or developments in history. You learn to assess the impact and lasting influence of historical phenomena, considering factors such as the scale of change, the number of people affected and the duration of the impact.
  - *Communicating:* This focuses on the ability to effectively convey historical knowledge and understanding through various forms of communication, including writing, speaking and using digital media. You learn to present your ideas clearly and persuasively, using evidence to support your arguments and engaging with different audiences.

1.10.2 Key terms

ancient history the period from the beginning of civilisation to the fall of the Roman Empire
artefact an object made or changed by humans
biased one-sided or prejudiced; seeing something from just one point of view
cause and consequence 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
chronology a record of past events in order of time, from Latin *chronos* meaning time and *logos*, meaning to work out
civilisations societies that have towns and features such as complex forms of government and religion
continuity and change the concept that while many changes occur over time, some things remain constant
evidence information that indicates whether something is true or really happened
hypothesis (plural: hypotheses) a theory or possible explanation
Latin the language of Ancient Rome and its empire

perspectives point of view or attitude
prehistory the period before writing was invented
primary sources objects and documents that were created or written in the period of time 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 (e.g. events, developments, movements and historical sites)
timeline a diagrammatic tool representing a period of time, on which events are placed in chronological order

1.10.3 Reflection

Complete the following to reflect on your learning.

Revist the Inquiry question posed in the Overview.

Why is the ancient world important to study, and what skills do I need to understand History?

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

learnon

eWorkbooks	Customisable worksheets for this topic Reflection
Digital document	Key terms glossary

1.10 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 8, 13	3, 4, 5, 9, 10	6, 7, 11, 12

REMEMBER AND UNDERSTAND

1. We study history in an effort to learn about what?
   A. Our past
   B. Our heritage
   C. Our future
   D. Our grandparents
2. What are historical sources?
   A. Written materials that provide information about the past
   B. Non-written materials that provide information about the past
   C. Stories from people who lived during the time of the event we are studying
   D. All of the above
3. How can we, as historians, test the reliability of evidence from sources?
   A. Compare them with other sources that are available
   B. Ask a teacher
   C. Ask Google
   D. Check for bias

4. Why do historians make use of chronology, sequencing and timelines?
   A. To investigate how events have happened from start to finish
   B. To investigate the relationship between different events
   C. To investigate what has changed about society and what has stayed the same
   D. All of the above
5. What must historians be able to do to identify cause and effect?
   A. Place events in chronological order
   B. Create timelines
   C. Identify patterns of cause and effect
   D. Explain the relationship between two events
6. Why do different perspectives of events occur?
   A. Differing values and attitudes
   B. Differing age and gender
   C. Differing social status
   D. All of the above
7. What does determining historical significance mean a historian can do?
   A. Explain all the important events that have taken place in history
   B. Make judgements about what is more important and what is less important
   C. Decide what is important and what is not
   D. Argue that one event is more significant than another
8. When do historical debates occur?
   A. Many sources of evidence are available about the same event.
   B. Some sources of evidence contradict other sources.
   C. Evidence is missing about an event a historian is investigating.
   D. All of the above
9. Why is gaining confidence and expertise with history skills important?
   A. Learning about our past can help us to predict what may happen in the future.
   B. Critical thinking and effective communication skills are important to employers.
   C. Knowledge of our own history is important to our everyday lives.
   D. All of the above

ANALYSE AND APPLY

10. **Explain** what a historian is doing when identifying continuity and change.
11. **Contrast** short-term causes and effects and long-term causes and effects.
12. 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? **Justify** your answer.
13. **List** three features of a well-constructed timeline.

Answers and sample responses for this topic are available online.

LESSON 1.3 SkillBuilder: Historical questions

LEARNING INTENTION

By the end of this SkillBuilder you should be able to develop key historical questions.

1.3.1 Tell me

What are historical questions?

Historical questions may be asked to evaluate historical sources, or examine cause and consequence, or they may be about how or why something happened.

Why are historical questions useful?

Historical questions allow us to critically evaluate historical sources, understand the causes and consequences of events, and explore the reasons behind historical occurrences. They guide researchers in their investigation of the past, helping them to construct detailed and accurate narratives. By asking historical questions, we can gain insights into the complexities of history and develop a deeper appreciation for the events that have shaped our world.

SOURCE 1 An example of a historical question

'What were the consequences of rising sea levels on Aboriginal and Torres Strait Islander Peoples during Deep Time?'

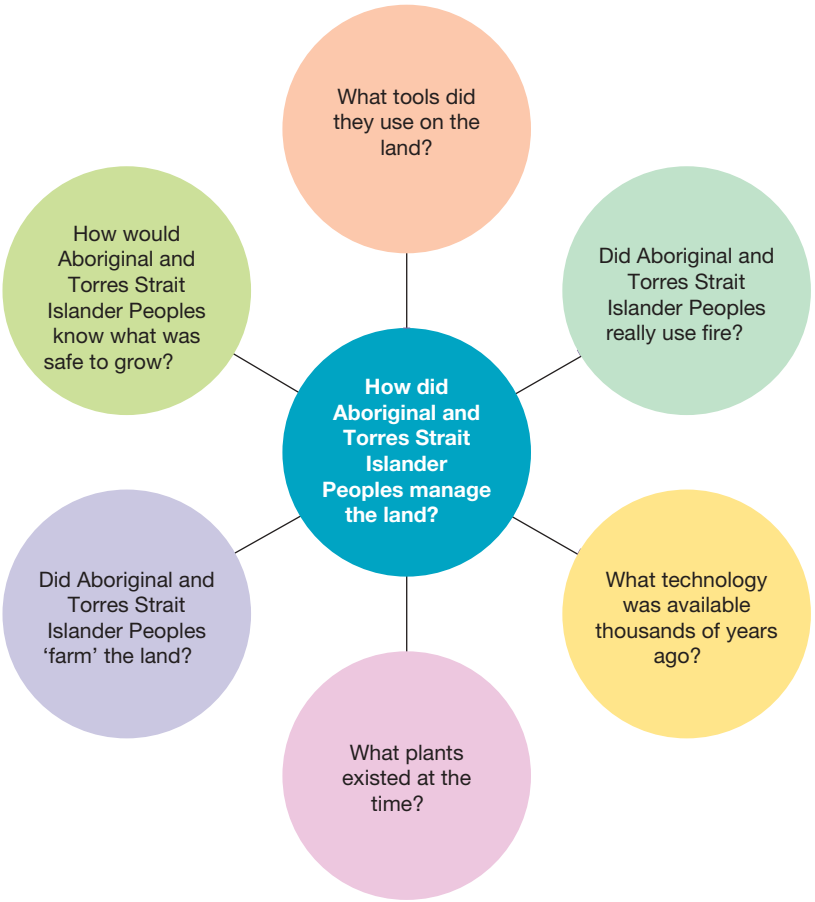
1.3.2 Show me

To develop historical questions, you will first need to choose your topic. If your topic is 'Aboriginal and Torres Strait Islander Peoples during Deep Time' a good place to start is with a mind-map to establish what you would like to know or gain a deeper understanding of.

Step 1

Mind-map a list of initial questions about a specific historical event — in this example, we could focus on how Aboriginal and Torres Strait Islander Peoples managed the land. Some questions that you might have could be:

SOURCE 2 A mind-map of some of the questions that came up in the quest to find out more about how Aboriginal and Torres Strait Islander Peoples managed the land.



Step 2

To answer the questions that you have developed, you will need to have a source to help you.

The image can already help with some of the questions — such as, what technology was available thousands of years ago? The spears in **SOURCE 3** are exactly that — technology that helps to secure food.

You may wish to use other sources in this resource or as part of internet research.

SOURCE 3 Joseph Lycett, the early nineteenth-century convict artist, painted images of Aboriginal and Torres Strait Islander Peoples' lives. Lycett's paintings show fire being used as a tool to catch animals and create grasslands. Early European explorers often noted open country with scattered trees that looked like well-tended parkland. Firestick farming created the landscape that Europeans occupied in 1788.

1.3.3 Let me do it

Complete the following activities in small groups to practise this skill.

1.3 SkillBuilder activity

1. Decide on a topic from history that you would like to inquire about to find out more.
2. Mind-map a list of initial questions about this historical event, such as its causes or what it was like.
3. a. Locate two to three historical sources related to the event.
   b. **Evaluate** the sources and determine if the initial questions can be answered with the available evidence.
   c. Based on your evaluation, you may wish to refine your initial questions by introducing some other historical concepts and skills such as cause, consequence, continuity and change. Present your list of improved questions to your class.
   d. **Discuss** how the questions have evolved and how they better address your initial historical 'inquiry'.

LESSON 1.4 SkillBuilder: Chronology

LEARNING INTENTION

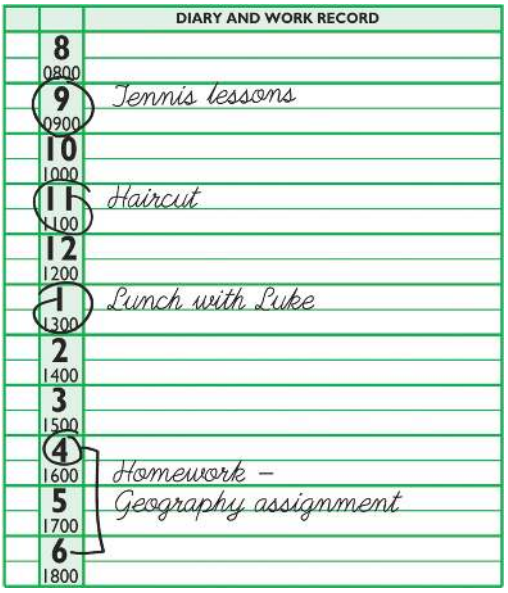
By the end of this SkillBuilder you should be able to sequence events in chronological order.

1.4.1 Tell me

What is a timeline?

A timeline is a diagrammatic tool for placing events in chronological order (the order in which they happened). An example of a simple chronology is one that shows in sequence, or time order, key events of a day in your life.

SOURCE 1 A simple chronology



Why are timelines useful?

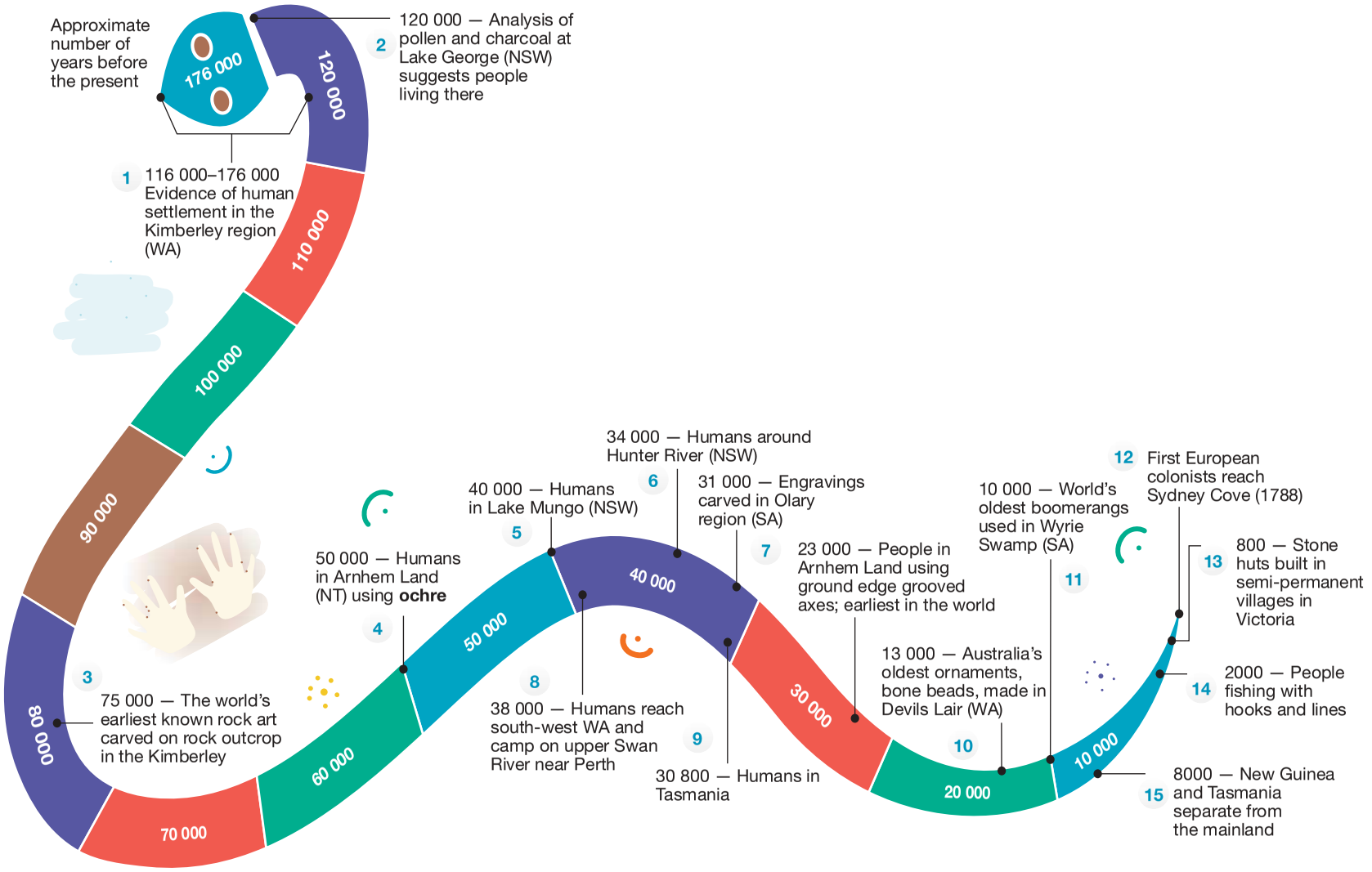
Timelines are useful because they can help us make sense of events in the past. Timelines are particularly useful in the study of History. Creating a history timeline helps to:

- understand the order in which events occurred
- describe the time distances between events
- identify what has changed over time
- identify what has stayed the same over time
- analyse how one event might relate to other events
- compare what might have been happening in different places at the same time
- assess whether one event might have led to another event (cause and effect).

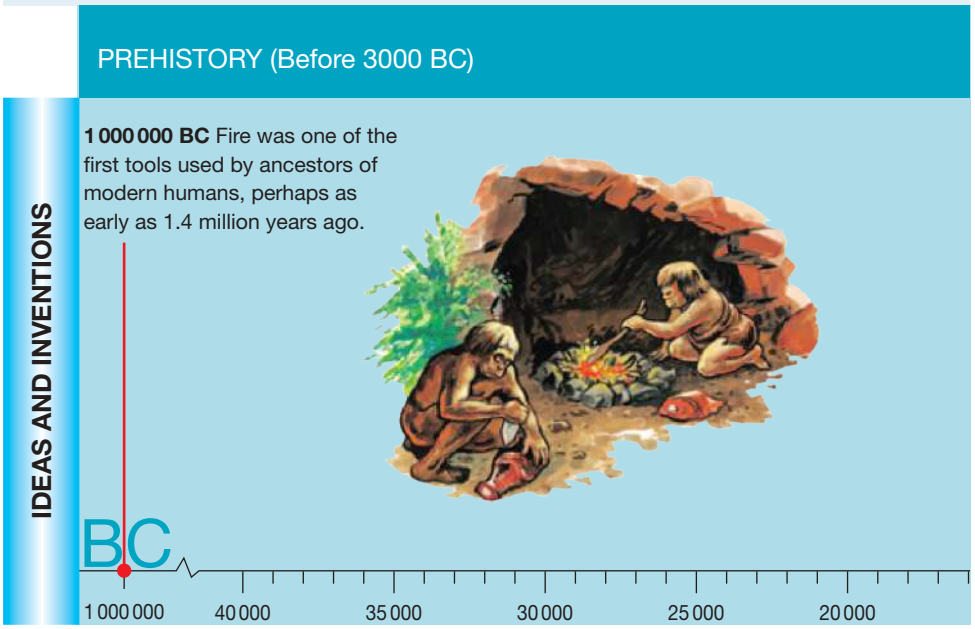
Generally, timelines are constructed using a sequence of dates with the addition of descriptive labels. The timeline may span thousands of years (see **SOURCE 2**) or cover a very short period (see **SOURCE 3**). In print, timelines may be as simple as a horizontal or vertical line, or highly visual with use of colour and images. Using digital technology, online timelines can be interactive, where users click on a date to see a descriptive label, an image or even hear an audio narrative or sound effects.

SOURCES 2 and **3** are examples of highly visual timelines that could be presented in printed history textbooks.

SOURCE 2 An example of a timeline that covers a long span of time



SOURCE 3 An extract from a timeline that provides some illustrative material to accompany descriptive text labels



1.4.2 Show me

How to create a timeline

Timelines can cover very short or very long periods of time. They have the following features and requirements:

- They can focus on just a few months or years.
- They can focus on big, sweeping changes over thousands of years.
- In most cases, they are divided up into equal blocks of time, such as decades or centuries. This is not essential, but it helps us to see the order of events and how close or how far apart they were.
- A break in the timeline (using a zigzag line, for instance) can show a long span of time between one date and the next.
- To make equal blocks of time, you need to use a scale — for example, 1 cm = 10 years.
- Timelines can be horizontal (across the page) with the earliest dates on the left and later dates to the right.
- Alternatively, they can be vertical (down the page), in which case the dates usually run from the earliest at the top to the latest at the bottom.
- Often, we have only approximate dates for events in ancient history. In those cases, we put 'c.' in front of the date. This stands for the **Latin** word *circa*, which is Latin for 'around' or 'about'.

Step 1

Study the timeline shown in **SOURCE 4** and the way this timeline has been constructed.

- It is a horizontal timeline.
- It has been divided into thousands of years.
- A scale of approximately 1 inch has been used to represent 5000 years.

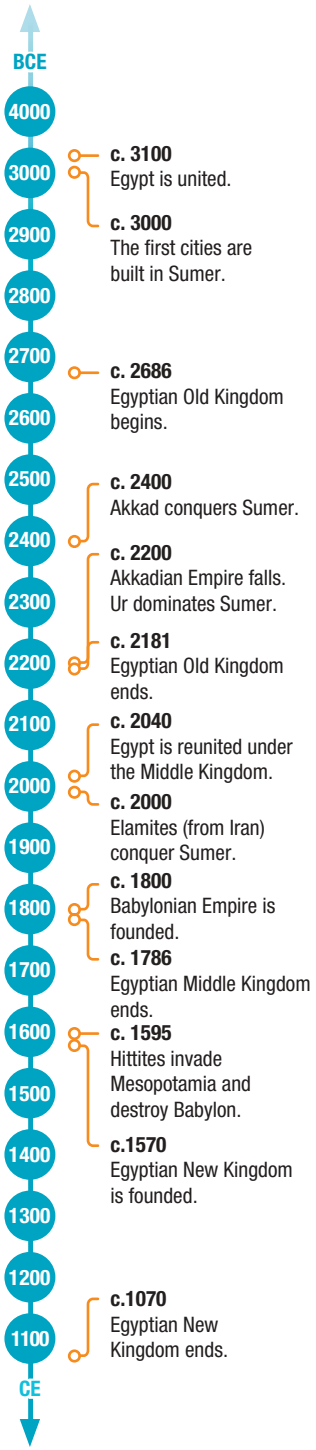
Step 2

A completed timeline has a clear title.

The title should state:

- the time period covered
- the subject or theme
- the beginning and end dates.

SOURCE 4 Timeline of the rise and fall of kingdoms and empires in Egypt and Mesopotamia between 3000 BCE and 1000 BCE



1.4.3 Let me do it

Complete the following activities to practise this skill.

1.4 SkillBuilder activity

1. **Construct** a timeline of the rise and fall of civilisations in east and south Asia between 2500 BCE and 200 BCE.
   - Use a vertical timeline.
   - Divide it into centuries.
   - Decide on the scale you will use.

Key events for your timeline	
c. 2500 BCE	Cities are built by the Indus Valley civilisation.
c. 2100 BCE	According to Chinese legends, the Xia dynasty begins ruling China.
c. 1600 BCE	The Shang dynasty is established in China. The Indus Valley cities are abandoned and India is invaded by Aryans.
c. 1100 BCE	Iron begins to be used in India.
c. 1045 BCE	The Zhou overthrow the Shang and start the Zhou dynasty.
c. 770 BCE	The Eastern Zhou dynasty begins in China.
c. 500 BCE	Iron begins to be used in China.
475 BCE	The Warring States period begins in China, starting centuries of conflict.
327 BCE	India is invaded by Alexander the Great (of Macedonia and Greece).
304 BCE	India is united under the Mauryan Empire.
221 BCE	China is united under the Qin dynasty.
206 BCE	The Qin dynasty is overthrown in a peasant revolt. The Han dynasty begins.

   Your timeline will help you to **analyse** and **compare** events. For example, you could use it to answer questions, such as:
   - Which of these two cultures was the first to build cities?
   - Which was the first to use iron?
2. Answer the following questions based on the timeline you have drawn:
   a. What time span does your timeline cover (i.e. how many years in total are covered by your timeline)?
   b. Which Chinese dynasty shown on your timeline was the earliest?
   c. How many years elapsed between the establishment of the Shang and Qin dynasties?
   d. Did the Indian or Chinese civilisation use iron first? What period of time separated the introduction of the use of iron in the two civilisations?
   e. **Identify** three significant events during the period of time illustrated on the timeline for:
      i. China
      ii. India.
   f. What statement could you make about the length of Chinese dynasties over the period shown on your timeline?
   g. Which event of significance for ancient Indian civilisation occurred during the period of the Shang dynasty in China?
   h. **Outline** a consequence for Indian civilisation of the invasion of Alexander the Great? (*Hint:* Look for an event that happened relatively shortly after his invasion.)

LESSON 1.5 SkillBuilder: Using historical sources

LEARNING INTENTION

By the end of this SkillBuilder you should be able to use historical sources.

1.5.1 Tell me

What are the main ancient Greek sources?

Ancient Greek sources include pottery, tombs, temples, fortifications, weapons, tools, coins, theatres and written records. They also include artworks such as statues and other sculptures in stone and bronze and the paintings that decorated vases and other types of pottery.

Why is it important to analyse and corroborate ancient Greek sources?

Almost all of our knowledge of ancient Greece comes from such sources. Works of art, in particular, tell us much about ancient Greek culture, especially myths and religious ideas. Buildings and sculptures tell us about technology, skills and values. Written records tell us about Greek ideas about politics, myths, history, science and a vast range of other subjects. Not all ancient Greek sources are really primary sources as some were written long after the events they describe.

SOURCE 1 A sixth century BCE Spartan cup showing Spartan soldiers returning from war carrying a slain comrade

1.5.2 Show me

How do we analyse and corroborate ancient Greek sources?

When you study an ancient source, you need to think carefully about the clues it provides and ask questions about its accuracy, usefulness and reliability. You need to ask questions such as:

1. What is it?
2. Who created it and when was it created?
3. Who or what was it created for?
4. For what aspect of ancient Greek history does it provide useful evidence?
5. Is the evidence it provides accurate and reliable and how can we tell this?
6. What conclusions can we draw from the source about ancient Greek society?

These questions have been applied to **SOURCES 1** and **2**.

Ancient writers and many later historians have regarded Spartans as tough soldiers who would die fighting rather than surrender or run from battle. **SOURCES 1** and **2** are relevant to this issue.

1. *What is it?* It is a cup with a design showing Spartan soldiers carrying the body of a comrade killed in battle.
2. *Who created it and when was it created?* We do not know who made it but we know that it was created in Sparta in the sixth century BCE.

3. *Who or what was it created for?* We cannot know whom it was created for. It was made to be a cup but more likely as a decoration than for practical uses.
4. *For what aspect of ancient Greek history does it provide useful evidence?* It indicates that Spartans honoured their men who died in battle by carrying their bodies from the battlefield.
5. *Is the evidence it provides accurate and reliable and how can we tell this?* Without other evidence, we cannot tell whether this source is accurate and reliable. However, several ancient Greek sources support this view of the Spartans.
6. *What conclusions can we draw from the source about ancient Greek society?* The Spartans regarded fighting bravely and dying in battle as great virtues.

SOURCE 2 Written by the Athenian general and historian, Thucydides (c. 460–403), in his book, *History of the Peloponnesian War*, this extract describes the surrender of a force of 120 Spartans in the seventh year of this war between Athens and Sparta

was . . . made, to know if they [the Spartans] would surrender themselves and their arms to the Athenians . . . [Hearing] this offer, most of them lowered their shields and waved their hands to show that they accepted it. Hostilities now ceased . . . after consulting together they surrendered themselves and their arms . . .

Nothing that happened in the war surprised the Hellenes [Greeks] so much as this. It was the opinion that no force or famine could make [Spartans] give up their arms, but that they would fight on . . . and die with them in their hands: indeed, people could scarcely believe that those who had surrendered were of the same stuff as the fallen.

1. *What is it?* It is an account of the surrender of a force of Spartans during the Peloponnesian War.
2. *Who created it and when was it created?* It was written by Thucydides, an Athenian general and historian, in the fifth century BCE, soon after the events it describes.
3. *Who or what was it created for?* Thucydides wrote a history of the Peloponnesian War, a conflict that divided the Greeks for many years. The extract was part of that history. Its original readers would most likely have been other Athenians.
4. *For what aspect of ancient Greek history does it provide useful evidence?* It tells of an occasion when a Spartan army surrendered to Athenians rather than fighting to the death.
5. *Is the evidence it provides accurate and reliable and how can we tell this?* In judging its accuracy and reliability, we should take into account that the writer was an Athenian general and, therefore, someone who had fought against the Spartans. Without other evidence, we cannot tell whether this source is accurate and reliable. However, as many other Greeks would have witnessed this event it is unlikely that Thucydides would have distorted the facts.
6. *What conclusions can we draw from the source about ancient Greek society?* We can conclude that, although the Spartans regarded fighting bravely and dying in battle as great virtues, they did not always carry out this ideal. If the source is reliable, we might conclude that Spartans were not always as heroic as many liked to think they were.

1.5.3 Let me do it

Complete the following activities to practise this skill.

1.5 SkillBuilder activity

1. Ancient writers and many later historians have regarded Spartan women as being as tough as Spartan men. **SOURCES 3** and **4** are relevant to this issue. Use the following questions to analyse **SOURCES 3** and **4**.
   a. What is it?
   b. Who created it and when was it created?
   c. Who or what was it created for?
   d. For what aspect of ancient Greek history does it provide useful evidence?
   e. Is the evidence it provides accurate and reliable and how can we tell this?
   f. What conclusions can we draw from the source about ancient Greek society?

SOURCE 3 From Plutarch, *Moralia, III, Sayings of Spartan Women*, 241. Plutarch lived c. 46–120 CE. He was born in Athens but was an admirer of Sparta and was writing many centuries after the events he described.

Another Spartan woman killed her son, who had deserted his post because he was unworthy of Sparta. She declared: 'He was not my offspring . . . for I did not bear one unworthy of Sparta'.

Another, hearing that her son had fallen at his post, said: 'Let the cowards be mourned, I, however, bury you without a tear, my son and Sparta's'.

As a woman was burying her son, a shabby old woman came up to her and said, 'You poor woman, what a misfortune!' 'No, by the two goddesses, what a good fortune,' she replied, 'because I bore him so that he might die for Sparta and that is what happened for me'.

Another woman handed her son his shield, and exhorted him: 'Son, either with this or on this'.*

* In order to run from battle a soldier would have to throw away his heavy shield. A soldier who was killed in battle would be carried home on his shield.

2. Apply your skills to answer the following questions.
   a. **Explain** how you would differentiate between ancient Greek primary sources and secondary sources about Ancient Greece.
   b. Why should **SOURCE 3**, the extract from Plutarch, be classified as secondary source?
   c. In this SkillBuilder, you have worked with a Spartan cup and a bronze figure (**artefacts**) and written accounts by two ancient Greek historians.
   Identify three other types of primary sources that a historian could use for a study of Ancient Greece.
   d. **Explain** why it is sometimes difficult to judge the reliability of ancient Greek primary sources.

SOURCE 4 A bronze figure of a running girl, 520–500 BCE, believed to have been made in or near Sparta

LESSON 1.6 SkillBuilder: Continuity and change

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **describe** broad patterns of change over time.

1.6.1 Tell me

What are broad patterns of change?

In this topic, we have studied developments in human societies from early communities (around 60 000 BCE) to later ancient times (up to around 650 CE). Over such a long period, we would expect significant changes. Broad patterns of change are not the kinds of changes that might have affected one community, such as a change of rulers. Rather, they are patterns of change that are extensive or widespread.

Broad patterns of change have taken place in the modern world in just a generation. For example, when your parents were your age there was no internet, and Facebook or X could hardly have been imagined. Such technological changes have revolutionised the ways we communicate. In the ancient world, patterns of change occurred much more slowly but, just as much as the recent technological revolution, these changes transformed human societies.

Why is it important to describe broad patterns of change?

In a period as long as that of the ancient world, there are many examples of broad changes in technologies, religious beliefs and the ways in which societies were organised and governed. Identifying such broad patterns of change will help you to:

- recognise the nature of a change that occurred
- recognise the speed of any change
- recognise the extent or significance of any change
- assess the role of changes in contributing to other changes.

1.6.2 Show me

How can broad patterns of change be described?

From your work in this topic, you will already understand that there were enormous changes from the Old Stone Age through the New Stone Age and into later ancient times. You will be able to recognise such changes when comparing primary sources from different ages within the times of the ancient world. You can recognise evidence of broad patterns of change by asking questions, such as the next question.

For what broad patterns of change do these sources provide evidence?

To answer such a question, you need to break it down into more specific questions, such as:

1. What kind of development was this? For example, was it a change in the ways in which people provided for basic needs, such as food and shelter, or a change in beliefs, transport, technology, trade or entertainment?
2. What was the situation before the change?
3. How did the change occur?
4. What was different after the change?

In the following example, these types of questions have been applied to **SOURCES 1**, **2** and **3**.

Returning to the question we posed earlier:

For what broad patterns of change do **SOURCES 1**, **2** and **3** provide evidence?

SOURCE 1 This Old Stone Age painting on rock shows a man hunting deer. It is from Mexico. Similar Stone Age rock paintings, cave paintings and engravings have been found in many places, including Australia. Some are believed to be 30 000 years old.

SOURCE 2 This ancient Egyptian wall painting of people harvesting crops is from the tomb of a successful Egyptian artisan named Sennedjem, c. 1306–1290 BCE.

SOURCE 3 This relief sculpture depicts ancient Assyrians hunting lions. It is from around 883 BCE to 612 BCE when Assyria was a powerful empire in the Middle East.

We can break the question down to more specific questions and answer these:

1. *What kind of development was this?* **SOURCES 1** and **2** provide evidence for a change from hunter–gatherer societies to societies based on farming.
2. *What was the situation before the change?* Before the New Stone Age, which saw the development of farming, all peoples provided for their needs by hunting and gathering, like the hunter depicted in **SOURCE 1**.
3. *How did the change occur?* The change first came about around 9000 BCE, when people in the Fertile Crescent began growing crops and herding sheep and goats. As others saw advantages in adopting these new ways, the development spread to other societies, such as the ancient Egyptians, shown in **SOURCE 2**.
4. *What was different after the change?* People were able to produce food in smaller areas than were needed by hunter–gatherers so they could settle in permanent dwellings. They could also produce a surplus so that some people could specialise in work other than food production. Large, settled societies saw the need for laws and powerful rulers. The surpluses the people produced could support a ruling class, who saw hunting as a form of sport or recreation, as depicted in **SOURCE 3**, rather than as a necessity, as in **SOURCE 1**.

1.6.3 Let me do it

Complete the following activities to practise this skill.

1.6 SkillBuilder activity

1. Apply the following questions to **SOURCES 4** and **5** to identify broad patterns of change in another aspect of life in ancient times.

General question: For what broad patterns of change do **SOURCES 4** and **5** provide evidence?

More specific questions:

a. What kind of development was this?
b. What was the situation, as shown in **SOURCE 4**, before the change?
c. How did the change occur?
d. What was different, as shown in **SOURCE 5**, after the change?

SOURCE 4 Creevykeel Megalithic Tomb was constructed in Ireland around 3000 BCE by New Stone Age people. This was around the same time that structures such as Stonehenge and other stone circles, temples and tombs were built in England. Because everything else built by these peoples was made of wood and other vegetable matter, such giant stone monuments, called megaliths, are the only built traces they left behind.

SOURCE 5 Part of the remains of the ancient Roman town of Pompeii, which was buried in volcanic ash when Mount Vesuvius erupted in 79 CE

LESSON 1.7 SkillBuilder: Causes and consequences

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **explain** cause and consequence effectively.

1.7.1 Tell me

To analyse cause and consequence effectively you will need to:

1. Look for multiple factors that contributed to an event. These can include social factors, and economic, political, cultural and environmental influences.
2. Determine which factors were most significant in bringing about the event. Consider both direct (intentional) and indirect (unintentional) causes.
3. Identify the immediate outcomes as well as the longer-term impacts of the event. Consider how it affected different groups and regions.
4. Understand how the causes and consequences are linked. Explore how one event may have led to another or how it influenced subsequent developments.

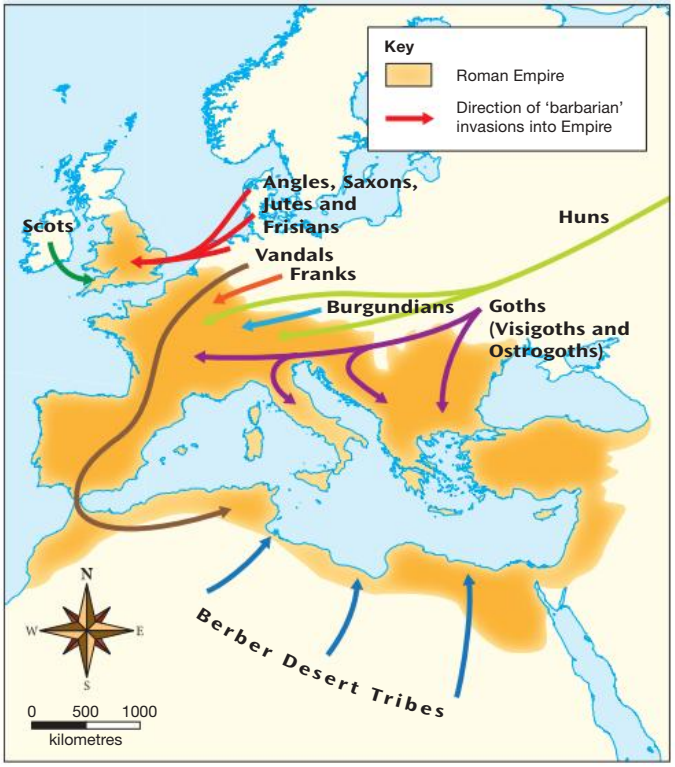
By following these steps, we can gain a deeper understanding of the complexities of historical events and appreciate the interconnectedness of past occurrences.

1.7.2 Show me

How do we know about the factors that contributed to an event?

Let us consider the fall of the Roman Empire using **SOURCE 1**.

SOURCE 1 The weakening of the Western Roman Empire. The arrows show the directions from which different barbarian groups invaded the empire.



Source: Map drawn by Spatial Vision.

This source shows that large-scale migrations took place across Europe in the fifth century CE. For example, Burgundians and other tribes entered Gaul; Angles, Saxons and Jutes from Germany and Denmark moved into Britain; and Vandals, another Germanic tribe, travelled into Spain. Some of these migrating peoples were referred to as **barbarians**.

These migrations almost certainly would have had an impact on the Roman Empire, creating many direct and indirect pressures.

Which factors were most significant in the fall of the Roman Empire?

We can **hypothesise** that these large-scale migrations would cause the following:

- weakening control for the Romans
- shifts in power
- military strain as the Romans tried to defend their empire
- cultural transformation.

Examining the most significant factors

There may not be one defining factor that caused the fall of the Roman Empire, but we can examine the events to see which were most significant. It is a good idea to place the information in a table or draw a concept diagram.

TABLE 1 Significant invasions on the Roman Empire

Year	Event	Description and impact
455 CE	Sack of Rome by the Vandals	Under King Geiseric, the Vandals sailed from Carthage and sacked Rome, causing extensive destruction and looting.
476 CE	Fall of the Western Roman Empire	Germanic chieftain, Odoacer, deposed the last Roman emperor, Romulus Augustulus, ending the Western Roman Empire.
452 CE	Invasion of Italy by the Huns	Led by Attila, the Huns invaded Italy, causing widespread devastation and significantly weakening the Roman Empire.
378 CE	Battle of Adrianople	The Visigoths defeated the Roman army led by Emperor Valens, resulting in a catastrophic loss for the Romans.

Let's consider **SOURCE 2**.

SOURCE 2 In 455 Rome was pillaged by the Vandals. This painting by Karl Briullov depicts the events of the Vandal King Geiseric who sailed his powerful fleet from Carthage to 'sack' Rome.

The painting illustrates the chaos and destruction, looting, violence, and the dismantling of Roman infrastructure.

The painting may also depict the clash between the Roman and Vandal cultures.

The artwork captures the emotional turmoil of the Romans during the sack. The fear, despair and helplessness of the citizens is the central theme, reflecting the human cost of the invasion.

With some additional research we know that this was the latter of many invasions on the Roman Empire. While it was a major contributor to the fall of Rome, it was not the only factor.

1.7.3 Let me do it

1.7 SkillBuilder activity

Lake Mungo was previously a site where Aboriginal Australians lived approximately 50 000 years ago. It contained many food sources that were hunted by Aboriginal communities such as fish and birds.

Lake Mungo is a significant place as it now provides evidence of how Aboriginal and Torres Strait Islander Peoples lived. In 1968, human remains of a woman who had been cremated were uncovered in the dry lake . The remains were dated to have been buried around 40 000 years ago. This is crucial evidence of the existence of ancient Aboriginal and Torres Strait Islander communities in Australia.

SOURCE 3 Lake Mungo today, a dry lakebed marked by sand drifts

1. To explore how Lake Mungo has changed over time and what this tells us about environment, culture and history, complete the following:
   a. Find an artist's impression of ancient Lake Mungo (e.g., when it was full of water and home to early Aboriginal communities). **Compare** this image to the one that you see at **SOURCE 3**.
   b. What differences do you see between each image? **List** 3–4 differences.
   c. What might these differences tell us about how the environment has changed?
2. Make a list of all the potential causes of these changes to Lake Mungo. Causes can include social factors and economic, political, cultural and environmental influences. Determine which causal factor you deem to be the most significant and why.
3. How would the changes to Lake Mungo have impacted Aboriginal Peoples:
   a. Socially, including relationships and community?
   b. Culturally, including the ability to practise traditions, customs and rituals?
   c. Spiritually, including connection to Country?
   d. Environmentally, including liveability and access to food sources?

Research the significance of Lake Mungo to communities today, including the Paakantji, Mutthi Mutthi and Ngyimpaa Peoples. How does Lake Mungo continue to impact these people today?

LESSON 1.8 SkillBuilder: Historical significance

LEARNING INTENTION

By the end of this lesson you should be able to **analyse** the significance of historical events and sources.

1.8.1 Tell me

What is historical significance?

To identify historical significance, we must create a set of criteria that helps us to determine what is important from the past.

Criteria that can help us decide on historical significance include:

- the changes that occurred because of a key historical event, movement or figure, and whether these changes have made a lasting impact today
- the number of people who were impacted by a historical event, movement or figure
- how a historical event, movement or figure has been remembered, celebrated or commemorated over time
- whether a historical event, movement or figure was unique or new for the period
- what a historical event, movement or figure reveals to us about the ideas, attitudes, beliefs, practices and customs of the time.

1.8.2 Show me

Let's apply this set of criteria to determine the historical significance of key leaders in ancient China, using the sources below as evidence. These sources discuss Qin Shihuang, who wanted to be seen as a great and powerful ruler to his people. **SOURCE 1** is an example of his propaganda. **SOURCE 2** provides other evidence.

SOURCE 1 From an inscription ordered by Qin Shihuang (shown in image). It was carved in 219 BCE.

. . . Great are the Emperor's achievements . . .

All people under heaven

Work with a common purpose.

Tools and measures are the same . . .

The written script is made the same . . .

He defines the laws, leaving no one in doubt,

Making known what is forbidden . . .

No evil is tolerated,

So all strive to be excellent people . . .

None dare to be lazy . . .

The ordinary people know peace . . .

People help each other,

There are no robbers or thieves:

People delight in his rule . . .

Wherever life is found,

All acknowledge his supreme rule . . .

SOURCE 2 Hsun-tzu, a Confucian scholar of the third century BCE, commenting on the methods of the rulers of the state of Qin in the last years of the Warring States period. These same methods were used throughout China under the Qin dynasty.

The Qin rulers employ their people harshly, terrorise them with authority, embitter them with hardship, bribe them with rewards, and destroy them with punishments.

What changes occurred because of Qin Shihuang?

- **SOURCE 1** discusses the changes made to ensure that tools, measures and written language were consistent across the empire. It also discusses that Qin Shihuang's rule led to limited crime, robbers or thieves, and that people generally lived a pleasant life under his reign. These changes are discussed quite positively. However **SOURCE 2** comments on the more negative changes that occurred under Qin Shihuang, such as terror and punishment. **SOURCE 2** states that people lived with hardship, as opposed to the peaceful way of life described in **SOURCE 1**.

Who was impacted by the rule of Qin Shihuang?

- Both sources indicate that the Chinese people were impacted by Qin Shihuang's rule, including aspects of their life such as law and order, communication and work.

How has Qin Shihuang been remembered, celebrated or commemorated over time?

- It is evident within **SOURCE 1** — an inscription ordered by Qin Shihuang himself — that the ruler wanted to be remembered positively, for bringing peace to his people and encouraging them to live a more prosperous life. However, in **SOURCE 2**, he and the entire Qin dynasty are remembered as cruel and terrorising, punishing the Chinese people and making their lives more difficult.

Was there anything unique or new under Qin Shihuang's rule?

- **SOURCE 2** indicates that the rules implemented under Qin Shihuang were not unique to his rule, but rather were a common feature of all Qin rulers.

What do the sources tell us about the ideas, attitudes, beliefs, practices and customs of ancient China under Qin Shihuang's rule?

- **SOURCE 1** reveals to us that Qin Shihuang wanted to appear in a favourable way and implemented propaganda to convince the public of his goodness. It shows us the ways in which rulers attempted to shape their public image in the eyes of their people. **SOURCE 2** reveals that people felt oppressed under the Qin dynasty and their views and attitudes contradict the ways in which Qin Shihuang wanted to be perceived, as seen in **SOURCE 1**.

As a result, we can come to a conclusion about the significance of Qin Shihuang as a ruler within ancient China. His rule was *significant* as he contributed to a poor and repressive way of life among Chinese people, using strict laws and tactics to control the population. However, his rule is also significant as it reveals the ways in which leaders in ancient societies attempted to present themselves to the public and gain control over society using propaganda to shape their views and attitudes.

1.8.3 Let me do it

1.8 SkillBuilder activity

This activity will help you to apply a set of criteria to determine the significance of a key leader in ancient Egypt who is discussed in this textbook — Tutankhamun. If you are not studying ancient Egypt, you can use any other key leader from your chosen ancient society.

1. Using Topic 3 of this textbook and your own research, examine the life and rule of Tutankhamun. Record key events and achievements in his rule.

2. Answer the following questions to determine the significance of his rule in ancient Egypt:
   a. What changes occurred because of Tutankhamun?
   b. Who was impacted by the rule of Tutankhamun?
   c. How has Tutankhamun been remembered, celebrated or commemorated over time?
   d. Was there anything unique or new under Tutankhamun's rule?
   e. Locate two historical sources that depict Tutankhamun's rule. These sources could be inscriptions, tombs, paintings, images or historian intepretations. What do the sources tell us about the ideas, attitudes, beliefs, practices or customs of Ancient Egypt during Tutankhamun's rule?
3. Come to a conclusion about the significance of Tutankhamun's rule. Was he an important leader and why do you think this? Does he reveal anything important to us about Ancient Egypt?
4. Research a different ancient Egyptian ruler such as Akhenaten, Nefertiti, Cleopatra or any other key figure. Use the criteria above to examine this ruler and determine whether they are more or less significant of a ruler than Tutankhamun.

LESSON 1.9 SkillBuilder: Communicating

LEARNING INTENTION

By the end of this lesson, you should be able to apply key historical terms and metalanguage to write about the past.

1.9.1 Tell me

How do we write about the past?

A key skill in History is being able to effectively communicate our findings about the past to construct a historical argument. However, the building block of any good historical argument is a series of effective sentences. Using the correct terminology and metalanguage in a sentence to discuss sources or historical skills and concepts is essential to developing a coherent argument about the historical event, movement or figure we are discussing.

Table 1 lists key terminology and metalanguage that you may have come across in your study of Year 7 History.

TABLE 1 Historical terminology in Year 7

Ancient societies	Historical skills and concepts
Country	Source
Deep Time	Evidence
Ancient	Significance
Society	Cause
Feudalism	Effect/impact/result/consequence
Hierarchy	Continuity
Emperor/pharaoh/ruler/leader	Change
Warfare	Bias
Death/funerary customs/afterlife	Reliable
Conquest	Limitations

We can also use a range of more generic terms and vocabulary to enhance our sentences, in different ways. These words are often referred to as 'signposts' — words that let the reader know about the direction of your writing.

TABLE 2 Useful terminology and vocabulary to enhance writing

Sequencing ideas	Adding a similar idea	Adding an opposing idea
First …	Similarly …	However …
Second …	Furthermore …	On the other hand …
Third …	In addition …	Despite this ...
Initially …	… also …	… rejects …
Subsequently …	… furthers …	… contradicts …
Last …	… supports …	… rather …
Adding evidence	**Cause and consequence**	**Concluding an idea**
This can be seen …	As a result …	Ultimately …
As shown by …	Consequently …	Therefore …
For example …	… due to …	Thus …
… demonstrated by …	… caused by …	In conclusion …
… suggested by …	… leading to …	Nevertheless …
… such as …	… resulting in …	Overall …

1.9.2 Show me

We're going to examine the source below and write a paragraph that responds to the following question:

'What caused the end of the Indus River Valley civilisation?'

SOURCE 1 From *Geography*, a book by the Greek historian and geographer, Strabo (c. 63 BCE–24 CE). Strabo's book was an encyclopaedia of geographical knowledge of his time. Here he was recounting observations made by an earlier historian, Aristobulus, who accompanied Alexander the Great to India around 327 BCE. Aristobulus's book has been lost.

[Aristobulus] says that when he was sent upon a certain mission he saw a country of more than a thousand cities, together with villages, that had been deserted because the Indus had abandoned its proper bed, and had turned aside into the other bed on the left that was much deeper, and flowed with precipitous descent like a ***cataract****, so that the Indus no longer watered by its overflows the abandoned country on the right, since that country was now above the level, not only of the new stream, but also of its overflows.*

First, let's analyse this source:

- *What is the subject or main idea of the source?* The subject is the abandoned cities of the Indus River Valley. According to the writer, the cities were abandoned because the river changed its course so that it no longer provided water at a level suitable for use by the people of those cities.
- *When was the source created?* The source was created between c. 63 BCE and 24 BCE.
- *Who created the source?* Strabo is using information he obtained by reading Aristobulus, who was in India around 327 BC.
- *Is the source supported or contradicted by the evidence of other sources?* Aristobulus's statements about the river changing course are supported by archaeological evidence in Topic 6 of this textbook. This change had a different effect in Mohenjo-daro from that described by Aristobulus, but his description could be accurate for other Indus Valley towns and cities.
  Now, let's use historical terminology to analyse the source in a paragraph and answer the question above.
- Begin by describing the source — *First,* **SOURCE 1***, written by Greek historian and geographer, Strabo, discusses the abandoned cities of the Indus River Valley. The source details some of the reasons that contributed to the end of the Indus River Valley civilisation, such as environmental factors.*

- Add evidence from the source — *This can be seen when Strabo states that the 'Indus [river] had abandoned its proper bed', referring to the river changing its course away from the civilisation.*
- Analyse cause and consequence — *As a result, the people of the Indus River Valley were no longer able to access the water they needed to survive, causing them to abandon the city in search of more suitable land.*
- Corroborate this idea using another source — *Archaeological evidence from the Indus River Valley supports Strabo's discussion about the environmental factors which may have caused the end of the ancient civilisation. Excavations suggest that Mohenjo-daro experienced a series of floods, which caused major issues for the city and its people. The city was rebuilt at least seven times as a result of heavy flooding, and eventually became difficult to live in.*
- Summarise your idea — *Ultimately, it can be argued that one of the causes of the end of the Indus River Valley civilisation was the changing environment, which altered the landscape and made it inhabitable for its people.*

Put these sentences together and it forms the paragraph below. Identify all the key historical terminology and vocabulary used, including language specific to ancient societies and signposts:

First, **SOURCE 1**, *written by Greek historian and geographer, Strabo, discusses the abandoned cities of the Indus River Valley civilisation. The source details some of the reasons that contributed to the end of the Indus River Valley civilisation, such as environmental factors. This can be seen when Strabo states that the 'Indus [river] had abandoned its proper bed', referring to the river changing its course away from the civilisation. As a result, the people of the Indus River Valley were no longer able to access the water they needed to survive, causing them to abandon the city in search of more suitable land. Archaeological evidence from the Indus River Valley supports Strabo's discussion about the environmental factors which may have caused the end of the Indus River Valley civilisation. Excavations suggest that Mohenjo-daro experienced a series of floods, which caused major issues for the city and its people. The city was rebuilt at least seven times as a result of heavy flooding, and eventually became difficult to live in. Ultimately, it can be argued that one of the causes of the end of the Indus River Valley civilisation was the changing environment, which altered the landscape and made it inhabitable for its people.*

1.9.3 Let me do it

1.9 SkillBuilder activity

Examine the sources below and write a paragraph that responds to the following question:

'What role did gladiators play in ancient Rome?'

SOURCE 1 Written by the Roman Emperor Augustus (Octavian), who ruled from 27 BCE to 14 CE

Three times I gave shows of gladiators under my name . . . Twenty-six times, under my name or that of my sons and grandsons, I gave the people hunts of African wild beasts in the circus, in the open, or in the amphitheatre; in them about 3500 beasts were killed.

SOURCE 2 A terracotta figurine of two gladiators. The figurine is from the first or second century CE. By this time there were several different categories of gladiators, including the *hoplomoch* (with a circular shield) and the *thraex* (with a small rectangular shield). Several gladiator figurines have been found.

1. For each source, answer the following questions:
   a. What is the subject or main idea of the source?
   b. When was the source created?
   c. Who created the source?
2. **Compare** what the two sources suggest about gladiators in ancient Rome. Do they share the same idea, or do they express different ideas?
3. Write a paragraph that answers the overall question above, using historical terminology and metalanguage found within this lesson. You may want to structure your paragraph by writing sentences that focus on the following:
   - Begin by describing **SOURCE 1**.
   - Add evidence from the source.
   - Corroborate this idea using **SOURCE 2**.
   - Add evidence from the source.
   - **Summarise** your response to the question.
4. Swap with another classmate and read each other's paragraphs. Highlight the historical terminology and vocabulary that is used within their writing, including signposts.

2 Deep Time to modern era

LESSON SEQUENCE

2.1 Overview 18
2.2 How do we learn about Deep Time in Australia? 20
2.3 What is meant by Country and creation? 24
2.4 How has landscape and life changed? 28
2.5 Living with the megafauna 31
2.6 What is connection to Country and kin? 36
2.7 What beliefs and values shaped everyday life? 40
2.8 How did trade and technology develop in ancient Australia? 45
2.9 How was land managed? 51
2.10 How do we care for Country and Place? 56
2.11 How is the connection to culture and Country continuing? 62
2.12 Inquiry: Should we return ancestral remains from museums? 66
2.13 Review 68

LESSON 2.1 Overview

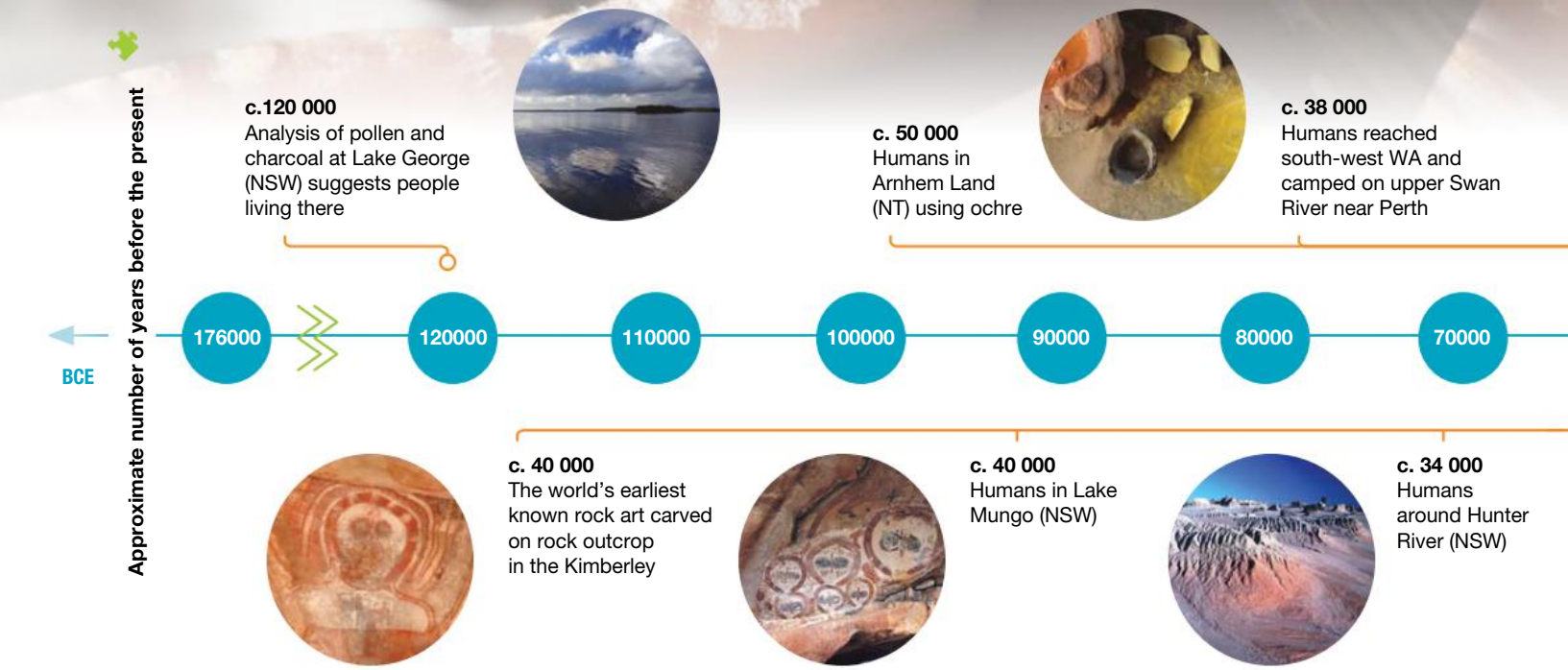
INQUIRY QUESTION

How do Aboriginal and Torres Strait Islander Peoples, as the world's oldest continuing cultures, show both continuity and change over time?

The history, culture and beliefs of Aboriginal and Torres Strait Islander Peoples date back over 65 000 years, representing the world's longest continuous culture. Archaeological evidence from places like Lake Mungo and Badu Island shows this ancient life on the Australian continent and in the Torres Strait.

learnon

- **Pre-test**
  Online pre-test
- **eWorkbook**
  Customisable worksheets for this topic
- **Digital document**
  Key terms glossary
- **Video eLesson**
  Deep Time history of Australia



SkillBuilder

Use the SkillBuilder activities to develop these Historical concepts and skills:

- HISTORICAL QUESTIONS
- CHRONOLOGY
- USING HISTORICAL SOURCES
- CONTINUITY AND CHANGE
- CAUSES AND CONSEQUENCES
- HISTORICAL SIGNIFICANCE
- COMMUNICATING

c. 31 000
Engravings carved in Olary region (SA)

c. 23 000
People in Arnhem Land using ground edge grooved axes; earliest in the world

c. 12 000
Land bridge between Australian continent and Papua New Guinea flooded creating Torres Strait Islands

c. 10 000
World's oldest boomerangs used in Wyrie Swamp (SA)

1788
First European colonists reach Sydney Cove

50000 | 40000 | 30000 | 20000 | 10000 | 0 | CE

c. 30 800
Humans in Tasmania

c. 13 000
Australia's oldest ornaments, bone beads, made in Devils Lair (WA)

c. 8000
Coastlines of Papua New Guinea and Tasmania stabilised and separated from mainland

c. 2000
People fishing with hooks and lines

LESSON 2.2 How do we learn about Deep Time in Australia?

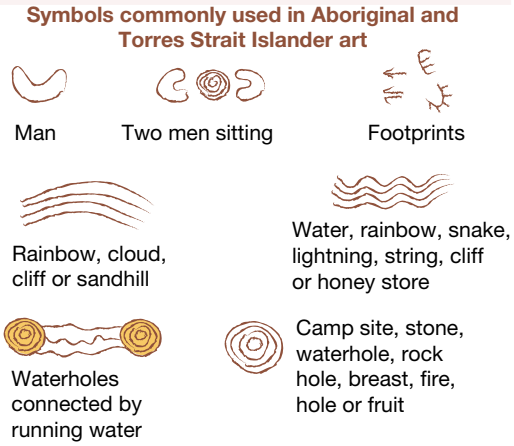
LEARNING INTENTION

By the end of this lesson you should be able to begin to **explain** Deep Time, Everywhen, the Dreaming and Songlines, and their relationship to Aboriginal and Torres Strait Islander Peoples' histories and cultures.

Tune in

SOURCE 1 shows the landforms around Kiwirrkura, about 400 km west of Alice Springs. Aboriginal and Torres Strait Islander artists used symbols to create maps of Country and sacred sites. These artworks are maps of Dreaming places made by ancestral beings, just like songlines, which are sung in short verses about their journeys.

SOURCE 1 Donkeyman Lee Tjupurrula Kukatja's artwork *Tingarri Dreaming at Walawala*



Look at SOURCE 1 and discuss what the artwork communicates, and how the information about the Walawala landscape is expressed.

2.2.1 Understanding Deep Time

Deep Time means looking back at Earth's history, and it also helps us think about the future. Aboriginal and Torres Strait Islander Peoples have lived on this land for at least 65 000 years. This is much longer than Western ancient histories, like ancient Rome or Egypt, which go back about 6000 years.

Aboriginal and Torres Strait Islander Peoples' early histories were not written down. Instead, they were painted, carved, built and shared through stories. The land itself can tell these stories, and Aboriginal and Torres Strait Islander cultural knowledge helps us understand them.

2.2.2 Explaining creation — the Dreaming

SkillBuilder discussion

Historical questions

1. What does the Dreaming 'tell us'?
2. Where have the stories come from?
3. Why were real events made into stories?

SOURCE 2 From Regina McKenzie, *Towards a New Dreaming*

Dreaming tells us about our history and where we came from. These stories are real events from long ago. They are made into stories so children can understand them better.

The Dreaming informs how different Aboriginal Peoples live and work together. It highlights the deep connections between people, their land and the Dreaming. A person's birthplace, family and cultural group determine their connection to Country.

The Dreaming is hard to translate into English because it is unique to Aboriginal Peoples' cultures. Each language group has its own words for the Dreaming. For example, it is known as:

- *Ungud* by the Ngarinyin Peoples of the Kimberley region in Western Australia
- *Wongar* by the Yolngu Peoples of northeast Arnhem Land.

Many Aboriginal Peoples believe their ancestors have always been part of Australia. Their Dreaming stories explain that people and the land have always been connected. These stories say that people have been here since the very beginning and that they did not come from South-East Asia during the Ice Age.

The Dreaming stories and science both show how Aboriginal Peoples are connected to their land. Scientists who study old remains and **DNA** find that their work matches what the Dreaming says about people and Country.

2.2.3 Everywhen

The connection between the Dreaming, Country and time is known to Aboriginal Peoples as Everywhen. Everywhen expresses time as a cycle of life, where the past, present and future exist together. It is through Everywhen that the Dreaming, the time of the powerful spirit ancestors, continues to shape Country and life. The Dreaming and Everywhen connects the spiritual, natural and human worlds. Everywhen continues to be expressed through ritual, stories, songs and traditions.

2.2.4 The songlines

Over thousands of years, a complex trade and communication network developed, stretching hundreds of kilometres and connecting many groups. The paths used for travel and trade are called Dreaming tracks or songlines. These tracks follow the journeys of Dreaming ancestors and are marked by features like water holes, hills and rivers. People remembered these paths through songs, known as songlines.

As the ancestral beings travelled across Australia, they created landmarks and named the land's features. For example, the Rainbow Serpent, called 'Jarapiri' in northern and central Australia, laid eggs that became the big round rocks called Karlu Karlu (formerly known as Devil's Marbles). The Serpent's movements made rivers and waterholes.

Songlines recorded the routes of ancestral beings' creation journeys. These Dreaming tracks served as maps, giving Aboriginal and Torres Strait Islander Peoples a detailed mental picture of their land and its creatures.

2.2.5 The many peoples of Aboriginal and Torres Strait Islander Australia

SkillBuilder discussion

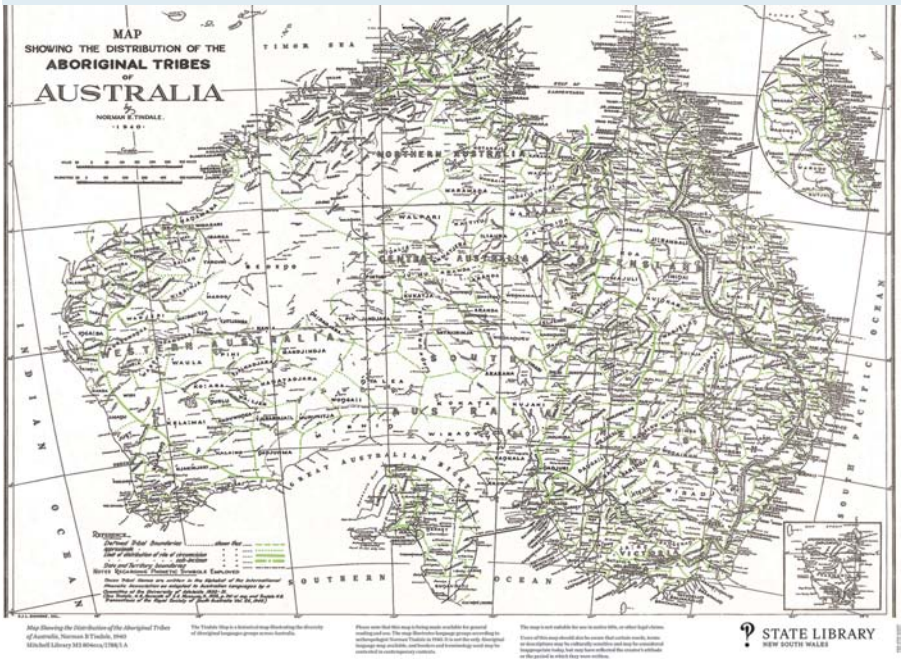
Communicating

1. What is illustrated in the **SOURCE 3** map of Australia?
2. What does the map show about the number of language groups of Australia?
3. How do you think the map shows links between language and land?

As modern Australians, we are a multicultural people, as were Deep Time Aboriginal and Torres Strait Islander Peoples. The exact number of Aboriginal languages spoken when Europeans arrived in Australia is unknown. But it is believed that there were approximately 250 separate language groups, and at least another 700 different **dialects**.

The spread of people across the vast continent of Australia and into the Torres Strait Islands took thousands of years. People settled in very different natural environments and developed unique cultural traditions, customs and languages. Languages were linked to the songlines, sacred sites and the ancestral beings of the Dreaming.

SOURCE 3 Map showing the language groups of Australia. Each separate group identified on the map may also contain within it smaller and dialect groups. The language map shows the strong links between language, land and culture.



Did you know?

The first sea voyages to Sahul, the combined continent of Australia and New Guinea, would have been one of the longest and most dangerous sea voyages ever made. This journey would have been the first time that human beings travelled beyond the massive single land mass that covered modern Africa, Asia, Europe, western Indonesia and the Americas. The coastline these first seafarers landed on would eventually be drowned by rising sea levels.

2.2 SkillBuilder activity **USING HISTORICAL SOURCES**

Dreaming stories contained information that became maps, assisting people to make their way across vast distances. As people travelled along the songlines they would recite the stories connected to the landscape to help them remember directions and features of Country.

1. Research a Dreaming story that explains the creation of a particular place.
2. Identify the location explained in the story.
3. Explain how the story represents the geographical features of Country.
4. Analyse the story you researched in question 1. How does the story show the powerful connection between Dreaming beliefs and the detailed knowledge of Country held by Aboriginal Peoples?

2.2 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 4, 5, 6	2, 3, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. **Outline** what is meant by Deep Time.
2. **Identify** what we can use sources, such as Dreaming stories, to learn about.
3. Briefly **explain** the term Everywhen.
4. Fill in the gaps. The pathways of daily travel and trade across the continent are known as _____ _____. Travel pathways are marked out by features of the landscape and remembered by Aboriginal and Torres Strait Islander Peoples as the _____. The songlines recorded the journey taken by the _____ _____ as they travelled across the land. The _____ _____ gave people a detailed mental image of their land that enabled them to travel safely through Country.
5. What were the 250 language groups of Australia linked to?

ANALYSE AND APPLY

6. Is **SOURCE 1** a primary or secondary source? **Explain**.
7. **Explain** how you could compare the symbols used in Aboriginal and Torres Strait Islander Peoples' art with, for example, Egyptian hieroglyphs or Sumerian cuneiform.
8. **SOURCE 2** explains the importance of the Dreaming. Using the source and the information from the text, write your own definition of the Dreaming.

EVALUATE AND COMMUNICATE

9. The **SOURCE 3** map shows the traditional lands of the many languages of Australia. During the eighteenth century European powers, such as Britain, could take control of land outside their own borders if they could claim it was unoccupied. The term used was 'terra nullius', meaning a land belonging to no-one. Using **SOURCE 3** and the text as your evidence, explain why the claim that Australia was terra nullius was incorrect.
10. Use the sources and the text from this lesson to write a paragraph explaining why Everywhen and Dreaming are important words to understand when beginning our study of the Deep Time history of Australia.

Answers and sample responses for this topic are available online.

LESSON 2.3 What is meant by Country and creation?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** the purpose of the creation stories to the Deep Time history of Aboriginal and Torres Strait Islander Peoples
- **explain** relationship and connection to Country.

Tune in

Rock art holds deep cultural and spiritual significance for Aboriginal and Torres Strait Islander Peoples. It serves as an important record of knowledge, traditions and connections to Country. Archaeological studies have provided evidence of the long history of Aboriginal Peoples in Australia, with some rock art dating back at least 43 000 years, reflecting the enduring presence and continuity of these cultures.

SOURCE 1 shows the Wandjina, a very important ancestral spirit for the Wunumbal, Ngarinyin and Worora Peoples of the Kimberley region. The Wandjina came from the sky and gave people the knowledge of how to care for Country.

SOURCE 1 Wandjina rock art painted on the wall in Kimberley. The Wandjina are ancestral beings of the Kimberley region. They are the bringers of rain, and control the weather and fertility.

1. **Look closely at the faces of the Wandjina: large round eyes and no mouth. The halo around their heads is believed to represent clouds and rain. Why do you think this ancestral spirit would have been painted in this way?**
2. **Why do you think the Wandjina were carved and painted onto the rock of cave walls and cliff faces?**

2.3.1 Explaining creation — spiritual beliefs

As people lived in different parts of Australia, they developed diverse spiritual beliefs, traditions and languages, reflecting their deep connection to the land and sea. Aboriginal Peoples and Torres Strait Islander Peoples have distinct spiritual traditions that guide their ways of life and connection to Country and Place.

For many Aboriginal communities, the Dreaming explains the creation of the world, the relationships between people, animals and the land, and the importance of rituals and traditions. It also passes down knowledge about the environment, such as where to find water, food and shelter.

Torres Strait Islander communities have their own spiritual and cultural traditions, which include stories of Tagai, Zogo beliefs, and connections to their ancestors and totems. These traditions guide their ways of living and reflect their strong ties to the sea and islands.

While spiritual beliefs differ between groups, both Aboriginal and Torres Strait Islander Peoples share a deep respect for their ancestors, a responsibility to care for Country and Place, and the importance of passing down knowledge through oral traditions, ceremonies and art. Spiritual beliefs also teach people about their land and where to find water, food and shelter.

The Dreaming is like a giant storybook, passed down through stories, songs, dances and art. The ancestral beings travelled across the land shaping everything — mountains, rivers and animals. These beings left behind clues, like the shapes of mountains or patterns in plants, to show where they went and how everything came to be.

The ancestral beings also gave people the *lore,* the rules of life that keep harmony between people and nature. The lore protected sacred sites and safeguarded the wellbeing of the community

SkillBuilder discussion

Using historical sources

1. Who is Tagai?
2. What made him angry and what did he do?
3. Why would this story be of importance to people living in the Torres Strait Islands?

SOURCE 2 This text extract tells us about Torres Strait Islander Peoples' stories. Tagai, a warrior and fisherman, shaped their world. The stars helped them navigate the ocean. In their stories, Tagai created the star patterns in the night sky.

Tagai was a great fisherman. One day, he and his crew of 12 were fishing from their canoe but caught no fish. Tagai went to the reef to look for fish.

As it got hotter, the crew of Zugubals (beings who look like people on Earth) became thirsty. They drank all of Tagai's water. When Tagai returned and saw this, he was very angry. He punished his crew by sending them to the sky. Six went to the Pleiades star cluster (Usal) and six to Orion (Utimal). He told them to stay in the northern sky and not come near him.

Tagai can be seen in the southern sky in a canoe made of stars. His left hand is the Southern Cross holding a spear. His right hand is a group of stars in the constellation Corvus holding a fruit called 'Eugina'. His canoe is made from the stars of Scorpius.

2.3.2 The creation story of Bunjil the eagle

Bunjil is a very important ancestral spirit from the creation stories of a number of Aboriginal Peoples, such as the Kulin Nation of southeastern Australia. There are variations of Bunjil the eagle story across different Kulin Nation language groups and among other Aboriginal groups in Victoria. These variations reflect the oral tradition of storytelling, where stories adapt over time and across regions while maintaining their core teachings. However, to all these peoples, Bunjil represents creation and connection to Country. Bunjil's image as the eagle shows him to be a protector spirit who continues to watch over the land and its people.

SkillBuilder discussion

Historical significance

1. How did the Wurundjeri people's Dreaming story describe the creation of the earth?
2. What does Bunjil represent?
3. Why do you think the eagle represents a powerful ancestral spirit?

Bunjil, a creator ancestral spirit of the Wurundjeri people, appeared as a wedge-tailed eagle. Bunjil fell from the Sky Country as a star and was then transformed into an eagle. Bunjil blew air from his beak, creating the earth, and then scratched at the soil with his sharp **talons** to create the first trees and plants. As Bunjil was returning to the Sky Country, he swooped on the branch of a gum tree that was lying on the earth. Bunjil shook the branch and created a snake called Mindi. Mindi became Bunjil's brother and the lore giver. Mindi and Bunjil then created all the animals of their earth.

Did you know?

The eagle has great spiritual significance for many Aboriginal and Torres Strait Islander Peoples. The eagle is seen as a messenger between the earth and the gods because it is believed to fly higher than any other bird. They are also known for the strength of their vision, giving the eagle wisdom and foresight. The eagle's ability to soar into the sky represents freedom and courage. The Māori people of New Zealand and the North American Lakota, Cree and Anishinaabe peoples also revere the eagle as a creator spirit.

SOURCE 3 Bunjil, appearing as the Australian wedge-tailed eagle. The wedge-tailed eagle is a symbol of strength and wisdom as it soars above the earth, seeing all below.

2.3 SkillBuilder activity USING HISTORICAL SOURCES

The Wandjina shown in **SOURCE 1** are very important ancestral beings, particularly to the people of the Kimberley region of Western Australia. They create the landscape, plants, animals and people. The Wandjina also control the weather, bringing water with the **monsoon** rains. The Wandjina gave people the rules of life, and the customs that must be kept to ensure harmony between people and nature.

1. Refer to **SOURCES 1**, **2** and **3** to reinforce your understanding of the significance of the Dreaming and the creation stories.
2. Working in groups, write a simple explanation of what you think the creation stories of the Dreaming help people to understand, and why they are of such importance.
3. Use **SOURCE 1** as the visual centrepiece for a poster promoting a museum exhibition of Australia's Deep Time history. Write a short explanation of the place of the Wandjina in expressing Dreaming beliefs.

2.3 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 5, 8	3, 4, 6, 7	9, 10

REMEMBER AND UNDERSTAND

1. Explain how the Dreaming is passed down through the generations.
2. Why do you think the stars are so important to Torres Strait Islander Peoples?
   A. Stars provided the Torres Strait Islander Peoples with an understanding of the universe.
   B. Stars provided the Torres Strait Islander Peoples with a scientific understanding of ocean currents.
   C. Stars provided the Torres Strait Islander Peoples with navigation guidance, enabling them to find their way across the ocean.
   D. Stars provided the Torres Strait Islander Peoples with clues about changing weather conditions
3. Briefly explain the importance of rock art to archaeology.
4. Suggest reasons why the details of the creation stories differ across Australia.
5. What purpose do all the creation stories share?

ANALYSE AND APPLY

6. **Recall** the sources in this lesson. How does the Dreaming strengthen the link between people and Country?
7. **SOURCE 1** shows a representation of an ancestral being. **Suggest** why it would be important to express the Dreaming through art.
8. Dreaming stories communicate values and the lore. Refer to **SOURCE 2**. **Explain** what lore you think the story of Tagai is expressing.

EVALUATE AND COMMUNICATE

9. Aboriginal and Torres Strait Islander Peoples' culture and traditions have been passed down orally for thousands of years. Archaeologists are now beginning to understand that these Dreaming stories, rock art and carvings provide clues into Deep Time history of Australia. **Explain** why you think this is important for Aboriginal and Torres Strait Islander Peoples.
10. Insulting or ignoring the lore and the values given by ancestral beings would lead to misfortune. The ancestral beings punish those who fail to live in harmony with the natural world. In one paragraph, **demonstrate** your understanding of this, referring to the sources to support your explanation.

Answers and sample responses for this topic are available online.

LESSON 2.4 How has landscape and life changed?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** how Aboriginal and Torres Strait Islander Peoples adapted to the changes in their Deep Time environment
- **describe** how the record of their changing landscape was passed on.

Tune in

SOURCE 1 Lake Mungo has been a dry lakebed for approximately 15 000 years. Before the last Ice Age the lake provided the resources needed for life. Lake Mungo is now one of the most important archaeological sites of ancient Australia.

1. **Describe the landscape of Lake Mungo as shown in SOURCE 1.**
2. **How does this picture provide evidence of the changing climate of the land surrounding Lake Mungo?**
3. **Why do you think Lake Mungo has become such an important Australian archaeological site?**

2.4.1 Droughts and floods

Further evidence of Australia's Deep Time history was found in the sand dunes of Lake Mungo National Park in western New South Wales. The dry layers act as a time capsule from the Pleistocene period, which began about 2.5 million years ago. During this time, the Pleistocene Lakes dried up, affecting the lives of Aboriginal and Torres Strait Islander Peoples. As Lake Mungo dried, sea levels rose, flooding Australia's coastal plains and creating features like the Great Barrier Reef.

The Pleistocene period, known as the last 'great ice age', saw much of the Earth's water frozen into ice caps, forming land bridges that allowed people to travel, including to Australia. The Holocene period began around 12 000 years ago, with melting ice and rising sea levels shaping today's continents. These periods differ from European time periods like the Stone Age or Bronze Age, as they are based on climate and sea level changes.

By 1788, Aboriginal and Torres Strait Islander Peoples lived across Australia, adapting to various climates. The rising sea levels of the Holocene period covered land bridges between New Guinea and Australia, and between Australia and Tasmania, creating the islands we see today. This separation led to isolated island life, with people in Tasmania and the Torres Strait relying more on the sea for food.

2.4.2 Changing Country and culture

About one-seventh of Australia's land was covered by rising oceans at the end of the last Ice Age. Dreaming stories remember these changes and tell of long-ago events.

Half of Australia's coast turned into sandy beaches, 30 per cent became tidal flats and 20 per cent changed to cliffs and estuaries. Many coastal people became islanders or moved away as their land was covered by water.

The Keppel Islands were now 13 km from the mainland. Woppaburra Peoples used one-piece bark canoes to travel between the islands and used stone drills to make fishhooks from turtle shells.

Aboriginal and Torres Strait Islander Peoples lived near what is now the Great Barrier Reef for thousands of years. Before the reef formed over 7000 years ago, they lived where the ocean floor is now. As the reef formed, the coastline moved more than 30 km inland.

Dreaming stories say the reef islands were once joined to the mainland. People walked across floodplains and hills to hunt kangaroos and emus.

In the region of the Spencer Gulf in modern-day South Australia, the Nukunu Peoples tell of the great flood that came and swallowed their land. In the area surrounding Kangaroo Island, an ancestral being ordered the waters to rise and drown his wives as they were running away from him. All these Dreaming stories explain what modern science has revealed about the changing landscape that came with climate change of the Holocene period.

SkillBuilder discussion

Using historical sources

1. What evidence of inhabitation did archaeologists find on Barrow Island?
2. Where is Boodie Cave located?
3. What information did the records of Barrow Island provide us with?

SOURCE 2 From Naaman Zhou's 'Earliest evidence of Aboriginal occupation of Australian coast discovered', *The Guardian*, 2017.

Australia's oldest [known] coastal site was found in a cave on Barrow Island in Western Australia. People lived there more than 50,000 years ago. Archaeologists found charcoal, animal bones, and old tools. Barrow Island, 60 kilometers from the Pilbara coast, became an island about 7,000 years ago because of rising sea levels. The cave was used for hunting and living, and it has the oldest record of what people ate in Australia.

SkillBuilder discussion

Communicating

1. What does **SOURCE 3** show about the geography of the Torres Strait islands?
2. What do you think the challenges would be for the people living on these islands?
3. Why do you think the people living on these islands would have needed to develop strong trade links with other island and mainland peoples?

SOURCE 3 The Torres Strait contains 247 islands and hundreds of cays, reefs and sandbanks. The Murray Islands are the vents of volcanoes flooded by rising sea levels 8000 to 10 000 years ago.

Did you know?

Torres Strait Islander Peoples of each language group traded with their immediate neighbours. The Kaurareg Peoples were the only Torres Strait Islander Peoples trading directly with the Cape York communities. The trade between the two groups took place on tiny Muralug Island, which lay very close to the Cape York coastline. The Kaurareg acted as traders, exchanging goods on behalf of all the other Islanders. The Kaurareg exchanged goods such as finely crafted Muralug Island dugong harpoons and small bamboo items for the spears and ochres from Gudang Peoples of the region now known as Cape York.

2.4 SkillBuilder activity **CONTINUITY AND CHANGE**

The sources in this lesson provide evidence of a changing environment.

1. Look carefully at the sources to gain a clear understanding of what environmental change meant for Deep Time Aboriginal and Torres Strait Islander Peoples.
2. Working in groups, write a simple explanation of how landscape and climate influence the ways people live, who they trade with and what they believe.
3. Using **SOURCE 1** or **3** as the centrepiece for a poster promoting a documentary on *'the changing land of Deep Time Australia'*. Write a short description to accompany your image, highlighting the fascinating history this documentary presents.

2.4 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 4, 5	2, 3	6, 7, 8

REMEMBER AND UNDERSTAND

1. Prior to European settlement Aboriginal and Torres Strait Islander Peoples had established more than 250 Countries or communities across the Australian continent. True or False?
2. Complete the following passage. At the end of the _____ period, changing climate resulted in _____ _____ melting. This meant that the coastline of Australia changed. _____ _____ were flooded by rising sea levels, isolating Aboriginal and Torres Strait Islander Peoples' communities in _____ and the _____ _____ _____.

3. Lake Mungo was once an inland freshwater lake. Approximately how many years ago did it dry up?
   a. 10 000 b. 20 000 c. 30 000 d. 40 000
4. What do the Dreaming stories and the scientific study of the Great Barrier Reef reveal about the changes that came with the end of the last Ice Age?
5. How did the end of the Ice Age change life for the people of the Torres Strait and Tasmania?

APPLY AND ANALYSE

6. **Compare** the landscapes of **SOURCES 1** and **3**. **Suggest** ways that the geography of these two locations would have shaped the lives of people living there.
7. **Explain** how the **SOURCE 2** description of the archaeological finds on Barrow Island help us to understand the effect of the Holocene climate change.

EVALUATE AND COMMUNICATE

8. Think about the connection between the Dreaming stories and the archaeological investigation of the Deep Time locations of Australia. **Demonstrate** your understanding by creating the front cover of a book with the title *From Dreaming to Deep Time.*

Answers and sample responses for this topic are available online.

LESSON 2.5 Living with the megafauna

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the features of the megafauna and the evidence of Aboriginal and Torres Strait Islander Peoples' responses to their changing environment.

Tune in

You are living during the last stage of the Pleistocene epoch, Ice Age, on the big continent called Sahul. People live in the north on thick ice sheets and big glaciers. They share their land with giant animals like woolly mammoths, sabre-toothed cats and huge ground sloths.

SOURCE 1 Life in the Ice Age

1. **What challenges would people face living in such a harsh environment?**
2. **How would Australia change if our own sea levels rose 150 m due to climate change?**
3. **How did the landscape in the image differ from the current Australian landscape?**

2.5.1 The great continent of Sahul

The ancient continent of Sahul comprised what is now Australia, New Guinea, Tasmania and the Aru Islands of eastern Indonesia. Sahul existed at a time when Australia's geography was very different from today.

The **Pleistocene** climate changed between ice ages and warm times. When the ice formed, it created the land bridges between Asia and Australia. People travelled from Africa, through Asia and into Australia. We don't know exactly where they first landed in Australia (Sahul) because rising sea levels covered those land bridges when the Ice Age ended.

The seas separated New Guinea from Australia about 8000 years ago and Tasmania about 6000 years ago. Humans likely took another 4000 years to settle across the Australian continent after arriving.

2.5.2 Megafauna: The creatures of the Dreaming

Archaeological evidence shows that humans and giant animals, called megafauna, lived in Australia together for 15 000 to 20 000 years. At Cuddie Springs in northwest New South Wales, which is land of the Muruwari, Ngemba, Weilwan and Yualwarri Peoples, scientists found stone tools and bones of animals like *Genyornis*, *Diprotodon* and *Sthenurus*.

Rock art across Australia also shows these giant animals. The detailed pictures suggest that the artists saw these animals in real life. For example, on Yolngu Country, in Arnhem Land, there are rock paintings of a very powerful animal with a large jaw and thick snout. These paintings are thought to be 40 000 to 50 000 years old.

The Aranda people tell of Kadimakara, a giant animal that lived in the trees when places like Willandra Lakes and Lake Eyre were lush. As the land dried, Kadimakara fell, and its bones were found near the shrinking lake. Palaeontologists have discovered leopard-like *Thylacoleo* bones and other giant animals in this area.

Sahul had at least 50 unique megafauna, mostly marsupials, some of which laid eggs. These included hoppers, scavengers, burrowers, predators and browsers. During the late Pleistocene, many marsupials were much larger than today. *Genyornis* was a giant emu and *Sthenurus* a huge kangaroo. The ancient wombat, *Phascolonus*, was up to eight times bigger than modern wombats and could dig large burrows. *Diprotodon*, another wombat-like marsupial, was as big as a hippopotamus with a head over one metre long and a koala-like nose pad.

SOURCE 2 Lizards like *Megalania prisca*, now extinct, were up to seven metres long and had curved teeth.

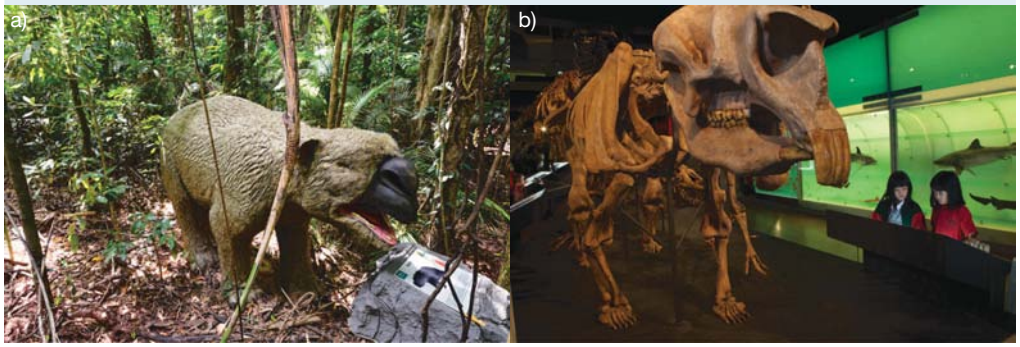
Scientists have debated why these giant animals went extinct. Some think they were hunted by early humans, but there's little proof of this. Another hypothesis is that extinction of the megafauna was due to climate change.

SkillBuilder discussion

Using historical sources

1. What key details does the *Diprotodon* model at the Daintree Discovery Centre emphasise about its appearance in ancient Queensland?
2. How does the *Diprotodon* skeleton at the Melbourne Museum illustrate its size and structure compared to other prehistoric creatures?
3. What insights about *Diprotodon's* physical characteristics and environment can we gather from studying both the model and skeleton in these exhibits?

SOURCE 3 **(a)** A *Diprotodon* model at the Daintree Discovery Centre, Queensland, and **(b)** an articulated *Diprotodon* skeleton at the Melbourne Museum showing its size.



SOURCE 4 Debunking the myth that Aboriginal stories are just myths: The Yamuti and the megafauna *Diprotodon*

Jacinta Koolmatrie is from the Adnyamathanha and Ngarrindjeri peoples in South Australia. She works in museums and shares stories from her ancestors about the land, water and sky. These stories are very old and are told around the fire, through paintings on walls, and in songs and dances. They are very important to her people's culture and language.

When outsiders came, they tried to write down these stories but didn't always understand them. They called them 'myths', which made them seem less important. But for Jacinta and her people, these stories are real and important.

As a child, Jacinta heard about the Yamuti, a frightening animal that scared kids. The story said the Yamuti couldn't look up, so kids were told to climb trees if they saw it. This made kids stay close to their parents and lock doors at night.

The Yamuti was described as very big, similar to the *Diprotodon*, a giant marsupial from long ago. The *Diprotodon* was huge but probably not dangerous.

The story of the Yamuti could be based on real animals like the *Diprotodon*.

Even if the Yamuti isn't exactly the *Diprotodon*, the stories are based on real things from over 40 000 years ago. These stories helped keep people safe and still matter today.

SkillBuilder discussion

Using historical sources

1. Source 4 refers to the Yamuti. What was the Yamuti?
2. Why were children told to climb the trees if they saw a Yamuti?
3. How were these stories told?

2.5.3 Megafauna power

The giant reptiles, flightless birds and marsupials of Pleistocene Australia would have provided abundant food supplies and resources for Aboriginal and Torres Strait Islander Peoples. The hunting of these giants would have meant that people had to work together and develop specialised hunting weapons and tools. The large size of these Pleistocene animals probably meant that people hunted less frequently, and had less of an impact on Country.

Scientists believe that approximately 20 000 years ago the megafauna became extinct. Their extinction and the loss of large prey would have meant that people had to hunt more frequently. They needed to chase the smaller and more agile animals like the kangaroos, wallabies and emus. People also had to adapt their land management practices to deal with a changing climate and geography. The ability to develop new hunting and living skills allowed Aboriginal and Torres Strait Islander Peoples to thrive across the continent and islands of Australia from Deep Time to the present.

2.5.4 Occupation and migration

The changing climate and rising sea levels of the Holocene period created Australia's coastal islands. Rottnest Island in Western Australia, Kangaroo Island in South Australia and Flinders Island in Tasmania were cut off from the Australian mainland by the rising water. Archaeological evidence tells us that people lived in these locations before sea levels flooded their land. Rottnest Island, traditionally named *Wadjemup* by the Noongar People, was isolated approximately 7000 years ago. The shell **middens** and stone tools found by archaeologists show the evidence of long occupation by people who had lived from the coastal plants and animals. Noongar stories describe a time when their people lived on Rottnest Island, providing evidence of their enduring spiritual connection to Country. The evidence of vast trade networks, shared practices, beliefs and tool technology show that even as people were forced to move from their flooded land they kept their Country and cultural connections.

The stories kept the Deep Time knowledge of the great changes to Country, and how Aboriginal and Torres Strait Islander Peoples from all across Australia responded and adapted to their new landscapes.

SkillBuilder discussion

Communicating

1. Where is the Dampier Archipelago?
2. How does the source show an 'archipelago'?
3. What evidence does the source show of rising sea levels?

SOURCE 5 An aerial view of the Dampier Archipelago, on the northwestern coast of Australia

2.5 SkillBuilder activity **COMMUNICATING**

SOURCE 4 talks about the Yamuti and the giant *Diprotodon*. Like the Aranda story of the Kadimakara, the Yamuti story was told to children for many generations.

The Yidindji People from Cairns tell stories about when their ancestors lived on land with big floodplains and hills, where the Great Barrier Reef is now. The Nukunu People from Spencer Gulf have stories about a time when the gulf was not so deep. The Narrangga People remember when the gulf was a marshy place with lots of birds and animals.

Children learned about the Dreaming and Country from stories told by their Elders.

1. Research another story that explains how Australia's land and climate have changed, how rising sea levels affected it, or about Australia's giant animals. Connect this story to the Deep Time history of Australia's Aboriginal and Torres Strait Islander Peoples.
2. Communicate your research as an illustrated storybook for children. The story should explain the key features of Country and climate, or the role of Palaeolithic giants in it.

2.5 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4	5, 6	7, 8, 9, 10

REMEMBER AND UNDERSTAND

1. Match the name of the megafauna animal with the description provided.

Name	Description
1. *Genyornis*	a. Leopard-like animal living mainly in the trees
2. *Thylacoleo*	b. Wombat-like animal with a head over a metre in length
3. *Diprotodon*	c. Large kangaroo-like animal with a short flat face
4. *Meglania prisca*	d. Large emu-like flightless bird
5. *Sthenurus*	e. Huge lizard with bulky body and powerful short tail

2. Decide whether each of the following statements is true or false.
   a. The ancient continent of Sahul was composed of the continent of Australia, New Guinea, Tasmania and the Aru Islands
   b. There is no evidence that the megafauna and human beings lived at the same time.
   c. During the Pleistocene period, no animals or people inhabited Sahul.
   d. There is little evidence of megafauna inhabiting Sahul.
3. **Identify** three Australian regions where the Ice Age warming greatly changed the environment.
4. The glacial ice periods exposed land bridges between Asia and _____.
5. Select the statement that best **explains** how the glacial periods helped people move out of Africa and into Sahul.
   A. The hotter climate made it easier for people to sail out of Africa.
   B. The colder climate flooded land bridges and made it easier for people to sail out of Africa.
   C. The glacial periods created land bridges, allowing people to walk across and take shorter sea voyages.
   D. The glacial ice period covered land bridges, enabling people to sail across shallow, safer waters.

APPLY AND ANALYSE

6. Write an extended caption to accompany **SOURCE 3 describing** the *Diprotodon* and the similarities you can see with wombats or any other animals.
7. How does the Dreaming help teach Aboriginal and Torres Strait Islander children about their culture and beliefs?
8. **SOURCE 4** tells the story of the Yamuti. **Name** the megafauna that looks like the Yamuti. **Reflect** on how stories help record ancient history.

EVALUATE AND COMMUNICATE

9. **Develop** your own hypothesis to explain why the megafauna vanished and were ultimately replaced by their much smaller Australian relatives.
10. The responses of Aboriginal and Torres Strait Islander Peoples to Deep Time changes to Country shows the resilience of culture. Write a short Rottnest Island tourist information sheet explaining why Australia is regarded as being home to the world's 'longest continuing culture'.

Answers and sample responses for this topic are available online.

LESSON 2.6 What is connection to Country and kin?

LEARNING INTENTION

By the end of this lesson you should be able to recognise the images and symbols of the kinship systems and totems guiding the daily and ceremonial life of Aboriginal and Torres Strait Islander Peoples.

Tune in

Look at the **SOURCE 1** image of totems. The story shows the Manarrngu mourning ceremony for Gurrumarringu, a great hunter who died from a snakebite. The kangaroo and goanna are the animals he hunted.

Totems are animals, plants or objects that people and groups must take care of. They show special qualities and help protect the environment because people must look after their totems.

SOURCE 1 A bark painting by David Malangi, 1966, called *Totems of the Manarrngu, Mortuary Rites*, shows a file snake on the left, a water goanna over a kangaroo in the centre, and a tree on the right.

1. **What qualities or strengths do you think are represented by the SOURCE 1 totems?**
2. **Discuss the animal totem you would feel lucky to have if you could choose one.**
3. **Explain why you picked this totem and what qualities it shows.**

2.6.1 Kinship

In Aboriginal and Torres Strait Islander Peoples' communities, kinship is very important. Kinship is a system that shows how people are related and what their roles are. Kinship is linked to spiritual beliefs because Dreaming ancestors are seen as family and everyone is connected to the land.

Three levels of kinship exist: moiety, totem and skin names.

- *People in the same moiety are like siblings:* They cannot marry and must support each other. Everything, including plants, animals, belongs to a moiety. Moieties are placed into two groups, usually based on the mother's or father's family line, balancing each other in ceremonies and daily life.
- *Totems are shared between moieties to maintain balance:* A totem shows a person's identity and role in the community. People can have multiple totems for their nation, family and self. Totems are spiritual symbols given at birth to connect people with their Country, including its plants, sky, water and spirits.

- *Skin names show a person's family history and connections, helping people understand their relationships across generations:* Husbands and wives have different skin names, as do parents and children. Each nation has its own skin name, often with a gender-specific prefix or suffix. Note: Not all Aboriginal and Torres Strait Islander community groups use skin names.

Kinship networks grew stronger through ceremonies and exchanging gifts. Trade often happened over long distances and through different areas, so kinship agreements were complex. Goods had to be shared carefully to honour all connections. Learning and respecting traditions and ceremonies helped keep alliances and trade connections strong.

SkillBuilder discussion

Communicating

1. Read **SOURCE 2**. How many Aboriginal tribes made the Kulin nation?
2. What similarities do they share?
3. What did the Aboriginal tribes do to strengthen their ties?

SOURCE 2 Excerpt from a speech by Bryon Powell, Kulin National Heritage Organisation, May 2000

The Kulin nation had five Aboriginal tribes in Central Victoria, around Melbourne. They were made up of clans and family groups. The tribes shared the same language, customs, traditions, and trade links. The Woiwurrung and Boon Wurrung tribes were very close. They married each other to strengthen their ties and traded goods with one another.

SOURCE 3 When outsiders visited Wurundjeri lands, they participated in the Tanderrum ceremony, which granted safe passage and involved exchanging gifts. A nineteenth-century painting by Charles Troedel depicts Wurundjeri members fishing and camping at Merri Creek near Melbourne.

In the Torres Strait Islands, kinship was crucial, often leading to conflicts over limited resources. Trade was vital for survival on small islands, but it could be tense due to disputes over property and kinship rights. Trading groups kept their canoes close to shore to quickly leave if issues arose among different clans and language groups.

2.6.2 Totems

Aboriginal and Torres Strait Islander Peoples spoke many languages, each with its own beliefs. A strong spiritual connection with Country was shared by all.

Aboriginal and Torres Strait Islander Peoples' traditions, lores and ceremonies focus on taking care of the land because all life comes from it. For Aboriginal and Torres Strait Islander Peoples, spirituality and the land are connected.

Elders share their knowledge of the land and lore through ceremonies and the Dreaming. When the Dreaming began, the ancestral beings created totems for people showing the different communities and language groups. Totems gave people a sense of belonging to their Country and culture.

The sacred places were protected by following Dreaming beliefs and rituals. The Dreaming gave rules about where people could live, whom they could marry and which animals they could hunt. Some areas were set aside where hunting was not allowed, to make sure that important animals were protected. Totems guided people in managing their resources. Each person had a totem to honour for life.

Did you know?

Totems have a very important role in **conservation**. Because totem animals are believed to be spirit ancestors, it is the responsibility of each totem group to protect them. People are forbidden to hunt or harm their totem animal. This protects the health of the whole ecosystem because it also keeps animal habitats safe. Totems ensure care of the environment and **sustainable** management of animals and plants.

2.6.3 Land, sea and Sky Country

For Aboriginal and Torres Strait Islander Peoples, the land, sea and the sky are places of great spiritual significance because they represent the ancestral beings, the songlines and the sacred sites of Country. Each group has a responsibility to care for Country, respecting and understanding the boundaries between themselves and another group's Country. For coastal peoples, the sea territories are recognised in the same way. Sea boundaries are connected to fishing rights and responsibilities handed down through generations of ancestral knowledge. The stars, the wind and the ocean currents link people to their ancestral fishing grounds, reefs and islands. The sky is also part of this landscape. The ancestral beings continue to move across the sky guiding navigation, ceremonies, the changing seasons and the activities that take place at different times of the year.

2.6 SkillBuilder activity **CONTINUITY AND CHANGE**

Aboriginal and Torres Strait Islander Peoples have different beliefs, lores and ways of recognising family relationships, such as moiety.

For example, the Yolngu People of Arnhem Land are either Dhuwa or Yirritja moiety. The Yolngu believe that the ancestral beings gave everything to either the black cockatoo, Dhuwa, or the white cockatoo, Yirritja.

Even with the differences, kinship connects many of the different language and cultural groups across Australia. People who shared totems may live far apart, but they would still meet for trade, marriage and ceremonies.

1. Imagine the difficulties nineteenth-century European invaders would have encountered when trying to understand the Aboriginal or Torres Strait Islander Peoples' culture and kinship.
2. Research one nation, such as the Kulin Peoples of Victoria. Through your research **identify** the following:
   - The region that is the Country of the people, and the geographic features of the land
   - How the land and climate may have changed over the long period of Deep Time
   - The languages and dialect/s spoken

- Stories related to the Dreaming, when the spirit ancestors travelled the land creating all the physical features such as mountains and rivers
- Archaeological evidence of the Deep Time history of the region

3. Write a simple explanation of the culture and beliefs of your chosen group that could be understood by a nineteenth-century European. Focus on the importance of Country, kinship and belief to Aboriginal and Torres Strait Islander Peoples.

2.6 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 4, 6	1, 3, 5, 7, 8	9, 10

REMEMBER AND UNDERSTAND

1. Briefly **explain** what the kinship system is and why it is of such significance to Aboriginal and Torres Strait Islander communities.
2. How were kinship and trade connected?
   A. Ceremonies and exchanging of gifts strengthened Kinship networks.
   B. Kinship ties and agreements were complex and determined who traded.
   C. Trade goods were shared carefully to honour all kinship connections.
   D. All of the above
3. **Suggest** reasons why all trade negotiations were conducted on the shoreline of the Torres Strait Islands.
4. **State** whether each of the following statements is true or false.
   a. Two Aboriginal and Torres Strait Islander people could not have the same totem.
   b. Totems were chosen by the individual.
   c. Totems helped Aboriginal and Torres Strait Islander Peoples to manage their resources.
   d. A totem was given at the time of a person's birth.
   e. Totems were used for trade among Aboriginal and Torres Strait Islander Peoples.
5. **Explain** what totems are and why they vary from one community to another.

APPLY AND ANALYSE

6. **SOURCE 2** explains what kinship means. **Describe** how the Kulin strengthened their kinship ties.
7. **Infer** what the artist of **SOURCE 3** shows about Wurundjeri culture. How does this help us understand the role of kinship and ceremony in their daily life?
8. Refer to **SOURCE 1** to understand the importance of totems. **Describe** how the totems in the artwork show the natural environment.
9. Aboriginal and Torres Strait Islander communities call more people 'brother' or 'sister'. **Explain** what this suggests about kinship relationships.

EVALUATE AND COMMUNICATE

10. **Construct** a list of questions to explore this main question: How important were kinship systems and totems to Aboriginal and Torres Strait Islander Peoples?

Answers and sample responses for this topic are available online.

LESSON 2.7 What beliefs and values shaped everyday life?

LEARNING INTENTION

By the end of this lesson you should be able to **analyse** sources of evidence that help explain Aboriginal and Torres Strait Islander Peoples' cultural practices and lores.

Tune in

Think about a ceremony, like a wedding, you've attended. Why was it important to your family or community?

Read SOURCE 1. Discuss why you think ceremonies are a very important part of the daily life and culture of Aboriginal and Torres Strait Islander Peoples in Australia.

SOURCE 1 An Elder from the Ngarinyin Peoples, of the northwestern Kimberley region of Western Australia, explains the significance of the traditional Welcome to Country

Before whitafellas came, it was the tradition of Aboriginals that when strangers came into their particular country to hunt or to gather, or to just pass through on their way to other places, that the host Aboriginals would go out to welcome them.

When they met, there would be the formalities of greeting. Part of the ceremony of welcome would be the men sitting around and talking men's business whilst the host women would take the visiting women and children to a women's site to talk women's business.

When this was completed, the two groups would join again and the men would hunt for kangaroo, goannas or bush turkey — and the women would prepare an area for eating and would gather firewood and berries, fruit, nuts and lily roots for a meal.

Then the ceremonies — the corroborees or jumbas would commence, and the dancing, the singing around the fire could well go on, not only all night, but sometimes for many nights in a row. Each jumba with a message — each with its own story — men, women and children taking part. Whilst during the day, the visiting tribe would be taken and shown the sites of significance and be told the stories of the spirit of the land they would be passing.

In this way, the hosts believed that by the end of formalities, when the strangers were ready to move on — they would not be considered strangers but friends who now had the spirit of the Country in their hearts — they carried the Wunggud with them — just like the people who lived there.

They believed that once the spirit of the land was in their hearts, then those people would never damage the land — they would love it and care for it like those whose home Country it was . . .

2.7.1 Dreaming lore

The Dreaming explains how the world was created, how people should live and their connection to the land. It shapes the traditions, ceremonies and rituals of Aboriginal and Torres Strait Islander Peoples. These include chanting, singing, dancing, body painting and wearing feathered headdresses. Ceremonies help with hunting times, initiations, funerals and marriages.

Elders are respected leaders who make important decisions, give advice, judge crimes, arrange marriages and lead ceremonies. They are the guardians of the Dreaming lore.

SkillBuilder discussion

Communicating

1. Look at **SOURCE 2**. What is shown in the image?
2. Who is the lead person here?
3. Which Aboriginal nation does the lead person belong to?

SOURCE 2 Aunty Joy Murphy, Senior Wurundjeri elder of the Kulin Nation, performs a Welcome to Country before a cricket match in Melbourne.

Ceremonies show respect and understanding. One important ceremony is Welcome to Country. It marks the boundaries of each group's land. When someone from one group wanted to enter another group's land, they had to ask for permission.

SkillBuilder discussion

Communicating

1. Read **SOURCE 3**. What is Country?
2. How does the idea of Country represent more than just a location on a map?
3. Why do you think Country is so important to all Aboriginal and Torres Strait Islander Peoples?

SOURCE 3 Aboriginal and Torres Strait Islander Peoples' leader, Professor Mick Dodson, explains the meaning of Country.

> When we talk about traditional Country . . . we mean something beyond the dictionary definition of the word. For Aboriginal Australians . . . we might mean homeland, or tribal or clan area and we might mean more than just a place on the map. For us, Country is a word for all the values, places, resources, stories and cultural obligations associated with that area and its features. It describes the entirety of our ancestral domains.

2.7.2 Initiation ceremonies

Archaeologists have gained significant insights into ancient Australia by studying bora grounds, which featured two earth rings. The inner ring was used for important initiation ceremonies where boys and girls transitioned to adulthood, learning responsibilities, laws, customs and special knowledge from the Elders. These ceremonies also connected them the Dreaming, the spiritual history of their land.

Ceremonies varied by local beliefs and could include making scars, or removing a tooth or part of a finger to signify group or family. Each person's role in initiation was tied to their kinship duties, and the process, taught by Elders, could take years. Initiates learned about lore, totem history and rituals, with strict taboos guiding daily life. Invitations were sent to family and group members to witness these **rites of passage**.

2.7.3 Death and funerary customs

The belief systems and funeral practices of Aboriginal and Torres Strait Islander Peoples vary greatly between different communities, cultures and language groups. Many Aboriginal and Torres Strait Islander Peoples believe that when someone dies, their spirit returns to the Dreaming, ancestral beings, or a specific spiritual place, such as a waterhole or a sky world. However, the details of these beliefs and the journey of the spirit differ among groups.

In southeastern Australia, burial sites were marked by mounds of earth, piles of stones or carved trees. Funeral traditions varied across Australia and included:

- *Simple burials with bodies either stretched out or crouched:* Grave goods were sometimes included.
- *Cremation:* The remains were collected and later buried or placed in a tree hollow.
- *Desiccation, the drying or smoking of bodies:* The dried remains were sometimes kept before burial.
- *Leaving the body on tree platforms to decay:* The bones were later collected and often finally buried.

Bodies might be buried with personal items or painted with totem designs. Sometimes, they were covered in ochre. The Kulin Peoples of Victoria buried important people with possum cloaks, stone tools and woven bags. Mourners painted their faces white, women cut their hair, and everyone sang and danced to honour the person's spirit.

2.7.4 The tombstone openings of the Torres Strait

The final stage of mourning for the dead is marked in the Torres Strait islands by a tradition that is both a sign of respect and celebration of life. The ritual releases the spirit, allowing the deceased to return to the land of their ancestors.

The ritual has two main parts:

- A memorial tombstone is created as a record of the deceased's position in the community and the significant events in their life.
- The memorial is 'opened' to the people of the community to begin celebrations that may last for a few days. People feast, dance, sing and conduct spiritual ceremonies in honour of the dead. Kinship ties are strengthened, and children are taught ceremonial practices.

The tombstone opening is a farewell to the spirit of the dead, and a celebration of the ties of kinship and community.

2.7.5 Tiwi and tutini

The Tiwi Peoples live on what we now know as the Bathurst and Melville Islands, 80 km from Darwin. For thousands of years, they had little contact with mainland communities, believing spirits of the dead lived there. They created special art for their death ceremonies called 'pukumani', which had many steps and took months to complete.

- *Iliana:* This was the first funeral ceremony at the time of death. The body was painted with totem symbols and decorated with hair ornaments. Mourners painted their bodies white.
- *Tutini:* Elaborate burial poles were carved to honour the deceased and as gifts to their spirit. Made from ironwood trunks, these poles were placed around the grave to signify the person's importance.
- *Final pukumani ceremony:* This was held about six months after the burial to help the dead enter the spirit world. Mourners painted themselves with ochre, wore special headbands and armbands called pamajini for protection, and sang and danced, following the stories of the Dreaming ancestor Purukapali.
- *Ceremony end:* Mourners departed from the grave, leaving the tutini to decompose.

SkillBuilder discussion

Using historical sources

1. What is painted on the burial poles shown in the image?
2. What are the raw materials used for the paint?
3. What are the brushes made from?

SOURCE 4 The Tiwi Peoples' burial poles are carved from tree trunks and have unique windows and sections. They are painted in geometric and abstract patterns using the Tiwi art style. The paint was made by mixing ochre with wax, honey or egg yolks, and brushes were made from soft bark, sticks or human hair.

2.7 SkillBuilder activity COMMUNICATING

Ceremonies have been very important to Aboriginal and Torres Strait Islander Peoples in Australia for thousands of years. Some lasted weeks and included many people. The Kulin Peoples of Victoria, who lived there for over 40 000 years, had a ceremony called Tanderrum. This showed respect when passing through another people's land.

1. Choose a ceremony from one of Australia's Aboriginal and Torres Strait Islander Peoples to research, such as marriage, rain-making, smoking ceremony or Welcome to Country.
2. **Identify** the following.
   - Why the ceremony would be conducted
   - Where the ceremony would take place
   - Who would be involved, and how invitations would be communicated (e.g., using message sticks)
   - What the preparations would be for the ceremony (e.g., construction of earth mounds or rock arrangements)
   - Ceremonial objects and rituals can include Tjurunga (used by the Arrernte people), bullroarers, ceremonial poles, sacred chants, headdresses and body painting
3. Communicate your understanding, and the significance, of the ceremony you have chosen via a visual representation, a booklet, a brochure or a website.

2.7 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 3, 4	2, 7	5, 6, 8

REMEMBER AND UNDERSTAND

1. Initiation ceremonies were the tests that _____ had to go through before they could gain the status, responsibility and position of _____. The tests were trials of physical and _____ strength. During these ceremonies, knowledge and _____ of behaviour were passed down generations.
2. Briefly **explain** how burial practices differed between Aboriginal and Torres Strait Islander communities.
3. Tutini poles are made from the trunk of an _____ tree.
4. Approximately how long after burial did the final pukumani ceremony take place?
   - A. Six years
   - B. Six months
   - C. Six weeks
   - D. Six days
5. Create a short guide (one or two paragraphs) to the Tiwi funeral rituals for someone who is visiting the islands and keen to become familiar with the traditions.

APPLY AND ANALYSE

6. Ceremonies that mark big changes in a person's life are called rites of passage. These ceremonies often change the person's role or status in their community. Section 2.7.2 explains more about these special ceremonies.
   - a. Briefly **describe** the ceremonies discussed, and then identify a rite of passage ceremony practiced in your own community.
   - b. Write a paragraph **explaining** why ceremonies marking rites of passage are important in all communities and cultures.
7. Using the sources from this lesson, write a paragraph about the social customs of Aboriginal and Torres Strait Islander Peoples. Include a topic sentence, evidence and a concluding sentence.

EVALUATE AND COMMUNICATE

8. Briefly **explain** how the study of death and burial practices provides archaeologists with evidence of culture.

Answers and sample responses for this topic are available online.

LESSON 2.8 How did trade and technology develop in ancient Australia?

LEARNING INTENTION

By the end of this lesson you should be able to **identify** features of everyday life through investigation of the trade links that crossed Australia and the technology that developed over time.

Tune in

While reading about the trade items in this lesson, think about how everyday objects give us an understanding of the world that we live in.

1. **Think about an everyday object that you use at home. Tell your partner what the object is, and why it is useful to you.**
2. **Discuss what the everyday object you have identified would tell an archaeologist from the future about our way of life in modern Australia.**

SOURCE 1 What objects do you use every day?

2.8.1 What was the Aboriginal and Torres Strait Islander Peoples' economy?

Archaeological sites across Australia show that trade networks have existed for thousands of years (and still do today). People traded with their neighbours and with groups far away. Trade was important for both practical needs and cultural reasons. Many different items were exchanged.

- *Stone:* Heaviest item traded, wrapped in paperbark and tied with string. Grinding stones were crucial for making flour. Sandstone slabs from north-west Queensland were brought 500 km to the Diamantina plains. Volcanic stone for axe heads came from Mount William, north of Melbourne. The Wurundjeri people mined and traded this stone for cutting bark for canoes on the Murray River.
- *Ochre:* From Pukardu in the Flinders Ranges, this was traded 500 km north through South Australia, New South Wales and Queensland. Message sticks were sent ahead to negotiate trades. Pukardu ochre had spiritual value and was used in ceremonies. In return, people traded black paint, boomerangs, spears, nets and grass seeds.
- *Pitjuri:* A small plant grown in central Australia, traded near the Cooper, Diamantina and Georgina rivers. Used as a drug for hunger, tiredness and pain. People from the north traded spears, spinifex glue, stone knives and pearl shells. From the east came wooden shields and spear shafts, and from the west came ochre and light spears. The south traded weapons, stone axe heads and possum skins.

SkillBuilder discussion

Communicating

1. How were message sticks used by the Yirandali language Dalleburra People of Queensland?
2. What symbols or markings are typically found on these message sticks?
3. How do message sticks reflect the communication practices of the Yirandali language Dalleburra People?

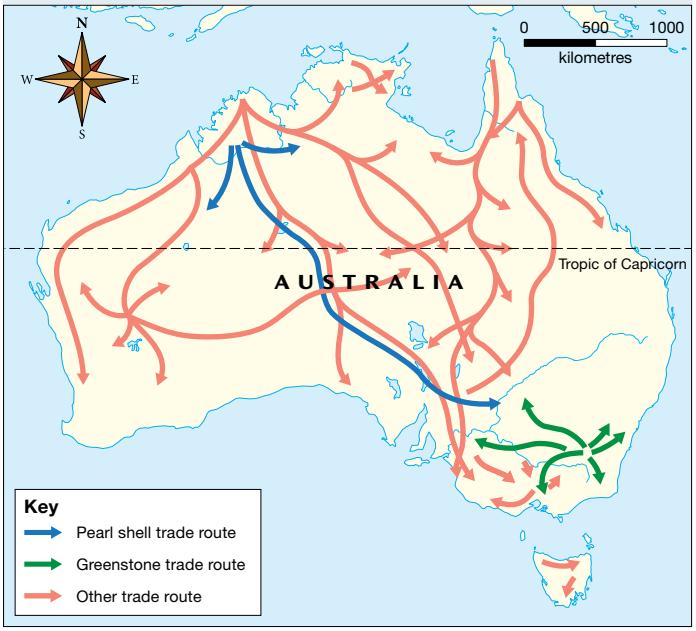
SOURCE 2 The Yirandali Dalleburra People in Queensland used message sticks with symbols, not words. They helped people stay safe when travelling through other groups' land. Smoke signals were sent first, then the message stick was given to the Elders with an explanation.

SkillBuilder discussion

Causes and consequences

1. Study **SOURCE 3**. Which regions were connected by these trade routes?
2. How did these trade routes support exchange of things among Aboriginal and Torres Strait Islander communities?
3. What role did these trade routes play in interactions among different Aboriginal and Torres Strait Islander Peoples?

SOURCE 3 The major trade routes of Aboriginal and Torres Strait Islander Peoples



Sources: Museum of Australia, Cited in Barlow, Alex, *Aboriginal Technology,* 1994.

2.8.2 The pearl shell trade

Pearl shells travelled the furthest of all traded items in ancient Australia. The Ngarluma People collected them from beaches or reefs using rafts. They traded the shells with the Yindjibarndi, Nyamal and Njangamarda-Iparuka Peoples for spears made from mulga and witjuti wood. Wrapped in soft bark, the shells passed through many hands.

The Gooniyandi People collected pearl shells from the Fitzroy River and traded pearl shells, stone blades and spear points for boomerangs and carved spears with desert peoples.

SOURCE 4 Pearl shells

The further the pearl shells travelled from the Kimberley coastline, the more valuable they became. Evidence of their journey is found from the tropics in the far north to the mallee scrub between Adelaide and Victoria.

2.8.3 Trade practices

Aboriginal and Torres Strait Islander communities lived in small groups on Country for most of the year, moving with the seasons and available food. An important event was the annual gathering when food was plentiful. Feasts on freshwater eels in Western Victoria or Bogong moths in the Snowy Mountains allowed for ceremonies, marriages, legal decisions and trade.

2.8.4 Gatherings

When groups gathered, they sent formal invitations with message sticks. In western Victoria, the land was crowded, but people shared resources and traded when there was enough food. At Mount Noorat, people traded spear points, possum cloaks, acacia resin, seashells and net bags during eel feasts. Leftover eels were dried and wrapped in kangaroo skin to take home.

In the Snowy Mountains, when the snow melted, there was plenty of food. Every year, the Ngarigo and Walgalu Peoples sent message stick invitations to nearby groups for trade and ceremonies. Men caught Bogong moths, cooked them into rissoles, and shared them at feasts.

Did you know?

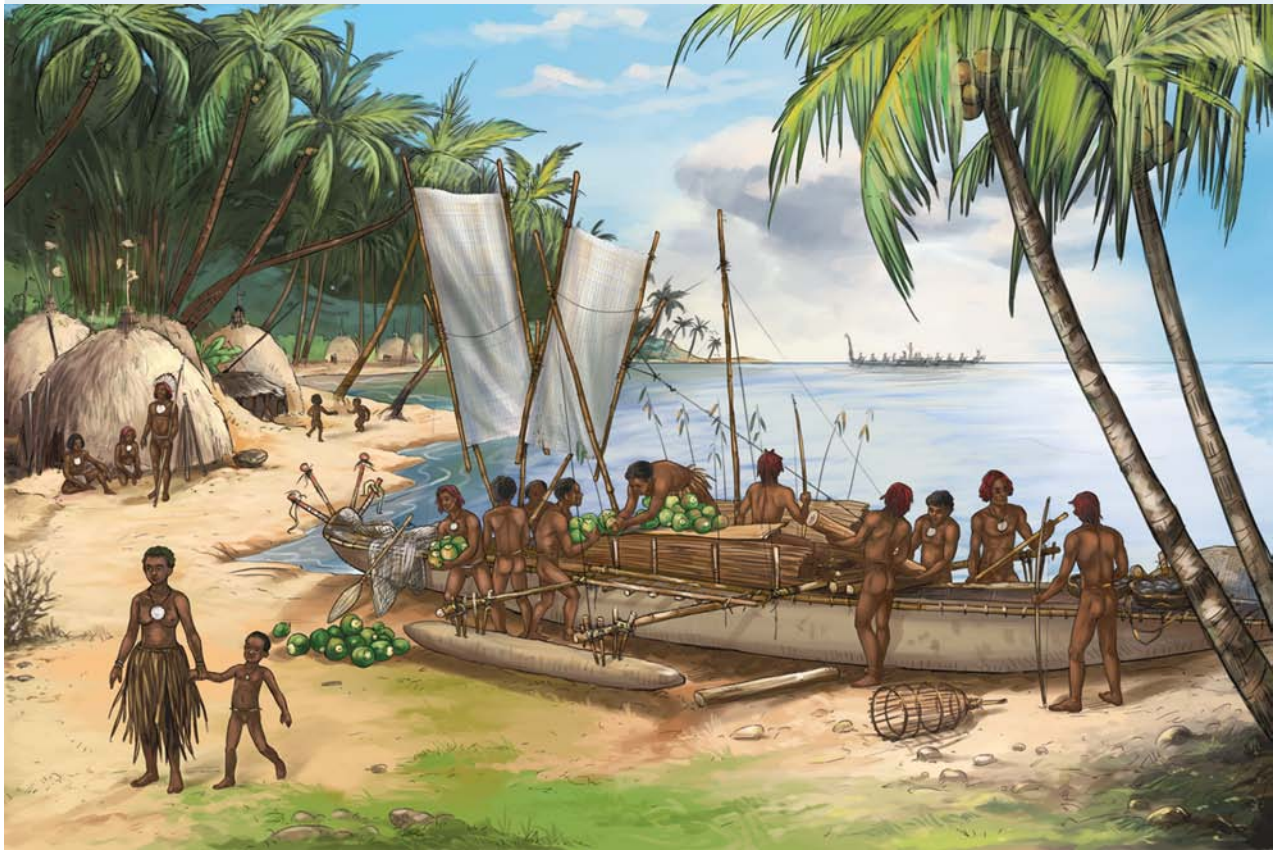
Dr Heather Builth, an archaeologist, studied how the Gunditjmara People farmed eels in Victoria's Lake Condah wetlands. She thought the farms could feed up to 10 000 people.

Bogong moths come from the Bogong High Plains in the Victorian Alps. When roasted, they taste nutty and are very nutritious.

2.8.5 Torres Strait trade

The farmers and fishers of the Torres Strait Islands had extra food at certain times of the year. Turtle and dugong could be dried, stored and traded with nearby clans in Cape York and Papua New Guinea.

SOURCE 5 Illustration detailing dugout canoes with two sails which were used to transport people and trade goods between the Torres Strait Islands, Papua New Guinea and the Australian mainland.



Trade was very important for survival on the Torres Strait Islands. The Torres Strait Islander Peoples got their fishing and transport canoes through trade with the Saibai Peoples from Papua New Guinea's Fly River area. The trees needed for the construction of the canoes don't grow on the Torres Strait Islands.

The Saibai traded with canoe builders who lived up the river in forests. They changed their single outrigger canoes, good for lagoons, into double outrigger canoes for rough seas. They added masts and woven nipa-palm sails. Torres Strait Islander Peoples traded shellfish, dried fish, turtle and **dugong** for these new canoes, drums, **sago**, bows and arrows, and feathers from **cassowary** and birds of paradise.

2.8.6 Tools and technology

Over thousands of years, the climate changed, affecting where people could find water and food. After the Ice Age, rising seas covered land, so people had to adapt. They didn't just react to changes — they also made the land better for farming. In a process we call **intensification**, they used fire to help grow plants like millet, fruit and nuts. They created tools like stone axes and picks, some of which are over 50 000 years old and were traded across southeastern Australia.

Stone was widely used in the construction of tools and weaponry:

- *Millstones:* Large sandstone tools from western New South Wales, used to grind seeds from grasses, wattle and kurrajong trees.
- *Whetstones:* Smaller, portable millstones with grinding surfaces on both sides.
- *Percussion stones:* Also known as hammer stones, used for breaking and trimming stones, shredding bark, and pounding bones, seeds and shells.
- *Anvil stones:* Flat or egg-shaped with a roughened centre, used to hold objects being shaped with hammer stones.
- *Chisels:* Long axe heads attached with gum to a handle, used to split bark and timber.
- *Blades:* Highly crafted stone implements used as spearheads and for carving and cutting hide.

Wood was important for making things like canoes, weapons, message sticks and tools. Bark was used for canoes, huts, sleeping mats, clothing and sandals. People also used shells, bones, gum, grass, skins and hair in their daily lives.

SkillBuilder discussion

Using historical sources

1. Look closely at **SOURCE 6**. What are some features of the boomerangs in the image?
2. How were hand axes used by Aboriginal and Torres Strait Islander Peoples?
3. What materials were traditionally used to make these artefacts?

SOURCE 6 A collection of Aboriginal and Torres Strait Islander Peoples' artefacts, tools and weapons, including boomerangs and hand axes

2.8 SkillBuilder activity USING HISTORICAL SOURCES

Look at **SOURCE 1** to learn what ancient Australians traded and how they did it. Trade was part of daily life and important for ceremonies. As ancient Australia changed, so did the trade networks.

1. In small groups, use the text and sources to create a mind map. Show the goods traded, where they came from, and where they went.
2. Look at a map of Australia to **identify** one of the trade regions from this lesson. Research the following.
   - The geographic features and landforms of the area (e.g., rivers)
   - The climate (e.g., subtropical)
   - The natural resources available (e.g., seafood through being close to the sea)
3. **Discuss** the challenges of surviving in your location, like unreliable water or cold winters. Also, consider what natural resources could be traded with other groups.
4. **List** the three most valuable trade resources from your location. Then, trade or barter with other groups to get three more resources you need.
5. Look at your map to **identify** where the extra trade goods came from and how hard it was to move them. Present your list of six resources to the class, explaining why you chose them and the challenges of trading them.

2.8 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 3, 4	2, 5, 6	7, 8, 9

REMEMBER AND UNDERSTAND

1. Fill in the gaps.
   _____ shells travelled further than all items traded in ancient Australia. The Ngarluma People collected them from beaches or reefs using _____. They traded the shells with the Yindjibarndi, Nyamal and Njangamarda-Iparuka Peoples for spears made from _____and _____ wood. Wrapped in soft _____, the shells passed through many hands. At the _____ River, the Gooniyandi People traded pearl shells, stone blades, and spear points for _____ and carved spears with desert peoples.
2. Briefly **explain** the importance of the following trade items to Aboriginal and Torres Strait Islander communities.
   a. Pearl shell
   b. Ochre
   c. Grinding stones
3. **Determine** whether each of the following statements is true or false.
   a. Message sticks were sent before the exchange of goods took place.
   b. Trade often happened alongside ceremonial events.
   c. Groups gathered when seasons were bad to exchange scarce food resources.
   d. Aboriginal Peoples understood how to preserve food.
   e. Groups generally shared food rather than traded it.
4. The Peoples of the Torres Strait Islands traded with the people of _____ and the coastal people of _____. Animal goods that could be dried such as turtle and _____ were exchanged.
5. **Explain** why trade was critical for survival on the Torres Strait Islands.

APPLY AND ANALYSE

6. What do the messages on the message sticks in **SOURCE 2** tell you about what was important to Aboriginal and Torres Strait Islander Peoples?
7. How can studying stone help archaeologists learn about the tool-making, trade, and travel of Aboriginal and Torres Strait Islander Peoples?

EVALUATE AND COMMUNICATE

8. Torres Strait Islander Peoples and some coastal mainland communities used wind names to indicate direction. Referring to **SOURCE 3**, write two sentences **evaluating** the importance of dugout canoes to the life and culture of Torres Strait Islander Peoples.
9. Write a paragraph comparing and contrasting the trade practices of ancient Australian communities and Torres Strait Islander communities. Describe what they did the same and what they did differently.

Answers and sample responses for this topic are available online.

LESSON 2.9 How was land managed?

LEARNING INTENTION

By the end of this lesson you should be able to **explain** the importance of Deep Time Aboriginal and Torres Strait Islander land management, farming and fishing practices.

Tune in

Think about a natural environment you know. Describe the plants, animals, landscape and climate. What challenges would you face living there? How would your life change, and what would you need to do to survive?

SOURCE 1 Joseph Lycett, an artist from the early 1800s, painted scenes of Aboriginal and Torres Strait Islander life. His paintings show people using fire to catch animals and make grasslands. Early European explorers often saw open land with scattered trees, like a park. This 'firestick farming' shaped the land Europeans settled in 1788.

Look at SOURCE 1.

1. **Describe the plants, animals and landscape.**
2. **What do you think the climate was like?**
3. **What evidence from this nineteenth-century painting shows how Aboriginal and Torres Strait Islander Peoples managed the land? Why would they have needed to manage it?**

2.9.1 The influence of the environment on ancient Australian communities

As the landscape and climate of Ancient Australia kept changing, Aboriginal and Torres Strait Islander communities had to create different ways to hunt, gather and manage their land. Aboriginal and Torres Strait Islander Peoples are known for their deep knowledge of managing the land and resources. They had homes but moved between their camps when the seasons changed. They did this by understanding the climate, sea life, plants and animals.

Aboriginal and Torres Strait Islander Peoples hunted and gathered food in a way that didn't use up all the resources, so there would be enough for the future.

Hunters only took what they needed from the land to protect the environment. They didn't harm young animals, left seeds to grow next season and left some eggs to hatch. They ate many different foods like fruits, berries, roots, grubs and local animals.

2.9.2 Firestick farming

Fire was very important for managing the land and helped shape the Australian landscape. It was used in many daily activities. **SOURCE 2** shows how fire was used.

Aboriginal and Torres Strait Islander Peoples have used firesticks as a tool for tens of thousands of years. They set small fires in the bush and grasslands to help manage the land. They carried smouldering banksia branches to start these fires safely. They only burned the dry leaves and grass when the weather was cool, so the fires wouldn't get out of control.

SOURCE 2 Uses of fire in Aboriginal and Torres Strait Islander Peoples' culture

1. Cooking food and catching animals by flushing them from burrows and driving them into traps
2. Repelling insects and removing snakes from long grass surrounding campsite
3. Manufacturing tools such as spears and stripping bark from trees in the process of making canoes
4. Sending messages by smoke over long distances and clearing the ground through recognised travel pathways

5. Cleaning wounds and scarring the skin for initiation and ritual
6. Scaring off evil spirits and burning the bodies of the dead in regions where this was the funeral tradition
7. Lighting the night for community gatherings and providing warmth for sleeping
8. Regularly burning the forest undergrowth to prevent large-scale bush fires

Burning the grasslands made new plants grow. After thousands of years of burning, there were more open grasslands, which meant more food for animals like kangaroos.

Fire helped people who hunted and **foraged** to find more food. Bush potatoes and other plants grew better in the open areas created by small fires. Scientists think small animals like the bilby started to disappear when Aboriginal and Torres Strait Islander Peoples stopped using firestick farming regularly.

SkillBuilder discussion

Historical significance

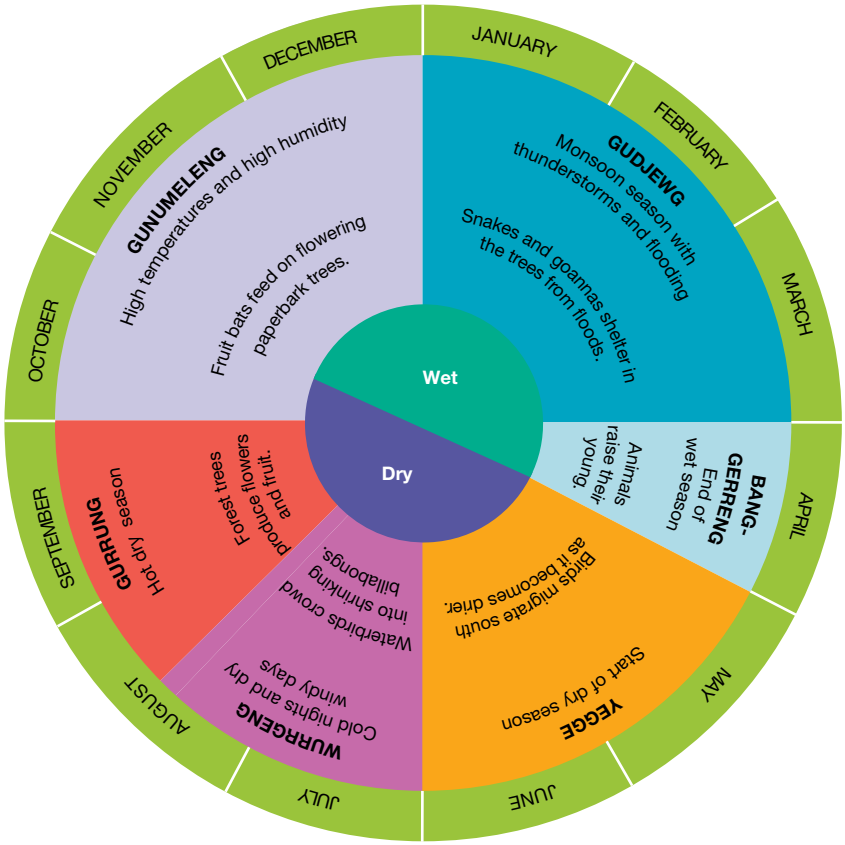
1. How does the **SOURCE 2** image illustrate the importance of fire in daily life?
2. How has the use of fire been shown to have a spiritual and ceremonial importance?
3. How did the use of fire contribute to the agricultural practices of Aboriginal and Torres Strait Islander communities?

SkillBuilder discussion

Communicating

1. What is the name of the season prevailing in the months of October to December?
2. Which is the shortest season?
3. Which are the dry seasons?

SOURCE 3 The calendar from Kakadu, Northern Territory, recognised six seasons based on changes in plants, animals and the environment. A modern picture below shows these seasons.



SkillBuilder discussion

Using historical sources

1. Describe the landscape illustrated in **SOURCE 4**.
2. What different activities can you see depicted in the painting?
3. How does the **SOURCE 4** image provide evidence of the agriculture of the eastern islands of the Torres Strait?

SOURCE 4 A nineteenth-century painting shows village life on Erub (Darnley) Island in the Torres Strait. The island's rich volcanic soil helped grow taro, bananas and other vegetables. At that time, around 400 people lived in seven villages on the island.

2.9.3 Managing the land in the Torres Strait Islands

Farming practices

In ancient times, farming was done in the Torres Strait Islands. Crops and farming knowledge came from Papua New Guinea. Early Torres Strait communities grew many different crops based on each island's land and conditions.

- People on the islands near Papua New Guinea relied on farming for food. They mainly grew **taro** and also planted bananas on nearby uninhabited islands, away from tidal swamps.
- On the islands to the northeast, where the volcanic soil was wet and rich, people grew coconuts, taro, bananas, and many smaller fruits and vegetables.
- People on islands like Muralag, near the Australian mainland, practised limited farming. They grew some taro, but most of their food came from the sea. The rocky islands didn't have good soil or climate for farming, so they relied on hunting and gathering.

Fishing practices

Even though the Torres Strait Islands had different landscapes and ocean conditions, all communities lived from the sea. People who farmed also went fishing for food and resources. The shallow waters, complex tropical reef systems and huge beds of **seagrass** created a thriving marine **ecosystem**.

SkillBuilder discussion

Using historical sources

1. Read **SOURCE 5**. What activities were women and children involved in?
2. What did the men hunt?
3. Why do you think the reefs would have been very important to the islands of the Torres Strait?

SOURCE 5 Shows fishing practices that early Torres Strait Islander Peoples used. This source is adapted from a 1912 report by A. C. Haddon and W. H. R. Rivers.

At low tide, men, women and children search the reef for shellfish and fish trapped in rock pools. Women and children mostly do this collecting. Serious fishing, like hunting dugong and turtle, is done by men. Women usually fish only on the reef around their home island.

Source: Bruce Pascoe, *Dark Emu: Aboriginal Australia and the birth of agriculture*, Magabala Books, 2014.

Torres Strait Islander Peoples made many tools for fishing, like harpoons, spears, hooks and nets. They built stone fish traps and caught over 450 types of sea life. They dried and preserved dugong and turtle meat for later use and trading. Dugong and turtle were important in their diet and creation stories.

Did you know?

Mainland Aboriginal Peoples fished, but Tasmanian Peoples stopped fishing about 3500 years ago and collected shellfish instead. Torres Strait Islander Peoples used harpoons for fishing, while people on the mainland used spears. Some spears had a barb from a stingray, and others were made with human hair.

2.9 SkillBuilder activity **USING HISTORICAL SOURCES**

Aboriginal and Torres Strait Islander Peoples practised aquaculture. The huge Darling River Fish Traps might be the oldest human-made structures on Earth. The remains of weirs, clay dykes, irrigation systems, fish nets with floats and weights, whale fishing boats and tools are all evidence of this.

Now, think about the Gunditjmara Peoples from Lake Condah in Victoria. Early Europeans, like escaped convict William Buckley, saw their fish traps, which were built before the Egyptian pyramids. To learn more, read **SOURCE 6**.

SOURCE 6 Brewarrina fish traps

The fish-trap system is so old that the Ngemba people say it was made by the creator spirit, Baiame. At a meeting in Sydney, Elder Brad Steadman shared a traditional story about it:

Bunggula, the Sooty Grunter (a type of fish), grunts when taken out of the water. The spines on its back are like spears thrown by Baiame, who hunted the fish in a waterhole. The fish escaped, creating a channel that became a river. But a drought came, animals left and plants died. Baiame returned and taught the people songs and dances to make the rain fall again.

1. Work in groups to **discuss** what information **SOURCE 6** provides about Aboriginal and Torres Strait Islander Peoples' aquaculture.
2. Look at the timeline to find out what and where you would search for evidence of people from your chosen time. Find one artefact that can help you understand what life was like for them.
3. Your group can research more examples of ancient Australian aquaculture, like the mollusc industries of the Kombumerri Peoples, the Brewarrina fish traps in north-west NSW, the Barragup fishing weir in Western Australia, the eel traps of the Gunditjmara people of Budj Bim or the stone fish traps in the Torres Strait.
4. The aquaculture and water management of ancient Australia are not well known. Discuss and evaluate your group's research and write one statement about why aquaculture and fishing are important for understanding Australia's Deep Time history.

2.9 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 3, 4	1, 5, 6, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. Fishing was key to Torres Strait Islander life. Name three features of these islands that made it great for their seafaring culture.
2. Number the sentences (1–6) to explain why farming and hunting were important to Aboriginal and Torres Strait Islander Peoples.

	Geographic conditions on each island group affected what and how people farmed.
	Torres Strait Islanders grew many crops, including taro, bananas and coconuts.
	Torres Strait beliefs provide further evidence of the importance of the sea.
	Farming knowledge spread from Papua New Guinea to the Torres Strait Islands.
	Despite the different landscapes, all the Islanders took to the sea for food and resources.
	Evidence includes various fishing tools: harpoons, spears, hooks, lines, fish scoops and nets.

3. **Identify** three ways fire increased food supplies for Aboriginal and Torres Strait Islander communities.
   A. Promoted new growth
   B. Attracted grass-eating animals
   C. Scared off animals competing with people for food supplies
   D. Changed patterns of plant growth
   E. Killed the weeds

4. Why did Aboriginal and Torres Strait Islander Peoples of Australia need so many ways to hunt and manage the land?
   A. Methods changed as resources were depleted.
   B. Methods were diverse because people lived in such a wide range of environments.
   C. Methods changed because people were constantly developing new technologies.
   D. Methods changed because people were given new advice.

APPLY AND ANALYSE

5. Use the information from the text and **SOURCE 2** to answer the following questions.
   a. How important was firestick farming to the Aboriginal and Torres Strait Islander Peoples' way of life?
   b. What was the impact on the environment of firestick farming?
   c. What do you think were the consequences for the environment when firestick farming stopped?
6. **Explain** how useful **SOURCE 2** is for historians to learn about ancient Aboriginal and Torres Strait Islander Peoples' land-management practices. Give reasons for your answer.
7. **Explain** how the sources in this lesson show that Aboriginal and Torres Strait Islander Peoples lived in harmony with the land.

EVALUATE AND COMMUNICATE

8. Imagine you are with an explorer in the early 1800s, travelling across the continent and the Torres Strait Islands. Use the sources and text to create diary entries about the land-management practices you see.
9. Managing land and natural resources was important to all Aboriginal and Torres Strait Islander Peoples. **Explain** how the natural environment shaped their beliefs and daily life.
10. **SOURCE 4** was painted by English artist Harden Melville, who travelled the Pacific Islands in the 1800s on the HMS Fly. **Analyse** the painting for clues about life on the Torres Strait Islands. **Describe** how the artist shows the lifestyle and the importance of the sea.

Answers and sample responses for this topic are available online.

LESSON 2.10 How do we care for Country and Place?

LEARNING INTENTION

By the end of this lesson you should be able to:

- understand historians' interpretations of Aboriginal and Torres Strait Islander People's histories and cultures
- **explain** the cultural importance and shared responsibility we have for the care of heritage sites, artefacts and ancestral remains.

Tune in

Empathy means understanding how someone feels or thinks. We use empathy when we imagine what life is like for others by reading a book, watching a movie, looking at art or listening to people.

Some of the footprints in **SOURCE 1** were made by a child who ran here 20 000 years ago. They give us just a small clue into that child's life, but are still very important to history.

These footprints of a child give us a special connection to Deep Time. At that time, people lived off the land by hunting, gathering and telling stories. These footprints show us how they moved across the land and lived with nature.

What do you think is the significance of this site to world heritage?

SOURCE 1 The Pleistocene footprints from the clay at Lake Mungo left an ancient human record of life in Australia.

2.10.1 Investigating Australia's ancient past

Archaeological and scientific studies give us lots of interesting information from ancient burial sites. But we shouldn't forget that these sites continue to have spiritual significance. The study of Deep Time is not just a story about the past.

SkillBuilder discussion

Using historical sources

1. What does **SOURCE 2** provide a description of?
2. What helped archaeologists to identify that there was a child with the group?
3. What makes this archaeological site so 'personal'?

SOURCE 2 Adapted extract from Harvey Johnstone and Michael Westaway, archaeologists

Some footprints show a child walking, pausing, turning, and running away from their group before quickly returning. This might suggest the child was called back by an adult or sibling. Such personal details are rare in open-site archaeology.

Aboriginal and Torres Strait Islander Peoples still care for their land and the generations connected to it. Australian governments now recognise their rights over human remains, artefacts and heritage sites. There is discussion about the future control and care of our heritage sites, artefacts and ancestral remains.

The role of the archaeologist

Investigating archaeological sites is where we start to gather information. These sites help us understand how people lived. Archaeologists survey the landscape, and then often dig pits and trenches to uncover the layers of history found in ancient campsites or middens.

2.10.2 The Kulin Nation

The Kulin Nation has five groups in Victoria. They left many archaeological sites and artefacts that scientists and archaeologists study to learn about their life.

- *Quarries:* Kulin Peoples used quartz for sharp tools and greenstone from Mt William for axe heads, traded as far as Queensland.
- *Scarred trees:* Old trees in Victoria's grasslands show scars from bark removal for shelters, graves, water containers, shields and canoes.
- *Stone scatters:* Found near rivers and lakes, these sites have broken stone tools and tool-making waste.
- *Rock art:* Patterns and pictures on rocks, painted with ochre or charcoal, carved or rubbed in. Grampians National Park has about 60 Kulin rock art sites.
- *Ceremonial circles:* Five earth circles at Sunbury, each about 20 m wide.
- *Ceremonial rocks:* In the Dandenong Ranges, linked to Kulin Dreaming beliefs, marking sacred areas.
- *Caves:* Cape Schank in Bunurong Country, linked to Dreaming stories, with a cave formed by Bunjil.
- *Rock wells and springs:* Dug into rock to provide water in areas without rivers or creeks.
- *Fish traps:* Tidal fish traps along the coast, with large traps at Toolondo and Lake Condah.
- *Burials:* Found along the Murray River, in caves or on tree platforms.
- *Mounds and middens:* Raised areas with old campsites, rubbish and ash from fires. Middens have shellfish, charcoal, bones and tools.

Did you know?

Bones and teeth show health and disease. At Roonka Flat in South Australia, people had jaw arthritis and tooth loss. Archaeologists link this to chewing tough food and using the mouth as a tool.

SOURCE 3 A shellfish midden at King River, Northern Territory

2.10.3 Lake Mungo

Aboriginal and Torres Strait Islander readers are advised that this section contains images of and references to people who have died.

The old Lake Mungo area in western New South Wales was once a lake but is now dry. Erosion has revealed signs of ancient people who lived there. Lake Mungo is in the land of the Paakantji, Ngiampaa and Mutthi Mutthi Peoples.

In 1968, wind uncovered the burnt remains of a young woman named Mungo I in the sand dunes. It was first thought she lived 25 000 years ago, but now it's believed she lived about 42 000 years ago.

Since then, many remains and artefacts have been found. One of the oldest is Mungo III, or Mungo Man. He lived 38 000 to 42 000 years ago. His body was placed with hands together and knees bent. Archaeologists found ochre, a red substance, used in his burial, turning the soil pink.

Lake Mungo is one of 17 lakes in the Willandra region. This area is a World Heritage Site, important for nature and culture. Remains of fireplaces, shell middens and human burials show that Lake Mungo once had lots of water and supported many life forms.

SOURCE 4 The remains of Mungo III, a man placed on his side with hands clasped and then buried in a shallow grave

Source: J. M. Bowler & Traditional Owners, c/o National Parks of NSW, Buronga, 2739.

SOURCE 5 A map of Australia showing some Aboriginal and Torres Strait Islander Peoples' art sites and locations of ceremonial and cultural significance in southeastern Australia

Source: Spatial Vision

In 2003, archaeologists found 20 000-year-old footprints of the Willandra Peoples in dried clay that turned to stone. Mary Pappin Junior, a Mutthi Mutthi woman, showed these footprints to the archaeologists. Elders from the Paakantji, Ngiampaa and Mutthi Mutthi Peoples help care for the Lake Mungo site with the government.

2.10.4 Appreciating our heritage

Caring for the human and archaeological remains of ancestors is of great importance to Aboriginal and Torres Strait Islander Peoples. These remains connect people spiritually to their ancestors. The return of remains from museums back home to Country is a big issue. When remains are returned there are several ceremonies and practices that must be followed:

- Discussing with traditional custodians to decide how remains should be cared for, what ceremonies should be performed and where reburial should be.
- Honouring the ancestors with appropriate mourning practices, smoking ceremonies.
- Restricting entry to the site to certain people, such as Elders or people with ceremonial roles.

Many places in Australia are important for history and culture. The Australian government has set up over 70 Indigenous Protected Areas. Working with Aboriginal and Torres Strait Islander Peoples, traditional custodians manage these areas, caring for plants, animals and special sites. Aboriginal and Torres Strait Islander community rangers help manage the tourists visiting the sites. Ongoing care of Country keeps their culture strong.

In 2010, the Heritage Council of Victoria agreed to the Burra Charter, an agreement that put in place conservation rules:

- Heritage sites enrich our lives by helping us understand the past and the culture we live in today.
- A heritage site's importance comes from its location, objects, use and the meaning it has for people today.
- Cultural significance must be considered and studied carefully before making decisions about a heritage site.
- Records must be kept ensuring the continued care and understanding of heritage sites.

Sites such as Budj Bim, on Gunditjmara Country in Victoria, and the Willandra Lakes in New South Wales have been given protection by their World Heritage listing. World Heritage sites are selected because of their great significance to the shared culture and history of our world:

- Buj Bim's great **aquaculture** system shows the unique land and water management of Deep Time Gunditjmara people. The stone **weirs** and channels were constructed over 6000 years ago to farm eels as a **sustainable** resource.
- The Willandra Lakes shows Deep Time life dating back over 40 000 years. Dry lakes are evidence of climate change during the Pleistocene period. Human remains of Mungo I and Mungo III show ancient cultural practices.

2.10 SkillBuilder activity USING HISTORICAL SOURCES, COMMUNICATING

Establish the location of an Aboriginal site of cultural significance that you can visit.

1. In small groups, plan your excursion and design archaeological activities. Consult traditional custodians when planning. Invite a member of the Aboriginal and or Torres Strait Islander community to join and explain the site and artefacts.
2. Treat the site with the same respect as a church, mosque or war memorial. Plan how to move carefully to avoid damage.
   In the planning process you will also need to:
   - Check with local park and wildlife services for the rules of the site in their care.
   - Make sure all visitors know the site rules, and check with local Elders that the site is appropriate for visiting. Some sites are sacred and are not to be shared with everyone, even within Country. This includes men's business and women's business. Only take written notes, photos and drawings as records of your visit.

- Learn about the site's key features: its water proximity, weather protection, accessibility and surrounding vegetation.
- Research the Dreaming stories and beliefs of the peoples who created and maintained the site.

2.10 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 5	4, 6, 7, 8	9, 10

REMEMBER AND UNDERSTAND

1. Match the Kulin archaeological site with its location.

1. Burial sites	**a.** Sunbury, west of Melbourne
2. Rock art	**b.** Cape Schank
3. Fish and eel traps	**c.** Plenty and Maribyrnong rivers and Darebin and Merri creeks
4. Ceremonial circles	**d.** Mt William in Central Victoria
5. Mounds and middens	**e.** Lake Condah
6. Quarries	**f.** Grampians National Park
7. Ceremonial rocks	**g.** Banks of the Murray River
8. Caves	**h.** Foothills of the Dandenong Ranges

2. **Identify** the artefacts and evidence of life found at Lake Mungo.
3. Hundreds of Pleistocene footprints were preserved at Lake Mungo because the people walked across a layer of thick _____ that later dried and hardened.
4. **State** what the principles of the Burra Charter are designed to achieve.
5. The charred remains of Mungo I, found near Lake Mungo, are about 20 000 years old. True or False?

APPLY AND ANALYSE

6. The map in **SOURCE 5** shows artefacts and sites around Australia of archaeological significance. **Identify** what the difficulties are in protecting and conserving these sites.
7. Look at **SOURCE 4** and read the relevant text.
   a. What role did erosion play in discovering the evidence of early Aboriginal and Torres Strait Islander Peoples' occupation of Lake Mungo?
   b. How deep was the Upper Mungo level?
   c. Would you expect Mungo I or Mungo III to be closer to the boundary between Upper and Lower Mungo?
8. Look at the photograph in **SOURCE 4**. What evidence of Aboriginal and Torres Strait Islander Peoples' spiritual and funerary practices could an archaeologist gain from studying this source?

EVALUATE AND COMMUNICATE

9. **Discuss** the concept of a 'shared heritage' and decide what that should mean in modern Australia. Write your own definition of the term.
10. **Explain** the main points of the 2010 Burra Charter and then **identify** why you believe it is of significance to the care of Australia's deep history sites.

Answers and sample responses for this topic are available online.

LESSON 2.11 How is the connection to culture and Country continuing?

LEARNING INTENTION

By the end of this lesson you should be able to recognise the changing interpretations of Aboriginal and Torres Strait Islander Peoples' histories and cultures, and the continuing significance of their connection to Country.

Tune in

SOURCE 1 An emu-feather dance skirt, made and worn by Wendy Berick of the Dja Dja Wurrung Peoples (Melbourne, Victoria)

SOURCE 2 Denise Lovett of the Gunditjmara people (western Victoria) explaining the importance of connecting artefacts, such as the emu-feather skirt made by her ancestors, with understanding and knowledge of culture.

> I look at the feathers that the women would have collected, made and danced with. I wonder what song they were singing while they danced. Rightfully, this should have been handed down to someone's daughter and the story handed down too. It's sad that we don't have the whole meaning of them, that they are just objects.

1. **What is the SOURCE 1 skirt made from?**
2. **What was the purpose of the skirt?**
3. **What do you think is the cultural significance of the skirt?**

2.11.1 Continuing connection to culture and Country

Caring for Country and culture is very important to Aboriginal and Torres Strait Islander communities. In caring for Country, Aboriginal and Torres Strait Islander Peoples share knowledge and pass on their traditions. This knowledge teaches future generations how to manage the land and conserve the archaeological evidence of Deep Time history.

Artefacts are wonderful sources of information when we know where they came from and their cultural background. Art and objects are understood when explained by Aboriginal and Torres Strait Islander

Peoples who have the knowledge of culture and traditions. Devastatingly, the consequences of colonisation are that some of these stories have been lost.

The evidence of Aboriginal and Torres Strait Islander Peoples' history and culture

Archaeologists now work directly with Aboriginal and Torres Strait Peoples. The knowledge of traditional custodians is respected, and is now studied along with the archaeological and written evidence to build our knowledge of Deep Time history. Oral history, for example, was not recognised by earlier twentieth-century historians but is now regarded as a very important source of information.

The significance of the Mungo remains

The discovery of Mungo Woman (Mungo I) and Mungo Man (Mungo III) are of world archaeological importance because:

- They are at least 40 000 years old, making them among the oldest human remains to be found outside Africa.
- They are the oldest examples of ceremonial burials and cremation, revealing ancient rituals and spiritual beliefs.

The remains of Mungo Man and Woman show the continuing connection between Deep Time history and Aboriginal and Torres Strait Islander Peoples today. They prove that the Aboriginal and Torres Strait Islander Peoples of Australia are the custodians of the longest continuous culture in the world. In 2017 the remains of 108 Aboriginal people, including Mungo Man, were returned to Mungo National Park for reburial by the traditional custodians of Country. Mungo Man's remains had been in museum storage since 1974. The return of human remains finally demonstrates a respect for the rights and the knowledge of Aboriginal and Torres Strait Islander Peoples.

SkillBuilder discussion

Continuity and change

1. How does the discovery challenge previous understandings or timelines of Aboriginal and Torres Strait Islander settlement in Australia?
2. What significant implications does the discovery of Aboriginal and Torres Strait Islander Peoples' habitation dating back 80 000 years have for our understanding of human history in Australia?
3. How do researchers think Australia's landscape looked when people first lived there, compared to how it looks today?

SOURCE 3 Newspaper article, 'Australian dig finds evidence of Aboriginal habitation up to 80 000 years ago'

A groundbreaking archaeological discovery in Australia's north has extended the known length of time Aboriginal people have inhabited the continent to at least 65 000 years.

The findings on about 11 000 artefacts from Kakadu National Park prove Indigenous people have been in Australia for far longer than the much-contested estimates of between 47 000 and 60 000 years, the researchers said. Some of the artefacts were potentially as old as 80 000 years.

The new research upends decades-old estimates about the human colonisation of the continent, their interaction with megafauna, and the dispersal of modern humans from Africa and across south Asia.

'People got here much earlier than we thought, which means of course they must also have left Africa much earlier to have travelled on their long journey through Asia and south-east Asia to Australia,' said the lead author, Associate Prof Chris Clarkson, from the University of Queensland. 'It also means the time of overlap with the megafauna, for instance, is much longer than originally thought — maybe as much as 20 000 or 25 000 years. It puts to rest the idea that Aboriginal people wiped out the megafauna very quickly.'

The significant trove of thousands of artefacts was buried in 2.6 metres of sand and sediment on the western edge of the Arnhem Land plateau. The site at Madjedbebe is on the traditional lands of the Mirarr people.

Source: Helen Davidson and Calla Wahlquist, 'Australian dig finds evidence of Aboriginal habitation up to 80 000 years ago', *The Guardian*, 20 July 2017.

2.11.2 From 'history' to Deep Time

Mungo Man and Woman, the Dreaming, Country and the songlines show the connection between the past and the present. Aboriginal and Torres Strait Islander Peoples have lived in Australia for at least 65 000 years, and so their history is ongoing and 'living' because the past is still present through culture and belief. The terms historians use to study the past, such as 'history' and 'prehistory', do not always help us to understand Aboriginal and Torres Strait Islander Peoples and their past. 'Prehistory' and 'history' usually refer to the difference between the time before written records, and the time from when written records began. 'Pre-history' does not recognise the many ways Aboriginal and Torres Strait Islander Peoples recorded their past and their culture.

The term 'deep history' helps us to understand the continuation of a story stretching back tens of thousands of years. Deep history is recorded through the oral traditions, natural landscape, archaeology, ceremonies, dance and memories of a living culture.

SkillBuilder discussion

Using historical sources

1. What does the source show images of?
2. What totems can you see in the source?
3. How is this image evidence of a 'living culture'?

Did you know?

Stone tools are the longest-lasting items archaeologists find because things like plants and animals don't last as long. Sometimes, nature helps preserve objects, like the wooden boomerangs found in South Australia's Wyrie Swamp, which lasted over 10 000 years. There are also 20 000-year-old bone tools found at Devil's Lair in Western Australia.

SOURCE 4 Aboriginal and Torres Strait Islander Peoples are the custodians of a rich culture and history.

2.11 SkillBuilder activity USING HISTORICAL SOURCES

As an archaeologist studying **SOURCE 3**, you want to learn more about Australia's Deep Time history through material remains.

1. Refer to the 2.1 Overview lesson and select one period from the **SOURCE 2** timeline of Australia to examine in more detail.
   - Research your chosen time period. Is it Pleistocene or Holocene? **Identify** key features of life on Earth during that time.
   - Use the timeline to **identify** where to look for evidence of people from your chosen time. Find one artefact to help understand their world.
   - Read **SOURCE 3** as an example of how archaeologists use artefacts as clues of how people lived in these distant times.
2. **Analyse** your artefact using questions from **SOURCE 1** about the emu-feather skirt. What do you see? What does it make you think of? What more do you want to learn about it?
3. Communicate your understanding of the significance of your artefact. Write a short guide for museum visitors about your artefact. Include where and when the artefact is from, who the traditional custodians of that area are, and some details about the region's geography. Also, share what life might have been like for people back then. Your goal is to help people understand a time that is very different from today.

(*Note*: Artefacts similar to those being archaeologically studied are still in use by Aboriginal and Torres Strait Islander communities in some regions of Australia today.)

2.11 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 3, 4, 5	2, 6, 8, 9	7, 10

REMEMBER AND UNDERSTAND

1. What is the significance of the Mungo remains?
   A. They are the oldest dinosaur fossils found in Australia.
   B. They provide some of the earliest evidence of human life and cultural practices in Australia.
   C. They show that the first humans in Australia came from Europe.
   D. They are important examples of early farming tools used by Aboriginal Peoples.
2. **Explain** why modern archaeologists work with traditional custodians and Elders of Country and the importance of this.
3. **Identify** how the histories, stories and lore of ancient Australia have been passed down through generations.
4. Artefacts found in Kakadu National Park could be up to 80 000 years old. True or False?
5. _____ tools are a rare archaeological find.

APPLY AND ANALYSE

6. **Explain** the difference between 'history' and 'pre-history'.
7. **Propose** two reasons archaeological sources may not give a complete picture of life in ancient Australia.
8. Why is the evidence found at Kakadu a 'ground-breaking archaeological discovery'?
9. **Identify** where the trove of around 11 000 artefacts was located.

EVALUATE AND COMMUNICATE

10. 'Artefacts from Deep Time Australia can only reveal their true meaning if their cultural background is also considered.' **Explain** what you understand by this statement. Refer to the source and the text for ideas.

Answers and sample responses for this topic are available online.

LESSON 2.12 Inquiry: Should we return ancestral remains from museums?

LEARNING INTENTION

By the end of this lesson you should be able to research, record and present information demonstrating your understanding of an issue of importance to Aboriginal and Torres Strait Islander Peoples' history and culture.

Museums help to protect and keep safe the history and culture of ancient Australia. The National Museum of Australia holds collections of artefacts from Deep Time to today. Unfortunately, the sacred and cultural importance of these museum artefacts has not always been respected. Museum collections of human remains and Aboriginal and Torres Strait Island artefacts are part of a 'living culture', and so they continue to have deep ceremonial and spiritual value.

Archaeologists have excavated burial sites and taken human remains for study. The disturbance of graves and the theft of ancestral human remains has caused deep sorrow and anger. While some progress has been made in returning remains, such as Mungo III, the process is slow and not always respectful of the rights and responsibilities of the traditional custodians.

In recent decades, Aboriginal and Torres Strait Islander Peoples have increasingly called for the return of the ancestral remains and sacred objects that are held in museums.

Your task is to conduct a small group investigation into a campaign for the return of ancestral remains from museums.

Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task, you can use this rubric to self-assess.

Inquiry steps

Step 1 Questioning and researching

- **Discuss** the reasons why you think ancestral remains should be returned to the traditional custodians.
- **Identify** museums that currently hold Aboriginal or Torres Strait Islander Peoples' ancestral remains.
- **Identify** traditional custodians or communities seeking the return of ancestral remains and artefacts.
- Research a case study, such as Mungo III's return from the Australian National University, to identify the key events and steps taken in the successful return of ancestral remains.

Step 2 Consulting and recording

- Contact an Aboriginal and Torres Strait Islander community representative to develop your understanding of the importance of ancestral remains to Aboriginal and Torres Strait Islander Peoples. Question the role community/Elders believe museums and archaeologists should have in the study and care of artefacts.
- Contact a museum to **identify** the problems associated with the return of ancestral remains and artefacts, and the continuing role the museum has in the study and care of artefacts.
- Record your interviews.

Step 3 Designing your campaign

After researching and discussing your findings, begin designing a campaign in support of the return of ancestral remains. Your campaign could involve:

- *Education:* Design materials such as pamphlets and posters explaining the importance of ancestral remains to Aboriginal and Torres Strait Islander Peoples.

- *Awareness:* Work with your community representative to plan a public exhibition or meeting to explain why ancestral remains have been returned to traditional custodians, and the need to continue the effort to return remains.
- *Promotion:* Write to local government or museum administrators to express your understanding of the reasons why ancestral remains should be returned to the traditional custodians.

Step 4 Reporting

Your group can put your findings together as a report, organised into the following sections:

- *Introduction:* A brief history of the removal and return of ancestral remains
- *Overview of current efforts and challenges:* Findings from your case study research and interviews
- *Traditional Custodians' beliefs:* The understanding gained through your interviews with community members of the continuing spiritual and cultural connection with ancestral remains, and the responsibility to honour ancestors
- *Recommendations for continuing action:* The steps museums and archaeologists need to make to improve relationships, build opportunities to work with Aboriginal and Torres Strait Islander Peoples, and assist in the return of ancestral remains to Country

Complete your self-assessment using the **Inquiry rubric**.

LESSON 2.13 Review

2.13.1 Key knowledge summary

Use this dot-point summary to review the content covered in this topic.

2.2 How do we learn about Deep Time in Australia?

- Deep Time refers to Earth's history and Aboriginal and Torres Strait Islander Peoples' 65 000-year connection to the land through art, stories and cultural knowledge.
- The Dreaming explains creation and connects people, land and ancestors through stories and cultural practices unique to each language group.
- Everywhen merges past, present and future in a timeless cycle, shaping life and Country through rituals and traditions.

2.3 What is meant by Country and creation?

- Creation stories, like the Dreaming and Tagai, guide cultural practices and connect people to land and sea.
- Rock art, such as Wandjina and Bunjil, reflects spiritual beliefs and a deep link to Country.
- Ancestral spirits shaped the land, providing lore for harmony and inspiring communities today.

2.4 How has landscape and life changed?

- Aboriginal and Torres Strait Islander Peoples adapted to environmental changes, such as rising sea levels, shaping landscapes like Lake Mungo and the Great Barrier Reef.
- Dreaming stories connect people to land and nature, reflecting changes and aligning with scientific findings.
- Archaeological sites like Barrow Island reveal resourcefulness in changing climates.

2.5 Living with the megafauna

- Sahul, the ancient continent, was home to megafauna like Diprotodon, which coexisted with Aboriginal Peoples during the Pleistocene.
- Dreaming stories, rock art, and archaeology highlight human adaptation to environmental changes and megafauna.
- Rising sea levels and extinction of megafauna led to new practices and enduring connections to Country.

2.6 What is connection to Country and kin?

- Kinship systems, including moiety, totems, and skin names, define roles, relationships and spiritual ties to Country.
- Totems connect people to land, sea and sky, fostering environmental care and cultural identity.
- Ceremonies and shared traditions strengthen kinship and ensure continuity across generations.

2.7 What beliefs and values shaped everyday life?

- Ceremonies, like the Welcome to Country and initiations, connect people to the Dreaming, Country and community, sharing spiritual knowledge and responsibilities.
- Funerary customs, including the Tiwi burial poles and Torres Strait tombstone openings, honor the deceased while strengthening kinship and cultural ties.
- Rituals and ceremonies promote respect, sustain traditions, and ensure the passing of cultural practices across generations.

2.8 How did trade and technology develop in ancient Australia?

- Aboriginal and Torres Strait Islander Peoples traded items like stone tools, ochre, and pearl shells for practical and cultural purposes.

- Seasonal gatherings allowed groups to trade goods, share food, and strengthen relationships.
- They developed and traded tools like grinding stones and blades, showing their creativity and adaptability.

2.9 How was land managed?

- Aboriginal and Torres Strait Islander Peoples managed the land sustainably, using practices like firestick farming to promote growth and protect ecosystems.
- Farming and aquaculture, including fish traps like those at Brewarrina and Lake Condah, supported food production and community sustainability.
- Communities adapted to diverse landscapes and climates, blending farming, fishing and spiritual practices to maintain harmony with the land.

2.10 How do we care for Country and Place?

- Caring for Country and Place involves studying Deep Time through archaeological sites like Lake Mungo while respecting their spiritual and cultural significance.
- Aboriginal and Torres Strait Islander Peoples' heritage includes artefacts, rock art, and remains, which connect communities to ancestors and culture.
- Heritage sites like Budj Bim and Willandra Lakes are protected through collaboration with traditional custodians, promoting cultural preservation and environmental care.

2.11 How is the connection to culture and Country continuing?

- Aboriginal and Torres Strait Islander Peoples maintain their connection to Country through cultural practices, artefacts and oral traditions, demonstrating a living culture.
- Discoveries like Mungo Man reveal the Deep Time history of ceremonial burials and the longevity of Aboriginal culture, the oldest continuous culture in the world.
- The concept of Deep Time highlights ongoing connections between past and present, integrating oral traditions, archaeology and natural landscapes.

2.12 Inquiry: Should we return ancestral remains from museums?

- Aboriginal and Torres Strait Islander Peoples advocate for the return of ancestral remains from museums to honour spiritual, cultural and ceremonial connections.
- The slow progress in returning remains, like Mungo III, highlights the need for respectful collaboration between museums and traditional custodians.
- Campaigns for repatriation focus on education, raising awareness, and promoting respectful relationships to ensure ancestral remains are returned to Country.

2.13.2 Key terms

aquaculture the rearing of aquatic animals, or the cultivation of aquatic plants for food. Aquaculture was a major part of the pre-European settlement economies of Aboriginal and Torres Strait Islander communities.
cassowary a large flightless bird related to the emu with a bare head and neck
conservation to prevent waste or destruction
dialects different forms of a language
DNA The material in all living things that carries genetic information
dugong a sea animal, sometimes called a sea cow, found mainly on the coasts bordering the Indian Ocean
ecosystem a community of organisms, plants or animals and the environment they exist in
foraged to search for provisions or food
intensification the action of making or becoming something greater
midden A mound of material, such as shells and bones, marking the place where people once lived.
Pleistocene A period of Earth's history from about 2.6 million to 11 700 years ago, known for ice ages and early human development
rites of passage ceremonial events that mark transitions in a person's life, for example some ceremonies apply to young people between 10 and 16 years, representing a point of transition from childhood to adulthood
sago a starch food obtained from palm used to produce a flour

seagrass marine plants with the same basic structure as terrestrial (land) plants. They trap and stabilise sediment and provide habitats and food sources for green turtles and fish.
sustainable able to be cared for and maintained
talons a claw, especially belonging to a bird of prey
weir A low dam built across a river to raise the level of upstream water to regulate the flow and catch fish.

2.13.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

How do Aboriginal and Torres Strait Islander Peoples, as the world's oldest continuing cultures, show both continuity and change over time?

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.

learnon

Post-test	Online post-test
eWorkbook	Customisable worksheets for this topic Reflection
Digital document	Key terms glossary

2.13 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
3, 4, 5, 8, 9, 10	1, 2, 6, 7, 11	12, 13, 14, 15

REMEMBER AND UNDERSTAND

1. Why was pitjuri a valuable trade item?
   A. It was valued for its great beauty.
   B. It was a strong timber used to make spears.
   C. It was used for decoration.
   D. It was a drug that could relieve pain, tiredness and hunger.
2. Why are kinship relationships very complex in Aboriginal and Torres Strait Islander communities?
   A. People lived in small village communities.
   B. People were living in harsh environments.
   C. Family links were tied to spiritual beliefs.
   D. Families were very large.
3. A totem is a special plant or animal that is which of the following?
   A. People were permitted to hunt it or gather it for food.
   B. It was only known of through Dreaming beliefs.
   C. It was chosen during an initiation ceremony to protect a young person.
   D. It was painted and carved onto rock walls.
4. What were the tutini?
   A. A set of Tiwi Island beliefs
   B. Elaborately carved grave posts used in the pukumani ceremony
   C. A weapon used by Torres Strait Islanders
   D. A totem

5. What is Lake Mungo the site of?
   A. The largest ceremonial grounds found
   B. The most remote Aboriginal and Torres Strait Islander communities
   C. The oldest known cremation site in the world
   D. The most complex rock art in Australia
6. Why are the Elders the ceremonial leaders in Aboriginal and Torres Strait Islander communities?
   A. Their old age has given them wisdom.
   B. They are respected community members with a deep knowledge of tradition.
   C. They are born into a hereditary position of power.
   D. They are the great warriors.
7. How did Aboriginal and Torres Strait Islander Peoples use fire to manage the land?
   Select three correct responses.
   A. They started bushfires to scare away enemies.
   B. Burning grasslands promoted lush new growth.
   C. Fire flushed animals from their burrows so they could be killed.
   D. They burnt areas to let others know where they had been.
   E. They burnt the undergrowth to reduce the risk of large bushfires.
8. What is the estimated number of Aboriginal and Torres Strait Islander Peoples that existed when Europeans first arrived in Australia?
   A. 50
   B. 100
   C. 150
   D. 250
9. As the ancestral beings travelled across Australia giving life, they created landmarks and named the geographic features of the land. The countless pathways of daily travel and trade crossed the continent and are known as the Dreaming tracks.
   What do Aboriginal and Torres Strait Islander Peoples also remember these tracks as?
   A. Songlines
   B. Sacredlines
   C. Dreamlines
   D. Pathlines
10. What is the word for how Aboriginal Peoples explain creation, the nature of the world and the importance of ritual and tradition?
   A. The Storytelling
   B. The Dreaming
   C. The Sagas
   D. The Folklore

ANALYSE AND APPLY

11. **Summarise** the changes that took place in Australia between the Pleistocene and the Holocene periods.

EVALUATE AND COMMUNICATE

12. Communicate your understanding of Deep Time history and then identify the ways in which the Deep Time history of Australia has been recorded.
13. **Identify** the ways in which Aboriginal and Torres Strait Islander Peoples managed the land and cared for Country.
14. **Explain** how the songlines were formed, and were then used to create trade networks.
15. **Compare** the concept of *kinship* in Western societies, and the kinship system as it continues to be defined in Aboriginal and Torres Strait Islander communities. **Identify** the similarities and differences in a one paragraph explanation of kinship.

Answer and samples responses for this topic are available online.

3 Ancient Egypt

LESSON SEQUENCE

3.1 Overview 74
3.2 How do we know about ancient Egypt? 76
3.3 Why was the River Nile so important? 80
3.4 What was Egyptian society like? 85
3.5 What did ancient Egyptians believe? 92
3.6 What is the truth about the pyramids? 97
3.7 Who were Tutankhamun, Akhenaten and Nefertiti? 102
3.8 What were the effects of war and trade? 106
3.9 Rameses II — Egypt's greatest pharaoh? 110
3.10 What should we thank the Egyptians for? 115
3.11 Inquiry: How have powerful women been recorded and treated in history? 118
3.12 Review 121

LESSON 3.1 Overview

INQUIRY QUESTION

How do we know about ancient Egypt, and what were its defining features, achievements and legacies?

Egypt is a relatively poor country with few natural resources. It has no oil, unlike some of its neighbours.

Many tourists visit Egypt to see the pyramids and ancient tombs in the **Valley of the Kings**. Tourists and historians continue to wonder why Egyptians were so fascinated by death and how they built pyramids without any machinery.

learnon

- **Pre-test**
  Online pre-test
- **eWorkbook**
  Customisable worksheets for this topic
- **Digital document**
  Key terms glossary
- **Video eLesson**
  Ancient Egypt

c. 5000–3100
People settle along the Nile and learn to use bronze. At least two separate states develop.

c. 3100
King Narmer unites Egypt. The Archaic period, also called Early Dynastic Period (to c. 2686 BCE), begins.

c. 2686–2181
The Old Kingdom: a long period of peace and order

5000 | 4500 | 4000 | 3500 | 3000 | 2500

BCE

c. 2551–2528
Khufu rules. The Great Pyramid is built.

SkillBuilder

Use the SkillBuilder activities to develop these Historical concepts and skills:

- HISTORICAL QUESTIONS
- CHRONOLOGY
- USING HISTORICAL SOURCES
- CONTINUITY AND CHANGE
- CAUSES AND CONSEQUENCES
- HISTORICAL SIGNIFICANCE
- COMMUNICATING

c. 2025–1650
The Middle Kingdom: Egypt is united under strong rulers. Nubia is conquered.

c. 1550–1069
The New Kingdom: the Hyksos are driven out. Egypt dominates neighbouring lands.

c. 1069–332
The Late Dynastic Period: Egypt is invaded and ruled in turn by Nubians, Assyrians and Persians.

30
Romans take control of Egypt.

2000 | 1500 | 1000 | 500 | BCE / CE | CE

c. 2181–2025
The First Intermediate Period: a time of disorder and division as rival leaders fight for control

c. 1650–1550
Second Intermediate Period: the Hyksos invade and occupy Egypt.

c. 1479–1458
Hatshepsut rules.

c. 1279–1212
Rameses II rules.

c. 332–30
Alexander the Great conquers Egypt. One of his generals founds the Ptolemaic Dynasty. The Ptolemaic Period lasts until Rome takes over.

LESSON 3.2 How do we know about ancient Egypt?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** how historians used hieroglyphics to understand Egypt's history
- **analyse** the importance of key discoveries in understanding Egypt.

Tune in

SOURCE 1 shows the Rosetta Stone, discovered in Egypt around 1799. It has been in the British Museum since 1802. The stone is black granite with three versions of a decree from Memphis, Egypt, in 196 BCE. The top band has hieroglyphics, the middle band has **demotic script** (simplified hieroglyphics) and the bottom band has ancient Greek. Before this, no one could read ancient Egyptian texts.

1. **In small groups, discuss how the stone helped historians crack the code.**
2. **Consider what we wouldn't know today if the stone hadn't been found.**

SOURCE 1 The Rosetta Stone.

3.2.1 How do we know about ancient Egypt?

The ancient Egyptians left many primary source evidence. As in Mesopotamia, most Egyptian houses were made of mud bricks, leaving few traces. However, their temples, pyramids and tombs were made of stone and held mummies and art. They also created enormous statues and painted wall panels.

3.2.2 How can we read ancient Egyptian writing?

The Egyptians began writing over 5000 years ago, possibly around 3100 BCE. At first, they used simple drawings and symbols for words. They wrote on stone, pottery and **papyrus** (paper made from plants). When the Greeks saw this writing on temple walls in the fourth century BCE, they called it hieroglyphs, meaning 'sacred writing'.

By the fourth century CE, the secret of reading hieroglyphs was lost. But in 1799, a French soldier found the Rosetta Stone in Rosetta (now called Rashid). This stone had the same message in three scripts: hieroglyphs, demotic script (a simpler form of hieroglyphs) and ancient Greek. Since people could still read Greek, they used it to understand hieroglyphs.

After years of effort by scientists like Thomas Young and Jean François Champollion, the code was cracked. Scholars could now read Egyptian records, including king lists, myths, hymns, legal documents and even graffiti.

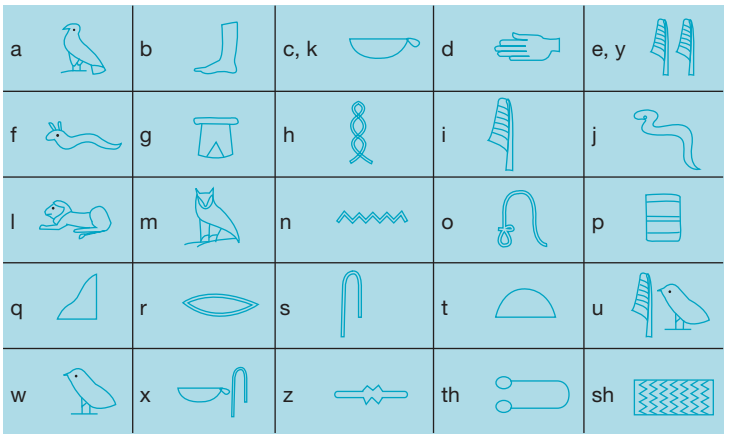
The hieroglyphic alphabet was much larger than ours, with over 700 symbols. Some were simple drawings, like a bird, while others were shapes, like a semicircle. See **SOURCE 2**.

At first, each symbol represented a word. As the language grew more complex, some symbols also stood for:

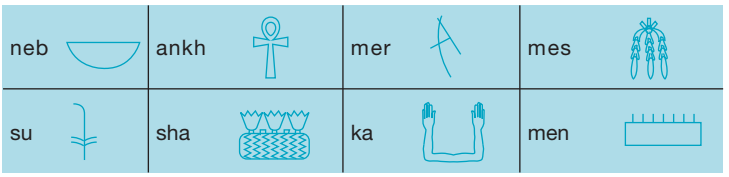
- consonant sounds (e.g., an owl for the sound 'm')
- ideas or actions (e.g., two legs for movement).

SOURCE 2 Translators have linked hieroglyphic symbols to most letters in our alphabet.

Symbols for single sounds



Symbols for syllables



SkillBuilder discussion

Using historical sources

1. Look at **SOURCE 2.** Identify the symbol that represents the letter 'a' in hieroglyphics.
2. Locate the hieroglyph used for the sound 'sh'. What does this hieroglyphic symbol remind you of?
3. Describe the shape of the symbol used for the sound 'mes'.

SOURCE 3 A cartouche is an oval frame around the name of an Egyptian god in hieroglyphs.

SkillBuilder discussion

Using historical sources

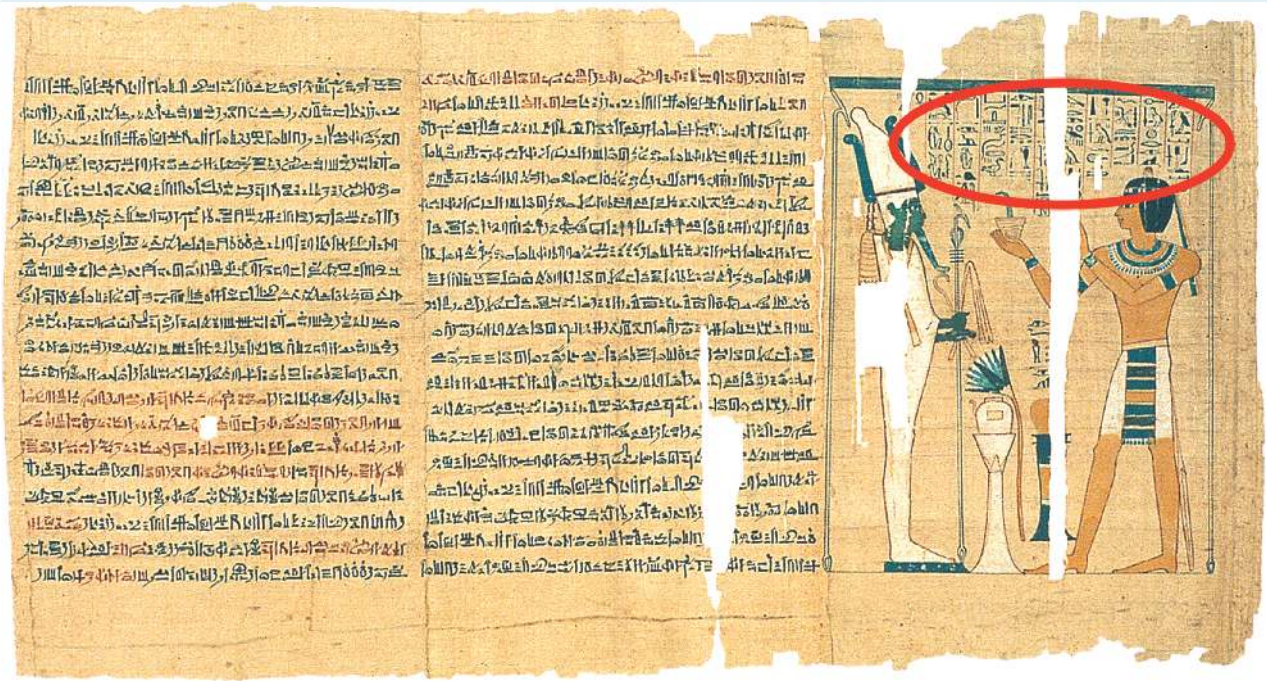
1. Identify who the Egyptian high priest is presenting an offering to in **SOURCE 4**.
2. Recall the two types of scripts shown on the papyrus sheet.

Reading hieroglyphs

At first, hieroglyphic symbols were written in columns and read top to bottom. Around 2000 BCE, they were arranged in rows and sometimes read left to right or right to left. A pharaoh's name was enclosed in a cartouche (see **SOURCE 3**).

Hieroglyphs were mainly for religious and official documents, readable only by priests and scribes, which is why they are found in tombs. Due to the time-consuming nature of hieroglyphs, simpler scripts were developed, such as **hieratic** (see **SOURCE 4**) and demotic, which used simplified hieroglyphs.

SOURCE 4 An Egyptian high priest presents an offering to **Osiris**, with both hieroglyphic and hieratic scripts on the papyrus.



3.2 SkillBuilder activity HISTORICAL QUESTIONS

1. The table below shows 5 important Egyptian archaeological discoveries. Research each one and complete the first two table columns.
2. Rank the five discoveries by significance, and **justify** your choices.

	What did we learn from this discovery?	What impact did this discovery have?	How significant is it? (rank 1 to 5)
The Rosetta Stone			
The Oxyrhynchus Papyri			
Tutankhamun's tomb			
Meteoric Jewellery			
The excavation of Luxor and the 'Plague of Cyprian'			

3.2 Exercise

learn on

Learning pathways

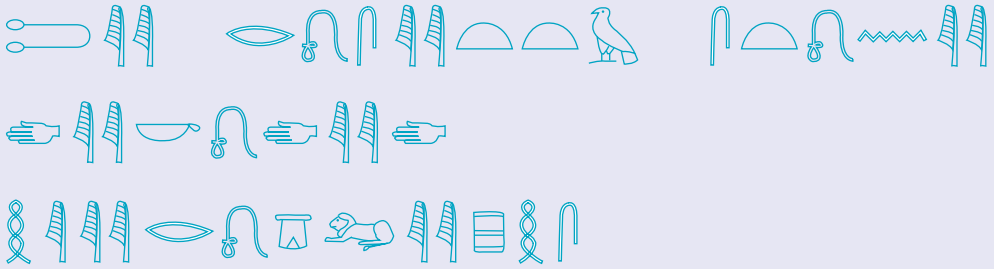
LEVEL 1	LEVEL 2	LEVEL 3
2, 4, 5	1, 3, 6, 7, 9	8, 10

REMEMBER AND UNDERSTAND

1. Which feature of the Rosetta Stone helped scholars unlock the meaning of ancient Egyptian hieroglyphs?
   A. It was written using gold ink, which preserved the text clearly.
   B. It included a map showing where hieroglyphs were used.
   C. It had the same message written in three different scripts, including Greek.
   D. It contained a list of all known Egyptian gods and their meanings.
2. **Identify** what types of information we have learned from reading ancient Egyptian languages.
3. **Explain** why it is significant for historians that Egyptians built important structures from stone.
4. The Egyptians used writing over _____ years ago.
5. **Identify** the meaning of the Greek word 'hieroglyph'.
   A. Sacred symbols
   B. Language
   C. Sacred writing
   D. Pictographs

ANALYSE AND APPLY

6. Use **SOURCE 2** to decode this message.



7. **Explain** why hieroglyphs can be found in tombs.
8. **Compare** the discovery of Tutankhamun's tomb with the Rosetta Stone. Which discovery was more significant and why?
9. **Explain** why the Egyptians developed scripts more like modern writing than early hieroglyphs.

EVALUATE AND COMMUNICATE

10. In 2022, archaeologists found over 18 000 pottery shards used for writing in ancient Egypt, possibly at an ancient school. Some shards had repeated words and sentences. **Propose** a theory for what these lines might be.

Answers and sample responses for this topic are available online.

LESSON 3.3 Why was the River Nile so important?

LEARNING INTENTION

By the end of this lesson you should be able to:

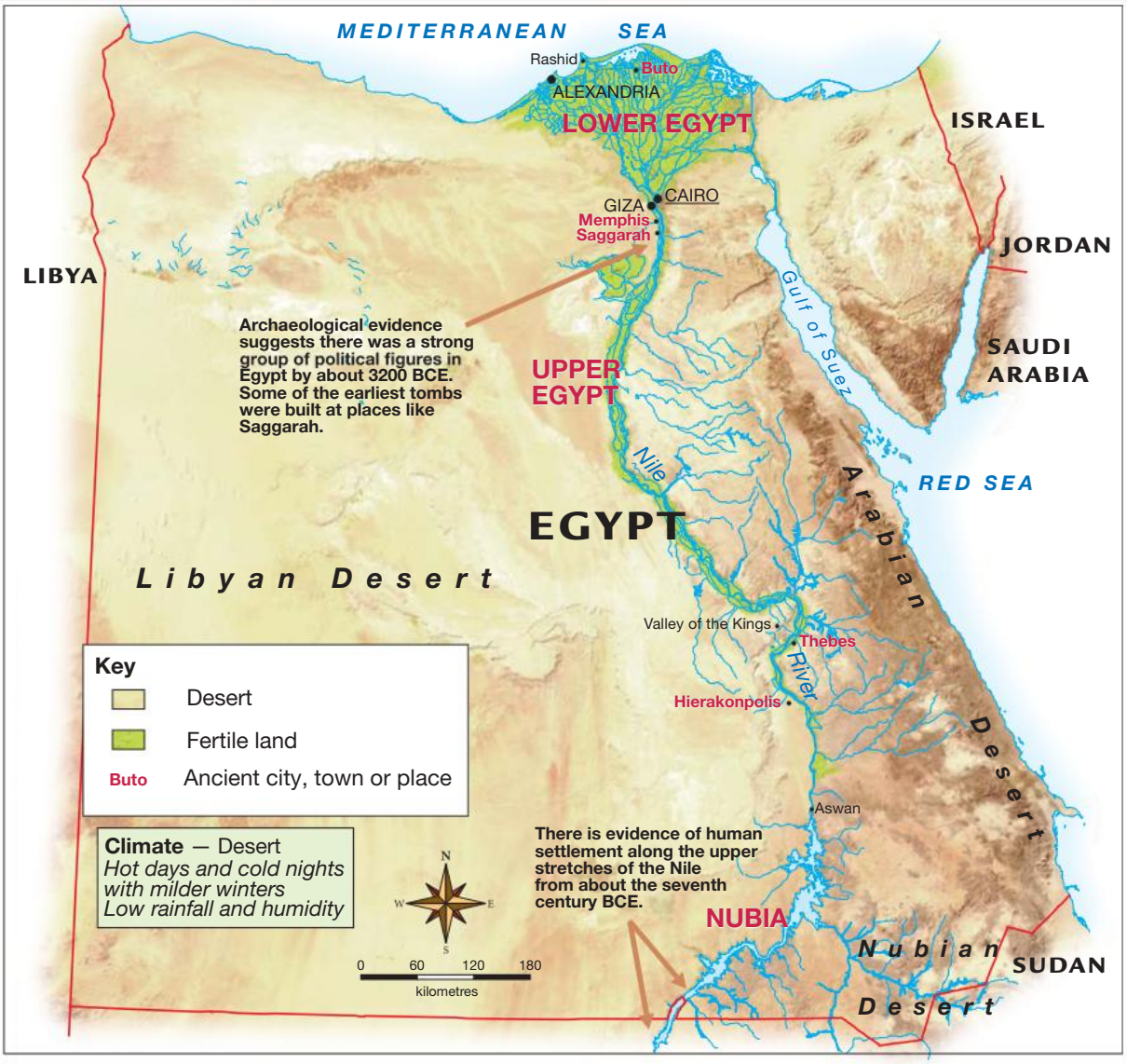
- **explain** the River Nile's importance to ancient Egyptian farming, transport, defence and religion
- **compare** the Nile's historical and modern uses.

Tune in

SOURCE 1 shows the main geographical features and key sites of ancient Egypt.

1. **Locate the main ancient cities on the map. What pattern do you notice?**
2. **Why was the River Nile so important? List two reasons why it was so useful to Egyptian people.**

SOURCE 1 Ancient Egypt



Source: Map drawn by MAPgraphics

3.3.1 Farming and the Nile

Like other ancient civilisations, Egypt developed along a waterway, the Nile, which made life possible in the hot, dry land. The Nile, formed by the White Nile and Blue Nile from central Africa, flows through deserts and finally empties through a long **delta** into the Mediterranean Sea.

Ancient Egyptians lived in the 'Black Lands', the Nile's floodplain. From June to September, heavy rains flooded the Nile, leaving fertile soil essential for civilisation. By 5000 BCE, people settled by the Nile for its water, plants, animals and fish. They domesticated cattle, sheep, goats and geese, and grew crops, making boats, baskets and papyrus from reeds.

The floods also set Egypt's calendar, with the **Inundation** (flooding) regarded as the new year. Egyptians used a way of lifting water for irrigation, a **shadoof**, moving water to fields. This meant fewer people needed to farm, and allowed more people to become scribes or **artisans**. More food led to leisure activities like hunting, games and music.

See **SOURCE 2** for details.

SkillBuilder discussion

Using historical sources

1. Identify who is hunting birds in the painting.
2. Describe the tool Nebamun uses to hunt the birds.
3. Describe this artwork. You may wish to focus on the colour, the images, the people and the animals.

SOURCE 2 A painting from Nebamun's tomb (c. 1400 BCE) shows him hunting birds with a stick, alongside his wife, daughter, and cat.

Did you know?

Away from the Nile floodplain, 90 per cent of Egypt is desert. The dry deserts didn't provide much for the Egyptians, but they were hard to cross. This helped protect Egypt from invasion for many years.

3.3.2 Transport and the Nile

The Nile was a major trade and transport route, like a highway. Land travel was slow due to desert paths, so boats were used to move people and goods. Winds helped boats sail south, and the current made rowing north easier.

SOURCE 3 From *The Histories*, written by the ancient Greek historian Herodotus, who visited Egypt in 475 BCE.

. . . it is clear to any intelligent observer . . . that the Egypt to which we sail nowadays is . . . the gift of the Nile . . . When the Nile overflows, the whole country is converted into a sea, and the towns, which alone remain above water, look like islands. At these times water transport is used all over the country instead of merely along the course of the river.

3.3.3 Defence and the Nile

Egypt was protected by fortifications (large defensive walls) at the Nile **cataracts** (rapids) to block invasions from Nubia (see **SOURCE 1**). These walls were built throughout ancient Egypt's history. The Mediterranean Sea, where the Nile ends, also served as a natural barrier against invaders.

3.3.4 Religion and the Nile

The ancient Egyptians worshipped many **deities** (gods and goddesses), with three linked to the Nile.

- Hapi, the god of the Inundation, was believed to bring fresh silt for farming and was the lord of fish and birds. Hapi's priests performed rituals for good floods.
- Khnum, the god of fertility and water, was believed to create humans from clay.
- Satet, the warrior goddess and protector of Egypt's southern borders, was believed to cause the Inundation

SOURCE 4 demonstrates the gratitude of Egyptians for the Nile.

SOURCE 4 This Hymn to the Nile, probably from the nineteenth and twentieth dynasties in the New Kingdom, expresses the gratitude Egyptians felt for the Nile.

Hail to you, O Nile, that issues from the earth and comes to keep Egypt alive! He that waters the meadows which Re created, in order to keep every kid alive. He that makes to drink the desert and the place distant from water: that is his dew coming down from heaven. The lord of fishes, he who makes the marsh-birds to go upstream. He who makes barley and brings emmer [wheat] into being, that he may make the temples festive. If he is sluggish, then nostrils are stopped up, and everybody is poor. When he rises, then the land is in jubilation, then every belly is in joy, every backbone takes on laughter, and every tooth is exposed. The bringer of good, rich in provisions, creator of all good, lord of majesty, sweet of fragrance. He who makes every beloved tree to grow, without lack of them.

3.3 SkillBuilder activity HISTORICAL QUESTIONS

1. Use **SOURCE 5**, and what you have learned so far to answer the following questions:

SOURCE 5 The Nile today

   a. **Identify** the types of animals near the Nile in the image.
   b. **Explain** how the land by the Nile is being used today.
   c. **Describe** the plants growing along the Nile.
2. **Compare** the past and present roles of the Nile by completing the table with your research notes.

	The Nile during ancient Egypt	The Nile in contemporary Egypt	Similar or different?
Where most people live			
Food and water			
Transportation			
Trade route			
Defence			
Religion			
Energy			
Annual flooding			

3. Complete some further research on the river Nile. Using your research, **discuss** how and why the Nile is changing. Do the benefits outweigh the drawbacks? Are rivers as important today as in the past? **Explain** your reasoning.

3.3 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4	5, 6, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. **Rate** the Nile's importance in Egypt's development (1–5) and **explain** your rating.
2. Flooding was disastrous for ancient Egyptians. True or False?
3. **Match** each word with its correct definition by writing the number in the answer column.

Answer number	Term	Definition
1	The Nile	River from central Africa flowing to the Mediterranean Sea.
2	Delta	Wetland formed where a river deposits water and sediment.
3	Papyrus	Early paper made from reeds.
4	Nile Inundation	Annual flood depositing fertile silt for crops.
5	Shadoof	Irrigation tool for raising water with a pole and bucket.
6	Cataracts	Shallow, turbulent water caused by rocks.
7	Hapi	Egyptian god of the annual flood, bringing fertility.
8	Khnum	Ram-headed god ensuring fertile silt.
9	Satet	Warrior goddess guarding the Nile cataracts.

4. **Describe** how the invention of Egypt's irrigation system contributed to the development of Egyptian civilisation.
5. How did Egypt's geography contribute to its defence against invaders?
   A. The harsh deserts and cataracts of the Nile acted as natural barriers, making it difficult for enemies to approach.
   B. Egypt's forests and mountain ranges provided strong hideouts for soldiers.
   C. The Mediterranean Sea created isolation from other ancient civilizations.
   D. The fertile Nile Delta was heavily fortified with stone walls built by early pharaohs.

ANALYSE AND APPLY

6. Read **SOURCE 3**. Why did Herodotus call Egypt 'the gift of the Nile'?
7. Find an example from the text that shows how ancient Egyptians linked nature with their religion.
8. From **SOURCE 4**, **identify** four ways the hymn shows the Nile's importance to ancient Egyptians. You can quote or paraphrase.

EVALUATE AND COMMUNICATE

9. In **SOURCE 4**, what can you **infer** from the line, 'Hail to you, O Nile' about how ancient Egyptians felt about the river? Look up 'hail' if unsure.
10. How did the Nile help protect Egypt from Invasions?

Answers and sample responses for this topic are available online.

LESSON 3.4 What was Egyptian society like?

LEARNING INTENTION

By the end of this lesson you should be able to:

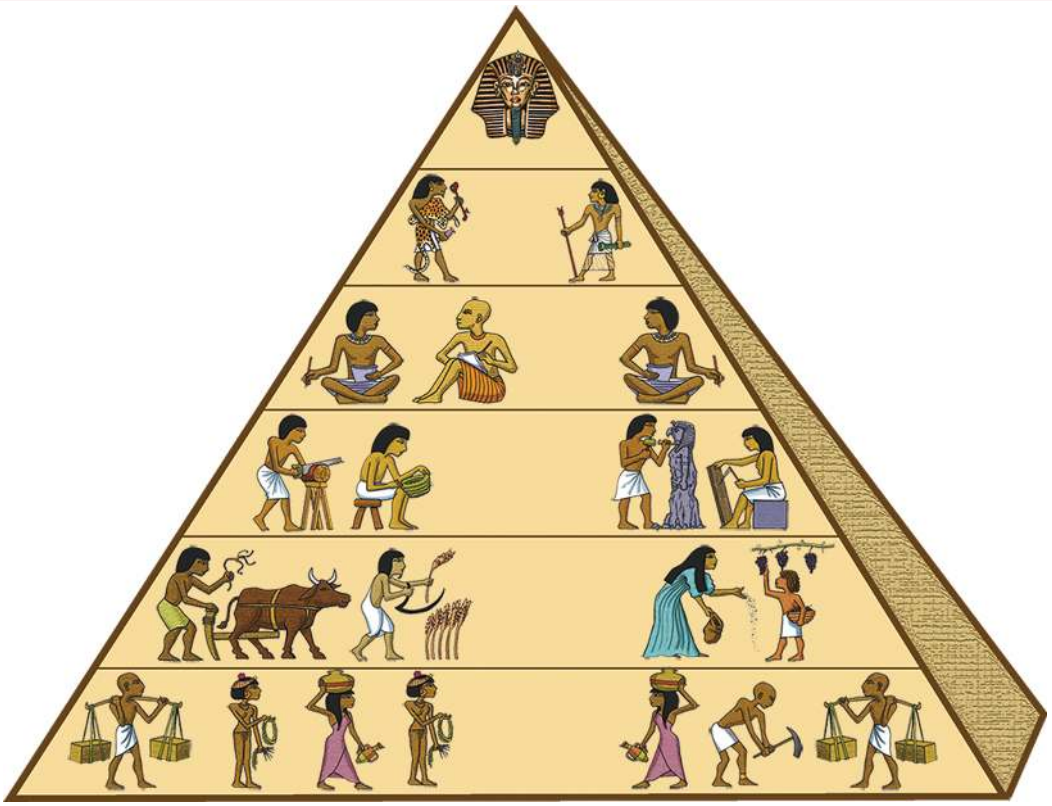
- **explain** the social structure of ancient Egypt
- **analyse** perspectives of different social groups
- **evaluate** the influence of each group on society

Tune in

Label the social pyramid in **SOURCE 1** with the provided social groups, ranking them by their importance in ancient Egyptian society.

- Scribes
- Peasants
- Servants
- The vizier (prime minister)
- Slaves
- Labourers
- Nobles
- Generals
- The pharaoh (king/god)
- Artisans such as stonemasons
- Priests
- Merchants
- Nomarchs (governors, officials)

SOURCE 1 A social pyramid showing where each class ranked in ancient Egypt



1. **Identify the group at the top of Egypt's social pyramid.**
2. **Determine the groups at the bottom of Egypt's social pyramid.**
3. **Analyse which group ranked above peasants and slaves in Egypt's social pyramid.**

3.4.1 The Pharaoh

SkillBuilder discussion

Historical questions

1. Describe the role of the pharaoh in ancient Egyptian society.
2. Identify the first known pharaoh of ancient Egypt.
3. Explain the primary responsibilities of the pharaoh in ancient Egyptian society.

Power and responsibility

The pharaoh was the wealthiest and most powerful person in ancient Egypt, supported by an army, priests, scribes and officials. He ruled alone and was seen as a god.

Heavenly powers

Egyptians believed the pharaoh had supernatural powers, descended from Amun-Ra, with Horus within him. They thought his laws controlled everything, from the Nile floods to crop growth. Out of respect, they called him pharaoh, meaning 'great house'.

Earthly responsibilities

The pharaoh was expected to protect and feed the people and keep peace. He made laws, controlled the government and army, and was shown as a military hero in art (see **SOURCE 2**). Few specific laws have survived, and cases were likely judged by officials.

The pharaoh managed temple building, tax collection, mines, irrigation, trade and religious ceremonies. He appointed officials and priests. His wealth came from taxes paid in labour and produce. Thousands worked on his farms or in the palace as cooks, cleaners, dancers, stable workers, craftsmen, weavers and wigmakers.

SOURCE 2 The pharaoh's power was shown by his false beard, bull's tail, and holding a flail (Osiris symbol) and shepherd's crook (symbol of kingship).

SkillBuilder discussion

Using historical sources

1. Look carefully at **SOURCE 3**. Describe the scene on Tutankhamun's gold emblem showing his war return.
2. Identify symbols showing Tutankhamun's importance.
3. Analyse how the emblem reflects the pharaoh's role in war and leadership.

Did you know?

Relief carvings show Egyptian soldiers cutting hands from enemies, which scribes counted and recorded to glorify the pharaoh's victories.

SOURCE 3 A gold emblem of Pharaoh Tutankhamun returning from war, one of many priceless objects found in his tomb.

3.4.2 Nobles, priests, officials and scribes

Nobles were wealthy landowners in ancient Egypt, living privileged lives while peasants and labourers worked on their estates. Priests controlled temples, thereby gaining power. Officials handled administration and ensured the pharaoh's orders were followed.

- Most high officials were nobles, but some scribes rose from being peasants.
- Scribes ranked below nobles, priests and officials but above peasants.
- Scribes could read and write, keeping important records like taxes.

SkillBuilder discussion

Historical questions

1. Identify the figure depicted in the statue and his role in ancient Egypt.
2. Describe the object the scribe is holding in his lap.
3. Explain how long it took to become a scribe like Nespekasut in ancient Egypt.

SOURCE 4 A statue of Nespekasut, a senior scribe of Karnak, shows him seated with a papyrus on his lap. Becoming a scribe required 12 years of study.

3.4.3 The ordinary people

Artisans and merchants

Artisans were a large group of common people. Sons learned their craft from their fathers. Craftsmen included:

- stonemasons, who built temples, tombs, statues and monuments
- painters, who decorated temples, tombs and coffins
- woodworkers, who made furniture
- wigmakers, who made wigs and false beards
- metalworkers, weavers, instrument makers, papermakers and jewellers.

Until the fourth century BCE, artisans were paid with food and beer since Egypt had no money.

Merchants were wealthier and worked in trade.

Peasants

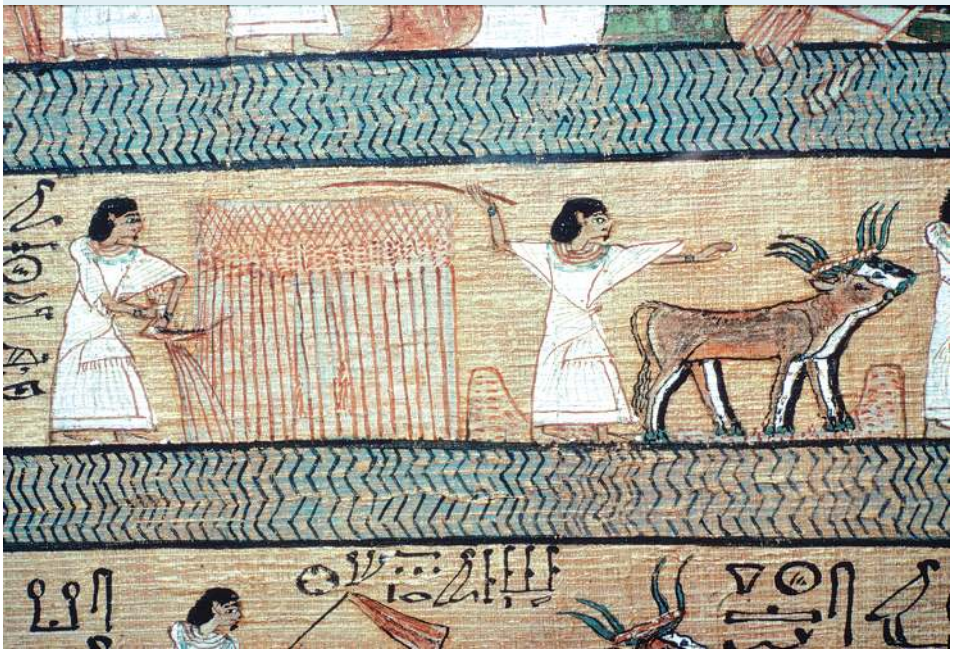
Peasants were the largest group. Most farmed land was owned by the pharaoh, priests or nobles, so most crops produced by peasants were given as rent or taxes. They ploughed, planted and harvested. During floods, they worked on projects like pyramids and temples. There were also labourers, servants and some slaves. Ordinary Egyptians stayed in their class to maintain ma'at (harmony) and follow the gods' will.

SkillBuilder discussion

Using historical sources

1. Describe the farming activities shown in this Egyptian papyrus.
2. Identify the tools and animals used by the workers in the image.
3. Explain how these farming methods might have supported Egyptian society.

SOURCE 5 An Egyptian papyrus depicting farming work



Ordinary women

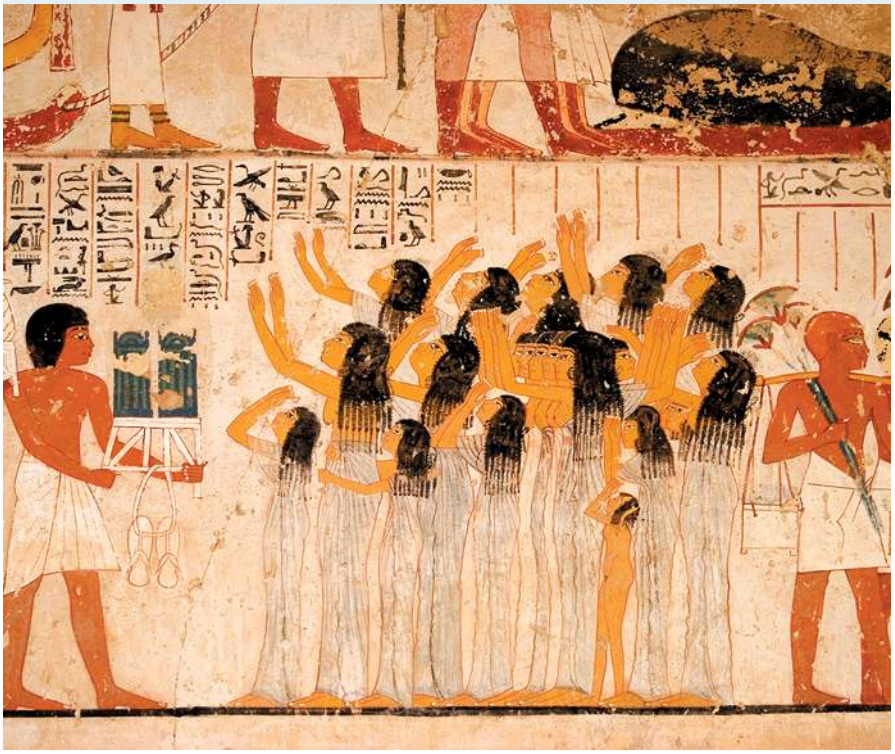
Women in ancient Egypt had fewer rights than men. They cooked, cared for children and worked in fields. Most couldn't read or write and had limited jobs, but they enjoyed more freedom than in other ancient societies.

SkillBuilder discussion

Using historical sources

1. Analyse the mourners' body language. What emotions are shown?
2. Describe their clothing and hairstyles. What do these suggest about their role?
3. Interpret this scene's importance in Egyptian burial practices.

SOURCE 6 Mourners painted on the tomb of the vizier Ramoseh



SkillBuilder discussion

Using historical sources

1. Describe Merseankh and Raherka's posture and expressions. What do they show about their relationship?
2. Identify Raherka's clothing and hairstyle. What do they reveal about Egyptian men's fashion?
3. Examine the material and style. How do they reflect Egyptian art?

SOURCE 7 A painted limestone statue of Merseankh and her husband Raherka, from around 2500–2350 BCE.

Upper-class women

In ancient Egypt, a woman's rank depended on her husband's, but she could gain status as the mother of a high-ranking man. Wives and daughters of pharaohs and nobles lived privileged lives with fine clothes and many servants. By 1550 BCE, women could inherit, own and sell property. They could become part-time priestesses, as well as choose to marry or divorce.

Wealthy marriages were often business deals, and some men had multiple wives. Pharaohs sometimes married their sisters but had other wives as well.

Some upper-class women became high officials, such as Nebet, a vizier under Pharaoh Pepy I. Nefertiti, wife of Pharaoh Akhenaten, was influential and often depicted with him, even in a war chariot.

Did you know?

Upper-class Egyptian women had many cosmetics and jewellery, including kohl pots, curlers, tweezers, combs, cosmetic boxes, rings, necklaces, **amulets** and makeup grinding stones.

SOURCE 8 Bottles like these held eyeliner.

3.4 SkillBuilder activity HISTORICAL QUESTIONS

Inscriptions and paintings show ordinary Egyptians working happily in fields or doing skilled jobs for the pharaoh, suggesting a peaceful society. But is this true?

1. What does **SOURCE 9** infer about workers' lives? Why was it made?
2. What does **SOURCE 10** tell you about workers' lives?
3. **Explain** why you think the two sources tell two different stories.
4. Ninety-five per cent of ancient Egyptians were illiterate. **Discuss** what problems this would pose for historians trying to discover the thoughts and feelings of ordinary Egyptians.

SOURCE 9 Tomb of Nebamun and Ipuky, *circa* 1390–1349 BCE

SOURCE 10 An ancient scribe's record of the strike of workers employed to construct and decorate the tomb of Rameses III

[The] gang walked out [of the tomb] because they were hungry; there is no wood, no vegetables, no fish. So they went to consult the magistrate...who declared, '[the people of the Tomb]' are in the right'.

3.4 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 5, 6, 9	3, 4, 7, 8	10, 11

REMEMBER AND UNDERSTAND

1. Rank these groups in order: artisans, nobles, scribes, peasants and pharaohs.
2. Ancient Egyptians believed the pharaoh could control nature. True or False?
3. The pharaoh did nothing for his people. True or False?
4. **Identify** an example of how someone could improve their social position.
5. Match the person with the description provided by writing the correct definition number in the Answer column.

	Description	Answer
a. Pharaoh	**2.** Looked on as a god; the ruler of the kingdom	
b. Noble	**8.** The wealthy class; owned land	
c. Priest	**7.** Controlled the temples, so had a lot of power	
d. Official	**6.** Administrators; carried out the pharaoh's wishes and judged law cases	
e. Scribe	**3.** Trained to read and write; kept state records, including taxes	
f. Artisan	**1.** Common people who had a craft	
g. Merchant	**5.** Wealthy commoners who traded goods	
h. Peasant	**4.** Farmed the land owned by the pharaoh, priests and nobles	

ANALYSE AND APPLY

6. What does **SOURCE 10** suggest about the reasons for the tomb workers' strike?
7. **Interpret SOURCES 2** and **3** to describe how pharaohs wanted to be seen by their people.
8. **Examine SOURCE 4** and explain what it suggests about the status of scribes.
9. **Identify** features of **SOURCE 5** that show the work of peasants.

EVALUATE AND COMMUNICATE

10. **Compare** the lives of ordinary and upper-class women in **SOURCES 7** and **9**.
11. Form a hypothesis about relationships between women and men using **SOURCES 7**, **8** and **9**. What evidence would you need to test it?

Answers and sample responses for this topic are available online.

LESSON 3.5 What did ancient Egyptians believe?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** Egyptian beliefs about the afterlife
- **explain** why Egyptians made mummies
- **identify** and **interpret** significant religious symbols in primary sources.

Tune in

Mummies reveal much about ancient Egyptian life.

SOURCE 1 An ancient Egyptian found buried in the desert sands

1. **Describe the condition of the mummy found in the desert sands.**
2. **Analyse what this burial method suggests about ancient Egyptian funerary practices.**
3. **Explain how the desert environment might have helped preserve the body.**

3.5.1 The journey to the afterlife

Death was a very important event for ancient Egyptians, linking life on Earth with eternal life. They spent much time preparing for death. Most of our knowledge comes from tombs. Many deities were believed to guide the journey to the afterlife, which was a fantastic but difficult journey.

- The dead crossed a wide river.
- They chanted spells to pass seven gates guarded by monsters.
- They avoided traps and attacks by crocodiles and snakes.
- Finally, their heart was weighed by 42 judges against a feather to check for sin.

Preparing for the journey of the soul

The ancient Egyptians believed that a dead person had a number of souls. Two of these were the *ka* and the *ba*. The *ka*, the person's life force, stayed within the tomb, getting strength from the food and drink left there. The *ba*, the person's character, set off on its journey towards the afterlife, returning to the tomb to rest each night. To do these things, the soul needed a body. So dead people's bodies were carefully preserved, or embalmed, so they did not rot.

SkillBuilder discussion

Historical significance

1. Describe what is happening in the scene shown in **SOURCE 2**.
2. Identify the gods present in the image and their roles in the afterlife.
3. Explain the significance of the heart being weighed against a feather in this image.

An embalmed body is called a **mummy**. Mummies were buried with lots of the possessions the person's soul might need in the afterlife. They included food and drink, clothing, perfume, furniture, jewellery and special charms called amulets. Sometimes small wooden or stone figures representing servants doing activities such as making bread, ploughing a field or sailing a ship were placed in tombs. As well, prayers, hymns and magic spells from the 200 such texts in the Book of the Dead were often written on a scroll of papyrus and buried with the mummy or carved in hieroglyphs on the walls of the tomb. These texts were thought to protect the soul from evil and guide it through the afterlife. After a dead person's body was mummified, a funeral ceremony was held.

The body was carried in a boat across the Nile and buried on the western bank, where the sun set. This was the direction in which the next world was believed to lie. Important people, such as pharaohs, were buried in elaborate underground tombs consisting of many rooms and tunnels. Poorer people were buried in the hot, dry sands to help preserve their bodies.

SOURCE 2 Scenes from the *Book of the Dead of Hunefer* (from around 1310 BCE) are painted on papyrus to guide the dead to the afterlife. If a heart was light as a feather, the person joined Osiris; if heavy, it was eaten by a monster with parts of a lion, hippopotamus and crocodile.

3.5.2 The gods of the ancient Egyptians

Ancient Egypt had many deities overseeing various aspects of life. For example, the god Hapi was linked to the River Nile. Some gods appeared as humans, animals or had animal heads on human bodies. At first, each settlement had unique gods, but over time, deities were worshipped more widely.

SOURCE 3 Figurines were thought to come to life in the tomb and carry out the wishes of the dead person.

SOURCE 4 Some ancient Egyptian Gods

Anubis Osiris Horus Hathor Thoth

TABLE 3.1 Egyptian gods and their responsibilities

Name of god	Responsibility	Associated animal/symbol
Amun-Ra	God of creation; sun god and king of gods	The sun
Osiris	God of the dead; afterlife judge	Pharaoh mummy
Seth	God of confusion and chaos	Hippopotamus
Isis	Mother goddess; goddess of fertility; Osiris's wife	Woman with throne crown
Horus	God of the sky; guardian of the pharaoh	Falcon
Hathor	Goddess of beauty, love, sky, fertility, music, dance and alcohol	Woman with cow horns
Thoth	God of scribes, wisdom, knowledge and time	Man with ibis head
Anubis	God of embalming; god of tombs and burials	Man with jackal head

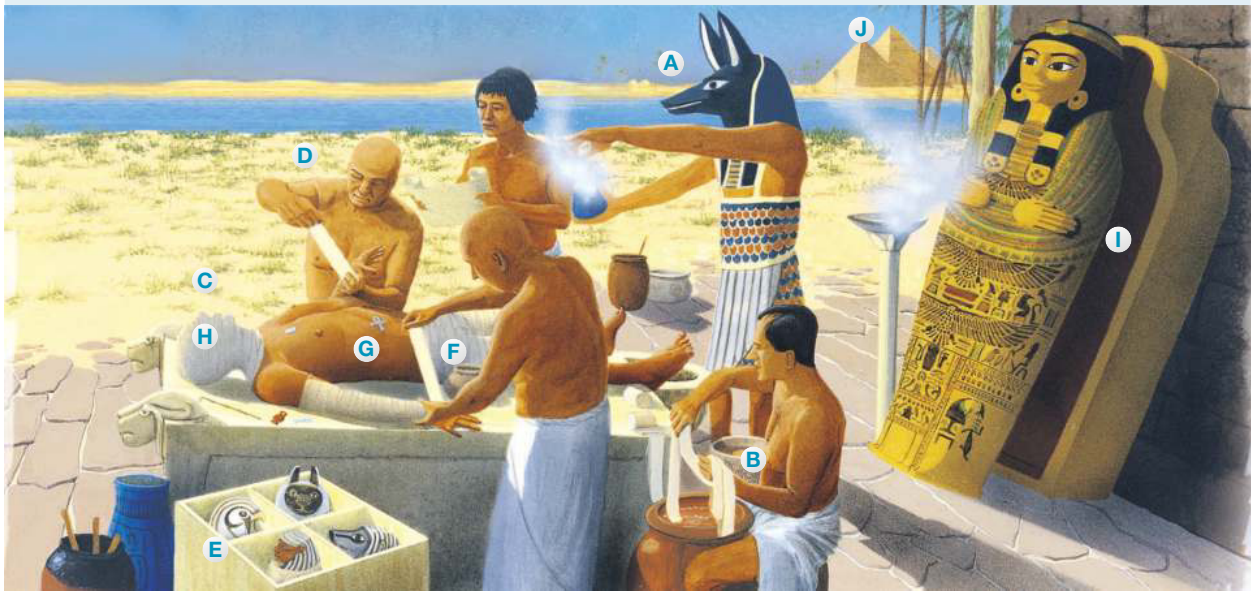
SOURCE 5 Ancient Greek historian Herodotus observed how important cats were to the ancient Egyptians. They were thought to protect people's homes. It is no wonder they were chosen as one of the animals to be associated with a god.

What happens when a house catches fire is most extraordinary: nobody takes the least trouble to put it out, for it is only the cats that matter; everyone stands in a row, a little distance from his neighbour, trying to protect the cats, who nevertheless slip through the line, or jump over it, and hurl themselves into the flames. This causes the Egyptians deep distress. All the inmates of a house where a cat has died a natural death shave their eyebrows . . .

3.5.3 Dead mummies do tell tales!

The art and hieroglyphs on ancient Egyptian tomb walls, along with their mummies, provide historians with insights into their way of life. The following sources reveal some of the significant practices associated with death and funerary.

SOURCE 6 Instructions to a priest for preparing a mummy



- **A** Prepare a jackal mask as Anubis and learn prayers from the Book of the Dead to chant.
- **B** Wash the body with water or palm wine.
- **C** Remove the brains through the left nostril with a hook and discard.
- **D** Cut the left side, remove organs except the heart.
- **E** Cover organs with **natron** to absorb moisture, rub with oils, wrap in linen and place in **canopic jars**.
- **F** Cover the body with natron for 40 days, rub with oils, pack the stomach with linen and sew.
- **G** Place a charm over the wound and a scarab over the heart, and wrap the body in linen with amulets.
- **H** Add a linen mask, paint or gold leaf and protective symbols.
- **I** Place the mummy in a coffin decorated with jewels and spells.
- **J** Inform relatives the mummy is ready. The chief priest will lead the funeral and open the mouth for the afterlife.

SkillBuilder discussion

1. What can be observed about the condition and preservation of Katebet's mummy in the image?
2. Are there any visible artefacts, jewellery or inscriptions in the image that provide clues about Katebet's status and life?
3. What details in the image suggest the techniques and materials used in the mummification process of Katebet?

SOURCE 7 The mummy of Katebet, a wealthy woman of high status, dates to around 1300 BCE.

3.5 SkillBuilder activity USING HISTORICAL SOURCES

Research online to complete the following tasks:

1. Find the four symbols from the table on the mummy in **SOURCE 7**.
2. Use the table below to **explain** the significance of each symbol on the mummy.

Symbol	Reason it is placed on a mummy
Isis	
Scarab	
Anubis	
Shabti figurine	

3.5 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 4, 7	5, 8, 10	3, 6, 9, 11

REMEMBER AND UNDERSTAND

1. **Identify** how the body in **SOURCE 1** was preserved.
2. **Describe** what is happening in **SOURCE 2**.
3. **Explain** why Egyptians were buried with possessions.
4. **Identify** two gods associated with death.
5. **Describe** what historians have learned from studying mummies.
6. **Complete** the sentences by matching the columns.

Left Column	Right Column
A mummy is	a body preserved by drying and wrapping.
Natron is	a mineral salt used to dry out bodies.
Bodies were mummified	so their souls would have a place to rest.
Canopic jars were used	to store organs removed from the body.
Magic charms were wrapped in	with bandages to help the soul's journey to the afterlife.

ANALYSE AND APPLY

7. How does **SOURCE 5** show Egyptians valued cats?
8. Study **SOURCE 1**:
   a. What would remain of this boy's body without mummification?
   b. Which technique could date it?
   c. What does the gold face paint suggest about his family's rank?
9. Using the sources:
   a. **Explain** why body preservation was crucial to Egyptians.
   b. **Compare** ancient Egyptian burial practices and beliefs with today's in a brief paragraph.

EVALUATE AND COMMUNICATE

10. **Evaluate** how beliefs about the gods and afterlife might make Egyptians content with their place in society.
11. Why do you think many Egyptian gods had animal heads?

Answers and sample responses for this topic are available online.

LESSON 3.6 What is the truth about the pyramids?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** why ancient Egyptians built the pyramids and how they are significant
- **evaluate** theories on how they constructed these structures.

Tune in

The **Great Pyramid** of Khufu, 150 metres tall, is Egypt's most famous legacy. It is made of 2.3 million stone blocks, each weighing around 2.5 tonnes, heavier than an adult rhinoceros!

SOURCE 1 The Great Pyramid of Khufu with the Sphinx in the foreground

1. **What questions do you have about the pyramids?**
2. **In groups, formulate a hypothesis about how the Great Pyramid was built and present it to the class.**
3. **Challenge each hypothesis with questions. No Googling!**

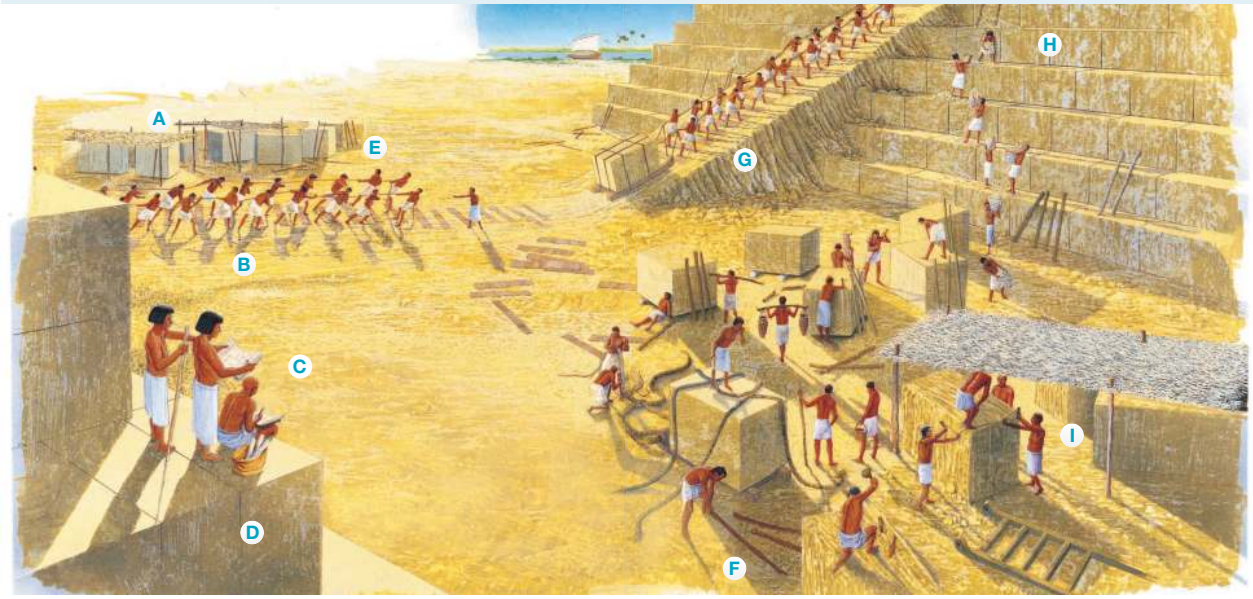
3.6.1 Pyramids and hidden tombs

Built around 4500 years ago, Egypt's 80 pyramids are the oldest human-made structures. The three at Giza are the most impressive. How they were built is unknown, but Egyptians used simple tools.

From 2500 BCE, pharaohs were buried in pyramids for about 500 years until tomb raiders became a problem. Later, tombs in the Valley of the Kings were mostly raided, except for Tutankhamun's tomb.

The Great Pyramid at Giza, built around 2550 BCE, was for Pharaoh Khufu. The other two pyramids were for his son Khafre and grandson Menkure. The Great Pyramid stands nearly 150 metres high and is made of 2.3 million granite blocks, each weighing about 2.5 tonnes.

SOURCE 2 The pyramids at Giza are the only surviving wonder of the Seven Wonders of the Ancient World.



A Daily work: Set 200 to 300 granite blocks each day.

B Transport methods: Dragged blocks over soft sand.
- Moved on rolling logs on hard surfaces.

C Management: Architects and overseers controlled the work, with scribes documenting details. Craftsmen included stonemasons and carpenters.

D Outer layer: Originally had polished white limestone, mostly removed for buildings in Cairo.

E Materials source:
- Granite from Aswan; limestone from eastern quarries.
- Transported via barges on the Nile.

F Labour force: About 100 000 men (not slaves) worked for 20 years to build the Great Pyramid.

G Construction ramps: Sand ramps may have been built to lift blocks.

H Precision cutting: Blocks were cut so precisely that a knife blade barely fits between them. Wood stakes may have been used to split the rock.

I Edge squaring: Workers ensured block edges were square.

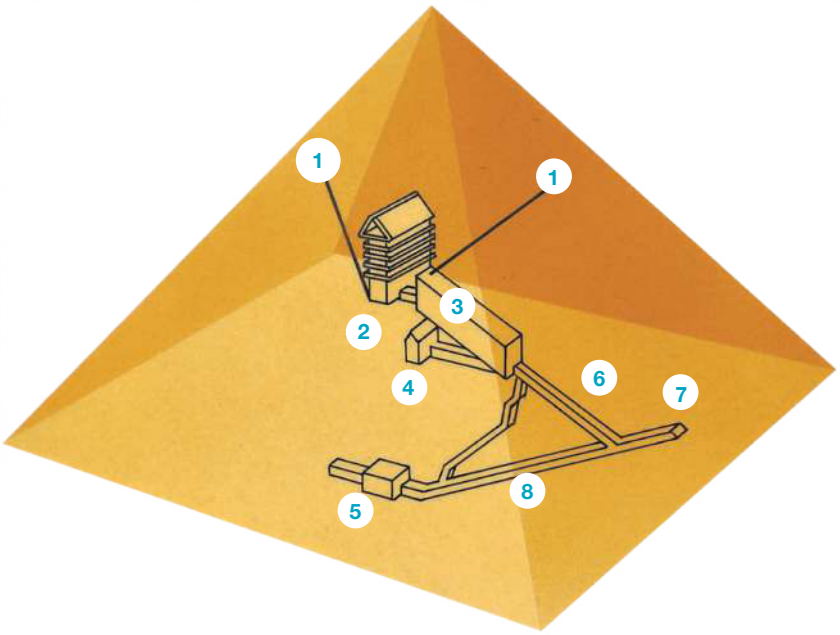
Pyramid mysteries

Some say the technology of the pyramids is so astonishing that they must have been built by an alien intelligence. Another view is that those who built the pyramids at Giza, and the **Great Sphinx** that guards them, used knowledge and skills passed down from an old but highly advanced civilisation that existed long before the Old Kingdom in Egypt. But archaeologists and historians prefer more scientific explanations.

Heavenly sails

One treasure that robbers missed in the Great Pyramid was a 43-metre-long boat for Khufu's afterlife. Found in 1954, it was in 1224 pieces inside a sealed cavity. When opened, archaeologists could still smell the cedar oil after 4500 years!

SOURCE 3 Inside the Great Pyramid



1 Air shafts
2 Pharaoh's burial chamber
3 Grand gallery
4 Queen's chamber
5 False chamber
6 Ascending corridor
7 Entrance
8 Descending corridor

3.6.2 Why did the age of pyramids end?

The end of the Old Kingdom marked the end of the age of pyramid building. Several different dates are given for the collapse of the Old Kingdom, the most common being 2181 BCE. But did it collapse?

Many historians of the twentieth century assumed that the collapse of the age of pyramids was due to failure of the regular flooding of the Nile. That flooding was essential for Egypt's prosperity because it provided fresh topsoil for farming. It was also assumed that the long age of peace and stability was replaced by a time of chaos after the death of pharaoh Pepi II. What made historians believe this?

One source of evidence were ancient texts that suggest that during this time Egypt experienced foreign invasions, disease, **civil war** and famines — even cannibalism. These texts were used to support the Biblical account of Moses, the Jewish slaves and the plague of Egypt. However, the ancient Egyptian sources on which this view is based were written 800 years after the events were supposed to have occurred. So are they reliable sources? Does other evidence contradict those sources?

Most historians now see these texts as fiction or propaganda to uphold pharaohs' power, warning against chaos without strong leadership. Recent skeleton studies show no signs of famine or violence, supporting this view.

SkillBuilder discussion

Using historical sources

1. Look carefully at **SOURCE 4**. Explain what this source shows.
2. What do you notice about the figures that might tell you about the situation in Egypt at the time?

SOURCE 4 Relief from Unas's causeway at Saqqara

SOURCE 5 Extract from *The Admonitions of Ipuwer* (dated to late Middle Kingdom era)

Everywhere barley has perished and men are stripped of clothes, spice, and oil. Everyone says: 'There is none.' The storehouse is empty and its keeper is stretched on the ground.

3.6 SkillBuilder activity USING HISTORICAL SOURCES

1. Carry out your own research using multiple credible sources to find out more about how the pyramids were constructed.
2. Create a table to record your findings, including the list of theories.
3. Rate each theory with a five-star system based on believability.
4. **Explain** which theory you find most and least believable.

Theory	Evidence?	Believability rating
a. Aliens built the pyramids.		
b. Slaves built the pyramids.		
c. Knowledge came from a lost advanced civilisation.		
d. Egyptian workers used canals, ropes and tracks to move stones.		
e. Ramps lifted the blocks.		
f. Herodotus said 100 000 workers built the pyramid.		
g. Stones were dragged on wet sand to move easily.		
h. Stones were rolled to the site.		
i. Blocks were made from limestone concrete and poured into moulds.		

3.6 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 3, 4	1, 5, 6, 8	7, 9, 10

REMEMBER AND UNDERSTAND

1. Which tools and equipment were commonly used by Egyptian pyramid builders?
   A. Iron hammers, pulleys, and steam-powered lifts
   B. Bronze chisels, wooden sledges, and copper tools
   C. Steel drills, cranes, and cement mixers
   D. Gold saws, wheeled carts, and scaffolding made of glass
2. Select the correct answer: There are **2 / 3 / 4 / 5** famous pyramids at Giza.
3. The Great Pyramid of Giza was built as the tomb of which ruler?
   A. Khafre
   B. Menkure
   C. Sphinx
   D. Khufu
4. The pyramids served as homes for royalty. True or False?
5. Outline why pharaohs stopped building pyramids after 500 years and switched to tombs in the Valley of the Kings.

ANALYSE AND APPLY

6. **SOURCE 2** shows the steps in building a pyramid. Select three steps and explain the tools and equipment needed by the workers.
7. **Study SOURCE 3**. Imagine you are an ancient Egyptian planning to rob Khufu's tomb. Write a note to your accomplice on how to enter the burial chamber and what to watch for.
8. Imagine you are a pyramid worker with access to two pieces of modern equipment. **Explain** which equipment you would use and how it would change your task.

EVALUATE AND COMMUNICATE

9. Many old Hollywood movies wrongly suggest that pyramids were built by slaves. **Discuss** how the scene in **SOURCE 2** would differ if this were true.
10. How were the massive stone blocks for the pyramids moved?

Answers and sample responses for this topic are available online.

LESSON 3.7 Who were Tutankhamun, Akhenaten and Nefertiti?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** why the discovery of Tutankhamun's tomb was a significant archaeological event
- **describe** the religious changes made by Akhenaten and Nefertiti
- **evaluate** the significance of these individuals.

Tune in

'Can you see anything?' Lord Carnarvon asked.

'Yes, wonderful things!' replied Howard Carter.

These were the words of the British archaeologist when he discovered the tomb of Tutankhamun.

1. **What do you think was behind the door in SOURCE 1?**
2. **Lord Carnarvon died a year after this door was opened. Did he die from the mummy's curse?**

SOURCE 1 The unbroken seal of Tutankhamun's tomb

3.7.1 An archaeologist's dream

The discovery of Tutankhamun's tomb was a key twentieth-century archaeological event. This was not because of the tomb's size or the pharaoh himself. Tutankhamun, a teenage king, had just a small tomb with four chambers. Its importance lies in its untouched treasures — over 5000 priceless objects. We can only imagine the treasures lost from larger tombs that were robbed.

SkillBuilder discussion

Historical significance

1. Describe the condition of Tutankhamun's head.
2. Identify the materials used for Tutankhamun's head.
3. Explain the significance of this head in ancient Egyptian history.

SOURCE 2 Head of the 19-year-old pharaoh Tutankhamun

In 1922, British archaeologist Howard Carter discovered Tutankhamun's tomb after years of searching in the Valley of the Kings. Digging around some old workers' huts, he found a step carved into the rock. More digging uncovered a sealed entrance with Tutankhamun's seal. After clearing rubble, Carter found the stone door, cut a hole and lit a candle. At first, he saw nothing, but then as his eyes adjusted to the darkness, he saw strange animals, statues and gold.

SOURCE 3 The *Illustrated London News* described the discovery of Tutankhamun's tomb on 9 December 1922 as 'the most sensational Egyptological discovery of the century'.

Key findings in Tutankhamun's tomb

- **A** The antechamber held about 700 items like stools, beds, statues, chariots, jars, lamps and clothing.
- **B** The side chamber had 600 items, including furniture, food baskets, and jars of wine and oil.
- **C** 200 000 tonnes of rubble were removed to access the tomb.
- **D** The gold-covered burial chamber was 5 metres by 3.5 metres, with three coffins, the innermost of 1100 kg of gold, called a **sarcophagus**, holding his mummy.
- **E** The mummy had a gold mask adorned with blue glass and semi-precious stones.
- **F** The treasury held treasures like a shrine with canopic jars, gold statues, a golden throne and jewellery.

SkillBuilder discussion

Historical questions

1. Identify the different objects visible in Tutankhamun's tomb.
2. Describe the layout of the tomb shown in the image.
3. Explain the purpose of the items found in Tutankhamun's tomb.

SOURCE 4 Translated inscription Tutankhamun had carved into a stone column, marking a return to the worship of many gods

I found the temples fallen into ruin, with their holy places overthrown and their courts overgrown with weeds. I reconstructed their sanctuaries, I endowed the temples and made them gifts of all precious things. I cast statues of the gods in gold and electrum, decorated with lapis lazuli and all fine stones.

3.7.2 A new mystery?

The last major pharaoh before Tutankhamun was Akhenaten, who became pharaoh around 1353 BCE as Amenhotep IV. In his fifth year, he started a religious revolution, worshipping the sun god Aten and renaming himself Akhenaten. He rejected other gods, but after his death, images of him and the new religion were destroyed.

Nefertiti, Akhenaten's first wife, is shown as elegant and beautiful in a limestone bust from 1340 BCE and in images worshipping Aten with him.

SkillBuilder discussion

Using historical sources

1. Look carefully at **SOURCE 5**. Identify the materials used to create the bust of Nefertiti.
2. Describe the features visible in Nefertiti's bust.
3. Explain the significance of Nefertiti in ancient Egyptian history.

SOURCE 5 This limestone bust of Nefertiti is held in the Egyptian Museum Berlin.

Tutankhamun, married to their third daughter, became pharaoh at nine in 1336 BCE. He restored the traditional gods and was known for fixing what was ruined. He died at 19 without an heir. **SOURCE 2** shows his mummy's head, and **SOURCE 6** suggests he wasn't alone in his tomb.

SOURCE 6 'Egypt's Queen Nefertiti may lie concealed in Tutankhamun's tomb, say archaeologists', *ABC News*, 5 October 2015

A British archaeologist, Dr Nicholas Reeves, from the University of Arizona, has used high-resolution scans, including radar and thermal imaging, to peer into hidden chambers in King Tutankhamun's underground tomb. Using these scans, he believes that Queen Nefertiti is buried there also.

. . .

His theory is that Nefertiti has lain undisturbed behind what he believes is a partition wall for more than 3000 years. The archaeologist believes the boy king, who died unexpectedly at 19, was buried in a rush in an underground burial chamber that was probably not intended for him.

3.7 SkillBuilder activity HISTORICAL QUESTIONS

A key skill in history is recognising patterns over time. It is important to understand when changes occur, why they happen, and their impact. Identifying periods of continuity — when things stay stable — is equally essential, as it helps connect the present with the past.

Work together as a group to fill out the table below.

Person	What did they do?	Why?	What impact did their action have?	Is this an example of change or continuity?
Nefertiti				
Akhenaten				
Tutankhamun				

3.7 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 4, 5	3, 6, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. Why was Tutankhamun's tomb such a rare and significant discovery?
   A. Tutankhamun is the most popular pharaoh.
   B. It was untouched.
   C. It contained more gold than any other.
   D. It was the first to be discovered.
2. **State** if the following are true or false.
   a. Howard Carter was not looking for Tutankhamun's tomb.
   b. Carter found the tomb by digging around old workers' huts.
   c. Though the tomb was filled with treasures, gold was not found.
3. **Explain** the meaning of the following concepts:
   - Burial chamber
   - Treasury chamber
   - Sarcophagus
4. Who were Akhenaten and Nefertiti?
5. Under Tutankhamun, Egypt made a complete return to traditional _____.

ANALYSE AND APPLY

6. Using **SOURCE 3**, identify one item from each chamber: side chamber, burial chamber and treasury chamber. **Explain** what these items reveal about life in ancient Egypt.
7. Read Tutankhamun's inscription in **SOURCE 4**.
   a. Who changed Egyptian religion before Tutankhamun's reign?
   b. Why did the temples fall into ruin?
   c. **Describe** the effect of Tutankhamun's reign on Egyptian religion and why he may have needed to undertake these works.
8. Review **SOURCE 3** and read **SOURCE 6**.
   a. What was Dr Reeves's hypothesis about Nefertiti and Tutankhamun's tomb?
   b. Where in **SOURCE 3** could the partition wall and hidden chambers be?
   c. What evidence did Reeves provide to support his hypothesis?

EVALUATE AND COMMUNICATE

9. Reeves's theory faced immediate criticism from other archaeologists. **Propose** why his theory was criticised.
10. Reflect on what you've learned about the ancient Egyptians in this lesson.
    a. **Discuss** how ancient Egyptians might have felt about Akhenaten's religious changes.
    b. **Suggest** why we lack evidence of ordinary Egyptians' thoughts on these changes.

Answers and sample responses for this topic are available online.

LESSON 3.8 What were the effects of war and trade?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** ancient Egypt's contact with other societies through trade and war
- **identify** the reasons for Egypt's rise and eventual decline.

Tune in

Egypt fought conflicts with several societies, including Nubia, Libya, the Hyksos, Hittites and the Peoples of the Sea. However, none were as feared as the Assyrians, known for their iron weapons, disciplined military, and brutal tactics of killing, torturing and enslaving resistors.

SOURCE 1 A wall panel depicting Assyrian soldiers attacking a fort

1. **Examine SOURCE 1 and identify three Assyrian military tactics depicted in the wall panel.**
2. **Discuss why an ancient society might choose to go to war.**
3. **Evaluate the impacts of wars on winners as well as losers.**

3.8.1 From the Old Kingdom to the New Kingdom

Empires are created by force and eventually fall. Egypt faced civil wars and invasions but also had strong governments that expanded control (see timeline in lesson 3.1). Egypt began as two kingdoms — Upper and Lower Egypt — united by King Narmer around 3100 BCE (see map in lesson 3.3). Egypt's history spanned 2700 years, with three key periods of unity and power: the Old, Middle and New Kingdoms.

The Old Kingdom: peace and stability

The Old Kingdom (2686–2181 BCE) was marked by pyramid construction and advancements in building and art. The era was one of peace, stability and prosperity, leading to the creation of the Great Sphinx. The kingdom thrived due to Nile floods, irrigation and trade with Nubia. A strong central government

ensured stability and land fertility. Egypt's natural barriers — sea, deserts and Nile cataracts — helped protect it from invasion.

The First Intermediate (Middle) Period: instability

The collapse of the Old Kingdom led to a century of bloodshed as nobles fought for control, making it easier for foreigners to enter the Nile Delta.

During the Sixth Dynasty, Pharaoh Pepi I sent expeditions to Nubia and Canaan. Droughts weakened royal power, and nomarchs (regional governors) competed for control, leading to the period known as the First Intermediate (Middle) Period.

During this period, Egypt's army was mostly made up of peasants. By the time of the New Kingdom, Egypt's army had become a permanent force, with chariots, archers, infantry (soldiers who march on foot) and foreign mercenaries.

Trade

Egypt's relations involved trade and war. Trade began around 6000 BCE and continued through Roman rule (30 BCE–646 CE). From the start of the Old Kingdom, Egypt traded with Nubia, Mesopotamia, Syria, Libya and Phoenicians. Egypt relied on trade for goods and luxuries.

Nubia provided gold, ivory and wood, while Egypt exchanged grain, beer and linen. Trade funded Old Kingdom pyramids and New Kingdom temples. Most trade used a barter system, with money introduced after the Persian invasion (525 BCE).

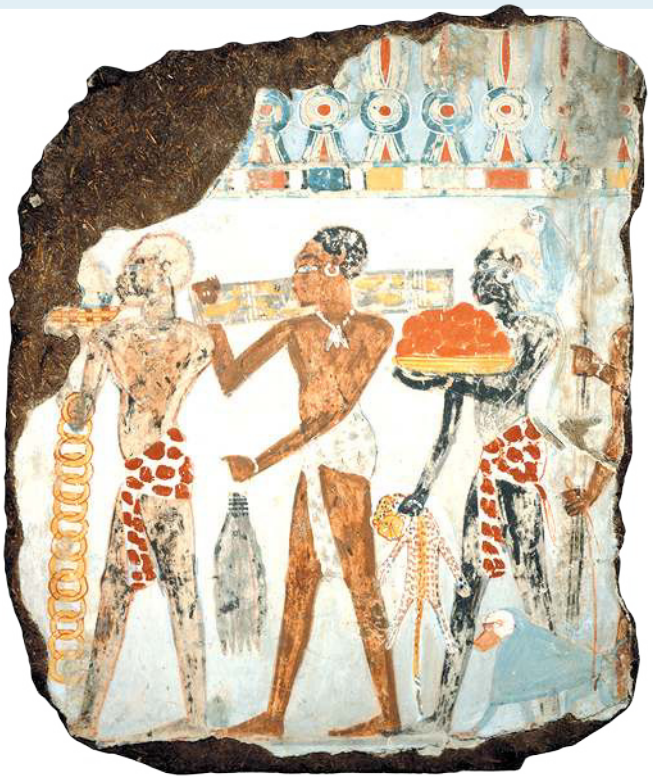
Despite trade, Egypt often conflicted with Nubia. In the Middle Kingdom, Egypt took part of Nubia and built forts to control gold routes. They also attacked Libyans and desert tribes to the north.

SkillBuilder discussion

Using historical sources

1. Nubians are shown carrying valuable items like ebony logs, leopard skins and gold rings. What does this suggest about the trade relationships between Nubia and ancient Egypt?
2. How do the items being carried, such as giraffe tails and a live baboon, reflect the cultural and economic exchanges between these regions?
3. What can the artistic style and details of this scene tell us about how Nubians were seen in ancient Egyptian society?

SOURCE 2 A scene on the wall of Sobekhotep's tomb shows Africans, likely Nubians, carrying ebony logs, leopard skins, gold rings, giraffe tails and a live baboon.



The Second Intermediate (Middle) Period and the New Kingdom: expansion

- Egypt was again weak in the Second Intermediate (Middle) Period when the Hyksos invaded from the north-east. However, this time was followed by the New Kingdom, the time of Egypt's greatest power. At the start of this period, the armies of Pharaoh Ahmose defeated the Hyksos, who had occupied Egypt. Ahmose also regained control of northern Nubia.
- In the fifteenth century BCE, Egypt defeated a coalition of **Asiatic** princes at the Battle of Megido. The territory occupied by modern Israel, Lebanon and Syria became part of the Egyptian Empire. Later pharaohs fought against the Hittites to keep control of these lands. In these wars Egypt plundered its defeated enemies and gained more wealth from the tribute (treasure, slaves and livestock) that had to be paid by conquered rulers.

3.8.2 Decline and fall

After Rameses II, Egypt weakened as Libyans and Peoples of the Sea invaded the Nile Delta. Despite victories, Egypt lost unity, with priests controlling Upper Egypt and princes ruling Lower Egypt.

In the Late Dynastic Period, Nubians took control, followed by the Assyrians in 663 BCE. Bronze Age Egypt had no iron ore and could not match the Assyrians' iron weapons. Later, Egypt fell to the Persians, then the Greeks and finally the Romans.

SOURCE 3 From an inscription in the temple of Pharaoh Rameses III at Thebes describing a victory over the 'Peoples of the Sea', in about 1188 BCE

Year 8 under the majesty of [Rameses III] . . . foreign countries made a conspiracy. No land could stand before their arms . . . they were coming forward toward Egypt . . . I have the river mouths prepared like a strong wall, with warships, galleys and coaster . . . The troops consisted of every picked man of Egypt. They were like lions . . . The chariotry consisted . . . of every good and capable chariot-warrior. Those who reached my frontier . . . were dragged in, enclosed on the beach, killed and made into heaps . . .

3.8 SkillBuilder activity CAUSES AND CONSEQUENCES

1. Work with a partner to **identify** the effects of each of the causes listed in the table.

Cause	Effect
a. Regularity of the Nile flooding and a strong, central government	
b. Peace and stability during the Old Kingdom	
c. Drought	
d. Trade with Nubia	
e. Invasion by the Hyksos	
f. Wars of the New Kingdom	
g. Invasion by various groups over time, such as the Libyans and Nubians	
h. Having no iron ore in Egypt	

2. Draw conclusions based on your completed table using the following guiding questions:
   a. What factors seem to cause war and conflict?
   b. What factors seem to contribute to stability and peace?
   c. How does a civilisation achieve prosperity?
   d. What factors seem to lead to the decline of a civilisation?

3.8 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4, 5	6, 7, 9	8, 10

REMEMBER AND UNDERSTAND

1. Which three main historical periods are used to describe ancient Egyptian history?
   A. The New Kingdom
   B. The Ancient Kingdom
   C. The Old Kingdom
   D. The First Intermediate Kingdom
   E. The Upper Kingdom
   F. The Lower Kingdom
   G. The Middle Kingdom
2. What factors enabled foreigners to invade Egypt's Nile Delta during the First Intermediate Period?
   A. They were granted access as a trap.
   B. Egypt lacked a strong leader.
   C. Egyptian nobles were in conflict with each other.
   D. The Egyptians were peaceful and unprepared for war.
3. When was Egypt at its strongest and weakest?
4. **List** the lands controlled by Egypt during its peak. Locate them on a map.
5. Which groups invaded Egypt after the New Kingdom of Pharaoh Rameses II?
   A. Hyksos
   B. Nubians
   C. Chinese
   D. Assyrians
   E. Romans
   F. Libyans

ANALYSE AND APPLY

6. **Analyse SOURCE 2**.
   a. Describe the details in the source.
   b. Outline what **SOURCE 2** reveals about Egypt's trade with Nubia.
7. **Examine** the inscription of Rameses III in **SOURCE 3**.
   a. Describe its style.
   b. Explain why it is written in that style.
8. **Infer** why Egypt's relationship with Nubia shifted from peaceful trade to conflict.

EVALUATE AND COMMUNICATE

9. **Create** a visual timeline of the main periods and events from this lesson.
10. **Summarise** the causes and effects of the rise and fall of Egypt in one paragraph.

Answers and sample responses for this topic are available online.

LESSON 3.9 Rameses II — Egypt's greatest pharaoh?

LEARNING INTENTION

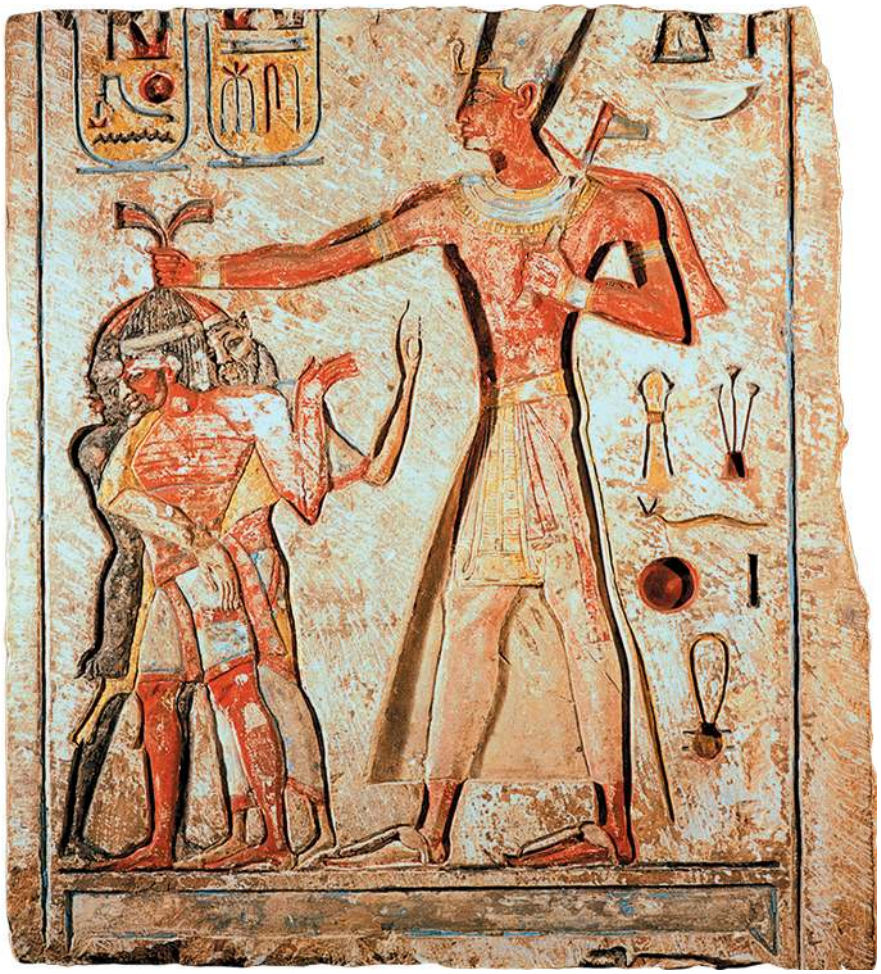
By the end of this lesson you should be able to:

- **describe** the significant figure often regarded as ancient Egypt's greatest pharaoh
- **evaluate** the reliability of sources depicting him as a great leader.

Tune in

Rameses II is often seen as the greatest pharaoh. However, does the evidence support this view?

SOURCE 1 A painted limestone panel depicts the great New Kingdom pharaoh Rameses II striking bound prisoners of war.



1. **Describe what Rameses II is doing in the panel shown in SOURCE 1.**
2. **Assess how such actions by a political leader would be regarded today.**
3. **Analyse how these actions would have been viewed in ancient Egypt.**

3.9.1 Who was Rameses II?

SkillBuilder discussion

Using historical sources

1. Look at **FIGURE 2**. What features of the statue's head, such as its expression and headdress, reflect the power and divinity attributed to Rameses II?
2. How does the craftsmanship and size of the statue compare to other statues from the same period in ancient Egypt?
3. What historical and cultural significance does the statue hold, and how does it contribute to our understanding of Rameses II's reign and legacy?

SOURCE 2 The head of the colossal statue of Rameses II at the Temple of Luxor in central Egypt.

You have already encountered several rulers of ancient Egypt in this topic. They include Narmer, the first pharaoh of both Upper Egypt and Lower Egypt; Khufu, for whom the Great Pyramid was built; and Tutankhamun, who became famous because his tomb was discovered with its contents untouched. However, many historians have regarded Rameses II, who ruled Egypt between ca. 1279 and1212 BCE, as the greatest of all pharaohs. Rameses II (sometimes spelled Ramses and Ramesses) was probably born around 1303 BCE. He was a son of King Seti I. Rameses was in his early twenties when he became Egypt's ruler. He held that position for longer than any other pharaoh. Because of his military campaigns and building projects, including temples and cities, he became known as Rameses the Great.

The warrior king

Around 1278 BCE, Rameses's navy defeated sea pirates attacking Egyptian ships in the Mediterranean. Leading an army of 100 000, Rameses became famous for battles against the Hittites and Nubians, repelling invasions, regaining territories and securing Egypt's borders.

3.9.2 Fighting the Hittites

For over 20 years, starting around 1277 BCE, Rameses led campaigns against the Hittites. In his first campaign, he defeated Palestinian princes and captured Amurra, a **vassal state** of the Hittite Empire in Syria. The next year, his army attacked Kadesh, but the Hittites ambushed one division. Isolated, Rameses still defeated many Hittites (see **SOURCE 4**). The battle ended in a **stalemate**, but Rameses claimed victory. Later campaigns led to captured Hittite territory, with a peace treaty around 1258 BCE.

Great ruler or great bragger?

Historians have many primary sources about Rameses II because he built monuments celebrating his achievements. He constructed large statues portraying himself as a handsome, smiling and powerful ruler.

At his temple in Abu Simbel, each of the four cliff-carved statues is nearly 20 metres tall. Records of his battles, including victories over the Hittites, were engraved on monuments across Egypt. His reputation was so great that nine future pharaohs adopted his name.

SOURCE 3 This relief sculpture in Luxor shows Hittite soldiers crushed under the wheels of Rameses II's chariot at the Battle of Kadesh.

SOURCE 4 From a poem inscribed by order of Rameses II on the walls of five temples to commemorate his victory at Kadesh

In the midst of many peoples, all unknown,

Unnumbered as the sand,

Here I stand,

All alone;

There is no-one at my side;

My warriors and chariots afeared [frightened],

Have deserted me . . .

. . . Two thousand and five hundred pairs of horses were around,

And I flew into the middle of their ring,

By my horse-hoofs they were dashed all in pieces to the ground . . .

SOURCE 5 Detail of Rameses II from sculptures and hieroglyphs at his temple in Abu Simbel

Did you know?

In the 1960s, an international effort saved the Abu Simbel temple and statues by cutting them into sections and relocating them to higher ground, preventing submersion from rising water behind the Aswan High Dam.

3.9 SkillBuilder activity USING HISTORICAL SOURCES

Historians develop skills to assess significance and determine who makes these decisions. They use specific criteria and ask questions to evaluate individuals, including:

- Role in society: What was their importance?
- Achievements: What did they accomplish?
- Impact: Did their achievements change society or history?
- Influences: What shaped their identity?
- Trustworthiness of information: How reliable is our knowledge of them?
- Perception: How were they viewed at the time? Did perspectives vary?
- Self-representation: How did they present themselves?
- Cultural interpretation: Have historians from different cultures viewed their significance differently?
- Contemporary perspective: How do we perceive these individuals today?

Some writers accept Rameses's propaganda as fact without question, while others, like those in **SOURCE 7**, approach it with scepticism.

SOURCE 6 From 'Ramesses II — the greatest leader of all time?' on Military History Matters website

Ramesses had walked blindly into a Hittite trap. With little warning, a huge detachment of 2500 Hittite chariots descended on the division of Ra as it marched toward the camp . . . Egyptian survivors of the initial assault fled in disarray as the Hittites poured into the Egyptian camp. Yet it was at this point, as the pharaoh stood alone and defeat seemed certain, that Ramesses proved his worth. He leapt into his war chariot and personally drove back the Hittite advance from the camp. As the Hittites faltered, they were hit by a second setback. Egyptian reinforcements had been sent by sea and fortuitously in time to help Ramesses repel the Hittites.

SOURCE 7 From 'Rameses II' entry in the online *World History Encyclopedia*

The reign of Rameses II has become somewhat controversial in the last century, with some scholars claiming he was more of a showman and a propagandist than an effective king, and others arguing the opposite. The records of his reign, however — both the written and the physical evidence of the temples and monuments — argue for a very stable and prosperous reign.

Analyse the information about Rameses in this lesson and **SOURCES 6** and **7** by completing the table with one sentence for each entry.

	By himself	By the Military History Matters website	By the *World History Encyclopedia*
How was Rameses II represented?			
Why was he represented that way?			
Was the representation from a reliable or unreliable source?			

3.9 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 3, 5, 6	2, 4, 8	7, 9, 10

REMEMBER AND UNDERSTAND

1. Which enemy group was not defeated by Rameses II?
   A. Nubians
   B. Assyrians
   C. Hittites
   D. Mediterranean pirates
2. Why is Rameses II known as Rameses the Great?
   A. He discovered the Rosetta Stone and translated hieroglyphs.
   B. He ruled for a short time but introduced writing to Egypt.
   C. He led military campaigns, built impressive monuments, and ruled for a very long time.
   D. He was the last pharaoh before Egypt became a Roman province.
3. Rameses II's forces fought the Nubians at the Battle of Kadesh. True or False?
4. Was the Battle of Kadesh truly an Egyptian victory? **Justify** your answer.
5. In 1258 BCE, the conflict with the Hittites ended with a _____ _____.

ANALYSE AND APPLY

6. Study **SOURCE 2**. What impression of Rameses II does the colossal head convey, and why would he want this portrayal?
7. Refer to **SOURCES 3** and **4:**
   a. What happened to Hittite soldiers at the Battle of Kadesh according to **SOURCE 3**?
   b. According to **SOURCE 4**, why were Rameses II's soldiers absent, how many enemies did he face and how did he defeat them?
   c. Do **SOURCES 3** and **4** provide conflicting or supporting evidence?
   d. Are these sources reliable? Provide reasons.
   e. How might Rameses II's soldiers have felt about the inscriptions in **SOURCE 4**?

EVALUATE AND COMMUNICATE

8. What problems may arise for historians from the fact that all four sources and most primary sources about Rameses II were produced on his orders?
9. **Create** a timeline of the main events in Rameses II's life.
10. Using **SOURCES 4** and **5**, how did Rameses II wish to be remembered?

Answers and sample responses for this topic are available online.

LESSON 3.10 What should we thank the Egyptians for?

LEARNING INTENTION

By the end of this lesson you should be able to **describe** ancient Egyptian inventions still in use today.

Tune in

Shown in **SOURCE 1** is an ancient Egyptian invention we still use every day.

SOURCE 1 An inscription found on the walls of the Kom Ombo Temple, an ancient Egyptian temple located in Upper Egypt, near the Nile River.

1. **What do you think SOURCE 1 might be?**
2. **How do you think the circle shapes might connect to its function?**

3.10.1 Paper

The Egyptians created the first ink and made paper from papyrus, which grew along the Nile's banks.

SkillBuilder discussion

Using historical sources

1. What kinds of symbols and pictures are shown on the papyrus, and what do they mean?
2. How was the Book of the Dead used in ancient Egyptian culture, and who would have used it?
3. What materials and techniques do you think used to create the papyrus, and how have they helped it survive for so long?

SOURCE 2 Papyrus from the Book of the Dead - A collection of magical spells and prayers to help the dead in the afterlife (*c.* 1310 BCE)

3.10.2 Makeup

The Egyptians invented cosmetics and hygiene products, including the toothbrush and breath mints. By 4000 BCE, they made black eyeliner from soot and galena, and green eyeshadow from malachite. Both noble men and women used makeup.

3.10.3 The calendar

The Egyptians created a 365-day calendar with 12 months of 30 days and five extra days at year-end. This calendar helped predict the Nile's floods, essential for agriculture (as shown in **SOURCE 1**).

3.10.4 Mathematics

Some say the ancient Egyptians invented mathematics, but that's not entirely true. Other cultures, such as the ancient Africans of the Congo, and Sumerians, Chinese, Indians and Mayans, also developed mathematics, likely sharing knowledge over time.

SkillBuilder discussion

Historical questions

1. Suggest why the Great Pyramid of Khufu was built so much larger than the other pyramids, and what was its purpose.
2. Identify what kinds of treasures and artefacts have been found inside the pyramids, and what do they tell us about ancient Egyptian life and beliefs.

SOURCE 3 Pyramids at Giza. The Great Pyramid of Khufu towers above the others.

The ancient Egyptians used mathematics for impressive engineering feats like the pyramids, which could not have been built without it. The Great Pyramid is the only surviving Ancient Wonder and remains Egypt's greatest legacy, attracting thousands of tourists each year.

SOURCE 4 Princess Nefertiabet eating (2589–2566 BC). You can see Egyptian numbers on the right panel.

3.10 SkillBuilder activity COMMUNICATING

When considering how people lived thousands of years ago, it may seem we have no connection to them. However, looking closely reveals our similarities. Next time you brush your teeth, thank the ancient Egyptians!

In small groups, choose one ancient Egyptian invention still in use today.

1. Research its development over time and take notes.
2. Create a visual timeline of its changes and display it in the classroom.
3. **Discuss** whether you could live without this invention and explain why.

3.10 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4	5, 6	7, 8, 9, 10

REMEMBER AND UNDERSTAND

1. **List** four ancient Egyptian inventions.
2. The ancient Egyptians made paper from _____.
3. True or False?
   a. Only noble women wore makeup.
   b. Egyptians were the first to invent mathematics.
   c. The Egyptian calendar is exactly the same as our calendar today.
4. The calendar helped the ancient Egyptians predict when the Nile would _____, which was essential for their _____.
5. What does it mean that "the pyramids could not have been built without mathematics"?
   A. The workers had to take math tests before building.
   B. The ancient Egyptians used math to decorate the pyramids with numbers.
   C. Mathematics was used to plan measurements, angles, and construction techniques.
   D. The pyramids were built to teach math to young scribes.

ANALYSE AND APPLY

6. **List** five questions you have about any of the sources in this lesson.
7. Look at **SOURCE 2**. How do you think the ancient Egyptians created colours without modern art supplies?

EVALUATE AND COMMUNICATE

8. What is the most significant Egyptian invention or legacy? **Justify** your answer in a short paragraph.
9. What did the Egyptians use to make black eyeliner?
10. Why did the Egyptians create a 365-day calendar?

Answers and sample responses for this topic are available online.

LESSON 3.11 Inquiry: How have powerful women been recorded and treated in history?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **analyse** the treatment of women leaders in history
- **evaluate** historical records on women in leadership.

Background

Women leaders have been treated differently throughout history. In this lesson, compare Pharaoh Hatshepsut with Julia Gillard and explore other female leaders.

Before you begin

Check the **Inquiry rubric** in the Resources panel. Use it to guide and self-assess your work.

Inquiry steps

Step 1: Questioning and researching

Look at the provided primary sources. What do you want to investigate? Write an inquiry question inspired by these sources.

SOURCE 1 An inscription in the pharaoh Hatshepsut's mortuary

Then his majesty said to them: this daughter of mine . . . I have appointed as my successor upon my throne . . . she shall direct the people . . . it is she indeed who shall lead you. Obey her words.

SOURCE 2 Hatshepsut was often shown as a man, with a false beard, in statues, drawings, and paintings.

SOURCE 3 Defaced relief of Hatshepsut in the temple of Amun

SOURCE 4 Australia's first female prime minister, Julia Gillard

SOURCE 5 Protest outside Parliament House against Gillard and Labor Party policy, 2011

Step 2: Using historical sources

Read the secondary source and highlight sections that answer your inquiry question.

SOURCE 6 Analysis of Hatshepsut by historian Robert Darlington

Hatshepsut becomes a pharaoh

Although women in ancient Egypt generally had more rights than in other ancient societies, the leaders of ancient Egypt were nearly all male. Before Hatshepsut, only three women had ruled the land.

The only circumstance in which a woman could become ruler was if the pharaoh died before the heir to throne was old enough to rule. In that case, the Chief Royal Wife could act as regent. This meant that she would be a temporary ruler on behalf of the heir. If there was no heir, the Chief Royal Wife could rule as pharaoh.

Hatshepsut was the daughter of Thutmose I (who ruled Egypt c. 1506 BCE–1493 BCE). As was common in Egyptian royal families, she married her half-brother, who became Thutmose II and ruled from c. 1493 to 1479 BCE. When her brother died in 1479 BCE, his son Thutmose III was just three years old. This meant that Hatshepsut was able to become regent, ruling on his behalf.

When Thutmose III was about eight years old, Hatshepsut arranged to have herself crowned as pharaoh. She and Thutmose III became co-rulers of Egypt. Hatshepsut made two claims in support of her right to the throne. She claimed that her father, Thutmose I, had appointed her to succeed him as ruler. She also claimed to be the daughter of the god Amun. Hatshepsut and Thutmose II ruled together until 1458 BCE.

Achievements

Hatshepsut is believed to have brought wealth to Egypt, particularly through trade in gold, ebony and incense. She led Egypt's armies — on at least one occasion against Nubia. She had grand structures built that still stand, including her mortuary temple at Deir El Bahri. However, after her death in 1458 BCE, her images were chiselled off some walls, many of her statues were smashed and an attempt was made to remove her from the records of pharaohs.

If **SOURCE 6** doesn't answer your question, research online using the **Hatshepsut** and **Hatshepsut — The pharaoh that wouldn't be forgotten** links in the Resources panel.

Step 3: Historical perspectives and interpretations

Explain what these sources reveal about the challenges faced by female leaders in ancient Egypt and twenty-first-century Australia. Are things changing?

Step 4: Communicating

What is the answer to your inquiry question? Use examples from your research and present your findings to the class in a format of your choice.

LESSON 3.12 Review

3.12.1 Key knowledge summary

Use this dot-point summary to review the content covered in this topic.

3.2 How do we know about ancient Egypt?

- Scholars have read ancient Egyptian sources since hieroglyphs were decoded in the nineteenth century.

3.3 Why was the River Nile so important?

- Egyptian civilisation relied on the Nile.
- The Nile's floods gave fertile soil for farming.
- The Nile was important for transport and defence and was connected to the gods.

3.4 What was Egyptian society like?

- Egyptian society was structured like a pyramid.
- Pharaohs had great power and responsibility.
- Most people were peasants, but some had skilled jobs.
- Women had fewer rights than men but more than in other ancient societies.

3.5 What did ancient Egyptians believe?

- Ancient Egyptians worshipped many gods.
- They believed in the afterlife and buried possessions for it.
- Mummification was a careful and complex process.
- Burial customs give us most of the evidence about ancient Egypt.

3.6 What is the truth about the pyramids?

- In the Old Kingdom, pyramids housed pharaohs' mummies.
- Egyptians used stone, wood and bronze tools to build them.
- Later pharaohs were buried in the Valley of the Kings due to pyramid robberies.

3.7 Who were Tutankhamun, Akhenaten and Nefertiti?

- Tutankhamun's tomb is important because its contents were not robbed.
- Akhenaten led a religious revolution, making Aten the main god.
- Nefertiti was Akhenaten's influential wife.

3.8 What were the effects of war and trade?

- Egypt traded and fought with other countries.
- During strong periods, Egypt drove out invaders and dominated other lands.
- During weak times, Egypt was invaded.

3.9 Rameses II — Egypt's greatest pharaoh?

- Rameses II is seen as the greatest pharaoh for his military success and monuments.
- His greatness is debated since much evidence was built on his orders.

3.10 What should we thank the Egyptians for?

- Egyptians invented paper, makeup, a 365-day calendar and mathematics.

3.11 Inquiry: How have powerful women been recorded and treated in history?

- Hatshepsut was one of few women to become pharaoh.
- After her death in 1458 BCE, her images were removed and attempts were made to erase her from history.

3.12.2 Key terms

amulet charm believed to protect against evil
artisans skilled craftspeople
Asiatic peoples of Asia, including the Middle East
canopic jars used to store the liver, lungs, intestines and stomach of the person being mummified
cataracts rapids, where the river's surface is broken by rocks
civil war war between rival factions within one state or country
deities god or goddess
delta low, triangular area where a river fans out as it nears the sea
demotic script the simplest of the ancient Egyptian scripts; almost like handwriting
Great Pyramid the oldest and largest pyramid in Egypt; one of the Seven Wonders of the Ancient World
Great Sphinx monument with the body of a lion and the face of a man; located in Giza near the Great Pyramid
hieratic Egyptian script that was less decorative and complex than hieroglyphs
Inundation the seasonal flooding of the Nile
mummy body that has been embalmed
natron a mineral salt used to dry out dead bodies
papyrus paper made from crushing reeds
sarcophagus stone or wooden coffin (often inscribed or decorated) in Egypt
shadoof irrigation device used to lift water from the river
stalemate a situation in a contest or conflict in which neither side can defeat the other
Valley of the Kings gorge on the Nile in Upper Egypt that contains many royal tombs
vassal state a state whose ruler recognises another, more powerful ruler as overlord

3.12.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question:

How do we know about ancient Egypt, and what were its key features, achievements and legacies?

1. Discuss your views on the question with a partner. Has your learning changed your perspective? If so, how?
2. Write a short paragraph summarising your answer to the inquiry question.

learnon

Post-test	Online post-test
eWorkbook	Customisable worksheets for this topic Reflection
Digital document	Key terms glossary

3.12 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4, 6, 7, 9, 11	5, 8, 10, 12	13, 14, 15

REMEMBER AND UNDERSTAND

1. In Egypt, the Inundation was which of the following?
   A. A temple
   B. An annual period of flooding
   C. A bucket used for irrigation
   D. A writing tool
2. The Nile is formed by the joining of which two rivers?
   A. The Murray and Darling
   B. Green Nile and Yellow Nile
   C. Red Nile and Black Nile
   D. White Nile and Blue Nile
3. After the pharaoh, who was the next most powerful official?
   A. The president
   B. The prime minister
   C. The vizier
   D. The lord high executioner
4. Who were included as skilled artisans in ancient Egypt?
   A. Peasants and slaves
   B. Stone masons and paper makers
   C. Scribes
   D. Nobles and priests
5. Which of the following woman ruled Egypt as pharaoh from 1479 to 1458 BCE?
   A. Nefertiti
   B. Cleopatra
   C. Hatshepsut
   D. Neber
6. The Great Pyramid was built during which of these periods of ancient Egyptian history?
   A. The Old Kingdom
   B. The First Intermediate Period
   C. The Middle Kingdom
   D. The Second Intermediate Period
7. In ancient Egypt, a woman's social rank depended on the rank of which of these?
   A. Her mother and father
   B. Her brother or sister
   C. Her cousins
   D. Her husband or son
8. Which gods were associated with death, tombs and the afterlife?
   A. Seth and Horus
   B. Osiris and Anubis
   C. Isis and Hathor
   D. Amun-Ra and Thoth
9. When a body was mummified, where were most internal organs stored?
   A. Refrigerators
   B. Cupboards
   C. Cellars
   D. Canopic jars

10. Why was the tomb of Tutankhamun a significant discovery?
    A. Tutankhamun was a powerful pharaoh.
    B. The tomb was enormous.
    C. It was the only royal tomb that had not been robbed.
    D. There was a curse on the tomb.

ANALYSE AND APPLY

11. Look at **SOURCE 1**.
    This obelisk was taken from Egypt to Constantinople (now Istanbul) during the Roman Empire.
    a. **Identify** the hieroglyphs visible on the obelisk.
    b. **Describe** the symbols and their significance in ancient Egypt.
    c. **Interpret** what this section of the obelisk might represent or communicate.
12. **Describe** the ancient Egyptian view of death and the afterlife.
13. **Explain** why opinions on Rameses II's greatness differ.

EVALUATE AND COMMUNICATE

14. **Discuss** the importance of the Nile to ancient Egyptians in a paragraph.
15. Summarise one type of evidence we have of ancient Egyptian life and what it reveals.

SOURCE 1 A section of a huge Egyptian obelisk engraved in neat hieroglyphs

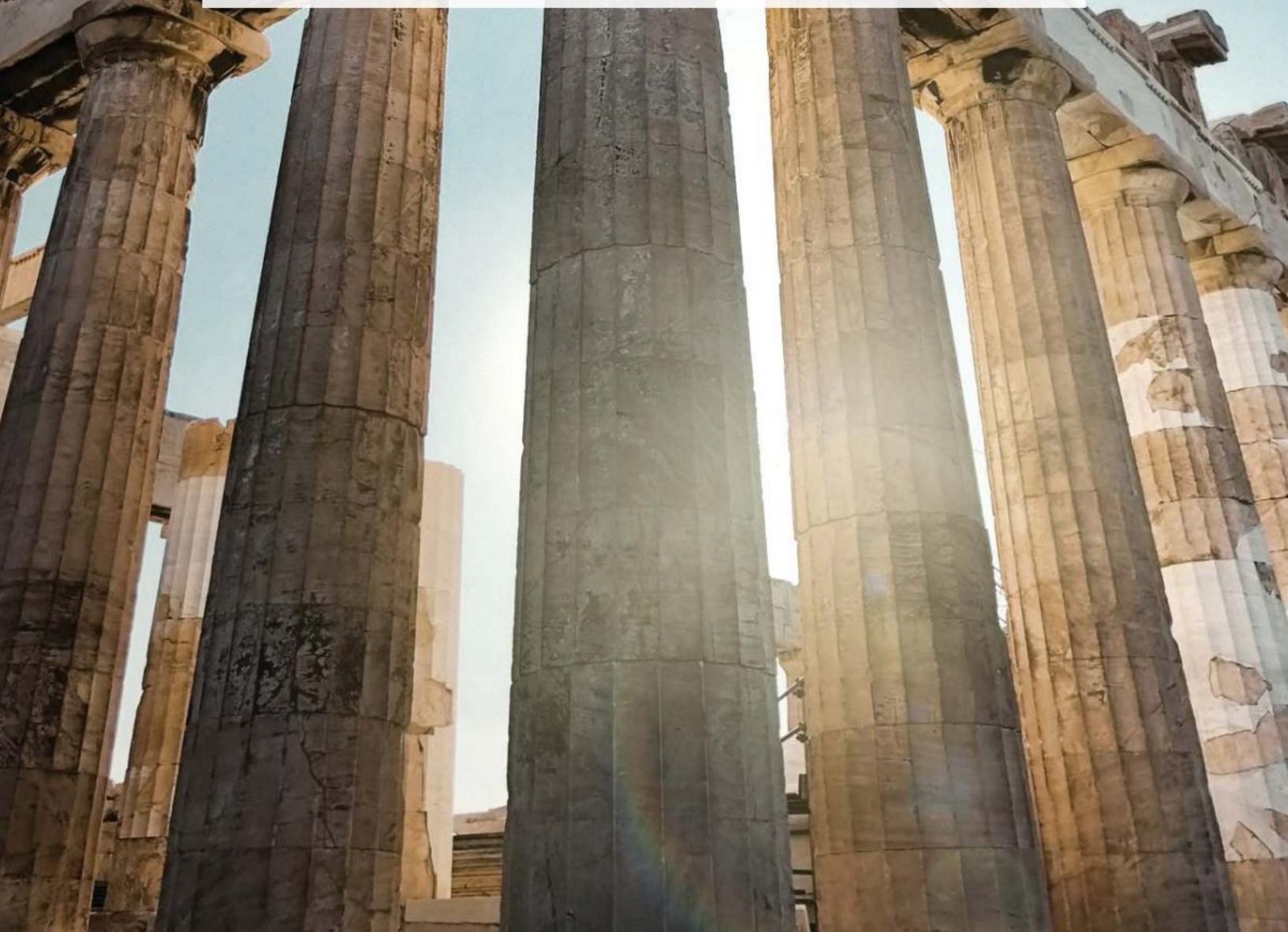
Answers and sample responses for this topic are available online.

4 Ancient Greece

LESSON SEQUENCE

online only

4.1 Overview
4.2 How do we know about ancient Greece?
4.3 Who were the Minoans and Mycenaeans?
4.4 What was the Greek 'Dark Age'?
4.5 How were Athens and Sparta governed?
4.6 What was life like in Sparta?
4.7 What was life like in Athens?
4.8 What do we know about Greek laws, myths, gods and oracles?
4.9 What were the Olympic Games?
4.10 How was Greece changed by wars?
4.11 What is the heritage of ancient Greece?
4.12 Inquiry: Did the Spartans really kill their weak babies?
4.13 Review



LESSON 4.1 Overview

INQUIRY QUESTION

How do we know about ancient Greece, and what were its defining features, achievements and legacies?

In 2004, the Summer Olympics were held in Athens, Greece, where the first ancient Olympics took place in 776 BCE. Greece gave us many important ideas that still influence us today.

Melbourne has the largest Greek community outside of Athens. Ancient Greek culture continues to shape our world.

learnon

- **Pre-test**
  Online pre-test
- **eWorkbook**
  Customisable worksheets for this topic (ewbk-14157)
- **Digital document**
  Key terms glossary (doc-43010)
- **Video eLesson**
  Ancient Greece (eles-1836)

c. 3000
The Minoan civilisation develops on Crete.

c. 1400–1200
The Great Age of Mycenae flourishes.

c. 1150
The Greek 'Dark Ages' (to c. 750): Many Greeks migrate from the mainland to the Aegean islands and the coast of Asia Minor.

BCE 3000 — 1500 — 1400 — 1300 — 1200 — 1100 — 1000 — 900

c. 1000
Dorians settle in Sparta and other Mycenaean sites.

SkillBuilder

Use the SkillBuilder activities to develop these Historical concepts and skills:

- HISTORICAL QUESTIONS
- CHRONOLOGY
- USING HISTORICAL SOURCES
- CONTINUITY AND CHANGE
- CAUSES AND CONSEQUENCES
- HISTORICAL SIGNIFICANCE
- COMMUNICATING

c. 776
The First Olympiad is held.

508
Democracy is introduced in Athens.

460–445
The First Peloponnesian War.

431–404
The Peloponnesian War is waged between alliances led by Athens and Sparta.

336
Alexander the Great becomes ruler of Greece.

146
The Romans conquer Greece.

800 | 700 | 600 | 500 | 400 | 300 | 200 | 100 | 0 | CE

c. 800
The Greek alphabet is developed.

c. 750
The Greek archaic period (to c. 490)

c. 490
Greek Classical Age (to c. 323): a period of great achievements in art, literature and drama

490
The Persian Wars begin.

403–371
Sparta dominates the Greek world.

371
The Thebans defeat the Spartans.

334
Alexander the Great invades the Persian Empire.

LESSON 4.2 How do we know about ancient Greece?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** the archaeological and written sources for ancient Greece
- **explain** the gaps in our knowledge.

Tune in

Archaeological sources such as sculptures can tell us about the past.

SOURCE 1 Many marble sculptures once adorned the Parthenon (temple) in ancient Athens.

1. **Discuss how sculptors around 2500 years ago could produce art such as that shown in SOURCE 1.**
2. **Brainstorm what you think these sculptures could have been about.**

4.2.1 How do we know about ancient Greece?

Millions of people visit Greece each year to see its ancient history. Famous places include the Parthenon and Erechtheion on the **Acropolis** of Athens, and the ruins of the first Olympic Games. The National Archaeological Museum in Athens holds the largest collection of ancient Greek artefacts. Other important sites include the Temple of Poseidon and Delphi, which the Greeks called the 'navel of the Earth'. Some Greek treasures, like the Parthenon Marbles, were taken by Lord Elgin in the early 1800s and are now in the British Museum in London.

Written sources

The Greeks left many writings that are still read today. Famous writers include Homer, Herodotus, Thucydides, Plato, Aristotle and Sophocles. Their work helps us understand ancient Greece better.

Archaeological sources

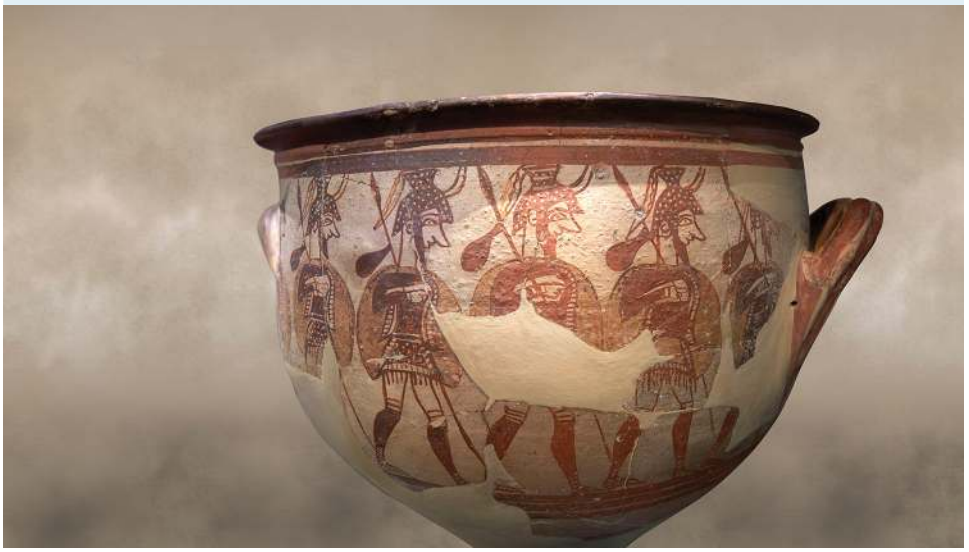
These Ancient Greek sources include things like pottery, statues, buildings, and tools. These objects help us learn about how the ancient Greeks lived, what they believed in, and what their daily life was like. For example, decorated pots can show us scenes of myths, sports, or everyday activities. Temples and ruins help us understand their religion and architecture.

SkillBuilder discussion

Using historical sources

1. Describe what the paintings of Mycenaean soldiers tell us about their weapons, armor and fighting techniques.
2. Explain why these soldiers were important to Mycenaean society.
3. How does the pottery help us understand the daily life and culture of the Mycenaeans?

SOURCE 2 Mycenaean soldiers painted on pottery. Mycenae was the earliest civilisation on the Greek mainland.



SOURCE 3 This is a theatre mask used in ancient Greek plays. Beside it are the remains of an amphitheatre found on the Turkish coast where actors performed wearing masks.

4.2 SkillBuilder activity USING HISTORICAL SOURCES

The Parthenon is the building on top of the Acropolis.

1. **Investigate** online to find images and information about the Parthenon.
2. **Identify** the features of the Parthenon used in modern buildings. Share with your class.

4.2 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4	5, 6, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. **State** the main reason that millions of people visit Greece each year.
2. **Identify** the ancient Greek writers whose works are still read today.
   A. Homer
   B. Thucydides
   C. Aristotle
   D. All of the above
3. The original Olympic Games were held at Olympia. True or False?
4. **Recall** what the earliest civilisation on the Greek mainland was called.
   A. Mycenae
   B. Dorian
   C. Aeolian
   D. Ionian
5. Who was Herodotus?
   A. A famous Greek warrior who led battles against Persia
   B. A Greek philosopher who taught Alexander the Great
   C. A Greek historian known as the 'Father of History'
   D. A king of Athens who built the Parthenon

ANALYSE AND APPLY

6. **Explain** how **SOURCE 1** provides evidence of the artistic skills of ancient Greek sculptors.
7. Use **SOURCE 1** to **propose** a hypothesis about the wealth and values of ancient Athens.
8. **Discuss** what you think we might learn from **SOURCE 2** about the skills of Mycenaean potters.
9. **Explain** what kind of character you think the mask in **SOURCE 3** was meant to represent. How can you tell?

EVALUATE AND COMMUNICATE

10. **Summarise** what you have discovered about ancient Greece from **SOURCES 1** to **3**.

Answers and sample responses for this topic are available online.

LESSON 4.3 Who were the Minoans and Mycenaeans?

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the Minoans — the first ancient Greek civilisation — and the Mycenaeans who conquered them around 1375 BCE.

Tune in

The sculptures shown in **SOURCE 1** have been dated to the time of the first ancient Greek civilisation, the Minoans.

1. **Why do you think they would have sculpted the heads of bulls?**
2. **Consider what significance bulls might have had for them.**

SOURCE 1 Ancient Minoan sculptures of bulls

4.3.1 Minoan civilisation

Civilisation in Greece began before 3000 BCE on Crete, the largest Greek island. Archaeologist, Arthur Evans, found Minoan cities and named them after King Minos. By 2500 BCE, the Minoans built towns and made bronze tools, weapons and pottery. Their main city, Knossos, had walls with pictures of athletes on wild bulls (see **SOURCE 2**). The Minoans traded by sea with Egypt and Syria and used a writing that modern language experts have called Linear A, which disappeared around 1450 BCE. Later, volcanic eruptions and earthquakes destroyed their cities.

SkillBuilder discussion

Using historical sources

1. Name the type of artwork mentioned in the source. What does this name mean?
2. Where was this artwork found?
3. Describe the activity that the Minoan men and women are doing in the painting.

SOURCE 2 A fresco (wall painting) from Knossos showing young Minoan men and women leaping on the back of a bull

4.3.2 The Mycenaeans

By about 1375 BCE, invaders from cities like Mycenae and Athens took over the Minoans. The Mycenaeans were great traders and used bronze. They copied some Minoan culture, lived in palaces, and enjoyed music and sports. They spoke early Greek and used a writing that modern language experts have called Linear B, which was decoded in 1952. Homer's *Iliad* tells how the Mycenaeans captured Troy around 1200 BCE.

SkillBuilder discussion

Using historical sources

1. Study **SOURCE 3**. Which civilisations are mentioned in the source?
2. What island is associated with the Minoan civilisation?
3. How did the geographical locations of the civilisations influence their trade routes and interactions with each other?

SOURCE 3 Crete, Greece and Egypt at the time of the Minoan and Mycenaean civilisations

Source: Map drawn by Spatial Vision.

Homer's *Iliad* and the Trojan War

The story in the *Iliad* is so famous it was even made into a movie. We don't know if it's true, and archaeological finds have added to the debate. The story was passed down for 300 years before Homer, who lived in the eighth century BCE, wrote it down.

As the *Iliad* tells the story, there are several main characters. Among them are:

- Agamemnon, the king of Mycenae
- Menelaus, the king of Sparta and brother of Agamemnon
- Helen, the wife of Menelaus
- Priam, the king of Troy
- Paris, son of Priam
- Odysseus, a Mycenaean warrior hero.

In the *Iliad*, the war started when Paris took Helen to Troy. Agamemnon led a Greek army in a ten-year siege of the city. The Greeks tricked the Trojans by leaving a giant wooden horse with warriors hidden inside. The Trojans thought it was a gift and brought it into the city. At night, the Greeks came out of the horse, opened the gates and destroyed Troy.

SOURCE 4 A scene from one of the wall paintings found at Tiryns, a Mycenaean site from the fourteenth to thirteenth centuries BCE

Fact or fiction?

People have doubted the truth of the *Iliad* for a long time (see **SOURCE 5**). In 1870, archaeologist Heinrich Schliemann used the story to find what he believed was Troy (see **SOURCE 6**). He found ruins, but later digs showed the city he found was from the wrong time.

SOURCE 5 From *The Histories*, written by the ancient Greek historian, Herodotus (c. 484–425 BCE)

… had Helen really been in Troy, she would have been handed over to the Greeks with or without Paris' consent; for I cannot believe that either Priam or any other kinsman of his was mad enough to be willing to risk his own and his children's lives and the safety of the city, simply to let Paris continue to live with Helen.

SkillBuilder discussion

Historical significance

1. Study **SOURCE 6**. Describe the evidence that Schliemann and later archaeologists found that indicates there were nine different settlements built on top of each other.
2. What methods and tools might the archaeologists have used to excavate and study the layers of settlements, and what challenges might they have faced in preserving the site?

SOURCE 6 At Canakkale in Turkey, Schliemann found city ruins. Later digs showed nine settlements built on top of each other.

The Mask of Agamemnon?

Four years later, Schliemann excavated Mycenae and found five royal graves with gold treasures. One of the gold masks, pictured in **SOURCE 7**, was called the 'Mask of Agamemnon', but many archaeologists doubt it is really his, for several reasons, including:

- Schliemann had a record of faking archaeological finds. He could have had the mask made.
- The grave where the mask was found is about 300 years earlier than the supposed date of the Trojan War.

The 'Mask of Agamemnon' looks different from other masks, including **SOURCE 8**, found with Mycenaean chiefs. There is no clear proof that the Trojan War happened or that Schliemann found Agamemnon's grave.

4.3 SkillBuilder activity HISTORICAL QUESTIONS

1. Compare **SOURCES 7** and **8**.
   a. **Describe** the features of the masks in **SOURCES 7** and **8**
   b. If both of these masks were really found in the graves at Mycenae, **explain** why you think a decision was made to call **SOURCE 7** rather than **SOURCE 8** the mask of Agamemnon.
2. Choose one primary source from this lesson. **Propose** three questions to check if it's reliable and useful for studying Minoan or Mycenaean history.

SOURCE 7 The gold 'Mask of Agamemnon' was found by Heinrich Schliemann in 1876 during Mycenae excavations. It's in the National Archaeological Museum, Athens.

SOURCE 8 Another Mycenaean gold mask from excavated graves in Mycenae, now held in the National Archaeological Museum, in Athens

4.3 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 3, 4, 9	1, 6, 7, 8	5, 10

REMEMBER AND UNDERSTAND

1. **Describe** the achievements of Minoan civilisation.
2. **Identify** what caused the collapse of Minoan civilisation.
   A. The Persian Wars
   B. An earthquake
   C. An invasion
   D. The Romans
3. **Explain** what role the Mycenaeans might have played in the destruction of Minoan Crete.
4. How, according to legend, did the Mycenaeans win the Trojan War?
   A. They killed Priam, the king of Troy.
   B. They left a wooden horse with Greek warriors inside and pretended to sail away.
   C. They defeated the Trojans during battle.
   D. They did not win the Trojan War.
5. **Describe** the supposed causes and effects of the Trojan War.

ANALYSE AND APPLY

6. Look closely at **SOURCE 2**.
   a. **Describe** what is depicted in this Minoan wall painting.
   b. Do you think the Minoans did this for sport or could there be another explanation for the scene? **Justify** your answer.
7. Study **SOURCE 3**. **Explain** how Crete's location helped the Minoans trade and how they benefited.
8. Analyse **SOURCE 4** and **explain** what you might be able to suggest about Mycenaean art and everyday life from this source.
9. In **SOURCE 5**, **identify** what Herodotus doubts about the account of the Trojan War in the *Iliad.*
   A. That the Mycenaeans used a wooden horse to enter and take the city
   B. That Troy was defeated
   C. That Helen ever existed
   D. That the Trojan king would have risked defeat, death and destruction just so Paris could keep Helen
10. **Explain** why it is likely that the walls in **SOURCE 6** are not the walls of ancient Troy.

Answers and sample responses for this topic are available online.

LESSON 4.4 What was the Greek 'Dark Age'?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** Greece's physical environment
- **explain** how it impacted its civilisation from 1150 BCE to 490 BCE.

Tune in

Pottery and other works of art can be powerful sources to help us better understand history. Examine **SOURCE 1**.

SOURCE 1 Mycenaean pottery showing **hoplites**

1. **Is this piece of pottery considered a primary or secondary source? Why?**
2. **Discuss the elements of this source that suggest what hoplites were.**
3. **Consider how accurate you think these images are.**
4. **Share your thoughts with your class.**

4.4.1 The influence of geography

Mycenaean kings ruled southern Greece from 1600 BCE to 1200 BCE. After 1200 BCE, their culture collapsed, leading to the Greek 'Dark Age', which lasted almost 400 years. We know little about ancient Greece from 1150 BCE until the Greek alphabet was developed around 800 BCE. The landscape, climate and resources shaped Greek civilisation. As shown in **SOURCE 2**, 75 per cent of Greece is mountainous, so settlements were isolated, and only 20 per cent of land could be farmed.

SOURCE 2 The origins of Greece

Source: Map drawn by Spatial Vision.

Trade

Although sea travel was dangerous, the Greeks relied on it for trading bronze, timber and wheat, which didn't grow well in their rocky soil. From 600 BCE, they imported food from Egypt, Italy and the Black Sea, and exported olive oil, wine and pottery.

4.4.2 The development of the Greek city-states

The Greek 'Dark Age', c. 1150–750 BCE

The period from 1150 to 750 BCE is called the Greek 'Dark Age' because little is known about it. Mycenaean palaces were destroyed, and most fortresses, except Athens, were abandoned. Until the late twentieth century, most historians thought the destroyers were **Dorians** from northern Greece. However, evidence shows the Mycenaean kingdoms had already collapsed before the Dorians arrived. During the Dark Age, writing was lost, trade stopped and governments disappeared. Many Greeks migrated to the Aegean islands and Asia Minor. Around this time, the **Iron Age** began, leading to iron tools and weapons.

SkillBuilder discussion

Using historical sources

1. What artefacts and structures have been uncovered at the excavation site, and what do they tell us about the daily life and culture of the ancient Greek settlers?
2. How do the findings at this site compare to other ancient Greek settlements around the Black Sea, and what unique features have been discovered here?
3. What techniques and tools might the archaeologists have used to excavate the site, and how might they be preserving the artieacts they find?

SOURCE 3 An archaeological excavation at the site of an ancient Greek settlement in what is now the Black Sea port of Odessa, in Ukraine

SkillBuilder discussion

Continuity and change

1. Look at **SOURCE 4**. Describe the relative location of Athens.
2. What is the modern name of the port associated with Athens?
3. Arid mountains are typical of Greece. What else would you associate with Greece?

SOURCE 4 Athens today as seen from its port, Piraeus. The arid mountains in the background are typical of Greece.

The Archaic Period and the rise of the polis

The time from 750 to 490 BCE is called the Archaic Period. Many changes happened in Greece. **Pan-Hellenic** events like the Olympic Games helped unite Greek culture. Around 750 BCE, Greeks set up colonies in Italy, Sicily and the Black Sea due to a lack of farmland. By the early 600s BCE, independent city-states, called **poleis**, like Athens, Sparta and Corinth, developed and often fought for land.

4.4 SkillBuilder activity CHRONOLOGY

1. **Construct** a timeline of important events from this lesson. Use dates from around 1600 BCE to 490 BCE. On your timeline, mark any events that were big turning points.
2. **Describe** the broad changes that occurred in Greece over this period.

4.4 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 5, 6	3, 4, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. Complete the following paragraph by **identifying** the correct words from the list: sea, fifth, unreliable, mountainous, isolated, hot.

   The type of civilisation that developed in ancient Greece was influenced by the _____ landscape, _____ summers and _____ rainfall. Only a _____ of the land was good for farming. Because Greek settlements were _____ from each other, the Greeks used the _____, despite the risk of dangerous storms.
2. The Greek 'Dark Age' refers to what period of time?
   - A. When Troy was defeated by the Myceneans
   - B. When Mycenaean civilisation collapsed
   - C. When Minoan cities were destroyed following the eruption of a volcano on the island of Santorini
   - D. All of the above
3. **Describe** what became of the Mycenaean cites and writing in this period.
4. **Explain** why many Greeks migrated during this period.
5. **Identify** three locations where many Greeks set up colonies during the Archaic Period.
   - A. Sicily
   - B. Bulgaria
   - C. Southern Italy
   - D. The Black Sea
   - E. Northern Greece

ANALYSE AND APPLY

6. **Examine SOURCE 2**. **Describe** how much of Greece is mountainous and how that would have affected farming and travel.
7. Referring to **SOURCE 2**, **explain** why the Greek coastline is very long relative to the size of the country.
8. Look closely at **SOURCE 3** and **propose** three questions you would ask about its usefulness and reliability as evidence for the establishment of ancient Greek colonies.
9. Using **SOURCE 4**, **describe** the landscape surrounding Athens.

EVALUATE AND COMMUNICATE

10. Using all the sources from this lesson, **summarise** why Greece became a place of independent city-states that often fought each other.

Answers and sample responses for this topic are available online.

LESSON 4.5 How were Athens and Sparta governed?

LEARNING INTENTION

By the end of this lesson you should be able to **explain** the different systems of government that developed in Athens and Sparta.

Tune in

A bust is a sculpture of a person's head, shoulders and chest. The bust in **SOURCE 1** was made by a sculptor in Rome in the second century CE. The original Greek bust is lost.

1. **Discuss who you think Pericles was.**
2. **Brainstorm possible reasons Pericles was so significant that Romans would have wanted a bust of him made seven centuries after his death.**

SOURCE 1 A Roman copy of the original Greek bust of Pericles

4.5.1 Athens — the roots of democracy

Athens and Sparta shared many things with other city-states, like worshipping the same gods and using the same language. But each city-state had its own laws and rulers.

Originally, city-states were ruled by kings. Later, most were controlled by **oligarchies**. From the seventh century BCE, many were led by tyrants who made changes to gain support. However, aristocrats often regained power. In 508 BCE, Athens introduced **democracy**.

In this system, Athenian citizens voted on laws and chose leaders in meetings called the 'Ecclesia'. **Ostracism** meant that if 6000 citizens spoke up against a man, he could be exiled from Athens for 10 years.

But was it a fair democracy?

In Athens, only adult citizens could vote, just like in Australia today. However, in the fifth century BCE, only about 45 000 of Athens' 300 000 people were citizens. Women and children, who made up nearly half the population, as well as **metics** (12 per cent) and slaves (25 per cent), could not vote.

Since only some people could vote and everyone had specific roles — like women taking care of the home and men serving in the military — were the Greek citizens truly 'free'?

Did you know?

All citizens in Athens could take part in the government because the population was small. Each citizen could discuss and vote on laws and be elected to public office. This is called 'direct democracy'.

In Australia, we have 'representative democracy'. Citizens over age 18 vote for politicians to represent them and their community. The party with the most seats in the House of Representatives forms the government, while the losing party forms the Opposition to review the government's actions. The Senate has 76 members who are supposed to protect state interests.

SOURCE 2 Government in Athens

Government in Athens

Assembly or *ecclesia*

- Comprised Athenian citizens
- Met every nine days
- Debated and voted on all Athenian laws and policies

Elected every year →

Jury courts or *heliaea*

- Comprised 6000 citizens
- Juries were drawn by lot from the 6000
- Dealt with all crimes except murder

Elected ←

War generals

- Ten men chosen
- Had to be citizens with military experience
- Often served for more than one year
- Had special powers

Elected every year ↓

Referred laws and policies for voting ↑

Council of 500 or *boule*

- Comprised 50 men from each of the 10 tribes of Athens, chosen by lot
- Took action on laws passed by *ecclesia*
- Citizens could be members only twice in a lifetime
- Leader changed daily

Worked with →

Committees

- Helped to manage specific aspects of government (e.g. markets)
- Each comprised 10 elected citizens
- Minor officials elected to help committees

Elected ←

Religious officials

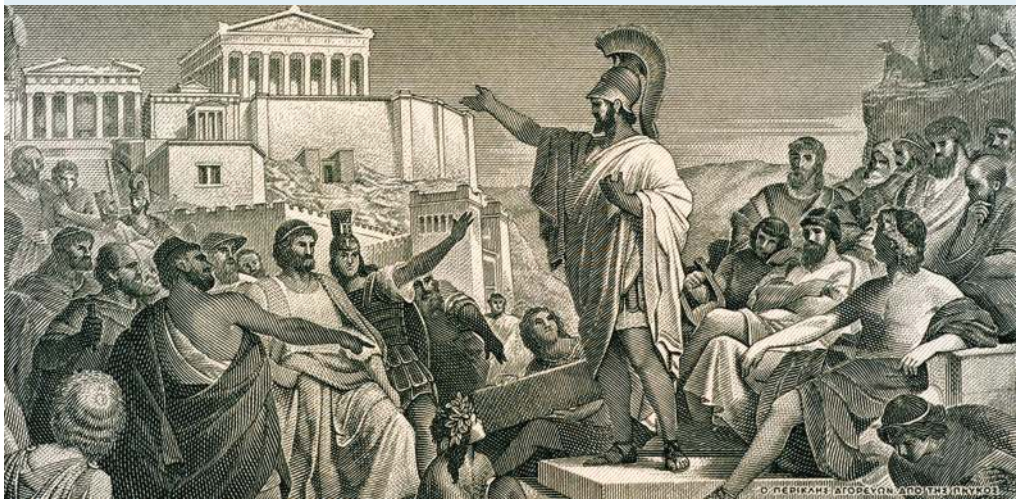
- Nine men chosen
- Had to be citizens
- Had special powers

SkillBuilder discussion

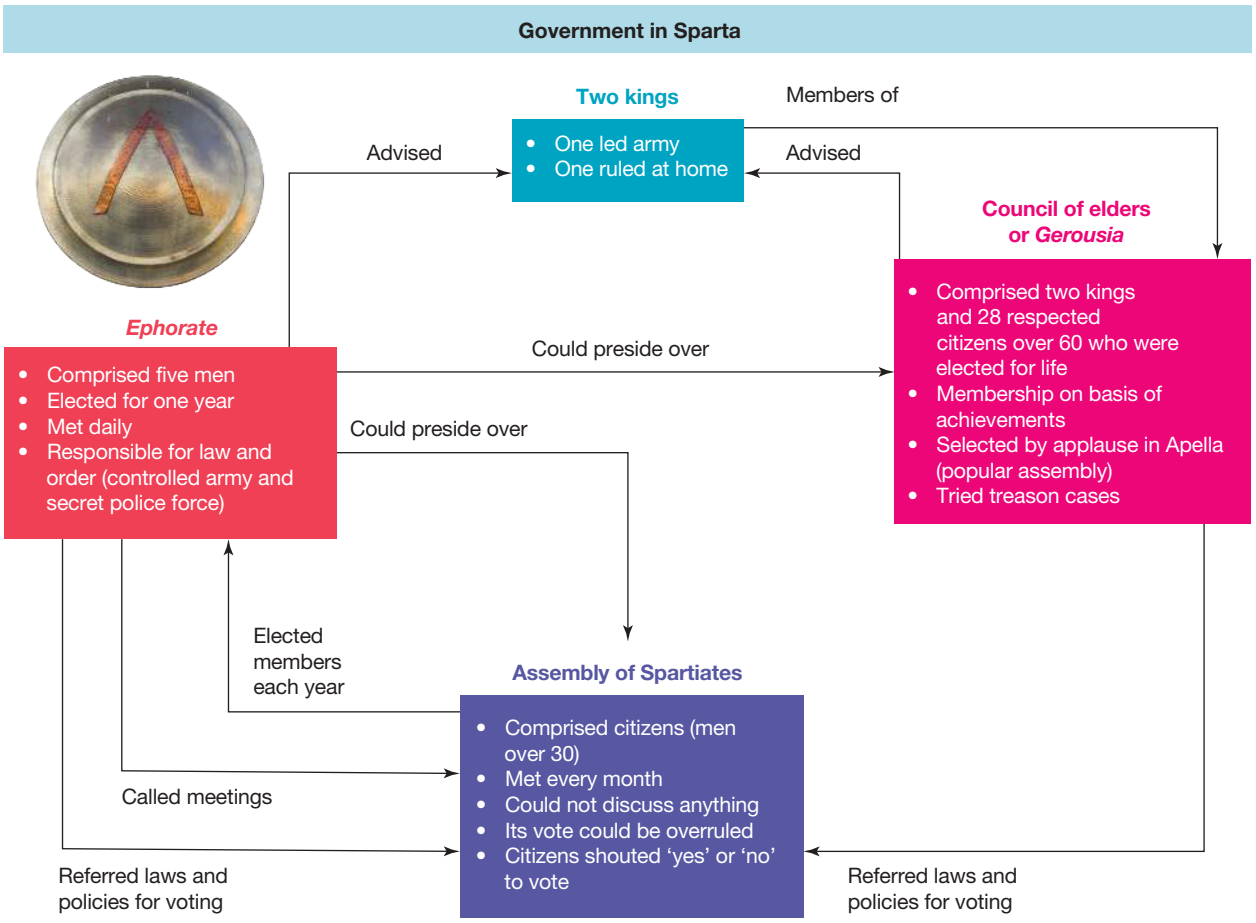
Historical significance

1. How does the painting show the mood and atmosphere of the Athenian Assembly following Pericles' death?
2. Identify the historical details and symbols that are included in the painting to show the political and social changes in Athens after Pericles' death.
3. Describe how the artist's style and choice of colors influence the viewer's perception of this significant moment in Athenian history?

SOURCE 3 Painting of Athenian Assembly after the death of Pericles in 429 BCE



SOURCE 4 Government in Sparta



SkillBuilder discussion

Communicating

1. What type of government did Sparta have?
2. How did Sparta's government differ from that of Athens?
3. What role did the military play in Spartan governance?

4.5.2 Spartan rule

Dorians settled in Sparta around 1000 BCE. In the eighth century BCE, Sparta conquered the nearby Laconian plain and Messenia. They made many of the local people, called **helots**, their slaves and treated them harshly.

At first, Sparta had two kings, but by the end of the seventh century BCE, it became an oligarchy. A few powerful families controlled the government. Citizens in the Assembly could only say 'yes' or 'no' to laws, and their votes could be ignored.

4.5 SkillBuilder activity COMMUNICATING

1. **State** the three types of government many Greek states had before Athens started democracy. **Identify** the main differences between them.
2. **Conduct** research to find out how modern democracy is different from ancient Greek democracy.

4.5 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 8	5, 6, 9	4, 7, 10

REMEMBER AND UNDERSTAND

1. What did the ancient Greek city-states have in common? Select all that apply.
   A. Language and alphabet
   B. Ruling systems
   C. Gods
   D. Laws and traditions
   E. Festivals and myths
2. In _____ BCE, Athens introduced a new system of government called democracy.
3. **Identify** the correct words to complete the passage.

   Someone suspected of trying to grab **wealth** / **power** / **children** in Athens could be ostracised. Ostracism meant that if **600** / **6000** / **60 000** citizens spoke up against a man, he could be exiled from Athens for **5** / **10** / **25** years.
4. **Identify** what effect the Spartan conquest had on the Messenians.
5. Around what time did Sparta become an oligarchy? **Explain** what this meant.

ANALYSE AND APPLY

6. Using **SOURCE 2**, **explain** the difference between the Athenian Assembly and the Council of 500.
7. **Describe** the scene in **SOURCE 3** and suggest what impression it gives of the character of the Athenian Assembly meetings.
8. **Examine SOURCE 4** and **explain** who could be Spartan citizens.
9. **Describe** powers held in Sparta by each of these institutions: the Ephorate, the Gerousia and the Assembly.

EVALUATE AND COMMUNICATE

10. Using the sources in this lesson, **deduce** if ordinary citizens had more power in Athens or in Sparta.

Answers and sample responses for this topic are available online.

LESSON 4.6 What was life like in Sparta?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** the military practices in Sparta
- **describe** how Spartan men and women lived.

Tune in

The word 'Spartan' often means 'tough and disciplined'. This idea comes from stories about Spartan boys who trained as warriors from age seven. They were starved and had to steal food to survive. If they were caught, they were punished. A famous story by Plutarch tells of a boy who died rather than be caught, though Plutarch wrote this centuries later.

SOURCE 1 From Plutarch, *Life of Lycurgus*

[One of the Spartan boys] who was carrying concealed under his cloak, a young fox, suffered the animal to tear out his bowels with its teeth and claws, and died rather than have his theft detected.

1. **Clarify what you think this story is saying. What happened?**
2. **What kind of message do you think it was sending?**

4.6.1 A strong city-state

After stopping a slave revolt around 650 BCE, Sparta became a military state. Spartan men were warriors, and women raised strong children.

SOURCE 2 As the Greek writer Plutarch notes, the main aim of boys' education was to teach them to be fierce, disciplined soldiers.

The boys learned to read and write no more than was necessary. Otherwise their whole education was aimed at developing smart obedience, perseverance under stress and victory in battle. So as they grew older they intensified their physical training, and got into the habit of cropping their hair, going barefoot and exercising naked. From the age of twelve they never wore a tunic, and were given only one cloak a year. Their bodies were rough, and knew nothing of baths or oiling.

SkillBuilder discussion

Using historical sources

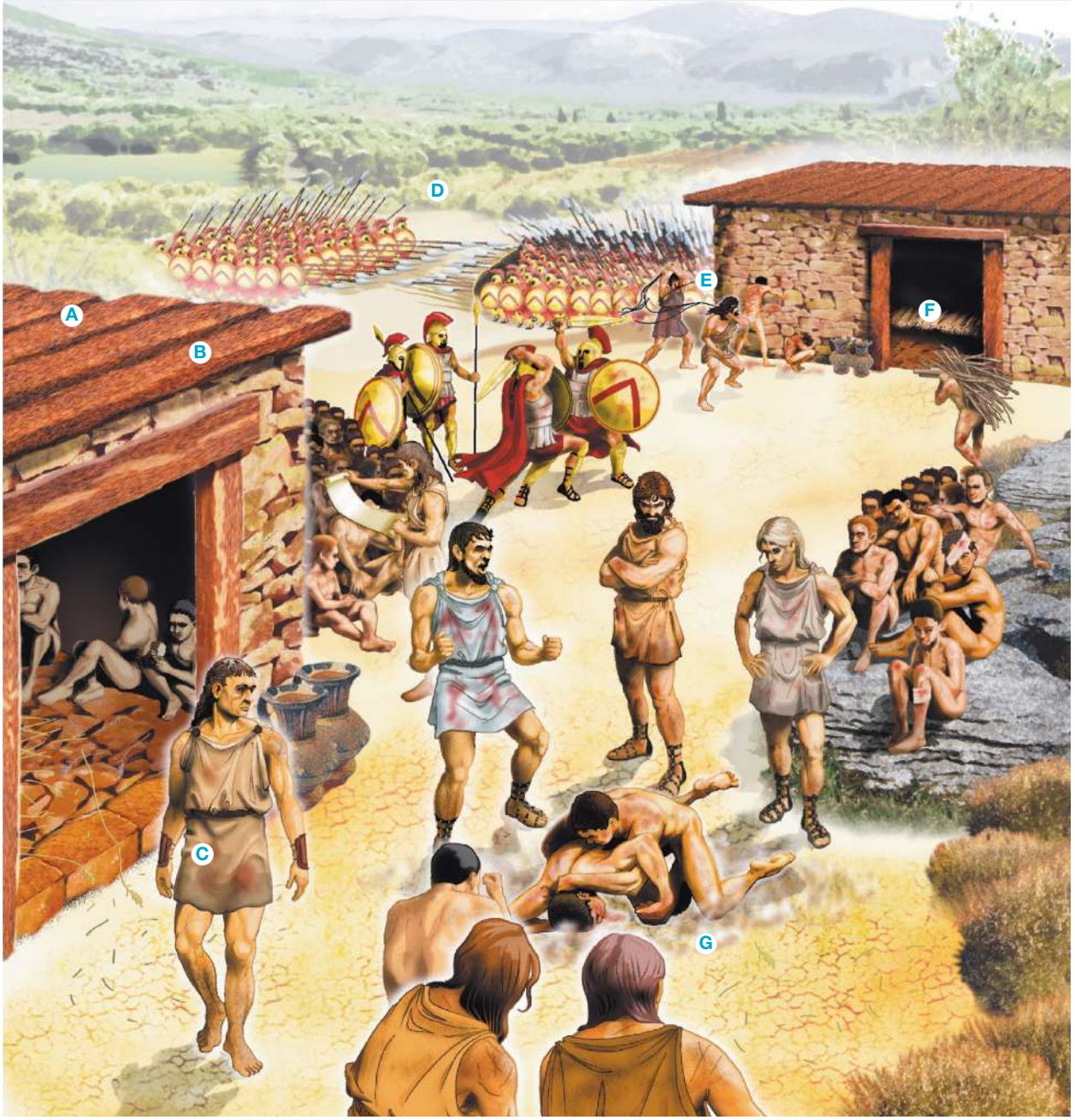
1. Describe how Spartan males lived, according to **SOURCE 3**.
2. What was the primary focus of life for Spartan males?
3. Where did Spartan males spend much of their time? Discuss reasons for this.

Sparta was a city-state in ancient Greece with a fortified centre and farmlands. It had its own laws and government. Sparta was powerful because it had a permanent army.

A tough life

Sparta ruled the **Peloponnese peninsula**, but life there was tough. Ancient writers said weak baby boys were left on hills to die, though new evidence questions this. Boys left home at seven to start military training. Their personal needs did not matter; everything was about protecting Sparta.

SOURCE 3 Spartan males lived a harsh and disciplined life, much of which was spent in military camps.



- **A** The army barracks and other Spartan settlements had no walls.
- **B** Even after marrying, Spartan men ate in the army barracks. To be a citizen, a man had to join an army mess.
- **C** Men lived in military camps until they were 30, when they could become a citizen and marry.
- **D** Spartan soldiers grew their hair long and wore little clothing. In battle or training, they wore armour and red cloaks. In phalanx formation, they stood close with shields touching and spears pointing forward.
- **E** Boys were often whipped to teach them to handle pain and be brave. Stealing was accepted, but getting caught was punished harshly.
- **F** Beds were a bundle of long reeds, cut from the riverbanks, and laid on the floor.
- **G** In military camps, boys and young men exercised, played war games and learned Sparta's rules. They had no comforts from home, and discipline was very strict.

Spartan women

Spartan women couldn't be citizens, vote or hold office, but they could own land and go to court. Many women ended up owning a third of Sparta's wealth because men died in battle. Like boys, they were taught to be brave and outspoken. They wore simple clothes, cut their hair short and didn't use makeup or jewellery. They trained to stay fit and had the role of having healthy children.

4.6.2 The helots and the perioeci

Helots in Sparta were slaves. They weren't owned by people, but by the state. They farmed land for Spartans, who feared a helot rebellion because the helots outnumbered them. This fear made Sparta a strict military state.

The **perioeci** lived near Sparta and were free but had to serve in the army if needed. They were craftspeople and merchants, jobs forbidden to Spartans.

How did the helots react to enslavement?

When the Spartans conquered the Messenians, they made them slaves. This allowed Spartans to be full-time soldiers since the helots farmed their land. The Messenian helots never gave up wanting freedom and rebelled around 650 BCE and again in 464–459 BCE. Spartan methods to control the helots may have made them more rebellious. The **Ephorate** ran a secret police called the 'Krypteia', sending young Spartans to spy on and kill helots who seemed likely to lead a rebellion (see **SOURCES 4** and **5**).

SOURCE 4 A description of the treatment of helots, by the ancient Greek writer, Plutarch (c. 46–120 CE)

The magistrates dispatched privately some of the ablest of the young men into the country, from time to time, armed only with their daggers . . . they . . . killed all the Helots they could light upon; sometimes they set upon them by day, as they were at work in the fields, and murdered them . . .

Aristotle, in particular, adds, that the ephori [ephors], so soon as they were entered into their office, used to declare war against them [the helots], so that they might be massacred without a breach of religion.

SOURCE 5 A description of the treatment of helots who had fought for Sparta against Athens in 424 BCE, by the ancient Greek writer, Thucydides (c. 460–403 BCE)

The Helots were invited by a proclamation to pick out those of their number who claimed to have most distinguished themselves against the enemy, in order that they might receive their freedom; the object being to test them, as it was thought that the first to claim their freedom would be the most high-spirited and the most apt to rebel. As many as two thousand were selected accordingly, who crowned themselves and went around the temples, rejoicing in their new freedom. The Spartans, however, soon afterwards did away with them, and no-one ever knew exactly how each one of them perished.

How have historians explained Sparta's treatment of the helots?

We have very few sources about ancient Sparta. Most come from archaeology and writings by ancient Greeks like Herodotus and Thucydides. Almost none were written by Spartans or helots. Many historians have written books and articles about Sparta using the little evidence we have. **SOURCES 6** and **7** are two examples.

SOURCE 6 An account of Spartan motives for suppressing the helots, from Sarah B Pomeroy, et al., *Ancient Greece: A Political, Social and Cultural History*, 1999

The Second Messenian War [of c. 650 BC] had been a terrifying revelation of the potential risks of the helot system, and the possibility of a repetition haunted the imaginations of Spartans and their enemies. One certain way of avoiding such a catastrophe, abandoning Messenia, was unthinkable . . . the Spartans realized that if all potential hoplites could be mobilized and trained to the highest degree of skill possible, Sparta would enjoy an overwhelming military advantage over its helots and other enemies . . . In effect they waged a perpetual war against the helots and were consequently always prepared to engage in other acts of aggression when necessary.

SOURCE 7 An account of Sparta recruiting helots as soldiers, from Antony Andrewes, *Greek Society*, 1991

The other main source [of recruits] was the helots. The 700 whom Brasidas took with him to the north [in 425 BC] were still formally slaves; they were only liberated on their return home . . . About the same time . . . Sparta created a whole new class . . . These were helots who were already liberated at the time when they were enrolled. For the next fifty years, they were a very important part in Sparta's military effort . . . The training-up of such numbers from a notoriously oppressed and ill-treated class looks like an appalling risk, though no doubt, in case of trouble, the Spartans could count on the perioikoi [perioeci] to support them.

4.6 SkillBuilder activity USING HISTORICAL SOURCES

1. **Compare** and **contrast SOURCES 6 and 7** and make notes on the differences and similarities between each.
2. **Describe** the conclusions each of these secondary sources present on Spartan attitudes towards the helots.
3. **Discuss** how **SOURCE 6** and **SOURCE 7** differ in their interpretations of Sparta's treatment of the helots.

4.6 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 3, 8	1, 4, 6	5, 7, 9, 10

REMEMBER AND UNDERSTAND

1. **Identify** why Sparta needed to develop a strong army.
2. **Identify** the correct words to complete the passage.

   Spartan women had **less** / **more** freedom and **better** / **worse** lives than Athenian women. Spartan women **could** / **could not** own land and represent themselves in court. They were expected to **stay meek and helpless** / **keep physically fit**, bear **smart** / **strong** children and to be **obedient** / **tough**.
3. **Identify** the correct words to complete the passage.

   The **Dorian** / **perioeci** / **helots** were descended from **Dorian** / **perioeci** / **helots** tribes who had settled in other areas around Sparta. They were mainly craftspeople and merchants but they could not be Spartan citizens. The **Dorian** / **perioeci** / **helots** were slaves.
4. **Identify** why the position of the helots differs from that of slaves in other parts of Greece.
   - A. They were owned by individuals.
   - B. They were owned by the Spartan state.
   - C. They had rights and freedoms.
   - D. They were treated with respect by the Spartans.
5. **Explain** how the slavery of the helots made the Spartan way of life possible.

ANALYSE AND APPLY

6. Read **SOURCE 2**. **Explain** how the hardships Spartan boys had to endure would have helped them to develop obedience and perseverance.
7. Look carefully at **SOURCE 3** and **examine** the labels. Then answer the following questions.
   a. **Recall** what Spartan boys did to keep fit and increase their mental strength.
   b. Would Spartan army camps have been easy targets for an enemy? **Explain**.
   c. **Discuss** why the way Spartans lived might have reduced the influence of the family and benefited the Spartan state.
   d. **Describe** what an approaching phalanx of Spartan soldiers would look like. Why might it frighten their enemies?
8. Read **SOURCES 4** and **5** and **analyse** them by answering the following questions.
   a. What information about Spartan treatment of helots does each source provide?
   b. Who wrote each source and around when would they have been written?
   c. How useful is each source as evidence for this topic?
   d. What more would you need to know about each of the authors to judge the reliability of these two sources?

EVALUATE AND COMMUNICATE

9. Do **SOURCES 4** and **5** provide complementary evidence or conflicting evidence for the Spartans' treatment of the helots? **Justify** your answer.
10. Using the sources and other information in this lesson, **explain** how Sparta's enslavement of the helots changed everyday life in Spartan society after 650 BCE.

Answers and sample responses for this topic are available online.

LESSON 4.7 What was life like in Athens?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** the significant features of Athenian society
- **describe** how the lives of men and women were different when Athens was very powerful.

Tune in

SOURCE 1 shows a bride being escorted to the home of her new husband after a wedding feast at her parents' home.

SOURCE 1 A painting from a small Greek pottery box

1. **Consider why the bride shown in SOURCE 1 would be escorted by so many people.**
2. **Based on what you've learned so far, do you think she would have had any choice about the marriage?**
3. **Do you think she might want to flee, knowing what life was like for Athenian women? How would you feel in that situation?**

4.7.1 The very different lives of Athenian men and women

By the fifth century BCE, Athens was one of the richest and most beautiful cities, known for its temples and love of the arts. Plays were often performed in theatres, and people valued learning.

In Athenian life, men were very important. They decided things like their daughters' marriages and whether babies would live. Most girls married in their early teens to much older men (see **SOURCE 1**).

After marriage, men spent time away from home on government duties or socialising with friends. Women mostly stayed at home, focusing on raising children, especially sons. They managed the household with help from slaves and older daughters. Marriage feasts were one of the few times women could celebrate with men.

Education

Only boys went to school in Athens. Some wealthy girls might have a tutor at home to teach them reading or the lyre. Boys started school at around seven and studied from dawn to dusk.

Housing

Most Athenian houses were two storeys but fairly small. Wealthy Greeks didn't build big mansions because they spent money on athletic and religious events. A rich family's home might have a central courtyard, a bathroom and a stone floor.

Athenian houses were made of sun-dried bricks, with rooms facing inward. They were often dark, smoky and airless because windows were small and high. Open fires were common indoors, and furniture was limited, with items stored on the floor or hung on walls.

Men and women had separate living areas. The women's area was far from the entrance and often dark, keeping it away from strangers.

4.7.2 Public life, death and burial

Only men could be citizens in Athens. Women had few rights; they couldn't hold public office or go shopping, but they could join some religious festivals.

Men often held banquets, as shown in **SOURCE 3**. Slaves took off guests' sandals and washed their feet. The men relaxed on low couches, eating foods like fried fish, boiled vegetables, goat cheese, bread, figs, dates and grapes.

In the fifth century BCE, Athens was very wealthy, with a strong democracy, good trade, a rich culture and a sense of pride.

SkillBuilder discussion

Using historical sources

1. Identify one of the few reasons that women could leave their homes.
2. What was the name for the place where water was collected?
3. Discuss what a gathering at the water fountains might have been like.

SOURCE 2 One of the few trips women could make outside the home was to collect water from public fountains near the agora. They carried the water in an amphora, a large clay jar.

SkillBuilder discussion

Historical questions

1. Look at **SOURCE 3** Describe the activities men would do to relax after a meal.
2. What kinds of entertainment did men sometimes enjoy?
3. Write down five questions that you have about life in Athens.

SOURCE 3 After a meal, men relaxed by telling jokes and riddles, and playing musical instruments. They were sometimes entertained by singers, dancers, musicians or gymnasts.

Death and burial practices

Athenians, like most Greeks, believed in an underworld ruled by Hades, the brother of Zeus. They thought a person's spirit (psyche) left the body when they died. To help the spirit reach the afterlife, the dead person's mouth and eyes were closed. The body was covered in oil, wrapped, and displayed for two days while women mourned and friends visited.

The next day, the body was taken in a procession to the cemetery outside Athens and placed in a tomb. In the seventh and sixth centuries BCE, wealthy families built mounds, statues and monuments for graves. By the end of the fifth century, simpler stone coffins were used.

4.7.3 A city of beauty and bustle

Like other city-states, Athens had a big acropolis in the center of its homes and a large **agora** (marketplace). It was surrounded by a wide area of open land.

The Acropolis

During this time, beautiful buildings were built on the Acropolis in Athens, a large rocky hill about 150 metres high. The biggest was the **Parthenon**, shown in **SOURCE 4**. It was a temple dedicated to Athena, the city's protector during war.

SkillBuilder discussion

Chronology

1. Explain what the Parthenon might have originally looked like when it was first built.
2. Why was the Parthenon used to store gunpowder by the Turks?
3. Investigate how the Parthenon has been preserved and restored since the explosion in 1687.

SOURCE 4 Work on the Parthenon began in 447 BCE and took 25 years to finish. Much of the building was destroyed in 1687 when it was used by the Turks to store gunpowder, which exploded during an attack.

The Parthenon was decorated with many beautiful sculptures and carved panels of gods, battles and festivals. In the early 1800s, Lord Elgin, the British Ambassador to the Turkish Empire, took many of these panels.

SkillBuilder discussion

Communicating

1. Describe what an agora looked like — what were its main features?
2. What were the main functions of the agora?
3. Why was the agora considered the heart of the city?

Now, more than half of the remaining panels, called the Parthenon Marbles, are in the British Museum. The Greek government is trying to get them back.

The agora

Below the Acropolis was the agora (see **SOURCE 5**). This large, tree-filled square surrounded by public buildings was the city's centre. It was where people bought food, animals, furniture, jewellery, musical instruments and pots.

Men went there to shop, learn about new ideas, watch plays and chat with friends. Women were rarely seen in the agora.

SOURCE 5 The agora was the political, legal, commercial and social heart of the city in ancient Greece.

A Public buildings around the agora in Athens included the law courts, the mint, the military headquarters and the Bouleuterion (meeting place of the Council of 500).

B Plays were first held in the agora and later in special theatres. They started as religious ceremonies to honor Dionysus, the Greek god of wine and fun.

C Athenian pots were usually decorated with detailed scenes of daily life and with the stories of myths and legends.

D Slaves were bought and sold in the agora. A skilled slave might cost 6000 drachma, while a simple wooden couch cost 20 drachma. A drachma was the main silver coin in ancient Greece. Before coins, people traded goods through bartering.

E Ropes and pulleys were used to lift stone blocks to build columns. Metal rods connected each block to the ones above and below.

F Large crowds listened to philosophers like Socrates. The works of Plato (Socrates' student) and Aristotle (a student of Plato) have been translated into English.

Attica

Most people in Athens lived in Attica, the countryside ruled by Athens. Many were farmers, but the dry, rocky land made it hard to grow grain. So, Athens imported grain from places like Egypt and Sicily.

However, olives, figs and grapes grew well, and selling olive oil and wine made Athens rich.

4.7 SkillBuilder activity COMMUNICATING

Your task is to work in small groups to design a poster or a museum display for an exhibition on everyday life in ancient Athens.

1. Select four of the following headings to focus on.
   - Eating and drinking
   - Clothing, hairstyles, make-up and jewellery
   - Worshipping
   - Entertainment
   - Marriage
   - Children
   - Occupations
2. For each of your four areas, conduct research and collect information and images from this lesson and websites.
3. Select one suitable image from your research for each area and write a paragraph about it.
4. **Create** your display in an engaging and informative way.

4.7 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 5	4, 6, 7, 9	3, 8, 10

REMEMBER AND UNDERSTAND

1. Which of the following is correct in relation to Athenian males?
   A. They received an education.
   B. They held all the power within Athenian families.
   C. They decided when and whom their daughters would marry.
   D. All of the above
2. **State** if the following are true or false.
   a. Girls generally received no education.
   b. Girls were able to choose any male of a similar age to marry.
   c. Women spent almost all of their lives confined to their homes, doing housework and raising children.
3. **Explain** what Athenian funeral rituals tell us about their beliefs.
4. **Recall** what the Acropolis and Parthenon were.
5. **Identify** how the Parthenon Marbles were lost to Greece.
   A. They were destroyed by the Turks.
   B. They were stolen by Athenian citizens.
   C. They were removed and shipped to Britain.
   D. They were destroyed in an explosion.

ANALYSE AND APPLY

6. Examine **SOURCE 1**.
   a. **Describe** the scene and **identify** the bride and groom.
   b. **Explain** what evidence this source provides for the wealth and social class of the family.

7. **Explain** what evidence **SOURCE 2** provides for the clothing and hairstyles of Athenian women and their position in Athenian society.
8. **Describe** the scene in **SOURCE 3** and **discuss** what Athenian women might have thought about men's banquets.
9. **Examine SOURCE 4** and use clues from **SOURCE 5** to **explain** how the Parthenon's supporting columns were built.
10. Look at **SOURCE 5**. **List** similarities and differences between the activities in the agora and a modern marketplace.

Answers and sample responses for this topic are available online.

LESSON 4.8 What do we know about Greek laws, myths, gods and oracles?

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the significant beliefs, values and practices of the ancient Greeks, shown in their laws, myths and religious ideas.

Tune in

The statue in **SOURCE 1** likely shows either Poseidon, the god of the sea, or Zeus, the king of the gods.

1. **Look at the statue and discuss if you think the Greeks believed their gods were more like humans compared to the gods of Egypt and other ancient societies.**
2. **Suggest why you think the artist used this pose for the statue.**
3. **Can you think of any modern examples of statues that have been created and the reasons for them?**

SOURCE 1 A large bronze statue of a Greek god, from c. 460 BCE.

4.8.1 Laws, myths and gods

The ancient Greeks lived in about a hundred city-states that often fought each other. They shared the Greek language, myths, gods and festivals, which helped them feel connected.

Greek laws

Each Greek city-state had its own laws, but we don't have a complete collection of them. Some laws, like those about inheritance, were similar. However, Athens and Sparta had different laws. By the seventh century BCE, many city-states chose 'law-givers' to write down their laws.

Most information we have about ancient Greek laws is from Athens. Draco was the first law-giver in Athens around 620 BCE, followed by Solon around 594 BCE. Solon made new laws, saying murderers should be banished but most crimes only needed fines. He also fixed a big problem where people could be enslaved for unpaid debts. Solon ended this practice and freed those enslaved.

In Athens, courts were set up to decide cases, and citizens chosen by lot made the decisions. In Sparta, laws were not written down. Lycurgus is said to be the law-giver who created the Spartan laws, but his story may be a myth.

SOURCE 2 Herodotus, *The Histories*, Book I, 66.

How the change to good government came about I will now relate. Lycurgus, a distinguished Spartan, visited the Delphic oracle, and no sooner had he entered the shrine than he was greeted with these words:

Hither to my rich temple have you come, Lycurgus,

Dear to Zeus and to all gods that dwell in Olympus.

I know not whether to declare you human or divine –

Yet I incline to believe, Lycurgus, that you are a god.

. . . [Lycurgus] made fundamental changes in the laws, and took good care that the new ones should not be broken. Later he reorganized the army, introducing the system of messes and the new tactical divisions of squadrons and companies . . . By these changes Spartan government was put upon a sound basis, and when Lycurgus died a temple was built in his honour.

Greek myths

The early Greeks shared many myths (see **SOURCE 3**), which they passed down through stories. Starting around 800 BCE, these stories were written down. The most famous are Homer's *Iliad* and *Odyssey*. The *Iliad* is about the siege of Troy, while the *Odyssey* follows Odysseus on his ten-year journey home, facing strange creatures and dangers. In these myths, the gods act like people and often take sides in human fights.

The gods of Mount Olympus

The Greeks believed that many gods controlled their lives. These gods lived on Mount Olympus in northern Greece. They were **immortal** but had human weaknesses.

- The chief god was Zeus, and the other gods were his family. Each god was responsible for different parts of human life. Hera, Zeus's wife, was patroness (protector) of marriage and children.
- Ares was the god of war.
- Artemis was the patroness of hunting and wild animals.
- Dionysus was the god of wine and pleasure.
- Athena was the goddess of wisdom.
- Hephaestus was the god of fire.
- Hermes was the messenger of the gods.
- Apollo was the sun god and god of law.
- Aphrodite was the goddess of love and beauty.
- Poseidon was the god of the sea.
- Pluto was the god of the underworld.

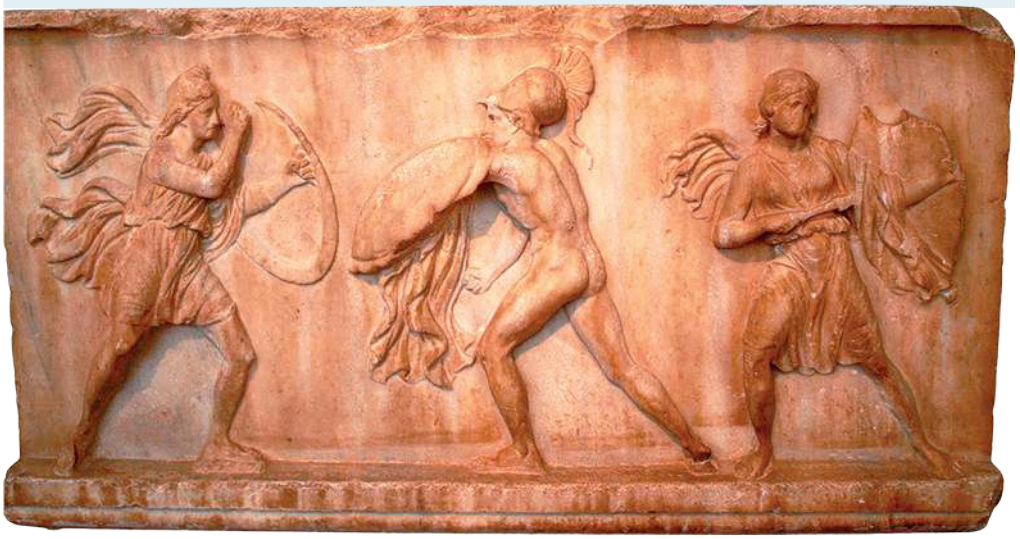
These were the main gods, but there were others and many mythical heroes. The heroes weren't immortal but had powers beyond normal people.

SkillBuilder discussion

Historical significance

1. Discuss how the sculpture in **SOURCE 3** might have been made
2. Explain what this sculpture is showing.
3. Who were the Amazons in Greek mythology and why were they important?

SOURCE 3 This sculpture is from Athens, made around 350 BCE. It shows two Amazons fighting a Greek warrior. In Greek myths, the Amazons were a group of female warriors. They often battled against Greek soldiers.



SkillBuilder discussion

Using historical sources

1. Where does this metope come from?
2. Which of Heracles' labours is depicted in the scene?
3. Who are the figures shown helping Heracles in the scene?

SOURCE 4 This **metope** comes from the Temple of Zeus at Olympia. It shows a part of Heracles' 12 labours. In the scene, Atlas gives Heracles the apples of the Hesperides. At the same time, Heracles and Athena hold up the sky and the world.

Did you know?

In Greek **mythology**, Heracles was a strong hero, not a god. As a baby, he strangled poisonous snakes. As a youth, he killed a fierce lion. He did many great deeds, like capturing Cerberus, the three-headed dog of the underworld. He even held up the sky for a time. He died after putting on a poisoned robe, which made him throw himself into a fire. The gods then took him to live with them on Mount Olympus.

4.8.2 The oracles — messages from the gods

Today, some people believe in fortune tellers. The ancient Greeks believed in oracles, too. An oracle was a place to ask the gods about the future. The most famous oracle was at Delphi, known as the 'navel of the world'. To consult the oracle, people paid a fee, sacrificed a goat and looked for **omens** in its **entrails**. They asked questions to a priestess called the Sybil. The priests of Apollo explained her answers, but they were often unclear and could mean many things.

SOURCE 5 From *The Persian Wars*, by the ancient Greek historian Herodotus

. . . the Athenians, anxious to consult the oracle, sent their messengers to Delphi . . . [They] went back with it to Athens. When, however, upon their arrival they produced it before the people, and inquiry began to be made into its true meaning, many and various were the interpretations which men put on it.

4.8 SkillBuilder activity COMMUNICATING

1. Use your library or the internet to **investigate** a Greek myth. It could be related to the scenes in **SOURCE 3** or **SOURCE 4**.
2. Briefly **summarise** the myth and tell it to the class.
3. In small groups, **discuss** how myths, religion and future predictions are alike and different in ancient Greece and today. For example, **compare** oracles in ancient Greece to today's astrologers who write horoscopes.

4.8 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 3, 5	2, 4, 8	6, 7, 9, 10

REMEMBER AND UNDERSTAND

1. **Recall** how most crimes were punished under Solon's laws.
   A. Death
   B. Fines
   C. Imprisonment
   D. Banishment
2. **Identify** which of Solon's laws would have been popular with poor citizens in Athens.
3. What were the two meanings of the term 'oracle'?
   A. A message from the gods
   B. A Greek myth
   C. A place where messages from the gods were requested and received
   D. A war
   E. A law
4. **Explain** why the ancient Greeks consulted oracles.
5. In Greek mythology, the Amazons were the gods who lived on Mount Olympus. True or False?

ANALYSE AND APPLY

6. **Identify** reasons most historians would doubt the story in **SOURCE 2**.
7. **Consider** why the scene in **SOURCE 3** was a popular theme in ancient Greek art.
8. **Identify** the three figures in **SOURCE 4**.
9. Read **SOURCE 5**.
   a. **Explain** why the message from the oracle at Delphi could have many different meanings.
   b. What can you **infer** about the kind of answers given to questions that were put to the oracle?
   c. **Determine** why such answers might have been given.

EVALUATE AND COMMUNICATE

10. Using the information in this lesson, **evaluate** how shared myths and gods helped create a sense of Greek identity.

Answers and sample responses for this topic are available online.

LESSON 4.9 What were the Olympic Games?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** the ancient Greek Olympics
- **explain** how the Olympics were linked to Greek religion and helped build a sense of Greek identity.

Tune in

SOURCE 1 shows the entrance to the ancient stadium at Olympia in Greece. The arch was added by the Romans.

SOURCE 1 The entrance to the ancient stadium at Olympia

As a class, discuss the following:

1. **When the modern Olympics were first held**
2. **Where the Olympic Games originated in ancient times**
3. **How different the modern Olympic Games are from the ancient Olympic Games**
4. **Whether anyone has watched any modern Olympic events live or on TV.**

4.9.1 The ancient Olympics

For modern athletes, the Olympic Games are the biggest competition, bringing together top athletes from around the world in sports like running, high jump, swimming, soccer and discus throwing. It is a great honour to represent a country at the Olympics, and winning a medal is a huge achievement. The modern games were inspired by ancient Greece, but they were quite different.

In ancient Greece, the most important festival was held every four years at Olympia to honour the god Zeus, and was called the **Olympiad**. The first Olympic Games were in 776 BCE. By the sixth century BCE, athletes from all over Greece came to compete. A truce was declared between city-states during the games, helping to unite the Greeks. The festival continued until 393 CE when the Christian Roman emperor Theodosius I ended it.

SkillBuilder discussion

Using historical sources

1. Who is the author of *History of the Peloponnesian War*?
2. What is the subject of Thucydides' work?
3. In what time period did Thucydides live?

SOURCE 2 From *History of the Peloponnesian War*, by the contemporary historian, Thucydides

This summer were celebrated the Olympic Games . . . The Spartans were refused access to the temple by the Eleans and so prevented from sacrificing and competing in the games. This was because the Spartans had not paid the fine which had been imposed upon them by the Eleans according to the Olympic law. The Elean case was that the Spartans had made an attack . . . and had sent hoplites of theirs into Lepreum during the period of the Olympic truce.

4.9.2 The events

The main events in the ancient Olympics were running races, like the stade (sprint) and the dolichos (long race). Other events included boxing, wrestling, the pankration (see **SOURCE 3**), and the pentathlon, which had discus, long jump, javelin, running and wrestling. Chariot racing, with up to 40 chariots, became the most exciting event. Winners received crowns of olive leaves.

SkillBuilder discussion

Using historical sources

1. Look at **SOURCE 3**. Describe what is shown on the Athenian vase.
2. From which century does the vase originate and how do we write this in numbers?
3. Are there similar events in modern Olympic games? What differences might exist?

SOURCE 3 A fifth century BCE Athenian vase shows the pankration, a wrestling sport with few rules.

Did you know?

The ancient Olympic festival lasted five days and began with a religious ceremony. Events included acrobats, plays and sideshows. Over time, poetry and music contests were added. Athletes competed naked, and only men could participate, though women were later allowed to watch.

4.9 SkillBuilder activity COMMUNICATING

In groups, find out why a country missed the Olympics.

1. **Investigate** using the internet and make notes on your findings.
2. **Evaluate** the information you find to answer the following questions:
   - How significant was it to people who lived at that time?
   - Who/what was affected by it?
   - How long-lasting were the consequences?
   - Do you think it has any effect on the Olympics today?
3. **Summarise** your evaluation and present it to the class.

4.9 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 3, 4, 9	1, 5, 6	7, 8, 10

REMEMBER AND UNDERSTAND

1. Where did the idea for the modern Olympic Games come from?
2. **Identify** which date is given to the first Olympiad.
   A. 393 CE
   B. 776 BCE
   C. 550 BCE
   D. 290 CE
3. The god _____ was honoured at the ancient Olympic festival.
4. **Identify** three events from the ancient Olympics that are not in the modern Olympics.
   A. Chariot racing
   B. Boxing
   C. A race in armour
   D. The pankration
   E. Wrestling
5. **Explain** why some events from the ancient Olympics would not be held in any modern Olympics.

ANALYSE AND APPLY

6. According to Thucydides in **SOURCE 2**:
   a. Which Greek city-state was refused permission to attend the Olympic Games?
   b. What evidence does this source give for reasons a city-state could be excluded from the ancient Olympics?
7. Study the picture of the pankration in **SOURCE 3**. **Describe** what it and other events not in the modern Olympics might show about the purpose of the ancient Olympics.
8. **Evaluate** what **SOURCE 1** suggests about how the Romans came to regard the Olympics when they conquered Greece.

9. **Compare** the ancient Greek Olympics and the modern Olympics by listing the differences you know. If you don't know much about the modern Olympics, make your best guess. You can organise your notes under these headings:
   - Locations where the games are held
   - Nationalities and gender of the athletes
   - Events
   - Rewards for winners and place-getters
   - Purpose of the Olympics
   - Periods of time from the beginning to the end of one Olympic Games

EVALUATE AND COMMUNICATE

10. Based on your work in this lesson, how would you **evaluate** the historical significance of the ancient Olympics?

Answers and sample responses for this topic are available online.

LESSON 4.10 How was Greece changed by wars?

LEARNING INTENTION

By the end of this lesson you should be able to **identify** the significant events that united and divided the ancient Greeks, and changed Greece forever.

Tune in

The leader in **SOURCE 1** is shown on a Roman mosaic from Pompei, but he is not Roman.

SOURCE 1 An ancient leader depicted fighting against forces of the Persian Empire in 333 BCE

1. **Discuss who you think this leader could be.**
2. **Explain why you've chosen the leader you have and consider why the Romans might have depicted him.**

4.10.1 The first Persian invasion, 492–490 BCE

The Greek city-states often fought each other but united when Persia attacked in 490 BCE and again in 480–479 BCE. They defended Greece from the powerful Persian Empire. Later, the Macedonians invaded Greece.

Persia, now called Iran, was a huge empire under Cyrus the Great and his successor, Cambyses. It included lands like Turkey, Palestine, Syria and Egypt. In 499 BCE, Greek cities in Anatolia, with help from Athens, rebelled against Persia. The revolt failed, and Persia took control of nearby Greek islands.

The Battle of Marathon

To punish Athens, King Darius of Persia sent a fleet to invade Greece in 492 BCE, but it was wrecked in a storm. When Athens refused to submit, Darius sent another fleet in 490 BCE. His army captured Eretria and landed at Marathon (see **SOURCE 2**), where 10 000 Athenians and their allies defeated 50 000 Persians in a surprise attack.

SOURCE 2 Naval and land campaigns of the Persian Wars

Source: Map drawn by Spatial Vision.

4.10.2 The second invasion, 480–479 BCE

Darius died in 486 BCE, but his son Xerxes planned an even bigger invasion of Greece. He built a floating bridge to carry his army across the Hellespont. A massive army of Persian spearmen, archers and cavalry marched into Greece, supported by a large fleet (see **SOURCE 2**). To fight them, 31 Greek states united. Athens led the navy, while Sparta led the army. At Thermopylae in 480 BCE, Spartan King Leonidas and 300 Spartans, along with 7000 other Greeks, held off the Persians but were eventually defeated, delaying Xerxes' advance.

Naval battles

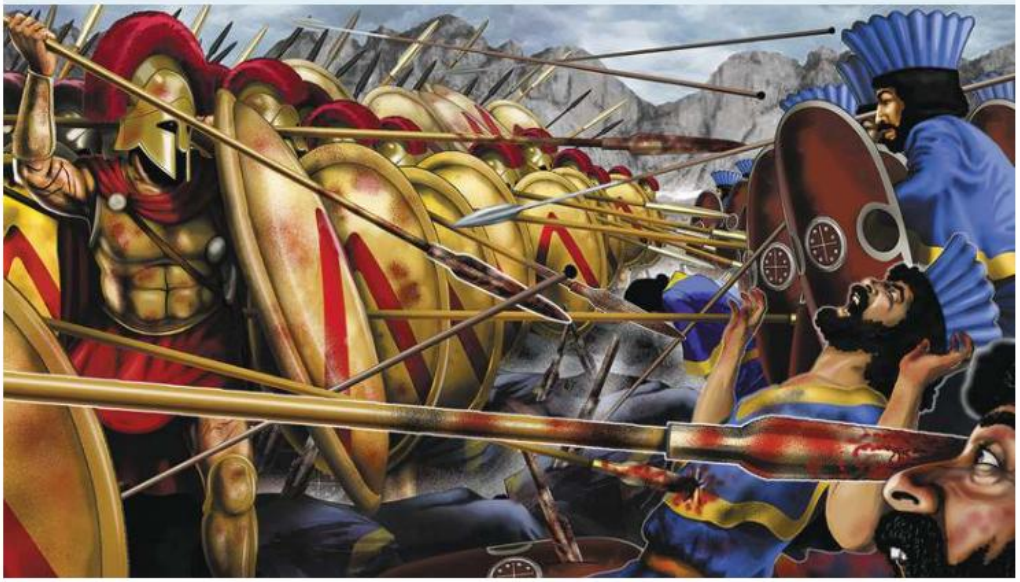
After the Battle of Thermopylae, the Greek fleet fought three battles against the larger Persian fleet at Artemisium, 60 km away. Both sides lost many ships, but the Persians were weakened. When the Persian fleet reached Attica, Athens was evacuated and burned. The Greek navy then attacked the Persians at Salamis, where the narrow sea helped them win completely.

SkillBuilder discussion

Communicating

1. Identify the types of weapons and armour that the Greek and Persian soldiers used during the Battle of Thermopylae.
2. Discuss how the terrain of Thermopylae would have influenced the tactics and outcome of the battle.
3. Can you identify any differences in the fighting styles and strategies of the Greek and Persian armies?

SOURCE 3 A modern artist's impression of Greek and Persian infantry at Thermopylae in 480 BCE



The final clashes

In 479 BCE, the Spartans led a Greek army of about 100 000 and defeated a much larger Persian force at Plataea. The Greek fleet then sailed to Samos and defeated the Persians at Cape Mycale. Although fighting continued, the Greeks no longer feared a Persian invasion.

SOURCE 4 From the description of the Battle of Thermopylae in Herodotus, *The Histories*, Book VII, 227

Of all the Spartans and Thespians who fought so valiantly, the most signal proof of courage was given by the Spartan Dieneces. It is said that before the battle he was told by a native of Trachis that, when the Persians shot their arrows, there were so many of them that they hid the sun. Dieneces, however, quite unmoved by the thought of the strength of the Persian army, merely remarked: 'This is pleasant news that the stranger from Trachis brings us: if the Persians hide the sun, we shall have our battle in the shade.'

4.10.3 Alexander the Great

The Peloponnesian Wars

The Greeks worked together for a while, but this didn't last. During the Peloponnesian Wars (460–445 BCE and 431–404 BCE), Greece split into two sides: one led by Athens and the other by Sparta. The second war ended when Sparta, with help from Persia, made Athens surrender. After this, Sparta controlled Greece until Thebes defeated Sparta in 371 BCE.

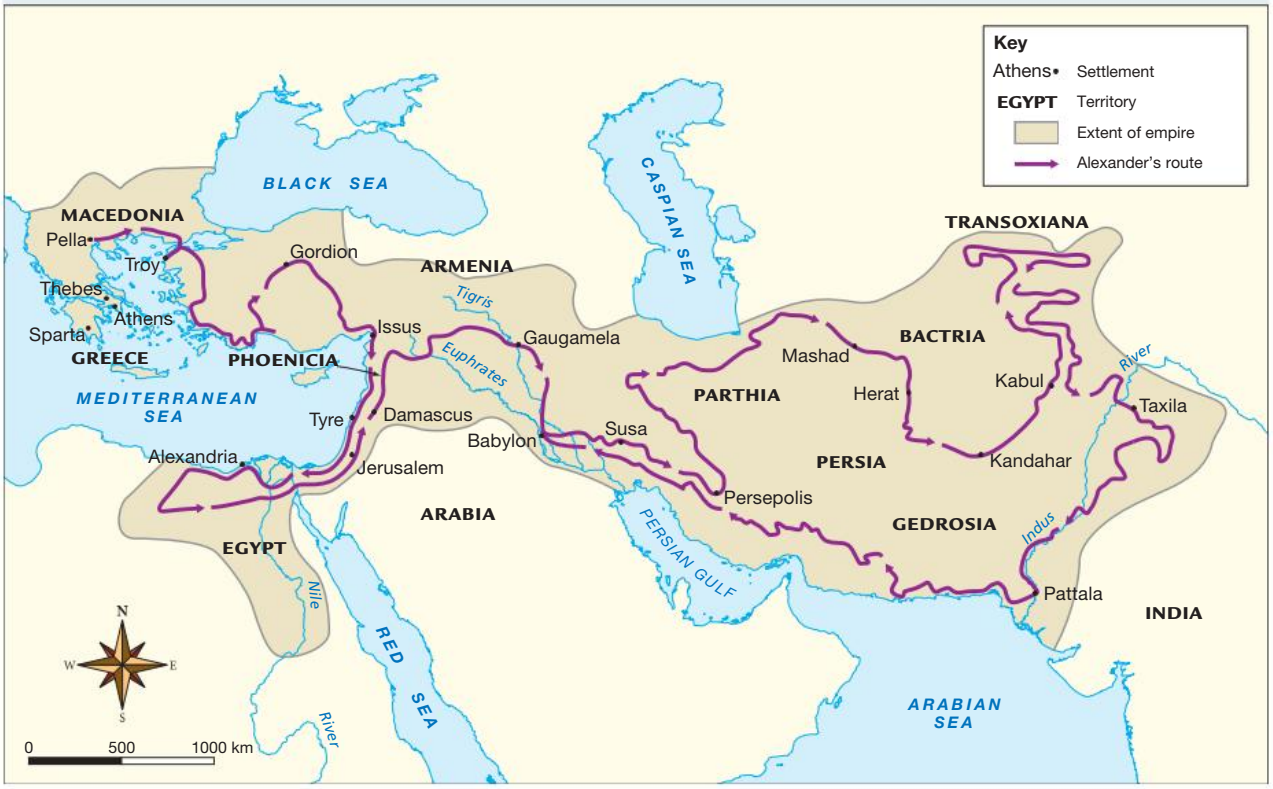
Macedon conquers Greece

After years of fighting, the Greek city-states were too weak to stop a new invasion. In 338 BCE, Philip of Macedon conquered Greece. Two years later, Philip was killed, and his son Alexander became the ruler. When Thebes rebelled, Alexander defeated the city, killing 6000 people and enslaving the rest.

Alexander creates an empire

In 334 BCE, Alexander led an army of Greeks and Macedonians to invade the Persian Empire. He defeated King Darius III in battles at Issus and Gaugamela in 333 and 331 BCE (see **SOURCE 5**). In 330 BCE, Alexander took Persepolis, the Persian capital, and called himself the 'Great King'. He continued east and reached India by 326 BCE, defeating King Porus and his war elephants. Alexander built cities to strengthen his control, many named 'Alexandria'. He died of fever at just 32 years old. His empire split into three parts: Macedon, Egypt and the Seleucid Empire.

SOURCE 5 Alexander the Great built his empire in 11 years, traveling about 34 000 km.



Source: Map drawn by Spatial Vision.

SkillBuilder discussion

Historical significance

1. How long did it take Alexander the Great to build his empire?
2. Approximately how far did Alexander travel during his conquests?
3. What significant achievement is highlighted in the source about Alexander the Great?

SOURCE 6 This is a silver coin from around 324 BCE that shows two sides. One side has a figure on horseback, thought to be Alexander the Great. The other side shows a person wearing a Macedonian cloak, Greek armour and a Persian headdress, holding a thunderbolt. These are believed to be the only images of Alexander from his lifetime.

4.10 SkillBuilder activity CAUSES AND CONSEQUENCES

Your task is to **identify** important events in this lesson and **explain** if one caused another. Just because one event happens after another doesn't mean it caused it. For example, the Greek victory over the Persians did not cause the Peloponnesian Wars.

You can use a table like this one. The first entry is already done for you.

Event or change	Cause or causes	Effect or effects
Greek cities of Anatolia revolted against Persia.	Athens provided help to those Greeks who saw the chance to break away from the Persian Empire.	The revolt failed and Persia took the offshore Greek islands.

4.10 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 3, 4	1, 5, 6, 8	7, 9, 10

REMEMBER AND UNDERSTAND

1. **Name** the modern countries that were part of the Persian Empire under Cambyses.
2. To prepare for the second Persian invasion of Greece, Xerxes built a floating _____ across the Hellespont, raised a huge _____ and readied a great _____ along the coast.
3. **Identify** why the Persian invasions of Greece failed.
   - A. The Greek army was larger.
   - B. The Persian fleet was wrecked in a storm.
   - C. Their army wasn't strong enough.
   - D. The Persian fleet was wrecked in an explosion.

4. Select the correct option to complete the statement.
   The Peloponnesian Wars lasted for a total of **33** / **42** / **47** / **52** years.
5. **Describe** how Alexander the Great treated Greek city-states that revolted against him.

ANALYSE AND APPLY

6. **Examine** the map in **SOURCE 2** and answer the following.
   a. How close did Persian forces get to Athens in 490 BCE?
   b. **Identify** who defeated the Persians at Marathon, ending the first Persian invasion attempt.
7. Read **SOURCE 4**. **Analyse** and **evaluate** it using the following questions:
   a. Who wrote this source and why might it have been written?
   b. As the Spartans were all killed in the battle, how could the writer have obtained this story?
   c. How could we know that the story is reliable?
8. **Identify** what clue **SOURCE 3** provides about reasons the Spartans and other Greeks were able to delay the Persian army at Thermopylae.

EVALUATE AND COMMUNICATE

9. Study **SOURCES 1** and **6**.
   a. **Describe** the way that Alexander is depicted in these sources.
   b. **Discuss** why you think he is depicted like that. (*Clue:* normally only a god would be shown holding a thunderbolt.)
10. Study the map in **SOURCE 5** and **compare** it with a modern map. **Identify** the modern countries that now occupy the places conquered by Alexander the Great.

Answers and sample responses for this topic are available online.

LESSON 4.11 What is the heritage of ancient Greece?

LEARNING INTENTION

By the end of this lesson you should be able to **describe** what ancient Greece has given to the modern world. This includes important ideas in medicine, mathematics, science, philosophy, drama, poetry and architecture.

Tune in

Plato was a Greek philosopher from Athens during the Classical period. Historians think he invented an early alarm clock called a 'water clock'. It was different from our clocks today.

1. **In class or in small groups, mind map how you think it worked without electricity.**
2. **You can also draw simple sketches of your ideas.**

SOURCE 1 A modern artwork of Plato

4.11.1 Medicine, mathematics, science and philosophy

Ancient Greece gave us many important ideas that still affect us today. These include democracy, the Olympic Games and advances in science, maths, architecture, medicine, philosophy, drama and poetry. Greek civilisation was at its peak in the fifth century BCE. By the fourth century BCE, Greek culture spread all the way to India because of Alexander the Great's conquests. After the Romans conquered Greece in 146 BCE, they also adopted Greek culture and helped pass on these ideas through time.

Most ancient Greeks believed that sickness was a punishment from the gods. Hippocrates (c. 460–377 BCE) changed this idea by teaching that sickness came from problems in the body, like diet. His Hippocratic Oath is still important for doctors today.

Mathematics, science and philosophy

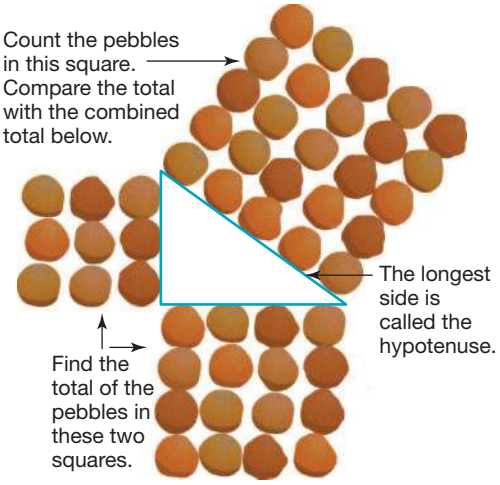
Ancient Greece had many great thinkers. Anaxagoras, Aristarchus and Eratosthenes studied **astronomy** and suggested that the Earth orbits the sun. Pythagoras (c. 582–500 BCE) arranged pebbles to show connections between space and numbers; he is famous for Pythagoras's theorem (see **SOURCE 2**). He also believed the Earth was round and that everything was made of four elements: earth, air, fire and water. Euclid created important ideas in geometry, while Thales (c. 624–546 BCE) discovered static electricity. Archimedes, in the third century BCE, found key principles in physics. Socrates, Plato and Aristotle helped develop philosophy. Aristotle taught that planets, the moon and stars moved around the Earth, a belief held for nearly 2000 years.

SkillBuilder discussion

Historical significance

1. Who was Pythagoras?
2. Identify the mathematical discovery that is attributed to Pythagoras. What type of triangle did Pythagoras's theorem apply to?
3. Consider why Pythagoras's theory is this useful and relevant to us.

SOURCE 2 Pythagoras was a philosopher and mathematician. He discovered that in a right-angled triangle, the square of the side opposite the right angle equals the sum of the squares of the other two sides.



4.11.2 Architecture, drama and poetry

The Greeks created building styles we still use today. Many modern buildings are influenced by ancient Greek designs. For example, St George's Hall in Perth has a **portico** like an ancient Greek temple.

Theatre was very popular in ancient Greece. One famous Greek playwright was Aristophanes (c. 448–380 BCE). He wrote funny plays that are still performed today. Many ancient Greek sayings are still used because they are relevant today. For example, Aesop, a fable writer from the sixth century BCE, said, 'We hang petty thieves and appoint great ones to public office' and 'In union, there is strength'.

SOURCE 3 The Erechtheion ruins are seen as the most beautiful building on the Acropolis in ancient Athens.

4.11.3 Sappho of Lesbos: The most famous woman of ancient Greece

Ancient Greek women had few rights and couldn't take part in public life, which meant most didn't get the chance to become famous or have their work recognised. One exception was Sappho from the island of Lesbos. She was born around 620 BCE into an aristocratic family, which gave her opportunities that many women didn't have. Sappho had a daughter named Cleis and was called 'the poetess' in ancient times. She was honored with statues and admired by the philosopher Plato. Sadly, some Greeks made fun of her for being a lesbian, and later, some Christian writers attacked her. Pope Gregory VII even ordered her writings to be burned. Many of her poems were preserved on Egyptian papyrus, but only fragments remain today.

SOURCE 4 A Roman bronze replica of the head of Sappho

SkillBuilder discussion

Using historical sources

1. Look at **SOURCES 5, 6** and **7** and identify what types of sources these are.
2. Discuss what these sources tell you about Sappho.

SOURCE 5 Some fragments of Sappho's poetry

And lovely laughing — oh it puts the heart in my chest on wings,

for me when I look at you, even a moment, no speaking

is left in me

no: tongue breaks and thin

fire is racing under skin

and in eyes no sight and drumming

. . . fills ears

and cold sweat holds me and shaking

grips me all . . .

SOURCE 6 From Judith Schalansky, 'What we know about Sappho', *The Paris Review*, 2020

In total, all the poems and fragments that have reached us, as brief, mutilated, and devoid of context as they are, add up to no more than six hundred lines. It has been calculated that [only] around 7 per cent of Sappho's work has survived.

SOURCE 7 From 'Sappho', Poetry Foundation website, 2022

Her celebration of love has echoed through the centuries not only in the work of translators and direct imitators, but also in all those other voices that have dared to declare their love to be radically important . . . Finally, she is widely recognized as one of the great poets of world literature . . .

4.11 SkillBuilder activity USING HISTORICAL SOURCES

Complete the following.

1. Read **SOURCE 5** and **describe** the emotions expressed and their physical effects.
2. **Infer** from **SOURCE 6** why we may never fully understand Sappho's talent and fame.
3. Read **SOURCE 7** and **explain** why the writer thinks Sappho's work is part of ancient Greece's heritage and why she is a great poet.
4. Referring to **SOURCES 4, 5, 6** and **7**, discuss whether you think Sappho's achievements should be regarded as being of historical significance. **Justify** your answer.

4.11 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 4, 5	3, 6, 9	7, 8, 10

REMEMBER AND UNDERSTAND

1. **Identify** what most ancient Greeks believed to be the cause of sickness.
   A. Bacteria
   B. Punishments from the gods
   C. Pollution
   D. An evil spirit
2. Match each person in the following table with their achievement or mistake. Add the correct letter to the centre column.

Person	Achievement or mistake
Hippocrates	a. Geometry
Pythagoras	b. Static electricity
Aristotle	c. Medicine
Thales	d. Physics
Archimedes	e. Philosophy

3. **Explain** how the ancient Greek idea about the elements differed from our modern understanding of the elements.
4. **Name** a building that has been influenced by ancient Greek styles.
5. Select the correct option to complete the sentence.
   Aristophanes was an ancient Greek **god** / **ruler** / **playwright** / **philosopher**.

ANALYSE AND APPLY

6. Study **SOURCE 3**.
   a. **Describe** the surviving features of the Erechtheion.
   b. **Explain** why you think it is regarded as an outstanding example of ancient Greek architecture.
7. Using **SOURCE 3**, **explain** what evidence the remains of the Erechtheion provide for the quality of ancient Greek building techniques.

EVALUATE AND COMMUNICATE

8. Is the observance of the Hippocratic Oath in modern times an example of continuity or change? **Justify** your answer.
9. **Identify** where and how ancient Greek plays are still performed today.
10. **Discuss** why only fragments of the poetry of Sappho of Lesbos survived into later times.

Answers and sample responses for this topic are available online.

LESSON 4.12 Inquiry: Did the Spartans really kill their weak babies?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **compare** sources
- ask questions to **clarify** facts.

Background

Many people believe the image in **SOURCE 1**, that Spartan warriors were tough and strong. A common story says that weak or sick babies were killed to make sure Sparta had strong warriors. This idea is often seen as shocking.

SkillBuilder discussion

1. What characteristics are attributed to the Spartan warrior in the image?
2. What is the warrior depicted as doing in the source?
3. Describe the warrior's outfit and accessories and explain why they were important.

SOURCE 1 A common image of a strong, fearless Spartan warrior attacking in battle dress

There are two main versions of this story. One says weak babies were thrown off a cliff on Mt Taygetus, while the other says they were left in the wild to die.

Plutarch, a writer who lived much later, said that a lawmaker named Lycurgus made these rules in the eighth century BCE. But Plutarch lived between 46 CE and 120 CE.

By reading the sources below, you can learn more and think about different opinions. You can also look online or in your library for other information.

SOURCE 2 From Plutarch, *Life of Lycurgus*

[If] they found it [a child] stout and well-made, they gave orders for its rearing . . . but if they found it puny and ill-shaped, ordered it to be taken to what was called the Apothetae, a sort of chasm under Taygetus; as thinking it neither good for the infant itself, nor for the public interest, that it should be brought up . . .

SOURCE 3 From Evan Andrews, '8 reasons it wasn't easy being spartan', History Channel website, 2018

All Spartan infants were brought before a council of inspectors and examined for physical defects, and those who weren't up to standard were left to die . . . If a Spartan baby was judged to be unfit for its future duty as a soldier, it was most likely abandoned on a nearby hillside. Left alone, the child would either die of exposure or be rescued and adopted by strangers.

SOURCE 4 From Trikkaliotis, D and others, 'The fate of sickly and disabled new-born babies in ancient Greece (Sparta and Athens)', *PANR Journal*, 2020

Our ancient and only testimony [about the practice of killing weak babies] is the biographer Plutarch who lived seven centuries later from the period that the alleged cruel custom [of killing weak babies] took place . . . Plutarch does not mention his sources, even though he very often does it in other cases . . . Ancient Greek authors who wrote on Sparta, its constitution and education of young boys and girls seem to ignore this brutal and merciless practice . . . No bones have been found related to babies. It is evident that Plutarch's statement regarding the exposure of sickly infants is difficult and hard to accept.

For each of these sources, does the writer accept or challenge the claim that Spartans killed their weak or sickly children?

Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task you can use this rubric to self-assess.

Inquiry steps

Step 1: Questioning and researching

1. Write your inquiry question. It could be based on the following issues:
   a. Can we trust a source that was written centuries after the practices it describes and does not cite any earlier sources to support its claims?
   b. What is the difference between these three sources in relation to the way the children were killed and whether they were killed?
   c. Would such killings be consistent or inconsistent with everything you have learned about Sparta?
   d. What other views on this issue have been expressed by historians and archaeologists?
2. **Investigate** to find other sources besides the three provided in this lesson that can help you to answer your inquiry question.

Step 2: Using historical sources

3. **Analyse** the three sources and any others you find. Take notes on what helps answer your question.

Step 3: Historical perspectives and interpretations

4. **Evaluate** the arguments in the sources. Do they accept or challenge the claim that Spartans killed their weak or sickly children?

Step 4: Communicating

5. What is your answer to your inquiry question? Present your findings in any format you like. Use examples from your research to support your answer.

LESSON 4.13 Review

4.13.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

4.2 How do we know about ancient Greece?

- Many archaeological finds from ancient Greece have survived, including buildings, amphitheatres, statues and vases.
- The ancient Greeks left many written sources, including histories, poetry and drama.

4.3 Who were the Minoans and Mycenaeans?

- Minoan civilisation developed on Crete from around 3000 BCE and was destroyed around 1575 BCE.
- Mycenaean civilisation flourished between 1400 and 1200 BCE.
- The Mycenaeans were the legendary conquerors of Troy, as told in the *Iliad.*

4.4 What was the Greek 'Dark Age'?

- Geographical features shaped the kind of civilisation that developed in Greece and its patterns of trade.
- Most Mycenaean citadels were abandoned in this period and the art of writing was lost.
- Dorians occupied much of southern Greece.
- Many Greeks migrated from the Greek mainland.

4.5 How were Athens and Sparta governed?

- The city-states of Athens and Sparta developed very different forms of government.
- Under the Spartan system, power was concentrated in the hands of a few families.
- Athens adopted democracy from 508 BCE.

4.6 What was life like in Sparta?

- From around 650 BCE, Sparta became a harsh military state.
- Spartan enslavement of the Messenians made the Spartan way of life both possible and necessary.
- Spartan women had more power than Athenian women.

4.7 What was life like in Athens?

- From the fifth century BCE, Athens was a rich and beautiful city with a flourishing culture.
- Men ruled Athenian society. Women were denied education and had very few rights.
- Athenian burial customs reflected those of most of the ancient Greek world.

4.8 What do we know about Greek laws, myths, gods and oracles?

- Each Greek city-state appears to have had its own laws.
- The myths and gods of ancient Greece were common to all Greek city-states.
- The ancient Greeks believed in oracles, the most important of which was at Delphi.

4.9 What were the Olympic Games?

- The ancient Greek Olympic festival was held every four years to honour the god Zeus.
- The festival contributed to a common sense of Greek identity.
- The festival was very different from the modern Olympic Games.

4.10 How was Greece changed by wars?

- When the Persian Empire invaded Greece, many of the Greek city-states united and were able to inflict crushing defeats on the Persians.
- The Greek city-states were weakened by the Peloponnesian Wars and were conquered by King Philip of Macedon.
- Philip's son, Alexander the Great, became ruler of Macedon and Greece.
- Alexander invaded the Persian Empire and created a vast empire.

4.11 What is the heritage of ancient Greece?

- The heritage of ancient Greece includes the idea of democracy and the Olympic Games.
- Other legacies of ancient Greek culture were developments in science and the arts.
- Rome absorbed Greek culture and contributed to passing down Greek ideas through the ages.

4.12 Inquiry: Did the Spartans really kill their weak babies?

- Two different traditional accounts exist of Spartans killing their weak or sickly babies.
- No reliable evidence exists to support either of these accounts.

4.13.2 Key terms

acropolis a city, citadel or complex that sits on a high hill
agora a large open space in the centre of a Greek city that served as a public meeting area and marketplace
astronomy the study of the stars and planets
democracy a political system according to which citizens choose the way in which they are governed
Dorians tribes from the north of Greece who moved into the south during the Dark Age
entrails the internal organs of an animal
Ephorate a five-man ruling body in Sparta that advised the kings
helot a slave of the Spartan state
hoplites Greek foot soldiers
immortals gods who lived forever
Iron Age the period in which people learned to use iron to make tools and weapons
metic a free man living in Athens but not born there; could not vote or own property but served in the army and paid taxes
metope a rectangular space above an architrave of a Greek building that often had paintings or sculptures on it
mythology a body of myths
oligarchy a governing council of rich aristocrats
Olympiad a staging of the Olympic Games
omen a sign that predicts good or evil
ostracism the punishment of being banished from Athens
pan-Hellenic for all the Greeks
Parthenon the Athenian temple dedicated to the goddess Athena
Peloponnese peninsula the southern part of mainland Greece, joined to the north by the narrow Isthmus of Corinth
perioeci peoples of Laconian towns around Sparta who could be required to fight for Sparta but were not citizens
polis an ancient Greek city-state (plural **poleis**)
portico a roof supported by columns, usually attached as a porch to a building

4.13.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

How do we know about ancient Greece, and what were its defining features, achievements and legacies?

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.

learnon

Post-test	Online post-test
eWorkbook	Customisable worksheets for this topic (ewbk-14157) Reflection (ewbk-10474)
Digital document	Key terms glossary (doc-43010)

4.13 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 5, 7, 11	2, 3, 6, 9, 10	4, 8, 12

REMEMBER AND UNDERSTAND

1. Which of the following causes probably contributed to the collapse of the Minoan civilisation?
   A. Lack of trade
   B. A tsunami and earthquakes
   C. Plagues
   D. Floods
2. The earliest Mycenaean stories to appear in written sources are which of these?
   A. The *Iliad* and *Odyssey*
   B. The *Bible*
   C. The *Koran*
   D. The *Upanishads*
3. Many Greek city-states were isolated from each other due to which of these geographical features?
   A. Rivers
   B. Deserts
   C. Mountains
   D. Seas
4. In ancient Athens, ostracism meant which of the following fates?
   A. Imprisonment
   B. Torture
   C. Enslavement
   D. Exile
5. Which of the following people in Athens were excluded from the rights of citizens?
   A. Farmers and soldiers
   B. Poor people
   C. Women, metics and slaves
   D. Rich people
6. Which of the following resources did the ancient Greeks import?
   A. Olive oil and grapes
   B. Bronze and timber
   C. Wine and beer
   D. Pottery
7. Although Spartan women could not be citizens, what could they do?
   A. Vote
   B. Hold public office
   C. Fight in wars
   D. Own land

8. Helots were which of the following?
   A. Messenians enslaved by the Spartans
   B. Allies of the Athenians
   C. Followers of Alexander the Great
   D. Peoples of the Persian Empire
9. In Athens, what was the large temple dedicated to the goddess Athena called?
   A. The Agora
   B. Attica
   C. The Parthenon
   D. The Erechtheion
10. What event was part of the ancient Greek Olympic festival but not part of the modern Olympic Games?
   A. Long distance running
   B. The high jump
   C. Discuss throwing
   D. The pankration

ANALYSE AND APPLY

11. **Write** an analysis of **SOURCE 1** based on the following questions.
   a. What are the main details of the painting on the vase?
   b. What types of skilled craft workers or artists would have created the vase?
   c. Why would it have been created?
   d. What evidence does it provide of ancient Greek artistic skills?
   e. What evidence does it provide of ancient Greek beliefs and values?

SOURCE 1 A red-figured stamnos (a type of ancient Greek vase) from about 430–420 BCE. The mythical scene shows Helen being abducted by Theseus.

EVALUATE AND COMMUNICATE

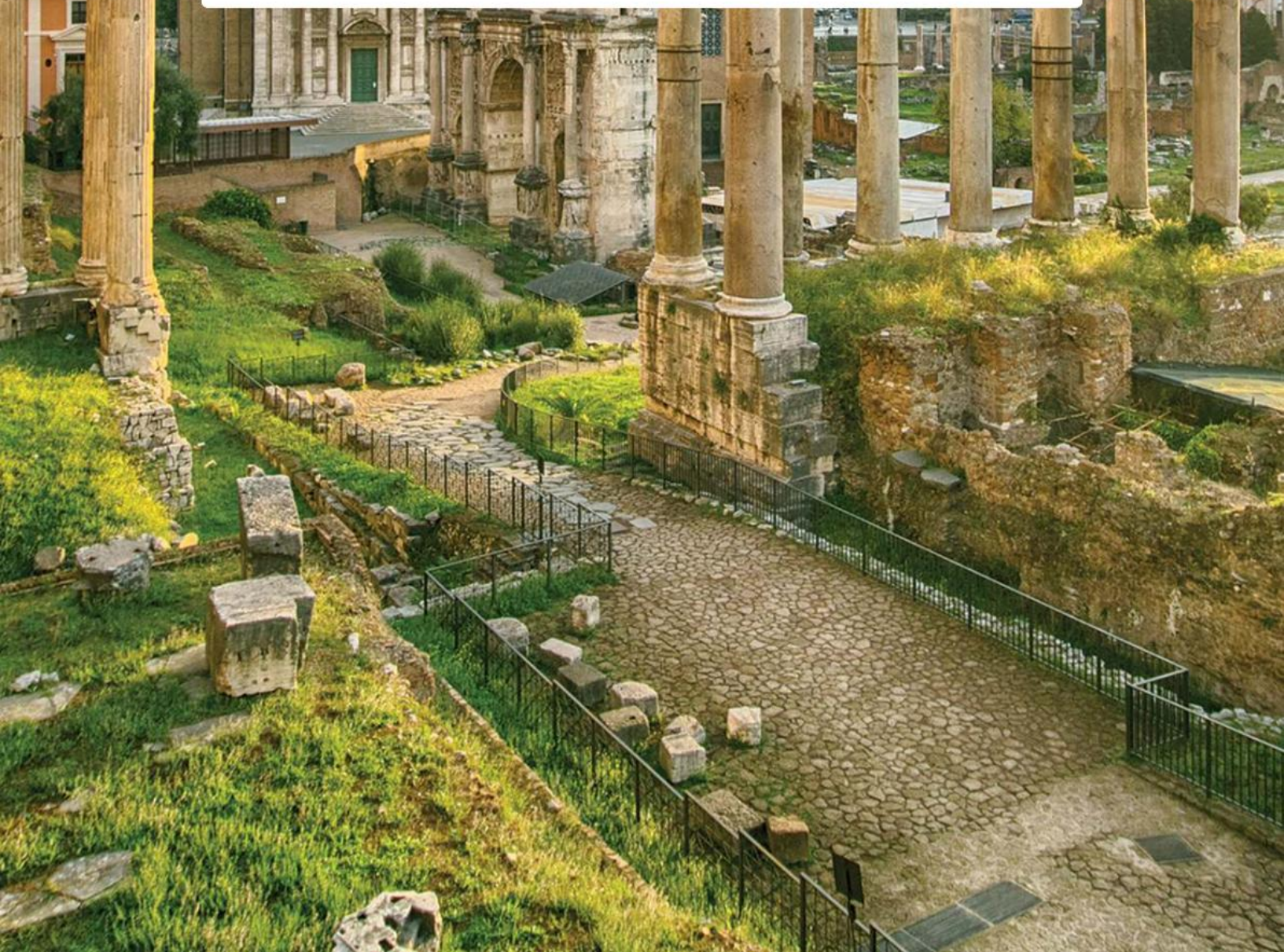
12. Alexander the Great is considered to be one of the most significant individuals, not just in ancient Greek history but in ancient history generally.
   Write a half- to one-page assessment of Alexander's significance using the following points as a guide:
   - how Alexander maintained his power in Greece
   - Alexander's invasion and defeat of the Persian Empire
   - the extent of his conquests by the time of his death
   - the effect of his rule on the Greek city-states
   - the significance of his role in spreading Greek culture.

Answers and sample responses for this topic are available online.

5 Ancient Rome

LESSON SEQUENCE

5.1 Overview 128
5.2 How do we know about ancient Rome? 130
5.3 How did Rome become so powerful? 134
5.4 How did the Roman Empire grow? 138
5.5 Why was the Roman army so successful? 142
5.6 How was Rome ruled? 145
5.7 How brutal was Roman slavery? 150
5.8 What was it like to live in the Roman Empire? 153
5.9 What did ancient Romans believe about death? 158
5.10 How did ancient Roman laws and religion change? 160
5.11 Why did the Roman Empire fall? 165
5.12 What is Rome's heritage? 169
5.13 Inquiry: How bad was Emperor Nero? 173
5.14 Review 176



LESSON 5.1 Overview

INQUIRY QUESTION

When, where and why did ancient Rome develop, and what were its defining features, achievements and legacies?

In the twenty-first century the United States of America is a superpower, much like the Roman Empire was long ago. From the second century BCE to the second century CE, Rome controlled most of the world that was known to it. Rome had amazing achievements in science, engineering and art, but it also had cruel games. The Roman Empire fell in the fifth century CE, but its ideas still influence us today. Many people visit Rome because of its fascinating history.

learnon

- **Pre-test**
  Online pre-test
- **eWorkbook**
  Customisable worksheets for this topic
- **Digital document**
  Key terms glossary
- **Video eLesson**
  Ancient Rome

753 BCE Rome is founded, according to legend.

509 BCE Rome becomes a republic.

264 BCE The Punic Wars begin.

146 BCE Rome destroys Carthage, ending the Punic Wars.

BCE 1000 900 800 700 600 500 400 300 200

390 BCE The Gauls defeat the Roman army and sack Rome.

272 BCE Rome dominates Italy.

218 BCE Hannibal invades Italy.

SkillBuilder

Use the SkillBuilder activities to develop these Historical concepts and skills:

- HISTORICAL QUESTIONS
- CHRONOLOGY
- USING HISTORICAL SOURCES
- CONTINUITY AND CHANGE
- CAUSES AND CONSEQUENCES
- HISTORICAL SIGNIFICANCE
- COMMUNICATING

73–71 BCE Spartacus leads the great slave revolt.

c. 30 CE Jesus Christ is crucified.

212 CE Roman citizenship is granted to free subjects of the empire.

313 CE Christianity is made legal.

395 CE The Roman Empire is divided into eastern and western empires.

476 CE The Western Roman Empire falls.

100 | BCE / CE | 100 | 200 | 300 | 400 | 500 | 600 | CE

91–88 BCE The Social War is fought between Rome and its Italian allies.

27 BCE Octavian ends the Roman Republic.

43 CE The Romans invade Britain.

303 CE A great persecution of Christians occurs.

378 CE The Goths defeat a Roman army.

410 CE The Visigoths capture and sack Rome.

LESSON 5.2 How do we know about ancient Rome?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** a range of source material about ancient Roman history
- **analyse** a range of source material about ancient Roman history.

Tune in

In addition to the many written records, the Romans left many archaeological remains.

SOURCE 1 Some of the many columns and sculptures that were created in ancient Rome

1. **Describe what you can see in SOURCE 1.**
2. **Why are columns and sculptures from 2000 years ago still in good condition?**
3. **What does their condition tell us about the skills of ancient Romans?**

5.2.1 How do we know about ancient Rome?

The Romans wrote many records about their time. Famous writers like Seneca (c. 4–65 CE), Tacitus (c. 55–117 CE) and Suetonius (c. 69–140 CE) are still read today. Many people visit Italy to see ancient Roman buildings like the Colosseum and the Forum.

Pompeii

Many also visit the ruins of Pompeii near Naples. It was buried in ash and **pumice** when Mount Vesuvius erupted in 79 CE.

In the 1800s archaeologists, led by Giuseppe Fiorelli, dug up Pompeii, finding streets, houses and even graffiti 'frozen in time'. They pumped plaster into cavities left by bodies in the hardened ash to create the forms you can see in **SOURCES 2** and **3**. Pompeii provides us with detailed evidence of Roman town life because:

- the town was destroyed very quickly
- those lucky enough to escape had no time to take their belongings
- the town was preserved undisturbed under metres of ash.

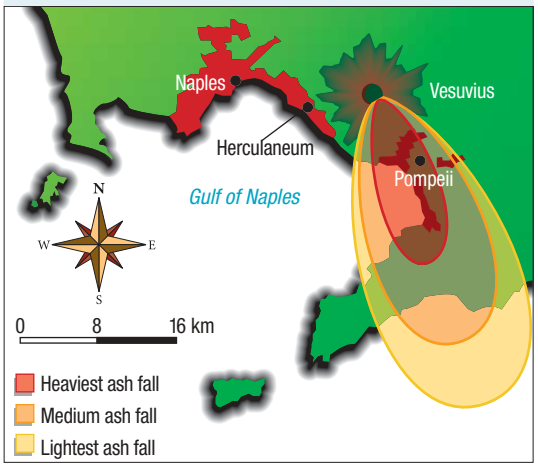
SOURCE 2 Plaster casts of victims of the volcanic eruption that destroyed Pompeii

SkillBuilder discussion

Using historical sources

1. Describe what the casts show about the victims' last moments.
2. How do the casts help us understand the force of the eruption?

SOURCE 3 The eruption of Mount Vesuvius. The prevailing winds carried most of the fallout from the explosion south, and Pompeii was soon covered by 3–4 metres of ash and pumice.



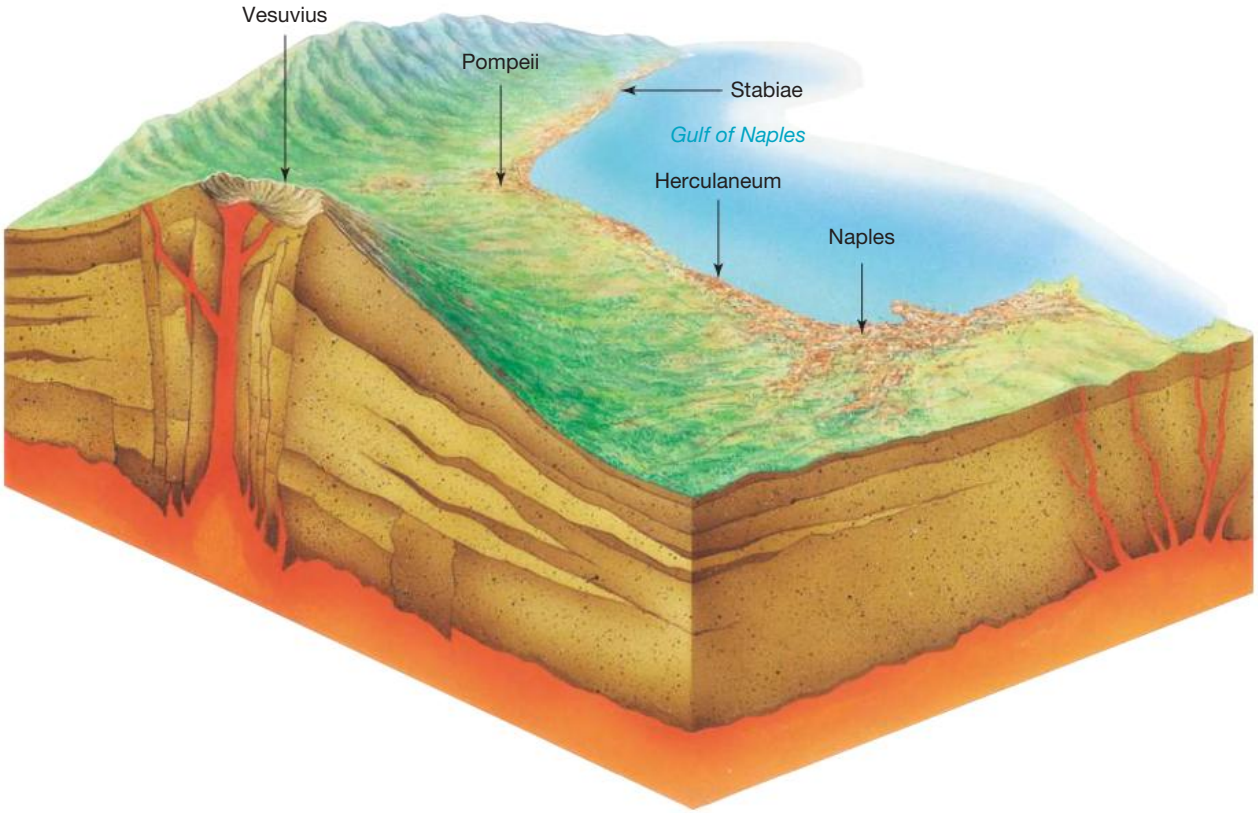
Source: © Wiley composition services

SkillBuilder discussion

Causes and consequences

1. In which locations did the heaviest ash fall occur?
2. Why would the ash have fallen in the way it did?
3. Identify the depth of the ash fall — explain the significance of this.

SOURCE 4 Pompeii and Herculaneum were totally destroyed by the eruption of Vesuvius. At first, the volcano spurted a column of ash and pumice high into the air, which fell back like rain. As the energy in the eruption weakened, the column collapsed into a glowing avalanche. Herculaneum, which had escaped the earlier fallout of ash, was covered by about 20 metres of boiling 'mud' — a mixture of hot ash, pumice and rocks.



5.2 SkillBuilder activity QUESTIONING AND RESEARCHING

SOURCE 5 is an account by someone who witnessed the eruption of Vesuvius and the devastation that followed.

1. Carefully read **SOURCE 5** to answer the following questions.
   a. According to Pliny the Younger's description, what was falling on the people trying to flee in boats?
   b. How do we know that the eruption of Vesuvius was followed by earth tremors?
   c. How does Pliny convey the sheer horror of the destruction of Pompeii?
   d. What evidence supports Pliny's story?

SOURCE 5 From an account by Pliny the Younger, who, as a young man, witnessed the destruction of Pompeii

By now ash, which became hotter and thicker ... was falling on the boats. This was followed by pieces of tufa [porous rock] and stones blackened, burnt and cracked by the fire ... Meanwhile sheets of flame and tall columns of fire were belching forth from several parts of Vesuvius, their flashing and intensity heightened by the darkness of the night ... The buildings were being frequently and violently shaken and seemed as they tottered backwards and forwards to being moved from their foundations ...

5.2 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 3, 4, 5	2, 6, 7, 8	9, 10

REMEMBER AND UNDERSTAND

1. **Recall** what destroyed Pompeii.
   A. Fire
   B. War
   C. Eruption of Mount Vesuvius
   D. Tidal waves
2. **State** the year that the eruption of Vesuvius took place.
3. **Identify** when Pompeii was excavated.
   A. Seventeenth century
   B. Eighteenth century
   C. Nineteenth century
   D. Twentieth century
   E. Twenty-first century
4. **State** the approximate number of metres of ash and pumice that covered Pompeii.
5. Which three pieces of evidence do the ruins of Pompeii provide for us?
   A. Few people escaped.
   B. Survivors provided details of daily life.
   C. There was no time to remove belongings.
   D. The town was preserved undisturbed for more than 1700 years.

ANALYSE AND APPLY

6. **Describe** the position of the bodies in **SOURCE 2**. Do you think they died quickly or slowly? Give reasons for your answer.
7. **Describe** how the archaeologists created the forms we see in **SOURCE 2**.
8. **Analyse SOURCES 4** and **5**. How was the destruction of Herculaneum different from that of Pompeii?
9. **List** three questions you would ask about each of **SOURCES 2 – 5** if you were using them as evidence for the destruction of Pompeii.

EVALUATE AND COMMUNICATE

10. **Explain** how Pompeii shows features of Roman life.

Answers and sample responses for this topic are available online.

LESSON 5.3 How did Rome become so powerful?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** why Rome became the great power of the ancient Mediterranean world
- **describe** the tactics they used to attain dominance.

Tune in

Power is something that some modern nations have. It can take different forms. Australia is considered to be a middle-ranking power, similar to quite a few other countries. The United States and China are regarded as big powers. Many modern countries are not regarded as powers at all.

SOURCE 1 What makes some countries more powerful than others?

1. **Discuss what gives a country power. Is it population size, economic strength, its education system, or is it more to do with military strength?**

5.3.1 Rome's origins

Ancient Rome's history lasted from about 753 BCE to 476 CE. The Roman Republic was from 509 BCE to 27 BCE, then came the Roman Empire ruled by emperors.

The ancient Romans had myths about their origins. In one myth, twin brothers, Romulus and Remus, were raised by a she-wolf. In 753 BCE, Romulus became the first ruler of Rome after he killed Remus. The wolf became a symbol of the city.

The Romans and their nearby tribes were called Latins. They lived on the Latium plain, with good soil and water from the Tiber River. Rome was easy to defend and close to salt flats. In the sixth century BCE, Etruscan kings ruled Rome. In 509 BCE, the Romans rebelled, expelled the last king and became a **republic**, making Rome the strongest city-state in Latium.

5.3.2 Rome's growing power

Over the next two centuries, Rome grew stronger through war. In 493 BCE, Rome made a treaty with Latin tribes to defeat the Aequi and Volsci. In 396 BCE, Rome captured the Etruscan city of Veii. Later, Gauls attacked Rome, but by 272 BCE, the Romans defeated the **Etruscans**, the **Samnites** and hill tribes, taking control of Greek colonies in the south.

Tactics of power

By 272 BCE, Rome had a population of about 150 000 people and controlled most of Italy, getting rich from plundering and taxes. To control such a vast area, the Romans:

- used conquered peoples against one another
- made alliances with former rivals
- sold defeated enemies into slavery
- allowed conquered cities to keep their own local government, but forced them to supply troops for Rome
- colonised strategically important places with Roman citizens.

SkillBuilder discussion

Using historical sources

1. What does the armour shown in **SOURCE 2** tell us about military practices?
2. How do the items reflect the commander's status?
3. Why is this burial significant in Roman culture?

Did you know?

In the early Roman Republic, powerful families held most political power. The top leaders were two consuls, who commanded the military and handled legal issues. The republic lasted nearly 500 years.

SOURCE 2 These items were found in a Latin (possibly Roman) tomb of a military commander who was buried about 475 BCE, soon after Rome became a republic. They include his bronze body armour, helmet, axe and spearheads (held in the National Archaeological Museum of Rome).

SkillBuilder discussion

Communicating

1. Look at the map in **SOURCE 3**. Which place names do you recognise?
2. Explain how Italy is divided in terms of territory.

SOURCE 3 Italy in the sixth century BCE

Source: Map drawn by Spatial Vision

5.3 SkillBuilder activity USING HISTORICAL SOURCES

SOURCE 4 From a description by the ancient Roman historian, Livy, of a Roman victory over the Volscians in 385 BCE

The large enemy forces, relying only on their numbers ... were bold only in battle cry, throwing of missiles and the first onrush of the battle; sword-fighting, holding ground, an enemy's face flashing in its fury they could not stand up to. Their front lines were driven in and panic spread to the supporting troops ... then the ranks were broken in many places ... After that, as the first lines collapsed and everyone saw his own turn to be killed was coming to him, they turned and ran. The Romans followed hard on their heels, and so long as they kept their weapons and fled in a packed crowd, it was the infantry's task to keep up the pursuit. But when the enemy were seen to be throwing away their weapons and scattering widely over the land, then came the moment for the cavalry squadrons to be let loose ... and by riding across their path hold the column until the infantry could catch up and finish the enemy off with a regular massacre.

1. How does Livy describe the actions of the Volscians (hill tribes) in his first three sentences?
2. What attitude to the Volscians do these three sentences convey?
3. How would you **describe** the tactics used by the Romans once the Volscians were running?
4. Is it likely that Livy was an eyewitness to this battle? If not, from whom would he have got this information?
5. Titus Livy (born 59 BCE) spent more than 40 years in Rome while writing his history of Rome. What do you think would have been his purpose in writing this account?
6. Could Livy have been biased? Give the reasons for your answer.

5.3 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 3, 6	1, 5	4, 7

REMEMBER AND UNDERSTAND

1. According to legend, **explain** why the wolf became a symbol of Rome.
2. Which of the following was *not* one of Rome's geographical advantages?
   A. A mild climate
   B. A mountainous location, making it difficult to attack
   C. A reliable water supply
   D. Fertile soil
3. Why was Rome involved in several wars between 493 BCE and 272 BCE?
   A. Desire for expansion and power
   B. To improve the skills of their armies
   C. To uphold honour
   D. Continuous attacks by enemies
4. **Explain** the effects of war on Rome's power.

ANALYSE AND APPLY

5. **Compare SOURCE 2** with images of Greek soldiers in topic 3. **Identify** items in **SOURCE 2** that indicate that the Latins, including Romans, were influenced by ancient Greeks.
6. Use **SOURCE 3** to **list** the peoples the Romans defeated to gain control of Italy.

EVALUATE AND COMMUNICATE

7. Using the sources and other information in this lesson, **identify** ways in which Rome changed between 509 and 272 BCE and **explain** how they achieved these changes.

Answers and sample responses for this topic are available online.

LESSON 5.4 How did the Roman Empire grow?

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the expansion of the Roman Empire and the defeat of its great rival, Carthage.

Tune in

Analyse **SOURCE 1** to begin exploring the Roman soldiers' resourcefulness and how it assisted them in battle.

SOURCE 1 Remains of Chester's Roman Wall Fort, northern England

1. **What can you see in SOURCE 1 that suggests to you that Roman soldiers were capable builders?**
2. **The Romans built a long wall with forts to keep Scottish warriors out of England. They realised they couldn't defeat the Scottish tribes. Why do you think that was?**

5.4.1 Building the empire through war

Over centuries, Romans expanded their empire. By 146 BCE, Rome was the strongest power in the Mediterranean.

SkillBuilder discussion

Historical significance

1. Identify the key locations of Hannibal's battles in **SOURCE 2**.
2. Describe how Hannibal's route impacted his strategy.
3. What obstacles did Hannibal face during his campaign?

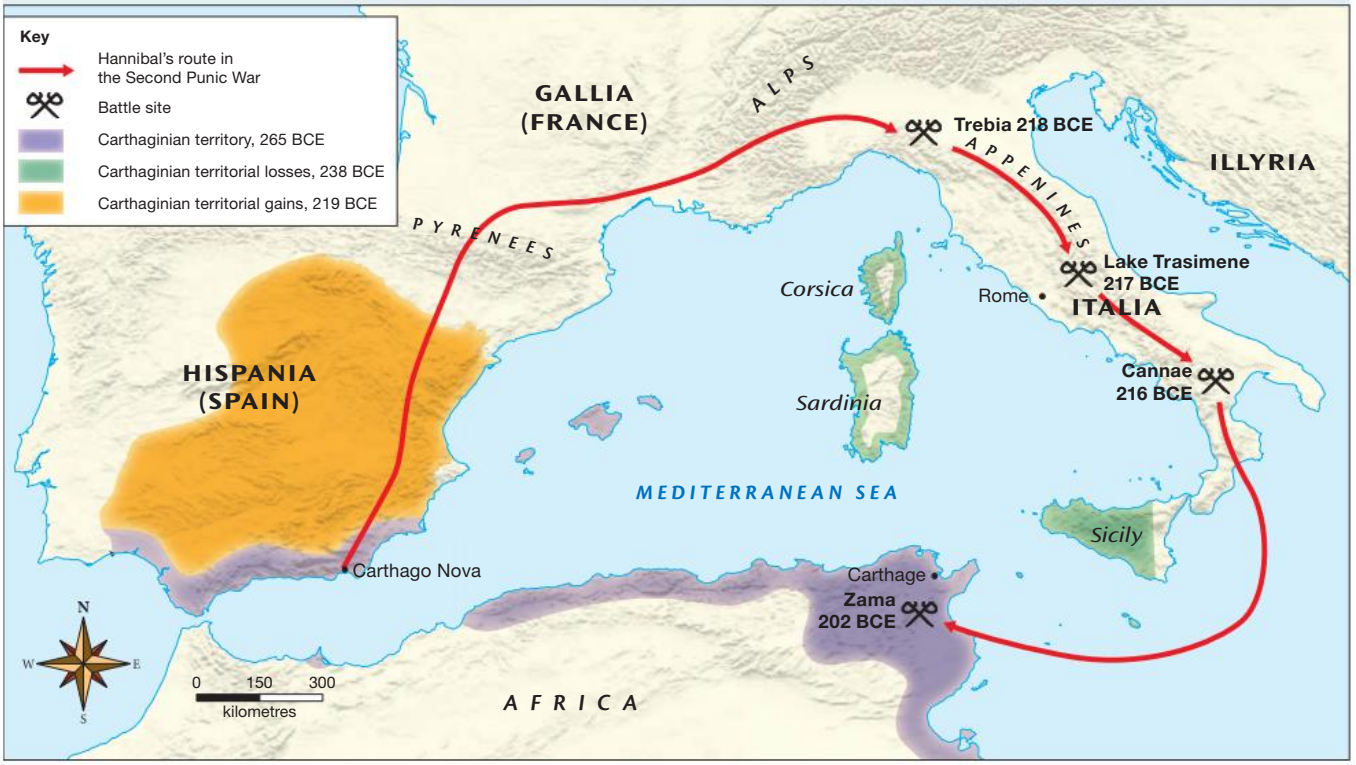
The Punic Wars

The Punic Wars were a series of three wars fought between the Roman Republic and the Carthaginian (Punic) empire from 264 BCE to 146 BCE. In the First Punic War, Rome defeated Carthage and gained control of Sardinia and Sicily.

The Second Punic War (218–202 BCE) began when Hannibal invaded Italy (see **SOURCE 2**) with 40 elephants. He won battles at Trebia, Lake Trasimene and Cannae. The Romans, led by Fabius Maximus, later defeated him at Zama in 202 BCE.

In 146 BCE, Romans captured and destroyed Carthage, enslaving its people.

SOURCE 2 Hannibal's route and major battles in the Second Punic War



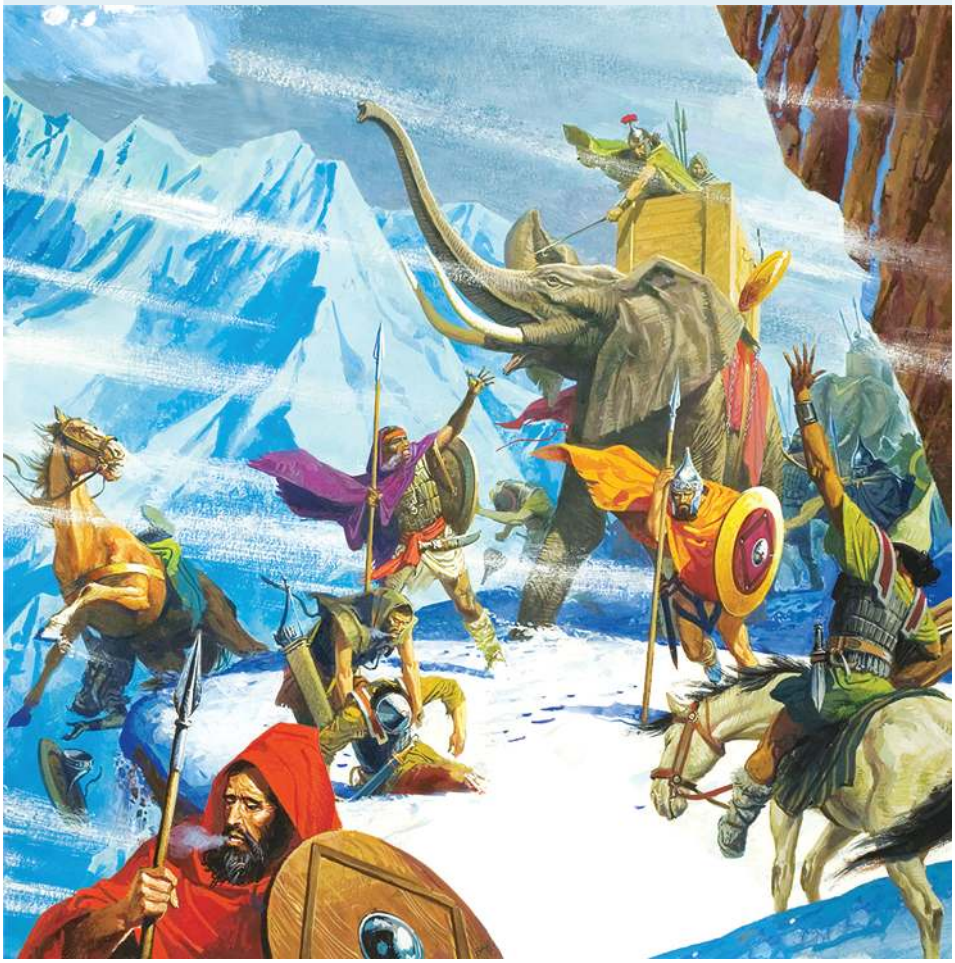
Source: Map drawn by Spatial Vision

SkillBuilder discussion

Historical significance

1. What challenges would Hannibal have faced crossing the Alps?
2. How did the terrain impact his army?
3. Why was this crossing significant?

SOURCE 3 A modern artist's impression of Hannibal's forces crossing the Alps



The Social War and the growing empire

The Social War was fought from 91 BC between the Roman Republic and its allies in Italy. The Italian allies lost the war but gained the right to be Roman citizens.

By 30 BCE, the Roman Empire covered most of the Mediterranean. In 43 CE, they invaded Britain and reached the Rhine and Danube rivers by 96 CE (see the map in lesson 5.6).

5.4 SkillBuilder activity USING HISTORICAL SOURCES

1. Create a timeline of events and developments in this lesson, noting approximate dates or ranges of dates from around 146 BCE to 96 CE.
2. Note on your timeline any developments that could be considered turning points.
3. **Describe** the broad changes that occurred in the Roman Empire over this period.

5.4 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 3, 4, 5	2, 6, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. **Select** the three major battles in which Hannibal defeated the Romans.
   A. Trebia
   B. The First Punic War
   C. Lake Trasimene
   D. Lake Cannae
   E. Zama
2. **Explain** how Fabius Maximus outmanoeuvred Hannibal.
3. The Social War was caused by Roman citizens rebelling against social injustice. True or False?
4. **State** how far north the Roman Empire extended by 43 CE.
5. When did the Roman Empire reach its greatest extent?
   A. Late first century CE
   B. Early second century CE
   C. Late second century CE
   D. Early third century CE

ANALYSE AND APPLY

6. Use **SOURCE 2** and an atlas to **list** the modern countries through which Hannibal's forces would have reached Italy.
7. Use **SOURCE 3** to **describe** the hazards of Hannibal's journey across the Alps.
8. **Infer** what **SOURCES 2** and **3** might tell us about Hannibal's significance as a military leader.

EVALUATE AND COMMUNICATE

9. In modern times, **describe** how we would view a power that massacred or enslaved the entire population of a defeated city, as the Romans did to Carthage.
10. **Suggest** the trading advantages, especially in sea trade, that Rome would have gained by destroying Carthage.

Answers and sample responses for this topic are available online.

LESSON 5.5 Why was the Roman army so successful?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** the characteristics of the Roman military
- **describe** its role in expanding and maintaining the power of the Roman state.

Tune in

What made Roman soldiers intimidating? Was it their training or bravery?

Roman soldiers feared their officers more than their enemies because of strict discipline.

Decimation was a severe punishment in the Roman army. Soldiers were split into groups of ten. One soldier was chosen to be killed by the others.

1. **Describe why anyone would want to join the Roman army.**
2. **Comment on how discipline would have affected the performance of the soldiers.**

SOURCE 1 Roman soldiers were subject to harsh discipline.

5.5.1 Roman army weapons and tactics

Until the first century BCE, the Roman army was made up of land-owning citizens. They provided their own gear and fought for glory and wealth.

As Rome grew, a stronger army was needed. From 396 BCE, soldiers were paid. They served for about 20 years and had to be fit.

5.5.2 A Roman soldier's harsh life

Roman soldiers couldn't marry, paid for their supplies and used **auxiliaries**.

When not marching or fighting, legionaries built camps, roads, walls and **aqueducts**.

Soldiers could share the **loot** from a battle and often received land when they retired.

SOURCE 2 Roman soldiers were well trained and well equipped.

- **A** Identify the key equipment that the soldiers carry.
- **B** How does training impact their effectiveness in battle?
- **C** What qualities made Roman soldiers successful?
- **D** Legions marched with a silver eagle pole, showing their power.
- **E** Sandals needed to be strong and well ventilated for long marches. Iron studs in the soles helped support and protect soldiers.
- **F** The dagger had a double-edged blade.
- **G** These tall, crested helmets helped soldiers see their leaders in battle.
- **H** Roman forts had wooden stakes called 'palisades' to keep them safe.
- **I** Soldiers often stood side by side, overlapping their shields to create a protective cover called a 'testudo', from the Latin word for tortoise.
- **J** The javelin's head had a soft iron strip that bent in shields, making removal hard.
- **K** Decorated leather belts showed a soldier's rank and protected against injuries.
- **L** The short sword was 60 cm long and used for stabbing up close.
- **M** The upper body armour had metal strips and leather straps.

SkillBuilder discussion

Historical questions

1. Study **SOURCE 3**. Make a list of questions that you have about the structure of the Roman army.
2. What are your observations about the army based on the diagram?

SOURCE 3 Structure of the Roman army

30 legions make up the whole Roman army

One legion had between 4000 and 6000 soldiers (10 cohorts led by a delegate)

A cohort of about 480 legionaries | A cohort of about 480 legionaries | A cohort of about 480 legionaries | A cohort of about 480 legionaries | A cohort of about 480 legionaries

A cohort of about 480 legionaries | A cohort of about 480 legionaries | A cohort of about 480 legionaries | A cohort of about 480 legionaries

First cohort was double-sized

80 legionaries made a century. 6 centuries made normal cohort.
The first cohort had 5 double centuries.
Each century was led by a centurion

5.5 SkillBuilder activity QUESTIONING AND RESEARCHING, USING HISTORICAL SOURCES

Read **SOURCE 4**. What questions can we ask of Polybius to unpack what he's trying to say about the discipline in the army? Write four questions you could use to **analyse SOURCE 4**. For example, why was being careless on patrol so bad that it would lead to such a brutal and public death?

SOURCE 4 The Roman historian, Polybius, reports that discipline in the army was harsh, with penalties that included death.

A court martial composed of the tribunes is convened at once to try [a soldier for being careless on patrol duty]. If he is found guilty he is punished by the bastinado. This is inflicted as follows: the tribune takes a cudgel [short, heavy stick] and just touches the condemned man with it, after which all in the camp beat or stone him, in most cases dispatching [killing] him in the camp itself.

5.5 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 3, 4, 5	2, 6, 7, 8	9, 10

REMEMBER AND UNDERSTAND

1. The Roman army fought in spring and autumn for good weather. True or False?
2. **Explain** what began to change in the Roman army from 396 BCE and why.
3. What did Roman soldiers have to pay for out of their own wages?
   - A. Time to farm their land
   - B. Soldiers did not get wages.
   - C. Their own equipment and armour
   - D. Nothing
4. How were Roman soldiers employed when not fighting? Select all that apply.
   - A. As teachers and scholars
   - B. Building camps and roads
   - C. As merchants and traders
   - D. Building walls and aqueducts
5. **Define** the following terms: 'auxiliaries', 'aqueduct', 'loot'.

ANALYSE AND APPLY

6. Use **SOURCE 2** to **sketch** and label a diagram of a testudo.
7. Using **SOURCE 2**, **explain** what was meant to happen when a Roman javelin pierced an enemy's shield.
8. **Explain** why the tactics shown in **SOURCE 2** made the Romans powerful enemies.
9. **State** what benefits Roman soldiers could receive from their leaders.

EVALUATE AND COMMUNICATE

10. Rome's military leaders gained popular support by granting loot from battles to soldiers. **Evaluate** what dangers this practice could have presented to Rome.

Answers and sample responses for this topic are available online.

LESSON 5.6 How was Rome ruled?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** Rome's changing system of government from republic to empire
- **explain** the significance of the class groups that the people of Rome were divided into.

Tune in

Ancient Rome's government aimed for prosperity, but not everyone was equally represented.

1. **How is the patrician in SOURCE 1 dressed?**
2. **Could someone dressed like that do manual work?**
3. **What does his outfit say about patricians' status?**
4. **How could patricians rise in society?**

SOURCE 1 A statue of a Roman patrician

5.6.1 Social divisions

After the Romans expelled the last Etruscan king (c. 509 BCE), they formed a republic. Rich people had the most power, while women and slaves had none.

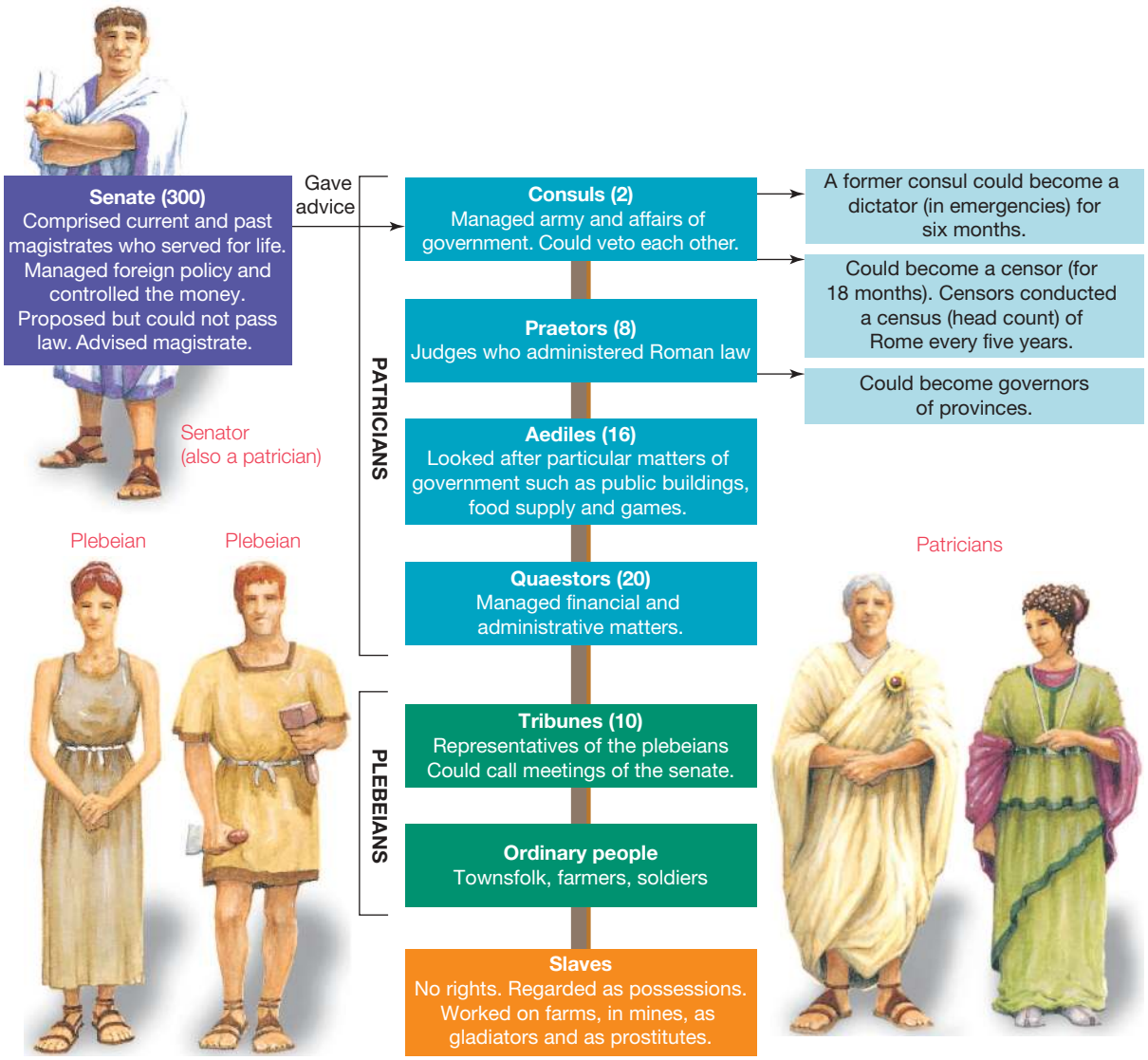
To be a Roman citizen, you needed to be male, age 25 or older, freeborn and able to vote on laws.

Roman citizens were divided into two classes — **patricians** and **plebeians** (see **SOURCE 2**). Patricians were from rich families who founded the republic. Plebeians were everyone else; although some became rich, they rarely had much influence.

There were more plebeians than patricians. Plebeians went on strike for more power.

From this strike, plebeians gained the right to elect ten tribunes, or protectors. Tribunes could veto laws to help ordinary people.

SOURCE 2 The structure of the Roman class system



SkillBuilder discussion

Historical significance

1. Study **SOURCE 2**. Identify the main classes in the Roman system.
2. How did class affect a person's rights and privileges?
3. What roles did the upper and lower classes play in society?

SOURCE 3 Romans from the first century CE, depicted on an altar held in the National Museum of Rome

Did you know?

All Roman provinces paid taxes. In 212 CE, all free people got citizenship. Conquered people adopted Roman ways and benefited from trade. This peace imposed by the conquerors was called the *Pax Romana*.

5.6.2 Ruling the Roman Republic

Every year, Rome elected over 50 **magistrates** to run the city. They served one year and worked with colleagues. After serving, they joined the **Senate**, which advised consuls but held much power and controlled Senate meetings.

Voting in the Roman Republic

All citizens could vote in assemblies to share their opinions and elect magistrates. Initially, voting was public, but later it became a secret ballot using wax pieces marked with 'V' (disagree) or 'A' (agree) for counting.

Democracy or not?

The Roman Republic seemed democratic, but it wasn't. Plebeians had little say because their votes counted less than patricians. They formed their own assembly. To avoid a revolt, patricians allowed plebeians to elect tribunes. By 287 BCE, plebeian assembly decisions were lawful, but plebeians had less power overall.

5.6.3 From republic to empire

Increased wealth led to power struggles among patricians, causing chaos. In 27 BCE, the Roman Republic became an empire (see **SOURCE 4**).

Julius Caesar

Julius Caesar outsmarted rivals and became popular. In 49 BCE, he attacked Pompey, his rival and former friend, starting a **civil war** and becoming Dictator for life.

SkillBuilder discussion

Historical significance

1. What key achievements is Caesar known for?
2. How did Caesar's actions impact the Roman Republic?
3. What conflicts did Caesar face during his rise to power?

SOURCE 4 Profile of Gaius Julius Caesar (based on the writings of the Roman historian, Suetonius)

- Born 100 BCE; died 44 BCE. Class: patrician
- Well built, tall, fair hair, balding (combed his hair forward), dark brown eyes
- Very fit, but sometimes had epileptic fits
- Ambitious, but fair man who judged men on their fighting record
- Good at sword fighting, horse riding, public speaking, writing
- Often wore a wreath of laurel leaves on his head (as a sign of victory)
- Introduced the Julian Calendar, used for more than 1500 years
- Introduced a number of land, law, tax and social justice reforms

Caesar or rex?

After defeating Pompey, some senators accused Caesar of being like a king. On 15 March 44 BCE, they arranged his murder. Those who fatally stabbed him included his old and trusted friend, Marcus Brutus.

SOURCE 5 Suetonius's description of Caesar's assassination (Suetonius lived about 69–140 CE)

As soon as Caesar took his seat [in the Senate House], the conspirators crowded around him as if to pay their respects. Tillius Cimber ... came up close, pretending to ask a question ... caught hold of [Caesar's] shoulders. 'This is violence!' Caesar cried, and at that moment one of the Casca brothers slipped behind and with a sweep of the dagger stabbed him just below the throat. Caesar grasped Casca's arm and ran it through with his stylus; he was leaping away when another dagger caught him in the breast. Confronted by a ring of drawn daggers, he drew the top of his gown over his face ... Twenty-three dagger thrusts went home as he stood there.

The Roman Empire

After Caesar's assassination, Octavian (later called Augustus) became ruler and declared himself emperor, starting a dynasty that ruled until 68 CE.

SOURCE 6 The Roman Empire at its peak. The empire consisted of a number of provinces, each ruled by a governor.

Source: Map drawn by Spatial Vision

The Roman Empire lasted until 476 CE under various emperors who were either given the title or simply seized power.

5.6 SkillBuilder activity QUESTIONING AND RESEARCHING

Australia is a democracy where all citizens can vote equally.

Everyone aged 18 and over must vote in federal elections every three years. Voting is private.

Your task is to use information in this lesson, including **SOURCE 2**, to **compare** democratic rights in modern Australia with rights in the Roman Republic by copying and completing the following table.

Comparisons	Modern Australia	Roman Republic
Who could vote?		
Did all citizens have the same voting rights?		
What was the highest position in government?		
How were people chosen for the highest position in government?		
Could an elected politician legally become a dictator?		

5.6 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 4, 5	3, 6, 7, 8	9, 10

REMEMBER AND UNDERSTAND

1. What were the requirements to qualify as a Roman citizen? **Select** all that apply.
   A. Any gender
   B. Male
   C. 18 or older
   D. 25 or older
   E. Freeborn
2. In practice, which social class had the most power?
   A. Citizens
   B. Patricians
   C. Plebeians
   D. Magistrates
   E. Males
3. **Explain** how the plebeians gained some power.
4. **Identify** what powers the Senate had in the Roman Republic.
5. The Roman Republic collapsed in 27 CE. True or False?

ANALYSE AND APPLY

6. Look carefully at **SOURCE 3**. **Suggest** which social class these Romans would have belonged to.
7. Look at **SOURCE 4**. **Identify** characteristics that may have helped Julius Caesar become Dictator for Life.
8. **Analyse SOURCE 5**. According to Suetonius, how many Romans must have taken part in Caesar's assassination?
9. **Explain** how you could test the reliability of **SOURCE 5.**

EVALUATE AND COMMUNICATE

10. **Suggest** why Rome struggled to stay a republic due to its society and political system.

Answers and sample responses for this topic are available online.

LESSON 5.7 How brutal was Roman slavery?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** the extent and suffering of slaves in the Roman Empire
- **outline** the causes and consequences of the great slave uprising.

Tune in

Slavery was common in ancient societies, but it was harsher in Roman society and the Empire.

SOURCE 1 A Roman stele (funerary monument) of a freedman (former slave), dressed in a toga, and his freedwoman wife

1. **Why did the Roman Empire have many slaves?**
2. **How do you think they were treated?**
3. **Is slavery completely gone today?**

5.7.1 Slavery in ancient Rome

As the Roman Empire grew, many captives were sold into slavery. Slaves had hard lives and could be **crucified** for rebellion. In Roman law, individuals sold into slavery had no ancestry, no legal person-hood and they could not formally marry.

Miners, prostitutes and gladiators suffered the most. Miners rarely lived past 21; gladiators fought to the death (see **SOURCES 2** and **3**). However, unlike most slaves, gladiators knew how to fight.

SOURCE 2 From an account of gladiators in combat by the Roman historian Seneca (4–65 CE)

I arrived at the Colosseum in the middle of the day ... No sooner has a man killed his rival than the crowd shout for him to kill another, or be killed. In the end every fighter dies ... why watch their sufferings?

5.7.2 The great slave rebellion

In 73 BCE, at Capua, gladiators led by a **Thracian** named Spartacus started a rebellion. They overpowered their guards and escaped. They grew to 10 000, defeated Roman legions and freed other slaves, causing panic throughout Rome.

The rebels were eventually defeated. Spartacus's group lost a battle, with about 60 000 dying (see **SOURCES 4** and **5**). Over 6000 were captured and crucified as a warning to others.

SkillBuilder discussion

Using historical sources

1. Describe the details that show the gladiators' status.
2. How does the sculpture reflect gladiatorial culture?
3. What combat techniques might we learn from the sculpture?

SOURCE 3 A relief sculpture depicting two gladiators named Scholasticus and Damascenus from the third century CE. The sign indicates that Damascenus died in the fight. Most gladiators' lives ended this way, although a few very successful fighters were able to buy their freedom.

SkillBuilder discussion

Historical significance

1. What sort of tribe did Spartacus belong to?
2. Where did he lead his army?
3. Describe what made Spartacus different from others.

SOURCE 4 From an account of the slave revolt by the Greek historian, Plutarch (c. 46–120 CE)

Spartacus ... was a Thracian from the nomadic tribes and not only had a great spirit and great physical strength, but was ... most intelligent and cultured ... Spartacus had grown to be a great and formidable power but ... could not expect to prove superior to the whole power of Rome, and so he began to lead his army towards the Alps ... His men, however, would not listen to him. They were strong in numbers and full of confidence ...

... both consuls were sent out to deal with what was considered a major war and a most difficult one to fight ...

Did you know?

Slaves had no rights until Emperor Claudius banned torturing them. Most lived harsh lives, while a few gained freedom.

SOURCE 5 From Plutarch's description of the final battles of the revolt

Crassus's troops killed 12 300 men, but he found only two of them who were wounded in the back. All the rest died ... fighting back against the Romans.

... Spartacus ... surrounded by enemies, still stood his ground and died fighting to the last.

5.7 SkillBuilder activity HISTORICAL PERSPECTIVES AND INTERPRETATIONS

Spartacus led a major slave revolt starting in 73 BCE, which scared Roman rulers. Known as the Third Servile War, it was crushed by eight Roman legions in 71 BCE. Spartacus became a legend. He inspired the novel, *Spartacus,* by Howard Fast and a 1960 Hollywood movie and later the Netflix series, *The Roman Empire*.

State your view on whether Spartacus should be regarded as having historical significance. **Consider** the following.

1. How important was his rebellion?
2. How many people were affected?
3. To what extent were people's lives changed?
4. How long-lasting were the consequences?

5.7 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4	5, 6, 8	7, 9, 10

REMEMBER AND UNDERSTAND

1. Which group benefited the mostly from slavery?
   A. Magistrates
   B. Slaves
   C. Wealthy, free citizens
   D. Women
2. **Identify** what you think would have been the worst jobs for slaves.
3. Which reason did *not* help the gladiators to revolt?
   A. They had combat experience and skills.
   B. They had a strong leader in Spartacus.
   C. They could easily escape their masters.
   D. Many were angry about their treatment.

4. The 6000 captured rebels were executed by crucifixion. True or False?
5. **Identify** Claudius's reforms on slavery and **explain** how effective they were.

ANALYSE AND APPLY

6. **Examine SOURCE 1**. How does it show that some former slaves advanced in Roman society?
7. Read **SOURCE 2**.
   a. **Explain** how we know not all Romans liked gladiatorial combats.
   b. Do you think many Romans agreed with Seneca? **Justify** your response.
8. Suggest, with supporting reasons, how long you think a gladiator's career was likely to last.
9. **Analyse SOURCE 4**. According to Plutarch, how big a threat did Rome's rulers see the slave revolt to be?
10. In **SOURCES 4** and **5**, **explain** what Plutarch says about the following.
    a. Why Spartacus was eventually defeated
    b. The courage of Spartacus and the other rebels

Answers and sample responses for this topic are available online.

LESSON 5.8 What was it like to live in the Roman Empire?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** daily life for Roman citizens, both rich and poor
- **identify** the social and cultural changes that came as the Roman Empire expanded.

Tune in

An old saying is that, in unequal societies, the rich and powerful keep the poor from rebelling with 'bread and circuses'.

SOURCE 1 Circus Maximus in Rome

1. **Does this saying refer to the Roman rulers keeping plebeians happy?**
2. **The bread was given to stop the poor from rebelling. What do you think 'circuses' means in ancient Rome?**

5.8.1 Changing Roman society

About 90 per cent of people in the Roman Empire were peasants, many of whom were plebeians. Most were workers or **tenant farmers**.

Wealthy Romans lived in luxury, while the gap between rich and poor grew larger.

Large Roman towns had well-planned streets, a **forum** and fancy villas for the rich. They enjoyed banquets with dancers and musicians, sometimes overeating and vomiting to keep feasting.

The poor ate bread and porridge, lived in rented slums and relied on public fountains for water (see **SOURCE 2**).

SOURCE 2 From a description of housing conditions of the poor by the Roman writer, Juvenal, first century CE.

We live in a city shored up with slender props ... for that is how the landlords stop the houses from falling down.

The impact of slavery on social change

The main reason for the large numbers of poor citizens in Roman towns was that conquered peoples became slaves. Many displaced Roman farmers moved to cities for work or to survive on the dole. The dole was a state-run social welfare program which gave cheap or free grain and bread to males.

SkillBuilder discussion

Communicating

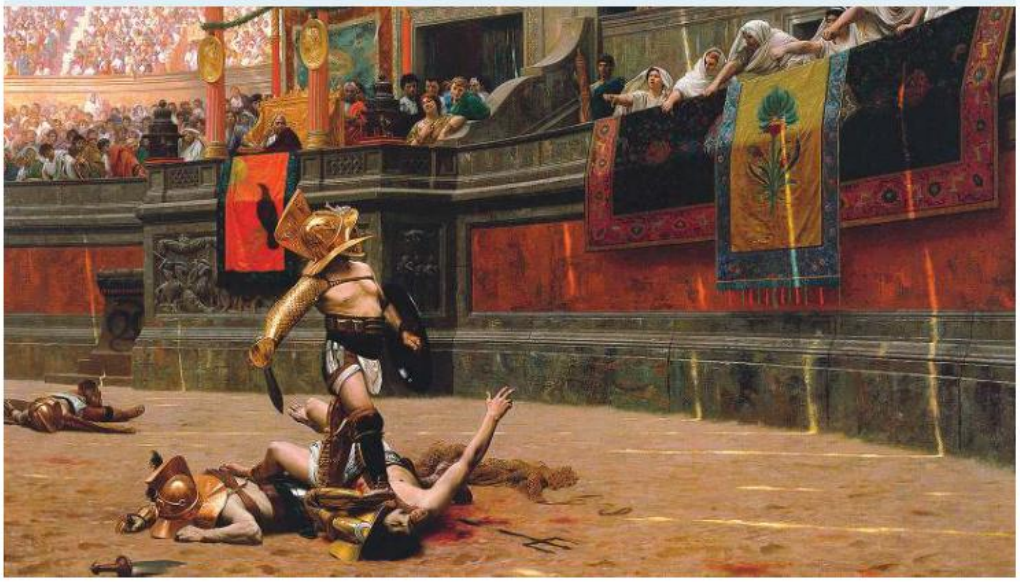
1. Describe the weapons that the gladiators are using.
2. What is the setting of the fight?
3. What would be the modern-day equivalent of this type of entertainment?

Did you know?

Public entertainments included gladiator fights, and fights involving gladiators and animals.

So many lions were captured for such shows that they vanished from the Middle East.

SOURCE 3 Public entertainments included fights between gladiators, and between gladiators and animals.



SOURCE 4 A typical villa of the type occupied by wealthy Romans

- **A** The atrium, or central courtyard, contained a shallow pool. The pool was filled by rain that entered through an opening in the roof (through which light also entered).
- **B** The solid high external walls had few or no windows.
- **C** The lararium, or household shrine, was also usually erected in the atrium.
- **D** Small olive oil lamps made of pottery or bronze provided lighting in the evening.
- **E** Furniture consisted mainly of beds, couches, low tables and chairs, which were placed on a mosaic or tiled floor. The floor was sometimes heated from beneath.

Did you know?

Roman fathers had total power over families, including killing or selling children. Girls had little schooling, and married women had few rights.

5.8.2 Roman culture

Ancient Rome had a rich culture, mainly enjoyed by the wealthy. They were influenced by the Greeks, especially in art. Rich Romans used Greek slaves to educate their children.

The Romans loved Greek literature. Famous poets like Virgil and Horace wrote important works. Virgil's *Aeneid* tells of Aeneas. Both Virgil and Horace were supported by noble **patronage**.

Virtues

Ancient Romans valued **virtue**. Boys learned to read, write and use Roman numerals, and studied **rhetoric** and great writers.

SOURCE 5 The general layout of cities throughout the Roman Empire followed the pattern set for the city of Rome.

- **A** Roman toilets had stone benches with holes. Running water took away waste, and a sponge on a stick was used for cleaning.
- **B** Roman roads were straight and long. They had layers of rubble, concrete or gravel, with stone slabs on top. The middle was higher to help water drain off.
- **C** The Romans improved the Etruscans' arch, creating tunnel vaults, cross-vaults and the dome.
- **D** Aqueducts used gravity to carry water to settlements and had to be built very carefully.
- **E** The Romans could fire bricks and used tools like rulers and chisels. They used a groma to make straight, level roads by lining up strings with landmarks.
- **F** Domes were used in public buildings, like baths. The Pantheon, built around 120 CE, has the second biggest dome in the world.
- **G** The Romans changed building by inventing concrete using volcanic dust, lime and water that set into hardened material.
- **H** People visited public baths daily to wash and socialise. They had hot and cold pools, saunas and shops. Some could hold thousands!
- **I** The public baths were heated by a **hypocaust**. Slaves kept fires burning, sending hot air through tunnels to heat the pools.
- **J** Roman cranes were large wooden structures, powered by a big wheel turned by slaves.

Did you know?

Roman buildings still stand today. Wealthy homes had running water, while poor housing often fell down. The Cohortes Vigilium fought fires.

5.8.3 Roman technology

The Romans built 84 000 km of roads, bridges, aqueducts and public buildings, many of which lasted for centuries.

As the Roman Empire grew, they built roads, walls and towns. These needed water, toilets and **public baths**. The army did much of the work.

5.8 SkillBuilder activity COMMUNICATING

Ancient Roman society achieved much in planning and arts but was cruel to slaves and to women and children.

1. Create a mind-map of the positive and negative aspects of ancient Roman society.
2. Based on your mind-map, briefly **explain** how you think Roman society was capable of such contradictions.

5.8 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 4	3, 5, 6, 7	8, 9

REMEMBER AND UNDERSTAND

1. **State** the jobs that most plebeians were employed in.
2. Why did large numbers of plebeians become unemployed?
   A. No wages needed; farming succeeded.
   B. Skills were not high enough for new technology.
   C. Machines made work easier.
   D. Slaves replaced free workers.
3. **Describe** ways in which privileged Romans were influenced by Greek culture.
4. Boys and girls had a similar education. True or False?
5. **Describe** the facilities that were needed in Roman towns.

ANALYSE AND APPLY

6. **Identify** what evidence **SOURCE 2** provides about the housing of the poor.
7. Imagine you are a member of the wealthy Roman family who own the villa depicted in **SOURCE 4**. **Describe** how you would decorate and furnish it.
8. Examine **SOURCE 5**.
   a. **Describe** a Roman public toilet.
   b. **Explain** how aqueducts worked.
   c. **Explain** how public baths were heated.
   d. **Construct** and label a diagram to show how Roman roads were built.

EVALUATE AND COMMUNICATE

9. Referring to the sources and other information in this lesson, **explain** how the growth of the Roman Empire changed Roman society.

Answers and sample responses for this topic are available online.

LESSON 5.9 What did ancient Romans believe about death?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** death and burial practices in ancient Rome
- **identify** the significance of commemorations of the dead as an expression of family identity and status.

Tune in

Losing someone affects those left behind. In ancient Rome, how might people have remembered them?

1. **What do you think most people, in modern times, believe about death?**
2. **Do religious people have different beliefs about death to people who are not religious?**
3. **Do you think different religions have different beliefs about death?**
4. **Did ancient Romans prefer cremation or burial?**
5. **Did they have anything like modern funerals?**

SOURCE 1 This stele (upright stone slab) served as the grave marker of a Roman family group of former slaves with a male child.

5.9.1 Beliefs and funeral customs

Roman funerals and cemeteries show their beliefs about death, honouring the dead and the afterlife.

Many Romans believed souls lived on after death and could be judged. They placed a coin in the dead person's mouth to pay the ferryman to the underworld.

Romans believed in caring for their dead. When someone died, their family mourned and called their name. The body was washed, dressed in clothes like a toga and prepared for burial. Funeral processions went from home to the cemetery. There were ceremonies with chanting, speeches and sometimes animal sacrifices.

5.9.2 Tombs and commemorations

Through most of the period of the Roman Empire, Romans usually cremated bodies and kept ashes in urns. Later, burial became more common, often in grand tombs.

Poor Romans had simple tombs. Those who could not afford them used catacombs, which are tunnels under the city.

After funerals, Romans remembered the dead. They inscribed epitaphs on tombs and celebrated during the nine-day Parentalia festival. Wealthy families displayed portrait busts at home.

SkillBuilder discussion

Using historical sources

1. What are the figures on the sarcophagus?
2. What can you interpret from the depictions?
3. Who donated the sarcophagus?

SOURCE 2 An inscription on this sarcophagus reveals that it was donated by two Roman citizens to their friend. The figures on the sarcophagus are a cobbler (shoemaker) and a spinner (a maker of thread for cloth). It is probable that one of these occupations was that of the deceased and the other was that of the donors.

5.9 SkillBuilder activity **USING HISTORICAL SOURCES, COMMUNICATING**

At least 40 networks of ancient catacombs lie under the city of Rome, often decorated with wall paintings.

1. Conduct research on these catacombs, making notes on anything that refers to their importance to the study of Roman history.
2. **Propose** a short explanation for why the catacombs are important to historians and archaeologists. Many websites provide useful information. You could include some illustrations in your report.

5.9 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
3, 4, 5, 6	1, 2, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. **Describe** what Roman family members did at home and at the cemetery following a family member's death.
2. **Explain** what the custom of placing a coin on or in a dead person's mouth reveals about the following.
   a. The influence of Greek myths on Roman ideas
   b. The belief, held by at least some Romans, in a life after death
3. Where did funeral ceremonies take place? **Select** all that apply.
   A. In the town centre
   B. At the deceased's home
   C. Funeral ceremonies did not occur
   D. At the cemetery

4. What was a sarcophagus?
   A. A traditional dress
   B. An animal
   C. A coffin
   D. A funeral rite
5. The tombs and burial places of the rich and poor were similar. True or False?

ANALYSE AND APPLY

6. The child in **SOURCE 1** is wearing a toga. **Explain** what this tells you about Roman society.
7. **Account for** the gift of the sarcophagus in **SOURCE 2**.
8. In a style that would appeal to their families, **propose** a eulogy for any one of the figures in **SOURCE 1** or **SOURCE 2**.

EVALUATE AND COMMUNICATE

9. Use the sources and other information in this lesson to **explain** what we could discover about Roman society from evidence of funeral customs. Use the following headings: attitudes to the dead; beliefs about an afterlife; occupations; social classes; movement between social classes.
10. Why would the change from cremations to burials have provided more evidence of Roman inequality?

Answers and sample responses for this topic are available online.

LESSON 5.10 How did ancient Roman laws and religion change?

LEARNING INTENTION

By the end of this lesson you should be able to **explain** the significance of changes in Roman religion and laws to Roman government, daily life and values.

Tune in

Demeter was the ancient Greek goddess of agriculture, grain and bread. In Roman times, worship of Demeter was merged with worship of Ceres, the Roman goddess of agriculture.

1. **As you already know, women had almost no rights in Roman society. How do you think it came about that ancient Rome had many goddesses as well as gods?**
2. **Are you aware of any other ancient Roman goddesses?**
3. **How do you think ancient Roman gods and goddesses featured in daily life?**

SOURCE 1 An ancient clay statue of the goddess Demeter

5.10.1 Roman law

Over 1200 years, many changes affected Roman society, especially in law and religion.

When Etruscan kings ruled, laws were based on their decisions. In the Roman Republic, written laws were needed to ensure fairness.

In 451 BCE, ten Roman citizens recorded the laws. These became the Twelve Tables (see **SOURCE 2**) and focused on citizens' rights.

SkillBuilder discussion

Using historical sources

1. Read **SOURCE 2**. What does 'Table IV, law 2' speak about?
2. Which law prevented marriages between plebeians and patricians? What does this mean?
3. What can be concluded from Table IV, law 2?

SOURCE 2 Three laws from the Twelve Tables

Table IV, law 2: If a father sell his son three times, the son shall be free from his father.

Table V, law 1: Females shall remain in guardianship [under the control of their fathers] even when they have attained their majority [became adults].

Table XI, law 1: Marriages should not take place between plebeians and patricians.

As Rome grew, new laws were added for everyday life, covering crime, property, trade and politics. The rich often used bribery (see **SOURCE 3**).

SOURCE 3 From the Roman writer, Petronius, who lived in the first century CE

What use are laws when money calls the tunes and people without a gentleman's income have no real rights at all?

Changing laws

Over the centuries, Roman law changed in many ways. This included decisions by magistrates, Senate decrees, assembly votes and orders from emperors. For example, in 212 CE, Emperor Caracalla gave citizenship to all free people. Laws also became kinder to women, children and the poor.

5.10.2 Roman religion

The Romans believed in many gods and goddesses. They accepted other religions as long as people honoured the Roman emperor. Roman religion focused on rituals for protection, rather than rules for living or beliefs about an afterlife.

Roman state religion

Ancient Romans built temples for their gods and held rituals and festivals with music and animal sacrifices. Families also had shrines at home for their household gods.

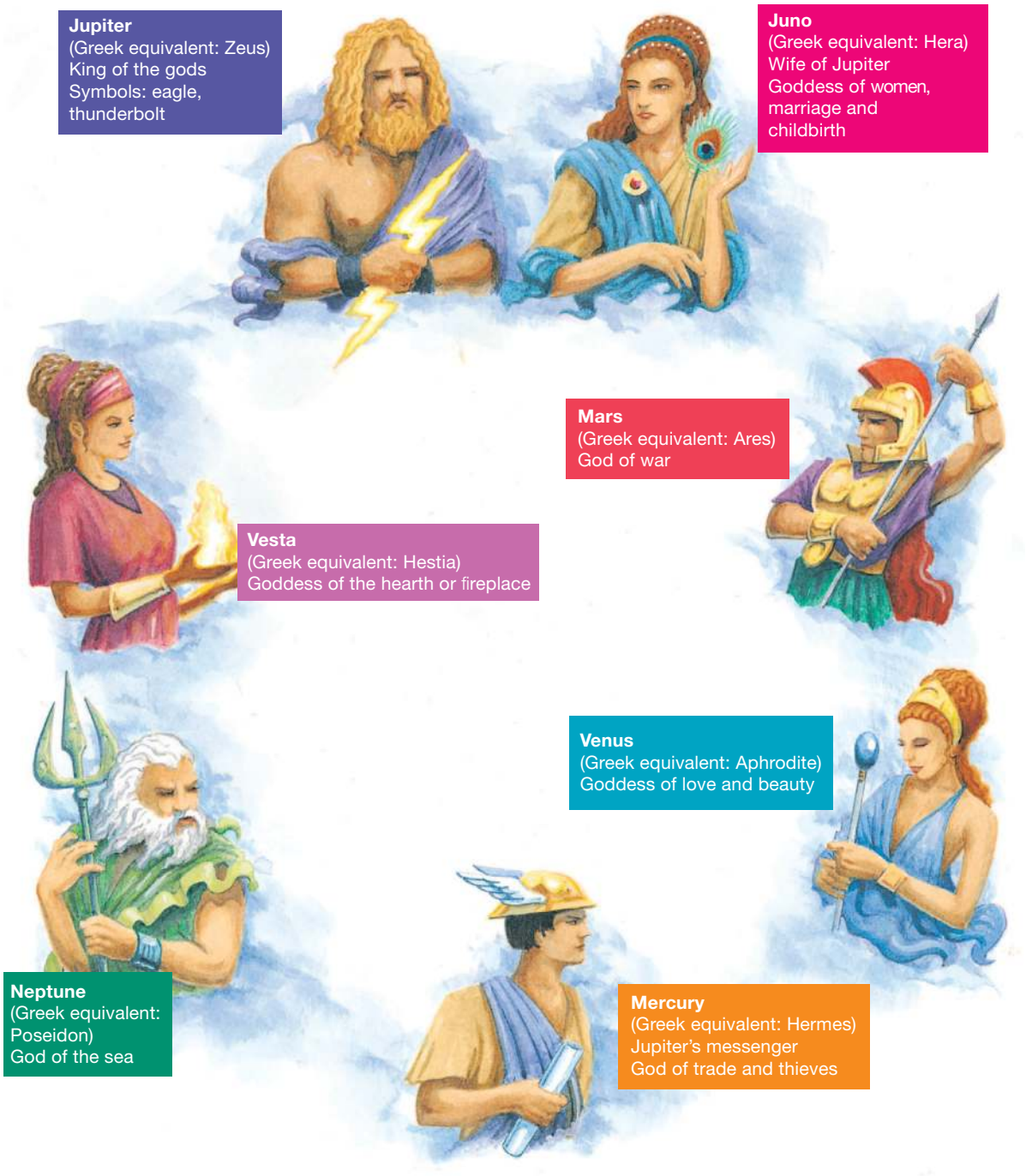
Romans believed that it was important to know the will of the gods before political decisions were made.

People thought the gods sent signs called 'omens'. They used **divination** to read these signs, using animal entrails, dice and **astrology** and consulting oracles.

Adopted gods

As the empire grew, Romans added more gods, especially from the Greeks. They use Roman names for Greek gods. For example, Poseidon became Neptune, and Zeus became Jupiter, the most important Roman god.

SOURCE 4 Some Roman gods and goddesses and their Greek equivalents



Mithraism, the cult of Mithras, believed in life after death and was popular with Roman soldiers. They linked the Celtic goddess, Sulis, with Minerva and called her 'Sulis Minerva'.

SkillBuilder discussion

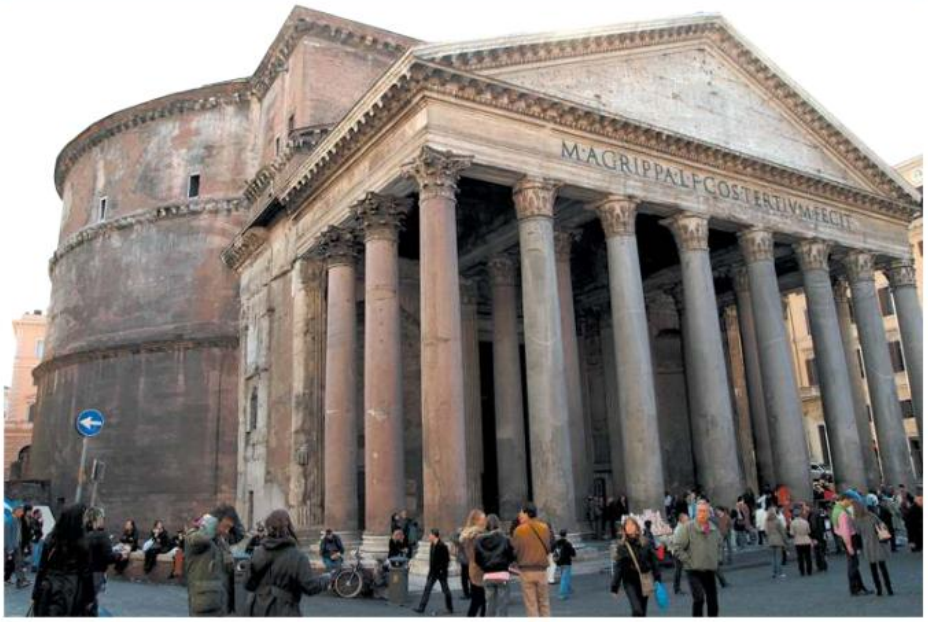
Continuity and change

1. Describe the architectural design of the Pantheon.
2. What role would the Pantheon play in Roman religious practices before it was converted into a Christian church?
3. The Pantheon was converted to a Christian church in the seventh century. How might its function have changed?

Did you know?

Roman priests and priestesses performed rituals to please the gods. The Vestal Virgins were important, keeping the fire for the goddess Vesta. They could be executed for having relationships.

SOURCE 5 The Pantheon, the largest Roman temple. It was built between 118 and 128 CE.



5.10.3 The spread of Christianity

Christianity began in Roman Palestine around the first century CE. It was based on Jesus of Nazareth's teachings. He said he was God's son and taught people to be kind. Some saw this as **blasphemous**, and he was arrested and crucified by Pontius Pilate.

Jesus' followers shared his message, bringing hope to many, especially the poor and slaves. The Romans saw Christianity as a threat because Christians wouldn't worship the emperor. Persecution continued until Emperor Constantine legalised Christianity in 313 CE, making it the state religion by 391 CE.

SOURCE 6 Account by the Roman historian, Tacitus (c. 55–117 CE), of the persecution of Christians by the Emperor Nero

Dressed in wild animals' skins [the Christians] were torn to pieces by dogs, or crucified, or made into torches to be ignited after dark. Nero provided his Gardens for the spectacle, and ... mingled with the crowd ... Despite their guilt as Christians, and the ruthless punishment it deserved, the victims were pitied. For it was felt that they were being sacrificed to one man's brutality rather than to the nation's interest.

SOURCE 7 From the Edict of Milan, in which Emperor Constantine granted religious freedom. An edict is a formal command.

... no one whatsoever should be denied freedom to devote himself either to the cult of the Christians or to such religion as he deems best suited for himself ...

5.10 SkillBuilder activity HISTORICAL PERSPECTIVES AND INTERPRETATIONS

Billions of Christians believe Jesus of Nazareth was the most important person in history. Others, including those of different religions, might not see him as God's son but still find him significant.

State your view on whether Jesus should be regarded as having great historical significance.

Consider the following:

1. How significant was his teaching to people at the time?
2. Were large numbers of people influenced by him in later times?
3. To what extent were people's lives changed by his teachings and influence?
4. How long-lasting has his influence been?

5.10 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 5, 7	3, 4, 8	6, 9, 10

REMEMBER AND UNDERSTAND

1. Answer the following.
   a. Why did the Roman Republic need written laws? **Select** all that apply.
      A. To prevent magistrates from interpreting the laws unfairly
      B. To prevent slaves from ever reaching freedom
      C. To prevent patricians from dominating matters of law
      D. To prevent emperors from creating new laws
   b. **Explain** how lawmaking changed under the emperors.
2. The purposes of Roman religious rituals and festivals were for the entertainment of the people. True or False?
3. **Explain** how Roman religion changed as the empire expanded.
4. **Identify** why Christianity had a special appeal for slaves and the poor.
5. The Romans were tolerant of other religions. So why did they persecute Christians?
   A. They were at war with Christians.
   B. The Christians were starting uprisings.
   C. They did not believe in the Christian god.
   D. The Christians refused to worship the Roman emperor.

ANALYSE AND APPLY

6. Read **SOURCES 2** and **3** and **identify** what these extracts reveal about the powers of fathers, the rich and patricians.
7. Using **SOURCE 4**, **list** three Greek gods and/or goddesses and their Roman equivalents.
8. The Pantheon (**SOURCE 5**) is considered an architectural wonder. **Explain** what the construction of such a building suggests about the importance of religion to the Romans.
9. **Analyse SOURCE 6**. **Identify** what kinds of punishments were suffered by Christians.

EVALUATE AND COMMUNICATE

10. Read **SOURCE 7** and **explain** why the Edict of Milan was a turning point in Roman history.

Answers and sample responses for this topic are available online.

LESSON 5.11 Why did the Roman Empire fall?

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the power struggles within Rome that gradually destroyed its unity, economy and ability to defend itself from invasion.

Tune in

The arch shown in **SOURCE 1** was commissioned by the Roman Senate and was erected in Rome to honour Emperor Constantine's victory over his rival, Maxentius, in 312 CE.

In 315 CE when the arch was completed, the Roman Empire appeared to be strong, but it was already showing signs of weakness.

SOURCE 1 Some of the details on the Arch of Constantine

Discuss what you think could bring the empire down.

5.11.1 A weakening empire

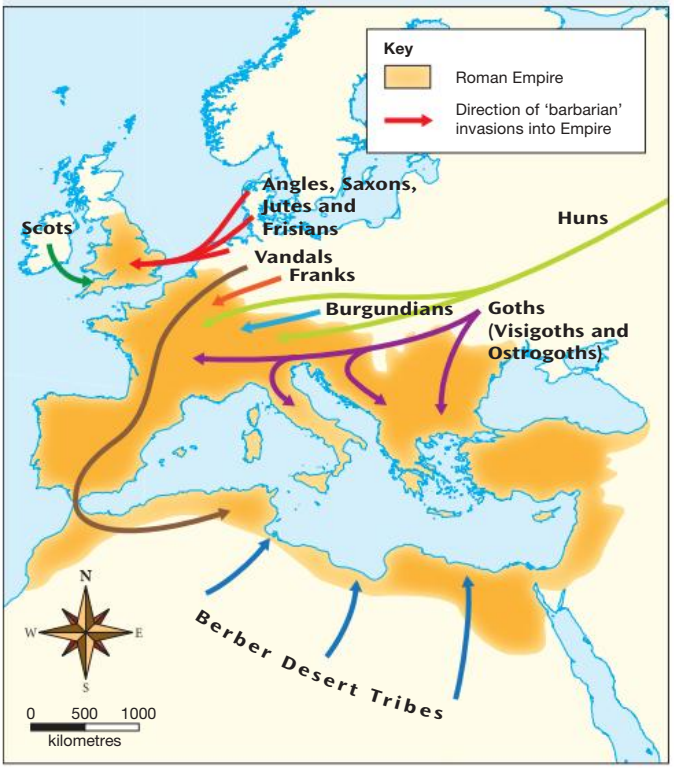
The Roman Empire started to weaken around 180 CE. Army generals fought for power, and trade declined. **Barbarian** raids also increased.

In 284 CE, Emperor Diocletian split Rome into Eastern and Western empires with two emperors. He hoped this would make the government stronger, but problems continued.

From 307 to 310 CE, six rival emperors fought for power. The winner, Constantine, built a new capital called New Rome, later named Constantinople (now Istanbul).

In 378 CE, the Visigoths defeated Rome's armies. Emperor Theodosius (379–395 CE) let them create a separate state within the empire as they promised to protect the empire. Theodosius reunited the empire in 394 CE, but the split became permanent after his death.

SOURCE 2 The weakening of the Western Roman Empire. The arrows show the directions from which different barbarian groups invaded the empire.



Source: Map drawn by Spatial Vision

5.11.2 The empire falls

In the fifth century CE, many tribes moved across Europe. The Burgundians invaded Gaul, while the Angles, Saxons and Jutes attacked Britain. In 410, Roman armies left Britain to defend Rome, which was sacked by the Visigoths.

The invasions weren't planned. Many tribes invaded the Roman Empire to escape others. For example, the Ostrogoths fled from the Huns. In 451, Romans, Visigoths and Burgundians defeated the Huns. However, in 455, the Vandals looted Rome, and in 476, Odoacer removed the last Western Roman emperor, Romulus Augustulus.

SOURCE 3 Detail from The Big Game Hunt, a mosaic of the third to fourth century CE found at the Villa dei Casale, Piazza Armerina, Sicily

Historians past and present have suggested several reasons for the fall of the Roman Empire. The mind-map shown in **SOURCE 4** outlines some of them. War and economic collapse stand out as the key reasons.

SOURCE 4 Reasons for the fall of the Roman Empire

Reasons for the fall of the Roman Empire

Civil wars
The involvement of Roman army legions in civil wars reduced Rome's ability to hold its frontiers.

Christianity
Some early writers claimed that Christianity weakened Rome because it made many people into pacifists.

Declining health
Some writers argued that lead poisoning through water carried in lead pipes caused a decline in Roman health and intelligence.

The changing Roman army
As attacks on the empire increased, ever more barbarians were recruited into the Roman army. The army's loyalty could no longer be taken for granted. Roman legions were essential for the empire's survival, but they were rebellious and a huge drain on Rome's finances.

Economic collapse
Farm labour was increasingly performed by slaves, which threatened the livelihoods of small farmers and farm workers. These citizens became an unproductive burden on the state. As Rome lost control in the provinces, trade became more difficult and Rome lost the taxes it had received from these areas.

The barbarians
Pressures from large groups of barbarians on several of the empire's frontiers were increasingly hard to withstand.

Moral decline and corruption
Some early writers pointed to a decline in morals. Roman emperors increasingly came to power through corrupt means, and several of them were assassinated.

SkillBuilder discussion

Continuity and change

1. Study **SOURCE 4**. How did the barbarians contribute to the fall of the Roman Empire?
2. What is the most important reason for the fall of the Roman Empire?
3. What role did religion play in the fall of the Roman Empire?

5.11 SkillBuilder activity QUESTIONING AND RESEARCHING, COMMUNICATING

Several barbarian groups contributed to the fall of the Roman Empire.

1. **Select** one of these groups to focus on.
2. **Investigate** your chosen group, making notes on any points that explain how they contributed to the fall of the Roman Empire. Many websites provide useful information in this area.
3. **Select** at least three sources that help to provide evidence for your explanation. Make sure you keep a list of all sites or sources you use for your bibliography.
4. Create a report to present to the class. You could include some illustrations in your report or support it with a PowerPoint presentation.

5.11 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 3, 4, 5	2, 6, 7, 8	9, 10

REMEMBER AND UNDERSTAND

1. **State** around what year the Roman Empire began to weaken.
2. **Explain** why Diocletian divided the Roman Empire.
3. What event in 378 CE showed Rome's weakness?
   A. Raids by barbarians into the empire's lands
   B. The division of Rome into Eastern and Western empires
   C. Defeat of Roman armies by the Visigoths
   D. The death of Theodosius
4. The Romans abandoned Britain in 410 CE to defend Rome. True or False?
5. **Select** the correct definition of the term 'barbarians'.
   A. Soldiers in the Roman army
   B. All peoples who lived beyond the borders of the Roman Empire
   C. Advanced, civilised people who dominated early Rome from about 575 BCE to about 396 BCE
   D. Members of the aristocratic families that founded the Roman Republic
   E. A mountain tribe of central Italy

ANALYSE AND APPLY

6. Study **SOURCE 2** and **identify** the various groups of barbarians who threatened the Roman Empire.
7. With reference to **SOURCE 2**, **explain** why the different directions of these separate attacks would have made it difficult to defend against them.
8. **SOURCE 3** depicts traders loading boats.
   a. **Describe** the scene.
   b. **Explain** why declining trade would have been both a cause and an effect of the weakening of the Roman Empire.

EVALUATE AND COMMUNICATE

9. **Construct** a timeline of events leading to the fall of the Western Roman Empire.
10. **Identify** reasons in **SOURCE 4** that you think would have contributed the most to the empire's fall.

Answers and sample responses for this topic are available online.

LESSON 5.12 What is Rome's heritage?

LEARNING INTENTION

By the end of this lesson you should be able to **explain** how the spread of Christianity and the survival of Roman power in the Eastern Empire helped to preserve Roman culture, despite its decline in western Europe.

Tune in

Many visitors travel to Rome and Italy to see ancient Roman sites, like the Colosseum and the Roman Forum. These are important parts of Rome's history.

Discuss what else you think could be part of Rome's heritage.

SOURCE 1 The Colosseum is a popular part of ancient Roman heritage.

1. **What key features of the Colosseum are visible?**
2. **How was the Colosseum used?**
3. **What does it symbolise?**

5.12.1 The Eastern Roman Empire and Christianity

As the Western Roman Empire fell, it split into non-Roman kingdoms. Many still felt Roman. Europe entered the Dark Ages with wars and fewer cities.

Odoacer took down Romulus Augustulus but didn't want to be emperor. He accepted the Eastern Roman emperor. Later, Emperor Justinian tried to restore the Western Empire. The **medieval** Byzantine Empire lasted until 1453 CE, when Constantinople fell to the Ottoman Turks.

Roman Christianity

When Christianity became the Roman state religion, it changed the Church more than the Empire. Roman emperors supported Christianity, helping to stop **pagan** beliefs and **heresy**. King Clovis of the Franks converted in the 490s, helping the Church keep Roman culture alive in medieval Europe.

SOURCE 2 From Hugh Trevor-Roper, *The Rise of Christian Europe*, 1966

In ... some respects ... the barbarians preserved rather than destroyed the Empire ... The barbarian Christian kings who rule over Italy, France and Spain in the fifth and sixth centuries still regard themselves as Roman ... they still acknowledge themselves subject to the emperor in the East; they still respect Roman traditions, Roman methods.

SkillBuilder discussion

Using historical sources

1. Study the image at **SOURCE 3**. Why are Emperor Constantine and Emperor Justinian shown presenting gifts to the Virgin Mary in this mosaic?
2. What significance did the city of Constantinople and the Hagia Sophia hold in the context of the Byzantine Empire and Christianity?
3. How does this mosaic reflect the religious and political power of the Byzantine emperors during Justinian I's reign?

SOURCE 3 A mosaic in the Hagia Sophia, in Istanbul. This church was built on the orders of the great Eastern Roman emperor Justinian I (527–565 CE). The mosaic shows Emperor Constantine presenting the Virgin Mary with the city of Constantinople and Justinian presenting her with the Church.

Did you know?

Roman law influenced laws in Europe for centuries. Latin, the Roman language, helped shape Italian, French, Spanish and Portuguese. Many Latin words are also in English.

5.12.2 Passing on the culture

Ancient Roman writers influenced later authors. In the **Middle Ages**, Christian monks copied these books by hand, and many are still read today. Greek ideas also passed to the Romans. Latin became the language of the Church and scholars, allowing educated people to communicate. Today, Latin terms are still used in sciences like botany to classify plants.

In the fifteenth century, the Renaissance revived interest in Roman art and ideas. Many buildings show this influence. In the eighteenth century, leaders used ideas from the Roman Republic to create new governments.

European unity

The Roman Empire was replaced by many states, but the idea of European unity remained. Around 800 CE, Charlemagne united much of Europe in an empire based on Roman models. This empire fell apart after his death, but Europe later united again through the European Union.

Did you know?

The Roman calendar had 12 months named after gods and emperors. For example, August is named after Emperor Augustus.

SOURCE 4 When the Pantheon was given to the Christians in 608, it was preserved with few changes apart from additions such as this Christian altar.

5.12 SkillBuilder activity COMMUNICATING

In history, we use arguments to understand the past and must ensure our reasoning is correct.

An argument is a group of sentences arranged so that the sentence called the 'conclusion' is said to follow from the other sentences that are called the 'premises'.

A logical argument is one in which the conclusion follows from the premises.

A fallacy is a misleading argument, or an argument based on reasoning errors.

A common mistake is thinking that if one event happens first, it causes the next. This is a fallacy.

An example could be the following argument:

Premise 1: In 284 CE, the Roman Emperor Diocletian divided Rome into Eastern and Western empires under two separate emperors.

Premise 2: The Western Roman Empire declined and fell during the following two centuries.

Conclusion: Dividing the Roman Empire caused the Western Roman Empire to collapse.

This argument might seem reasonable until you consider what you get if you use the same kind of reasoning for a different argument. For example:

Premise 1: The team ate big servings of oranges during half-time in the game.

Premise 2: The team scored its winning goals in the second half of the game.

Conclusion: Eating oranges caused the team to win.

The reasoning error with both arguments is assuming that the first event must be the cause of the second event without demonstrating any causal link between the two events.

Construct a logical argument with at least two premises and a conclusion to show how ancient Greek culture was passed on to the modern world through Roman culture.

5.12 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 5	3, 4, 6, 8	7, 9, 10

REMEMBER AND UNDERSTAND

1. As the Western Roman Empire collapsed, Europe was entering the **Medieval** / **Dark** / **Middle** Ages.
2. How did the Eastern Roman Empire maintain Roman civilisation after the fall of the Western Roman Empire? **Select** all that apply.
   A. Removed Roman Christianity
   B. Maintained Roman law
   C. Maintained Roman culture
   D. Altered Roman law
   E. Maintained Roman Christianity
3. **Explain** how the power of the Roman Christian Church was maintained.
4. **Describe** the roles in preserving Rome's cultural heritage played by the following.
   a. Christian monks and scholars in the Middle Ages
   b. The fifteenth-century Renaissance
5. What political idea from ancient Rome influenced thinkers in the eighteenth century?

ANALYSE AND APPLY

6. The Emperor Justinian used religion to create political unity. **Describe** the scene in **SOURCE 3** and explain the message it gave to early Christians.
7. **Describe** ways in which **SOURCE 2** provides evidence of the continuation of Roman culture after the fall of Rome.
8. Look closely at **SOURCE 4** and **explain** how it provides an example of ways in which Rome's heritage has been preserved.

EVALUATE AND COMMUNICATE

9. Using the sources and information in this lesson, **construct** a mind-map to show what Roman influences continued after the fall of Rome.
10. The European Union (EU) has removed economic barriers between member states and encouraged free trade across its borders. **Suggest** how this could be seen as a legacy of the ancient Roman Empire.

Answers and sample responses for this topic are available online.

LESSON 5.13 Inquiry: How bad was Emperor Nero?

LEARNING INTENTION

By the end of this lesson you should be able to:

- corroborate primary and secondary sources
- ask questions to **evaluate** the accuracy of different interpretations.

Background

In this inquiry, you will use skills in corroborating primary and secondary sources and asking questions about their accuracy and usefulness to draw conclusions and use as evidence.

SOURCE 1 The site of Rome's Circus Maximus, where, according to Suetonius, Nero drove a chariot in a race

SkillBuilder discussion

Historical significance

1. What were Nero's entertainments?
2. What type of life did Nero lead?
3. What novel game did he invent?

SOURCE 2 An account of Nero's lifestyle by the ancient Roman writer, Suetonius (c. 69–140 CE)

He gave an immense variety of entertainments ... parties, chariot races in the Circus, stage plays, a gladiatorial show ... and actually raced four-camel chariots! At the Great Festival, as he called the series of plays devoted to the eternity of the Empire ... all kinds of gifts were scattered to the people ...

Nero practiced every kind of obscenity, and ... finally invented a novel game: he was released from a cage dressed in the skins of wild animals, and attacked the private parts of men and women who stood bound to stakes.

Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task you can use this rubric to self-assess.

Conflicting interpretations in secondary sources

Nero Claudius Caesar Germanicus was the adopted son of Emperor Claudius and became emperor at just 17 in 54 CE. He was known for doing terrible things, like hurting his family and senators. People liked his parties, but in 68 CE, he lost power and took his own life.

Many people think Nero was a very cruel emperor. This idea grew from a movie called *Quo Vadis*. It showed him as the main enemy of Christians and linked him to the fire in Rome.

Read the following secondary sources.

SOURCE 3 From Robert Draper, 'Rethinking Nero', *National Geographic*, 2014

The case against Nero ... would appear to be open and shut. And yet ... his death was followed by outpourings of public grief ... mourners long continued to bring flowers to his tomb ... The dead do not write their own history. Nero's first two biographers, Suetonius and Tacitus, had ties to the Senate and would memorialise his reign with lavish contempt ...

SOURCE 4 From Alexander Canduci, *Triumph and Tragedy*, 2010

His creative and artistic side sat uneasily next to his bloodthirsty [side] and ... disregard for others ... in the aftermath of the fire rumours spread that Nero was the culprit who had started it. In order to throw suspicion off himself ... Nero began a campaign against the Christians ... feeding them to the beasts at the Great Games, crucifying them and setting them alight.

SOURCE 5 From Shushma Malik and Caillan Davenport, 'Mythbusting Ancient Rome: Throwing Christians to the lions', *The Conversation*, 2019

The myth of constant persecution [of Christians] largely stems from two works written in the early fourth century A.D., *On the Deaths of the Persecutors* by Lactantius, a Christian professor of Latin, and the *Church History* of Eusebius, Bishop of Caesarea ... Those authors were living in the reign of Constantine, the first Christian emperor ... In both their works, the torture and execution of Christians in preceding centuries is associated with the emperors under whom they occurred. But the reality is that the punishment of Christians in the first three centuries A.D. was not directed by imperial policy. The emperor Nero is referred to as the first persecutor of the Christians by Lactantius ... However, the initiative to punish Christians did not come from the emperors at all, but from below.

Consider the following questions.

1. Read **SOURCE 2**. What did Suetonius think of Nero?
2. Read **SOURCE 3** and **describe** Robert Draper's view.
3. In **SOURCE 4**, what judgement of Nero does Alexander Canduci make?
4. Read **SOURCES 5** and **6**. **Explain** how these sources account for the popular belief that Nero was responsible for Roman persecution of Christians and who the authors regard as really responsible. What point are the authors making about the role of rumours in creating Nero's terrible reputation?
5. For each of these sources, does the writer accept or challenge the view that Nero was a monster?

SOURCE 6 From Caillan Davenport and Shushma Malik, 'Mythbusting Ancient Rome: The emperor Nero', *The Conversation*, September 2016; on the allegation that Nero was responsible for the Great Fire of Rome (64 CE)

But are any of these stories ... of the emperor Nero actually true? ... These tales can be found in our ancient historical sources (all of which were written at least a generation after Nero's death) but should not be taken at face value. This is because they are reported by sources as rumours, rather than facts ... While most scholars now agree that Nero was not responsible for the fire, the modern-day rumour mill (as represented by the internet) is loath to exonerate the emperor. There are two reasons usually given for why Nero set fire to Rome. The first is that he was a mad megalomaniac who burned down the city simply because he could. The second ... is that Nero wanted to rebuild Rome according to his own plans, which included a sumptuous new residence for himself, the 'Golden House' ... There is a modern myth that the new palace was built solely for parties and orgies.

If we examine our historical accounts closely, the only evidence for Nero the arsonist comes from rumour and hearsay. This is freely admitted by the historian Tacitus: even though Nero was out of Rome when the fire started ... Our ancient sources are clear about the fact that they are reporting rumours ... Rumours, even if ultimately untrue, helped to define the expectations of a good emperor in the minds of the readers.

Reading these sources will enable you to compare different judgements that have been made. You can also use the internet and/or your library to find other relevant secondary sources.

Inquiry steps

Step 1: Questioning and researching

Write your **inquiry question**. It could be based on something like the following issues.

a. Can we trust a source that does not cite earlier sources to support its claims?
b. What is the difference between these sources in relation to the way they judge Nero?
c. Would Nero's behaviour have been worse than other Roman rulers?
d. What other views on this issue have been expressed by historians?

Research your question.

Step 2: Using historical sources

Analyse the sources provided and others that you find.

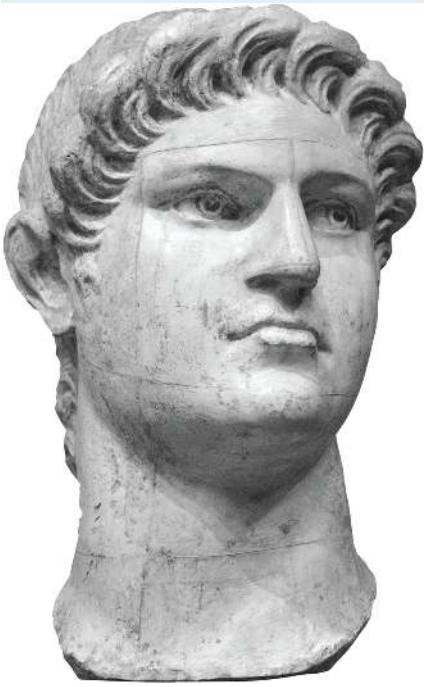
Step 3: Historical perspectives and interpretations

Evaluate the arguments in the sources.

Step 4: Communicating

What is your answer to your inquiry question? **Present** your findings in a format of your choosing. Support your answer with examples from your research, analysis and evaluation.

SOURCE 7 Emperor Nero



LESSON 5.14 Review

5.14.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

5.2 How do we know about ancient Rome?

- Ancient Romans left vast amounts of written evidence.
- Rome has many archaeological treasures.

5.3 How did Rome become so powerful?

- According to legend, Rome was founded in 753 BCE.
- In 509 BCE, the Romans rebelled against their Etruscan kings and founded a republic.
- Rome grew powerful through alliances and conquest.

5.4 How did the Roman Empire grow?

- Through the Punic Wars, between 264 and 146 BCE, Rome eliminated a major rival and became the strongest power in the Mediterranean region.
- By 96 CE, Rome had extended its empire into northern Europe and to the Black Sea.

5.5 Why was the Roman army so successful?

- From 396 BCE, the Roman army became a professional fighting force.
- Roman army discipline was harsh.
- Legionary rewards gained support for leaders.

5.6 How was Rome ruled?

- Roman citizens were divided into patricians and plebeians.
- Julius Caesar seized power in 49 BCE but was assassinated.
- Octavian ended the republic and controlled Rome 27 BCE.

5.7 How brutal was Roman slavery?

- Spartacus led a slave revolt in 73 BCE, defeating Roman legions before defeat.
- Slaves could be treated with great brutality.

5.8 What was it like to live in the Roman Empire?

- Widespread use of slave labour changed Roman society.
- Vast differences existed between the lives of rich and poor Romans.
- Greek culture influenced the lives of the more privileged Romans.
- Roman technology built enduring, impressive structures.

5.9 What did ancient Romans believe about death?

- Funeral customs reveal ancient Roman beliefs and values.
- Honouring dead ancestors was seen as duty.

5.10 How did ancient Roman laws and religion change?

- Roman law dealt mainly with the rights of men as citizens.
- Women, children and slaves followed the male head's authority.
- Emperors increasingly enacted laws through decrees.
- Romans worshipped hundreds of gods and goddesses.
- Christianity transformed from being persecuted to the state religion in 391 CE.

5.11 Why did the Roman Empire fall?

- From around 180 CE, the empire began to weaken.
- Civil wars and invasions caused empire's collapse.
- Historians have suggested many different reasons for Rome's fall.

5.12 What is Rome's heritage?

- The Eastern Roman Empire lasted nearly another thousand years.
- The Roman Christian Church helped to preserve Roman culture.
- The idea of European unity is one of many legacies of ancient Rome.

5.13 Inquiry: How bad was Emperor Nero?

- Historians have made very different judgements about Emperor Nero.
- Some have seen Nero as a monster.
- The worst judgements of Nero may be based on rumours.

5.14.2 Key terms

aqueduct a structure built to carry water long distances
astrology interpreting the influence of the stars on human affairs
auxiliaries soldiers in the Roman army drawn from areas conquered by Rome and made part of its empire
barbarians the Roman term for all peoples who lived beyond the borders of the empire
blasphemous great disrespect shown to God or to something holy, or something said or done that shows this kind of disrespect
civil war a war between rival factions within one state or country
crucified to be killed by crucifixion, an ancient form of execution in which the victim was tied or nailed to a pole or (as was Jesus) a cross and left to die slowly in agony
divination the skill of reading omens
Etruscans advanced, civilised people who dominated early Rome from about 575 BCE to about 396 BCE
forum an open meeting place of a town or city
heresy an opinion or belief that contradicts orthodox beliefs, especially in religion
hypocaust an underfloor and water-heating system used in Roman villas and public baths
loot goods or property taken from a defeated enemy after a battle
magistrates men elected by the citizens to run Rome for a year
medieval of the Middle Ages
Middle Ages between ancient and modern historical periods (generally between the fifth and fifteenth centuries)
pagan a name used to refer to people who believed in non-Christian gods
patricians members of the aristocratic families who founded the Roman Republic
patronage supporting and encouraging authors and artists
plebeians all non-patrician citizens of Rome
public bath a public building complex containing baths of varying temperatures, and sports and beauty facilities; a popular meeting place for Roman citizens
pumice lava ejected from a volcano that solidifies into a light, porous rock
republic a system of government in which the head of state is not a monarch
rhetoric the art of public speaking
Samnites a mountain tribe of central Italy
Senate the governing body in ancient Rome; (in theory) an advisory body of ex-magistrates
tenant farmers poor farmers who rented small plots of land
Thracian a native of the Roman province of Thracia
virtue a moral standard or value

5.14.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

When, where and why did ancient Rome develop, and what were its defining features, achievements and legacies?

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.

learnon

Post-test	Online post-test
eWorkbooks	Customisable worksheets for this topic Reflection
Digital document	Key terms glossary

5.14 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 3, 4, 7, 8, 11	1, 5, 6, 10	9, 12

REMEMBER AND UNDERSTAND

1. Who were Rome's enemies in the Punic Wars?
   A. Etruscans
   B. Gauls
   C. Visigoths
   D. Carthaginians
2. How was Pompeii destroyed in 79 CE?
   A. Invasion
   B. Volcanic eruption
   C. Tsunami
   D. Disease
3. What tactics were employed by the Romans to control their empire?
   A. Allowing conquered peoples to run the empire
   B. Giving gifts to those they conquered
   C. Using conquered peoples against one another
   D. Killing everyone they defeated
4. In Roman society, what group of people were patricians?
   A. Rich people
   B. The poor
   C. Slaves
   D. Aristocrats

5. What was the period from 509 BCE to 27 BCE known as?
   A. Roman Republic
   B. Roman Kingdom
   C. Roman Empire
   D. People's Republic of Rome
6. The Roman invasion of Britain took place in which of these years?
   A. 390 BCE
   B. 146 BCE
   C. 43 CE
   D. 378 CE
7. People in Roman towns were supplied with which of these?
   A. Water, public toilets and public baths
   B. Free housing
   C. Banquets
   D. Transport
8. Who was Spartacus?
   A. A former Roman general
   B. A gladiator
   C. A Christian
   D. A Visigoth
9. What was the main reason the Romans persecuted Christians?
   A. Christians refused to worship the Roman emperors.
   B. Romans were intolerant of other religions.
   C. Romans already had too many gods.
   D. Christians stirred up rebellions.
10. Christianity was made legal under which of these Roman emperors?
   A. Augustus
   B. Nero
   C. Diocletian
   D. Constantine

ANALYSE AND APPLY

11. a. **Describe** the features of the building in **SOURCE 1**.
   b. Why would such public facilities have been very important to the poor citizens of Rome?
   c. What would have motivated Roman politicians and rulers to build such facilities?
   d. **Explain** how this building is a useful source of evidence for Roman society.

SOURCE 1 The Baths of Diocletian, in Rome

EVALUATE AND COMMUNICATE

12. **Construct** a hypothesis about Roman building skills based on the fact that the building in **SOURCE 1** is still standing in Rome.

Answer and samples responses for this topic are available online.

6 Ancient India

LESSON SEQUENCE

online only

6.1 Overview
6.2 How do we know about ancient India?
6.3 What is the geography of India?
6.4 What are the lost cities of the Indus Valley?
6.5 New people, new ideas
6.6 What was significant about the Mauryan Empire?
6.7 Who was Ashoka the Great?
6.8 What was the social structure of ancient India?
6.9 Inquiry: What was behind Ashoka the Great's sudden change in leadership style?
6.10 Review

LESSON 6.1 Overview

INQUIRY QUESTION

How did life and society change over time in the Indus Valley Civilisation?

India, with over 1.4 billion people, is the world's most populated country. Its economy was the fifth largest in 2024, though many Indians still face poverty. India is a key trading partner with Australia, with many Indian people living, working and studying here.

Ancient India was much bigger, geographically, than modern India — it covered the entire region that today includes India, Pakistan, Bangladesh and Sri Lanka. This region was home to some of the world's earliest civilisations.

learnon

- **Pre-test**
  Online pre-test
- **eWorkbook**
  Customisable worksheets for this topic
- **Digital document**
  Key terms glossary
- **Video eLesson**
  Ancient India

c. 3000 BCE
The Indus Valley Civilisation is established.

c. 2500 BCE
The cities of Harappa and Mohenjo-daro are built.

c. 1600 BCE
The Aryans invade India.

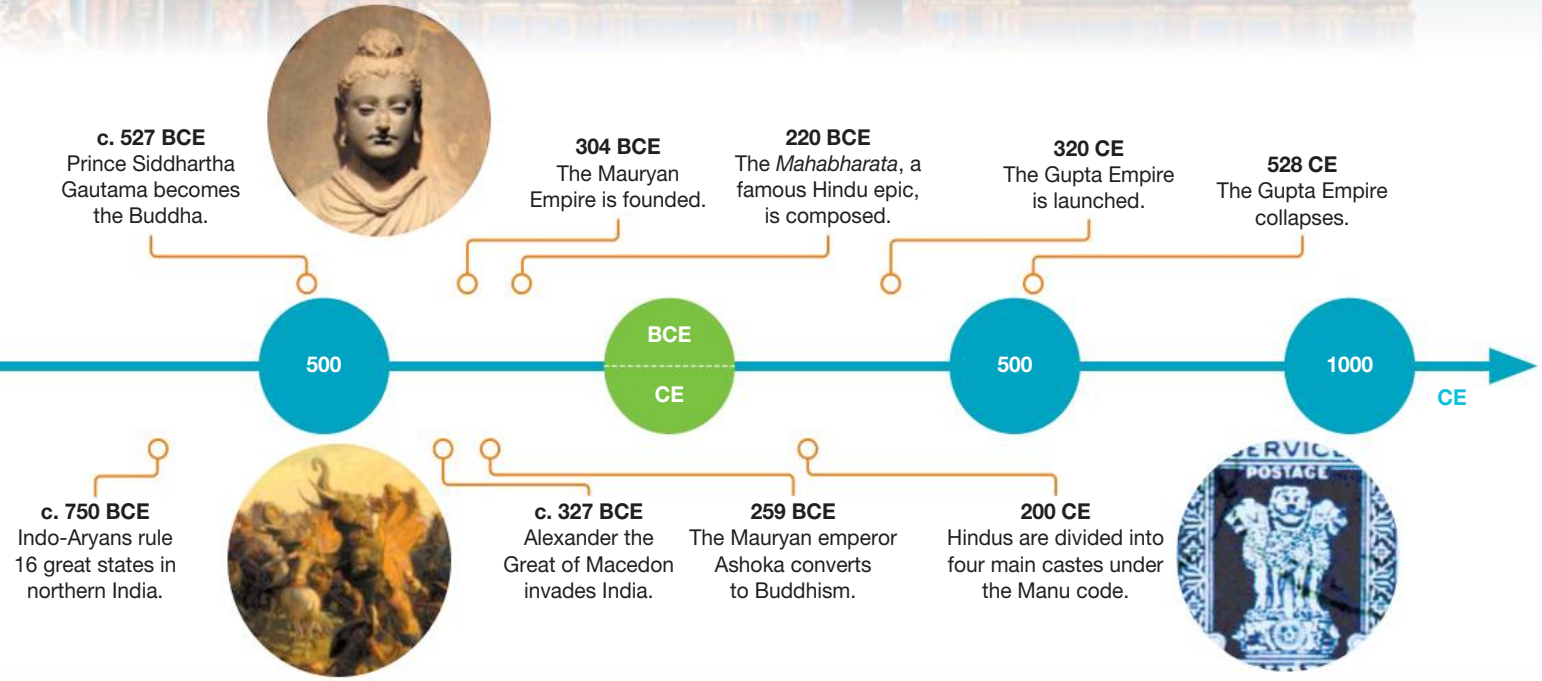
c. 1100 BCE
Iron is first used in India.

BCE 3000 — 2500 — 2000 — 1500 — 1000

SkillBuilder

Use the SkillBuilder Activities to develop these Historical concepts and skills:

- HISTORICAL QUESTIONS
- CHRONOLOGY
- USING HISTORICAL SOURCES
- CONTINUITY AND CHANGE
- CAUSES AND CONSEQUENCES
- HISTORICAL SIGNIFICANCE
- COMMUNICATING



LESSON 6.2 How do we know about ancient India?

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the types of historical sources that inform us about ancient India.

Tune in

SOURCE 1 A globe showing the relative position of India.

1. **Mind map and write a list of all the things you already know about India, including people, events, customs, food and traditions. Don't worry if you can't remember all the names, events or people — just write as many points down as you can. You may like to do this activity with a partner.**
2. **Discuss your lists as a class. Do you notice any similarities?**

6.2.1 How do we know about ancient India?

Ancient India has a history of over 3500 years. The oldest civilisation, the Indus Valley Civilisation, started in present-day Pakistan. Its ruins were hidden for thousands of years until archaeologists found them in 1921.

Most of what we know about ancient civilisations comes from things like pottery and old buildings. Unlike the vast treasures of ancient Rome or Egypt, fewer artefacts have been found from the Indus Valley.

Our knowledge of ancient India largely comes from studying three main cities: Harappa, Mohenjo-daro and Lothal.

Evidence from other civilisations

Ancient India connected with other civilisations. King Darius I of Persia sent an explorer to travel along the Ganges River. Later, Alexander the Great tried to invade India in 334 BCE. Alexander's stay was brief, but it had a significant influence on Buddhist art. Before the Greeks, the Buddha wasn't shown as human, but their art inspired Indian artists to create **anthropomorphic** depictions of the Buddha (see **SOURCE 3**).

SkillBuilder discussion

Using historical sources

1. What animal do the Indians use to travel through the desert in search of gold?
2. How do the Indians time their search for gold to avoid the giant ants?
3. According to the Persians' story, what happens if the ants catch up to the Indians during their journey?

SOURCE 2 From *The Histories* by the Greek historian Herodotus, written about 440 BCE

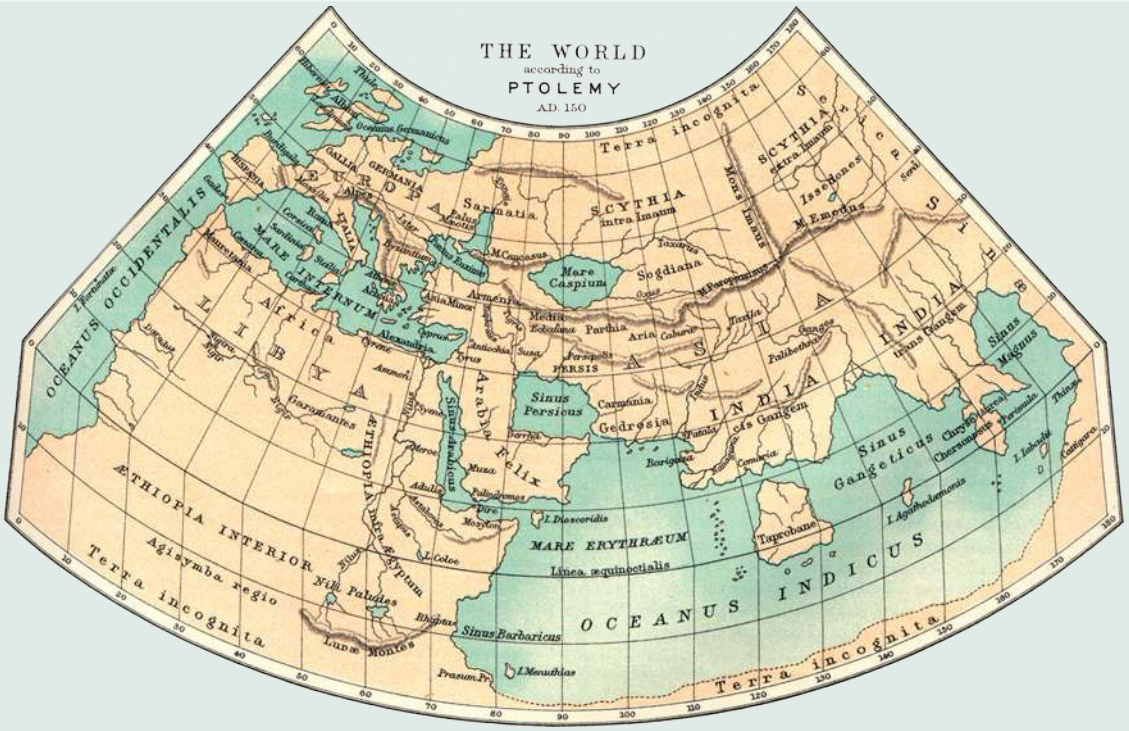
[The Indians of the north-west] go out to fetch gold — for in this region there is a sandy desert ... the sand has a rich content of gold ... There is found in this desert a kind of ant of great size — bigger than a fox, but not so big as a dog ... [These] Indians plan their timetable so as to actually get their hands on the gold during the hottest part of the day, when the heat will have driven the ants underground ... When the Indians [on their camels] reach the place where the gold is, they fill the bags they have brought with them with sand, and start for home again as fast as they can go; for the ants (if we may believe the Persians' story) smell them and at once give chase; nothing in the world can touch these ants for speed, so not one of the Indians would get home alive if they did not make sure of a good start while the ants were mustering their forces.

SOURCE 3 Depiction of the Buddha from Gandhara

6.2 SkillBuilder activity USING HISTORICAL SOURCES

1. Study the map in **SOURCE 4** and compare it to a modern map of the same area. Create and complete a table that lists the similarities and differences you can identify.

SOURCE 4 A reconstruction of the Greek mathematician Ptolemy's map of the world, which he drew about 150 CE.



	The world according to Ptolemy (AD 150)	Modern map Source of map:
Similarities		
Differences		

6.2 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 6, 7	4, 5, 8	9, 10

REMEMBER AND UNDERSTAND

1. The Indus Valley Civilisation originated in which modern-day country?
   A. India
   B. Afghanistan
   C. Pakistan
   D. Nepal
2. Archaeologists first discovered the Indus Valley Civilisation ruins in the year _____.

3. **Identify** where the main forms of information about ancient civilisations come from. Select all that apply.
   A. Paintings
   B. Pottery
   C. Songs and poems
   D. Engraved stone artefacts
   E. Walls of ancient structures
4. **State** one reason not a lot of records remain of the Indus Valley Civilisation.
5. **Recall** what influenced the creation of anthropomorphic depictions of the Buddha.

ANALYSE AND APPLY

6. Engravings from religious buildings provide much of the archaeological evidence we have from ancient India. **Name** three strengths and three weaknesses of this form of evidence.
7. Read **SOURCE 2**.
   a. **Recall** the observations Herodotus makes about India and its culture.
   b. **Evaluate** the accuracy of these observations.
8. Describe the depiction of the Buddha as shown in **SOURCE 3**. **Explain** how this depiction differs from those seen in India before contact with the Greeks.
9. a. **Compare SOURCE 1** to a modern map of India. **Identify** and **describe** the key differences.
   b. **Identify** one reason for the differences between Ptolemy's map and a modern map.
10. **Name** three key cities of the Indus Valley Civilisation. **Propose** reasons these cities are no longer as important to India as they once were.

Answers and sample responses for this topic are available online.

LESSON 6.3 What is the geography of India?

LEARNING INTENTION

By the end of this lesson you should be able to:
- **describe** India's physical environment
- **explain** the impact they had on early Indian civilisations.

Tune in

Choosing where to live is a decision that is based upon house prices, proximity to schools, public transport links, family, friends, access to entertainment and general safety.

People in ancient times would have thought about *very* different factors.

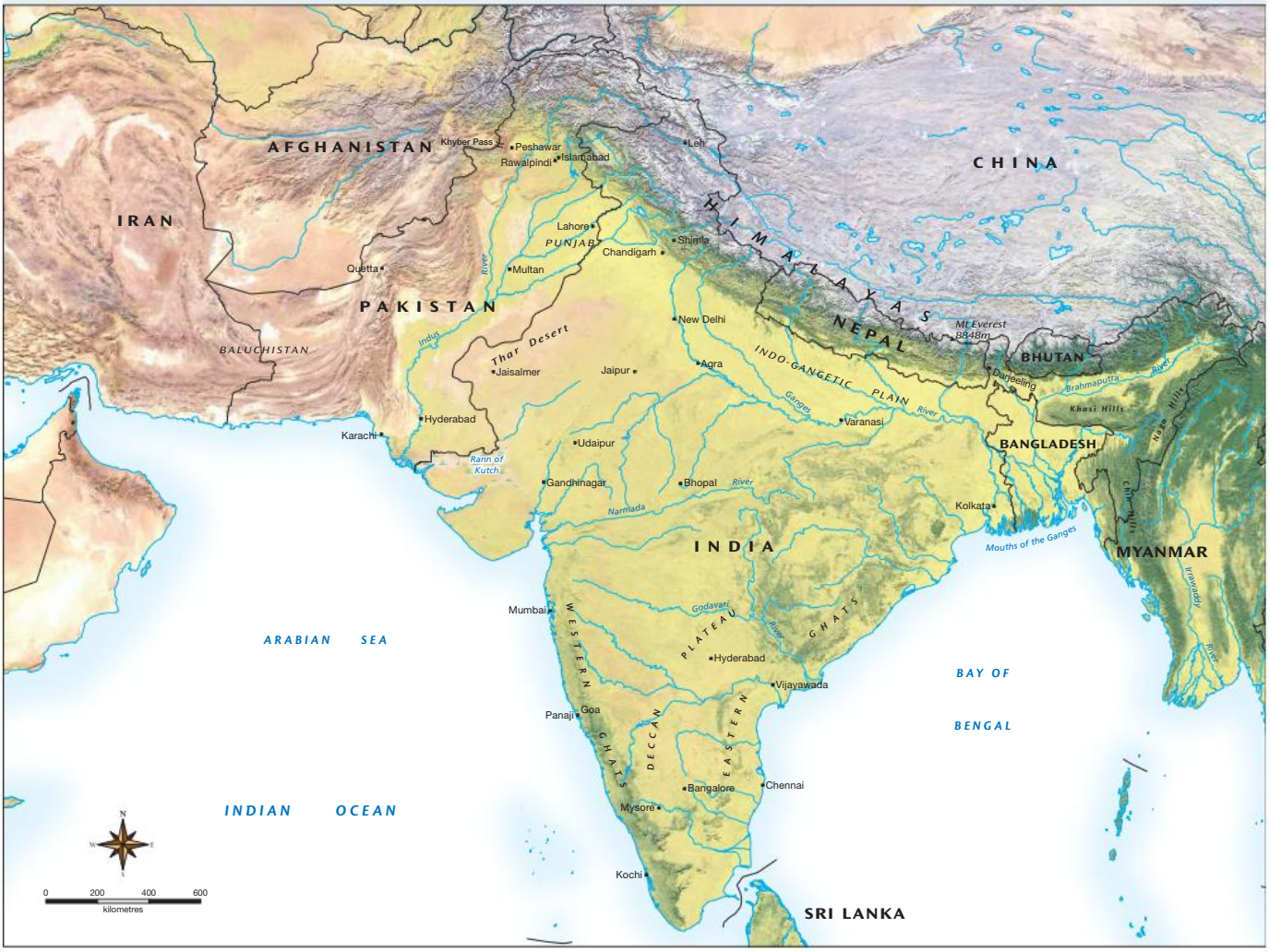
1. **If you were building a new city 5000 years ago, what would you need nearby? Make a list.**
2. **Look at the image. Why do you think people chose to build here?**
3. **What problems might they have faced in this location?**

SOURCE 1 Hills, lake and tea plantations in Kerala, India

6.3.1 Region and climate

India is the seventh largest country in world, but is just one country that comprises the Indian subcontinent. The subcontinent has three main areas: the Himalayan region, the Indo-Gangetic Plain and the Deccan Plateau. The Himalayas have some of the world's tallest mountains and provide water to major rivers like the Ganges. The Indo-Gangetic Plain is flat and fertile, while the western side becomes the dry Thar Desert.

SOURCE 2 A map of the Indian subcontinent



Source: Spatial Vision

SkillBuilder discussion

Using historical sources

1. How do farmers in the Deccan Plateau use rivers for crops?
2. What are the main features of the Deccan Plateau's terrain?
3. Why did ancient civilisations grow near river valleys?

The Deccan Plateau is rocky and barren, with farmers relying on rivers fed by **monsoon** rains. The Indian subcontinent has diverse weather patterns influenced by seasonal monsoons, featuring six seasons each year. Ancient civilisations developed along river valleys for reliable water, fertile soils and access to the sea, like other early civilisations in ancient Iraq and Egypt.

6.3 SkillBuilder activity COMMUNICATING

Your task is to inform others about the geography of India in a clear and interesting way.

Create a blank outline map of India. Complete your own investigations so that you can label the following:

a. major geographical features (rivers, mountain ranges, plateaus, deserts)
b. main areas of food production
c. major cities
d. two areas of high population density and two areas of low population density.

Use clear, coloured labels to ensure your audience understands what features you are pointing out. You may also like to use icons or images in your map to add interest.

Present your map to the class and **explain** the features you've added.

6.3 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 3, 6	2, 4, 5, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. What is a subcontinent?
   A. A small part of a continent
   B. A continent
   C. A country in a continent
   D. A very large land mass attached to a continent
2. **Name** the nations that make up the Indian subcontinent.
3. Match each region with its main feature:

Himalayas	Flat fertile land
Indo-Gangetic	Rocky plateau
Deccan	Tall mountain

4. **Name** the three main rivers of the Indian subcontinent.
5. Using **SOURCE 2**, explain how rivers influenced where ancient Indians built their cities. Give three specific examples.

ANALYSE AND APPLY

6. Look closely at **SOURCE 2**. Calculate the distance of the Indian subcontinent from east to west and from north to south.
7. Given the size of the Indian subcontinent and the variety in terrain and climate, do you think it possible that its population could share the same language and culture? **Explain**.
8. **Describe** the role that rivers played in India's early history.
9. **Explain** what other geographical features, besides rivers, influenced the development of ancient Indian civilisations.
10. **Explain** how the rivers of the Indian subcontinent might have helped to develop a civilisation based on farming.

Answers and sample responses for this topic are available online.

LESSON 6.4 What are the lost cities of the Indus Valley?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** the cities of Harappa and Mohenjo-daro and the people who lived there
- **explain** how the Indus Valley Civilisation ended.

Tune in

In 2013, archaeologists discovered pottery, wells and a well-preserved iron dagger near Keezhadi in Southern India. When uncovering artefacts, archaeologists often make educated assumptions about their use. The photograph shown in **SOURCE 1** was taken from the Keezhadi excavation site.

What do you think the purpose of the square holes is? Provide reasons for your assumptions.

SOURCE 1 Square holes at the Keezhadi excavation site

6.4.1 The Indus Valley Civilisation

People have lived in the Indian subcontinent since the Old Stone Age. By 7000 BCE, farming communities formed, and the first towns appeared around 3000 BCE. These towns thrived for 1400 years before disappearing, leaving only brick ruins. The first Indian cities were in the Indus River valley, known as the Indus Valley or Harappan Civilisation, named after the city of Harappa.

SOURCE 2 Mohenjo Daro is an ancient Indus Valley Civilisation city that was abandoned in the nineteenth century.

SOURCE 3 The main archaeological sites of the Indus Valley Civilisation

Source: Spatial Vision

The cities of the Indus Valley thrived. Farmers worked the fields surrounding the cities and officials managed the sale and trade of crops and livestock. The cities were well organised. Their leaders kept records using a special writing system. Skilled workers made jewellery and tools, while traders used boats to carry goods along rivers and across the sea to other lands. We know this because archaeologists have found objects from Mesopotamia (modern Iraq) in Indus Valley cities.

Refer to **SOURCE 4**. These are stamp seals, used by merchants, which were found at the Mesopotamian city of Ur and other sites in that region. Similarly, seals from Mesopotamian cities have been found at Indus Valley locations such as the port city of Lothal.

SOURCE 4 Indus Valley stamp seals excavated at Mohenjo-daro.

SkillBuilder discussion

Using historical sources

1. How did Indus Valley traders transport their goods?
2. The stamp-seals in **SOURCE 4** were designed to leave an impression when pressed into wet clay. The imprint would be fixed to bundles of merchandise as merchants' marks. What animals do you see and why do you think these were used?
3. Where have Mesopotamian artefacts been found?

SOURCE 5 Trade routes in the Indus Valley Civilisation and Mesopotamia

Source: Spatial Vision

6.4.2 Living in the lost cities

We know about Indus Valley cities like Harappa and Mohenjo-daro from archaeological sites. These cities had **grid systems**, strong walls and buildings made of bricks. Most people were farmers, and the extra food they produced helped the cities grow.

Features of Mohenjo-daro

You can see the grid system in the artist's impression of Mohenjo-daro in **SOURCE 6**. This area features a large **granary** positioned high above the floodplain, essential for storing grain like wheat and barley. Its walls have ventilation ducts to prevent spoilage. Additionally, a brick-lined, sunken structure in this 'Higher Town' is believed to be an enormous bath, possibly used for ritual bathing, as suggested by its design and contemporary Indian customs.

SOURCE 6 A modern artist's impression of Mohenjo-daro. The large structure to the right is a granary.

SOURCE 7 The Great Bath of Mohenjo-daro

Many wells in Mohenjo-daro provided fresh water for drinking and washing, constructed from wedge-shaped bricks. Some bricks had grooves to prevent the rope from slipping when drawing water. Most wells were built inside dwellings, though some were found along city streets.

SOURCE 8 A well at Mohenjo-daro

SkillBuilder discussion

Using historical sources

1. Look carefully at **SOURCES 6** and **7**. What kind of layout does the town have?
2. What do you see in the centre of the town? Why might this feature be located here?
3. Where are the windows positioned on the buildings? Why might this be?

Mohenjo-daro was remarkably **hygienic** for an early city, with many houses featuring baths and toilet-like structures. Houses had drainage outlets leading to gutters, and terracotta pipes and chutes were used to expel waste. Drains below the streets were large enough for workers to access and maintain. Harappa had similar features, with populations estimated at 35 000 for Harappa and 30 000 for Mohenjo-daro.

6.4.3 The end of a civilisation

The end of the Indus Valley Civilisation remains a mystery, but historians have proposed some hypotheses. Initially, it was believed that the Aryan invasion (see lesson 6.5) caused its end, but this theory is now largely dismissed, as the cities were abandoned before the invasion and no evidence of warfare has been found. The region is earthquake-prone and has experienced significant flooding, with evidence suggesting that Mohenjo-daro was rebuilt at least seven times. Most recently and notably, the disastrous floods of 2010 (see **SOURCE 10**) threatened the site, although fortunately, the floodwaters did not reach it.

People gradually left these cities, but their traditions and culture survived. Even today, some pottery styles in the Indus Valley are similar to those of the ancient civilisation. The Indus Valley Civilisation may not have ended; its culture likely blended into the diverse array of cultures in the Indian subcontinent.

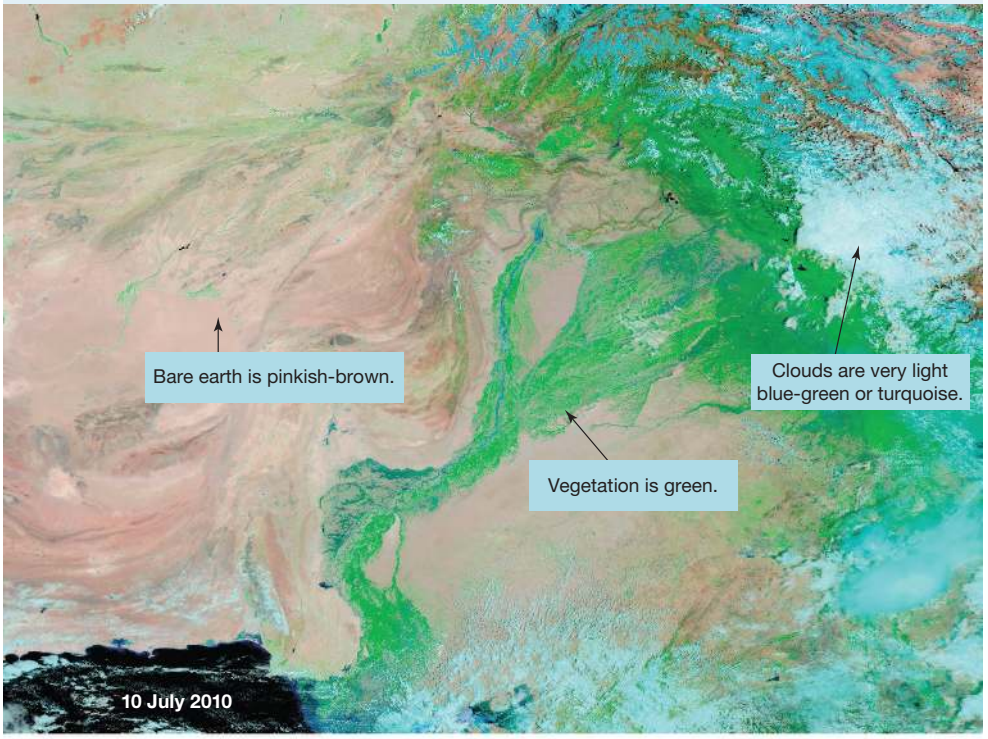
SOURCE 9 The Indus River

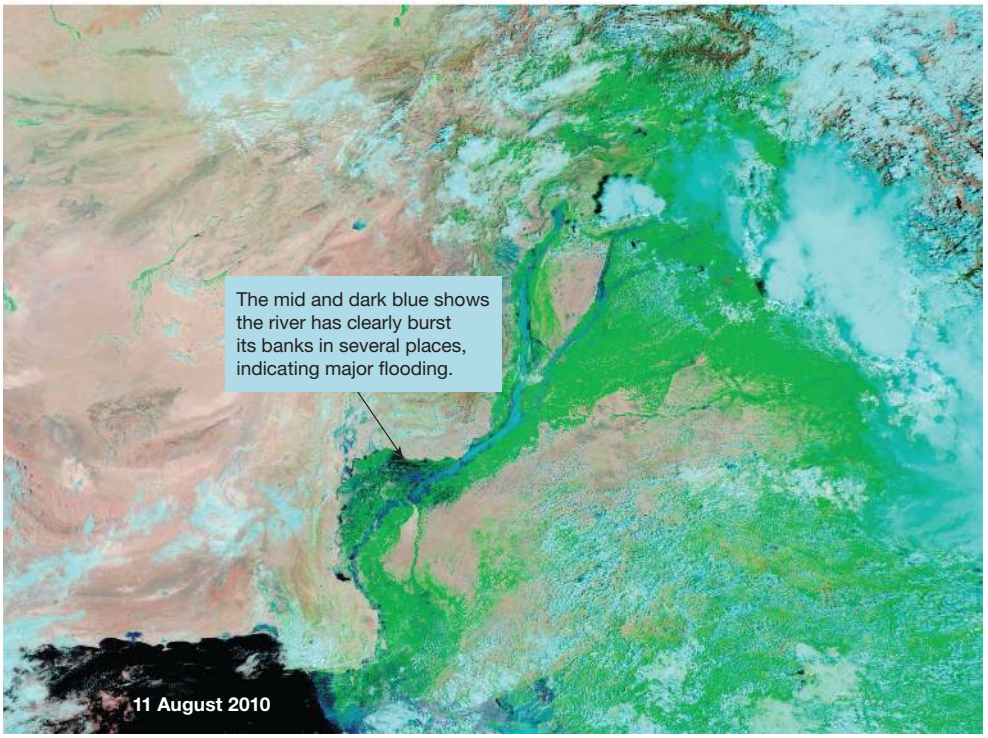
Skillbuilder discussion

Causes and consequences

Discuss the overall changes that you see between the two images and explain why they have occurred.

SOURCE 10 NASA images from space showing the flooding of the Indus River in 2010. The top image shows the Indus River Valley on 10 July, just before the floods. The bottom image shows the valley on 11 August, at the height of the floods. These images combine infra-red and visible light to give us a clearer picture of the difference between water and dry land.





6.4 SkillBuilder activity USING HISTORICAL SOURCES

Consider **SOURCES 4** and **5** in this lesson.

1. **Describe** the similarities and differences between the seals.
2. Research more information about the merchant stamp seals that were used. Choose one interesting fact to share.
3. **Summarise** the conclusions you have drawn about contacts between the civilisations of Mesopotamia and the Indus Valley based on **SOURCE 5**.

6.4 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 10	4, 5, 6, 8	7, 9

REMEMBER AND UNDERSTAND

1. Cities first emerged in the Indus Valley in _____ BCE.
2. What two structures dominate the Higher Town at Mohenjo-daro?
   - A. The aqueduct
   - B. The granary
   - C. The communal baths
   - D. The city centre
3. Using **SOURCE 6** and **SOURCE 7**, explain how the people of Mohenjo-daro:
   - a. Protected their food supplies
   - b. Kept their city clean
4. **State** two reasons it is unlikely that the Aryans destroyed the Indus Valley Civilisation.
5. **Propose** what may have finally led to the cities being abandoned.

ANALYSE AND APPLY

6. Look at **SOURCE 3**.
   - a. **Explain** why you think the cities and other settlements (shown by dots) are mostly located along the Indus River and its tributaries.
   - b. **Justify** why Lothal would be a suitable place for a port to serve these cities.
7. Look at **SOURCE 6**.
   - a. In a short paragraph, **describe** the layout of Mohenjo-daro as seen in this source.
   - b. **Explain** why you think the people of Mohenjo-daro would have needed such a huge granary for their produce.
   - c. **Evaluate** what such a large single granary tells us about the way society would have been organised at Mohenjo-daro.
   - d. From where would they have brought the produce to store in the granary?
8. **Compare** the satellite images in **SOURCE 10** with the map in **SOURCE 3**.
   - a. **Identify** which ancient Indian city was threatened with flooding in August 2010.
   - b. **Propose** what modern Indian governments could do to protect this and other important archaeological sites from the dangers of flooding.

EVALUATE AND COMMUNICATE

9. **Discuss** how the cities of Harappa, Mohenjo-daro and Lothal were so well preserved.
10. Compile a table that **summarises** the factors that contributed to the end of the Indus Valley Civilisation.

Answers and sample responses for this topic are available online.

LESSON 6.5 New people, new ideas

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** the extent of ancient India's trade with other lands
- understand how the Aryans changed India
- **discuss** why the Mauryan Empire was so important.

Tune in

The image shown in **SOURCE 1** depicts the army of Alexander the Great in battle with the Hindu king, Porus, at the Battle of Hydaspes. This image is a secondary source because it is a painting that was created *after* the events it depicts occurred.

1. **Identify the ways that secondary sources are useful to historians.**
2. **Some secondary sources may not be entirely accurate. Does this mean that they are not useful? Discuss.**

SOURCE 1 A depiction of Alexander's **Macedonian** and Greek army encountering an Indian army under the Hindu king, Porus, at the Battle of Hydaspes

6.5.1 Trade during the Indus Valley Civilisation

By 3000 BCE, valuable goods like stones and spices were traded between the Indus Valley Civilisation and distant lands. We know this because archaeologists have found Indus Valley trading seals in Mesopotamia, and ancient Roman maps show trade routes to India. The city of Lothal, one of the world's oldest ports, was active during this time. Objects like jewellery and pottery found in Harappa and Mohenjo-daro also show how these cities traded with other civilizations.

SkillBuilder discussion

Using historical sources

1. Look at **SOURCE 2**. Name the major cities of the Indus Valley Civilisation.
2. What makes the Indus Valley Civilisation an important trade area?
3. What kinds of items would you imagine were traded from this area?

SOURCE 2 The location of important cities of the Indus Valley Civilisation

Source: Spatial Vision

The port of Lothal was excavated between 1955 and 1960. While small compared to modern ports, it was large enough to hold boats capable of distant travel. Traders would leave via the Sabarmati River, sail down the Gulf of Khambhat and cross the Arabian Sea, likely meeting Mesopotamian traders in modern Iran.

SOURCE 3 A photograph of the ancient dock at Lothal

6.5.2 The Vedic Civilisation

The next civilization in India was named after a collection of sacred writings called the **Vedas**, developed around 1600 BCE. Written in **Sanskrit**, the Vedas are foundational to Hinduism, with the *Rig-Veda* being the most important. The Vedic (or Aryan) culture originated from western Asia, with some groups moving into Europe and others entering India.

The Aryans were nomadic warriors who moved across the Indus and Ganges rivers using horses and chariots. Unlike the city-building Indus Valley Civilization, they formed tribes led by chiefs or rajas and often fought among themselves.

Civil conflict led the Aryans to divide their land into 16 Mahajanapadas or 'city-states'. Later, Persian leaders like Cyrus the Great and Darius I invaded Northern India and the Indus Valley until they were defeated by Alexander the Great. Alexander then invaded northern India, believing it marked the end of the known world, and fought one of his costliest battles at Hydaspes.

6.5.3 The Mauryan Empire

When Alexander the Great left India in 321 BCE, a powerful new ruler emerged. Chandragupta Maurya united India for the first time, creating the Mauryan Empire. Under his rule, India became strong and prosperous. The empire reached its peak under Chandragupta's grandson, Ashoka, who ruled a vast territory stretching from Afghanistan to Bangladesh.

Ashoka and Buddhism

A fierce warrior king in his youth, the horrors of war changed Ashoka. In 259 BCE, Ashoka converted to Buddhism and chose a path of peace. Under his rule, writing and learning became important again. Ashoka spread Buddhist teachings across Asia and built new roads and trading networks. He even sent Buddhist missionaries to other regions and assisted the spread of Buddhism in Asia. Therefore, the first known writings since the fall of the Indus Valley Civilisation were Buddhist religious texts.

SkillBuilder discussion

Using historical sources

1. Why might the local ruler have chosen to be depicted in a Roman-type helmet on the coin?
2. What could this symbolise about his reign or his relationship with Rome?

SOURCE 4 An Indian silver coin (c. first century BCE) depicting the local ruler wearing a Roman-type helmet with bristles

After Ashoka died, the empire began to decline. When the last Mauryan ruler was killed, the empire collapsed. Greek rulers then invaded India, bringing their own culture and ideas. Greek artistic trends heavily influenced the development of Indian art. This change is reflected in representations of the Buddha.

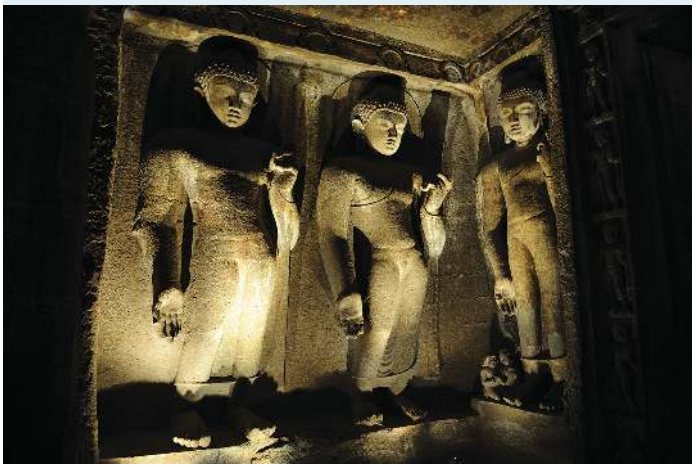
Even as empires changed, trade continued to grow. Roman ships sailed to Indian ports, and traders followed routes written down in Roman documents. These connections continued into India's next great period, known as the Golden Age.

SkillBuilder discussion

Using historical sources

1. What artistic techniques can you identify in the bas-relief at **SOURCE 5**.
2. How might the artists' techniques reflect the artistic style of the Gupta dynasty?
3. What does this bas-relief tell us about the cultural and religious environment of India during the Gupta dynasty?

SOURCE 5 Buddhist bas-relief in the Ajanta Caves, created during the Gupta dynasty



6.5 SkillBuilder activity **COMMUNICATING**

List the major events of ancient Indian civilisation mentioned in this lesson and place them in chronological order from most distant to most recent.

1. Create a timeline using the events you have listed.
   When creating a timeline, you need to carefully consider the scale of time. **Identify** when the first and last events on your timeline will be. This will help you **determine** the right scale to use on your timeline.
2. **Compare** your timeline to those of other students.

6.5 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3	4, 5, 6, 8	7, 9, 10

REMEMBER AND UNDERSTAND

1. Place the following options into the correct spaces to complete the sentence.
   Gulf of Khambhat, Arabian Sea, Sabarmati River
   When traders were leaving Lothal, they would exit the ancient port via the _____ and make their way down the _____ and across the _____.
2. Seals can be found on artefacts from many different civilisations across the ancient world. The purpose of this practice was to identify where items were being sent. True or false?
3. **Identify** the foreign forces that attempted to control India after the fall of the Mauryan Empire.
   A. Chinese Empire
   B. Ancient Greek Empire
   C. Ottoman Empire
   D. Roman Empire
   E. Mongol Empire
4. **Explain** why Ashoka adopted the Buddhist faith.
5. **State** at least three ways in which the Vedic Civilisation was different from the Indus Valley Civilisation.

ANALYSE AND APPLY

6. **Identify** evidence that suggests that trade occurred between the Indus Valley Civilisation and Mesopotamia.
7. Look closely at the location of Lothal on the map in **SOURCE 2**.
   a. Considering that it was a port town, what is strange about its location?
   b. Given the nature of the location of Lothal, **consider** why this may not have been a problem during the time the port was in operation.
8. **Explain** what **SOURCE 4** suggests about Indian contact with the Roman Empire.

EVALUATE AND COMMUNICATE

9. a. Create a table that **summarises** the accomplishments of the Vedic Civilisation and the Mauryan Empire.
   b. Using the table, **evaluate** the accomplishments of the Vedic Civilisation and the Mauryan Empire. Which of the two do you believe had the most significant impact on the development of Indian culture and beliefs? Provide historical evidence to support your arguments.
10. **Explain** the relationship (cause and effect) between the following events, people and/or beliefs.
    a. The writing of the *Vedas*
    b. The defeat of Alexander the Great
    c. Ashoka's brutal experiences of war
    d. The assassination of the last Mauryan ruler

Answers and sample responses for this topic are available online.

LESSON 6.6 What was significant about the Mauryan Empire?

LEARNING INTENTION

By the end of this lesson you should be able to **identify** and **discuss** the unique aspects of the political system used by Chandragupta Maurya.

Tune in

The Mauryan **medallion** in **SOURCE 1** shows riders on an elephant under a decorative umbrella. They are likely part of a royal procession.

1. **In small groups, carefully examine the medallion.**
2. **List all of your observations about this source. Note down all the details that you notice.**
3. **Discuss what you can infer about the Mauryan Empire based on your observations.**

SOURCE 1 Mauryan silver medallion from the second century BCE

6.6.1 Chandragupta Maurya and Kautilya

In 323 BCE, Chandragupta Maurya created India's first true empire, The Mauryan Empire, sometimes called the Mauryan dynasty. With help from his adviser, Chanakya (also known as Kautilya), set up a strong central government. Chanakya is also credited with compiling a set of rules on running a government, called The Arthashastra. The Arthashastra laid the basis for responsible administration and a powerful unified government across the subcontinent. The Mauryan Empire was divided into districts run by administrators who reported to the emperor, ensured law and order, provided troops for the army and collected taxes.

SOURCE 2 Bas-relief from the Great Stupa of Sanchi, showing what appears to be a festive scene from a Mauryan city

The observations of Megasthenes

We learn about Chandragupta's empire from two main sources. The first is Chanakya's *Arthashastra.* The second comes from Megasthenes (see **SOURCE 3)**, a Greek ambassador who visited Chandragupta's magnificent capital city, Pataliputra. According to Megasthenes, it was a vast and splendid city ringed with a high wooden wall and 570 towers.

Chandragupta built his empire through successful battles. He drove out Seleucid forces from northern India in 324 BCE, and when they tried to return in 305 BCE, he defeated them again. After Chandragupta, his son Bindusara made the empire even bigger by conquering 16 more kingdoms. The empire reached its greatest size under Chandragupta's grandson, Ashoka.

SkillBuilder discussion

Using historical sources

1. Using **SOURCE 3** list the key features of Pataliputra according to Megathenes.
2. Do you think that this source is reliable or not? Give reasons for your answer.

SOURCE 3 From an ancient Greek account of a report by a Greek ambassador, Megasthenes, who had visited the Mauryan capital, Pataliputra, on a mission from the Seleucid Empire

Megasthenes informs us that this city [Pataliputra] stretched in the inhabited quarters to an extreme length on each side of eighty **stadia**, and that its breadth was fifteen stadia, and that a ditch encompassed it all round, which was six hundred feet in breadth and thirty **cubits** in depth, and that the wall was crowned with 570 towers and had four-and-sixty gates. The same writer tells us further this remarkable fact about India, that all the Indians are free, and not one of them is a slave.

6.6 SkillBuilder activity **USING HISTORICAL SOURCES**

To use historical sources as evidence, you need to be able to **analyse** the source. This is often seen as a two-step process. In this activity, you will use **SOURCE 2** in this lesson as an example.

1. First, you simply need to **describe** what you can see in the source. Are there people, animals, tools? What is happening in the scene — does it depict a battle, a festival or just a scene from everyday life?
2. Next, you need to **interpret** any metaphorical meaning that may be contained within the visual source. Perhaps the king is depicted as taller than all other people in the source, denoting his importance and power. This metaphorical meaning can often provide a deeper understanding of the purpose or intent of the source.

Be careful, though — sometimes metaphorical meaning does not actually exist, and a visual source may simply be a depiction of an actual historical event.

3. Using the information gathered from steps 1 and 2, write an **analysis** of **SOURCE 2**, the bas-relief from the Great Stupa.

6.6 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 6	5, 7, 8	4, 9, 10

REMEMBER AND UNDERSTAND

1. The Mauryan emperors conquered a region reaching from _____ in the east to _____ in the west.
2. Only one written primary source is known from the time of the Mauryan Empire. True or False?
3. **Identify** the leader credited with creating the first unified Indian state.
   A. Chanakya
   B. Megasthenes
   C. Ashoka
   D. Chandragupta Maurya
4. Arrange the following events in chronological order: beginning of the Mauryan dynasty; beginning of the Seleucid Empire; end of the Mauryan dynasty; Chandragupta defeats the Seleucids and drives them out of the region.
5. **State** which empire Chandragupta drove out of the Indus Valley, thus expanding the Mauryan Empire.

ANALYSE AND APPLY

6. **Describe** what you believe is happening in **SOURCE 2**. How does this source help us understand what life was like in the Mauryan Empire?
7. **Explain** how **SOURCE 2** supports Megasthenes' description of a Mauryan city in **SOURCE 3**.
8. **Explain** how we know from **SOURCES 1** and **2** that during the Mauryan Empire Indians relied heavily on the elephant. How was the elephant helpful to them?

EVALUATE AND COMMUNICATE

9. **Identify** and **explain** the administrative changes Chanakya undertook.
10. 'It was Chanakya, not Chandragupta, who was responsible for the success of the early Mauryan Empire.' Do you agree or disagree with this statement? **Justify** your response.

Answers and sample responses for this topic are available online.

LESSON 6.7 Who was Ashoka the Great?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** the achievements of a significant historical figure
- **explain** the impact this individual's leadership had on Indian culture.

Tune in

What makes a great leader?

Ashoka 'the Great', Alexander 'the Great', Catherine 'the Great' — throughout history, approximately 105 monarchs have used this imposing title. But what actually makes a 'great' leader?

1. **List all the different leaders you have had in your life. Consider leaders in all aspects of your life including family, school and any extracurricular activities in which you participate.**
2. **What characteristics do you believe make someone a great leader?**
3. **What leadership characteristics do you think you have?**

SOURCE 1 An artist's impression of Ashoka the Great

6.7.1 The greatest ruler in world history?

Ashoka, known as 'Ashoka the Great', was a warrior king who expanded the Mauryan Empire, including the brutal Kalinga campaign.

After his father's death, Ashoka vied with his brothers for the throne — a struggle that Ashoka eventually won. Legend claims that Ashoka may have even killed his brothers during this conflict.

Over the next eight years, Ashoka conducted wars of conquest that extended the Mauryan Empire to its furthest limits. His final military campaign was in Kalinga, a kingdom on the north-east coast of India. During this bitter campaign, tens of thousands were slaughtered and the cities of Kalinga sacked after witnessing the suffering from this battle, Ashoka renounced violence and embraced Buddhism. Ashoka dedicated himself to spreading the message of peace through missionaries.

The edicts of Ashoka

We know a lot about Ashoka's rule from **edicts** inscribed on pillars and rocks across his empire. These edicts show that Ashoka cared for people and animals. He provided medical care, planted shade and fruit trees and banned sacrifices and hunting, even though he liked hunting when he was younger. He also stopped burning forests for farming to protect the animals living there and promoted a vegetarian diet to show respect for all living things.

Ashoka got rid of harsh punishments like torture and the death penalty, and he said everyone, including parents, teachers and those of different religions, should be treated with respect.

Ashoka's edicts show his commitment to *dharma* (or *dhamma*), which means doing the right thing towards people, animals and nature. After Ashoka died in 232 BCE, his son helped spread Buddhism to Sri Lanka, but the Mauryan Empire began to decline. Still, it was an important time in India's history, showing how a unified state could work.

SkillBuilder discussion

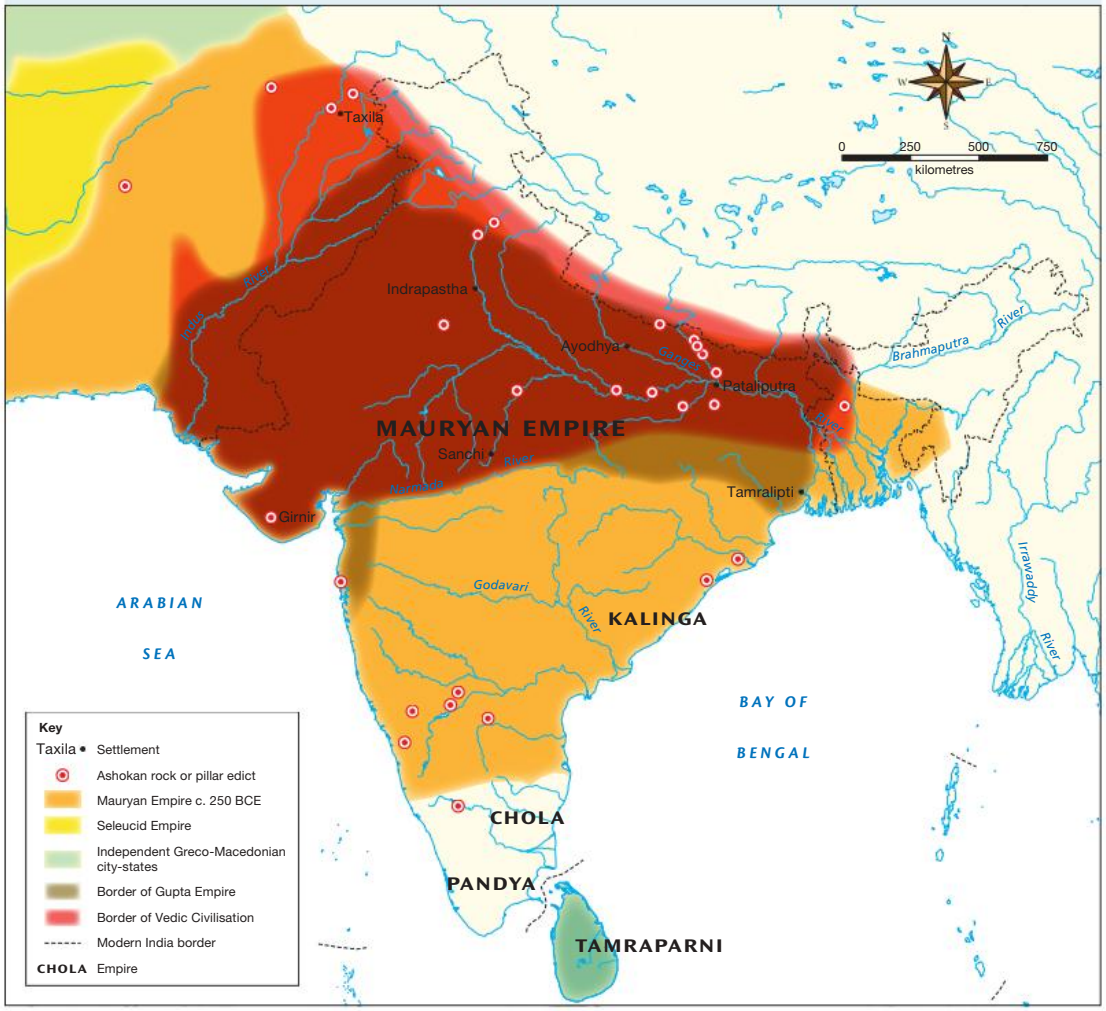
Using historical sources

1. Describe what you can see on this stamp.
2. Why might this kind of image have been chosen?

SOURCE 2 A stamp issued on 15 August 1949, the second anniversary of modern India's independence.

SOURCE 3 Another of Ashoka's pillars, this one with a single lion on top, at Kolhua. Behind it is a Buddhist stupa.

SOURCE 4 The furthest extent of the Mauryan Empire, as achieved by Ashoka. Also shown are the sites where Ashoka erected his rock or pillar edicts.



Source: Spatial Vision

SkillBuilder discussion

Using historical sources

1. Read **SOURCE 5**. What are some qualities that Dhamma has?
2. What gifts does the speaker claim to have given to animals?
3. What should people reflect on to avoid evil deeds?

SOURCE 5 From the pillar edicts of Ashoka

Dhamma is good, but what constitutes Dhamma? [It includes] little evil, much good, kindness, generosity, truthfulness and purity. I have given the gift of sight in various ways. To two-footed and four-footed beings, to birds and aquatic animals, I have given various things including the gift of life. And many other good deeds have been done by me. People see only their good deeds saying, 'I have done this good deed.' But they do not see their evil deeds saying, 'I have done this evil deed' or 'This is called evil.' But this [tendency] is difficult to see. One should think like this: 'It is these things that lead to evil, to violence, to cruelty, anger, pride and jealousy. Let me not ruin myself with these things.' And further, one should think: 'This leads to happiness in this world and the next.'

6.7 SkillBuilder activity COMMUNICATING

The aim of this activity is to teach you how to analyse information and then use that information to make informed judgements. To practise this skill, we're going to use two different sources — Ashoka's edicts and the political strategies of Kautilya (which were described in lesson 6.6). Ashok's edicts are primary sources whereas Kautilya's strategies are described in a secondary source — the resource you are now reading.

Step 1: Read the source and information provided. While it may seem silly to mention this as a first step, proper reading of a source is a step that sometimes gets overlooked. Try not to scan or skim-read, but instead read carefully and **identify** key information.

Step 2: Re-read the source and information. This time, write notes as you go, making sure that your notes are accurate and descriptive.

Step 3: Use your notes to make your informed judgement. Answer the following question using both the information you have collected and the opinions you have formed by completing this process.

Discuss how Ashoka's edicts, as shown in **SOURCE 5**, differ from the ideas of Chandragupta's chief minister, Chanakya, described in lesson 6.6. How do you think Ashoka's subjects would have felt about these changes?

6.7 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 6	7, 8, 10	4, 5, 9

REMEMBER AND UNDERSTAND

1. Ashoka was Chandragupta's
   A. brother.
   B. son.
   C. grandson.
   D. father.
2. **Identify** the correct definition of 'dharma'.
   A. A Buddhist moral teaching
   B. A religion
   C. A ruler
   D. A family tradition
3. The edicts of Ashoka were recorded on ancient scrolls. True or False?
4. How did Ashoka change after witnessing the appalling suffering brought about by war with Kalinga?
5. **Describe** how the Mauryan Empire grew under Ashoka's rule.

ANALYSE AND APPLY

6. **Examine SOURCE 2**. Propose why you think modern India's government, on the second anniversary after independence, issued a stamp with one of Ashoka's pillars on it.
7. **Consider** why you think Ashoka inscribed his edicts on monuments, as seen in **SOURCE 3.**
8. **Explain** how **SOURCE 4** supports the idea that Ashoka was trying to get his message across to all Indians through his edicts.

EVALUATE AND COMMUNICATE

9. **Evaluate** the effects a life of battle had on Ashoka.
10. **Discuss** how Ashoka's reign influenced religious observance in ancient India.

Answers and sample responses for this topic are available online.

LESSON 6.8 What was the social structure of ancient India?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** the beliefs and traditions of Indian religions
- **explain** the role of different groups in the social hierarchy of ancient Indian society
- **describe** ceremonies and customs that signify important moments in the lives of Indian people.

Tune in

The status and rights of women vary in different cultures and different time periods.

1. **Consider the rights that women have in most Western contemporary societies.**
2. **Discuss what rights and opportunities you think women have now that they didn't have in ancient India.**
3. **Revisit your discussion at the end of this lesson and evaluate the accuracy of your answer.**

SOURCE 1 What has changed for women in India over time?

6.8.1 Hinduism and the natural world

India's fertile geography, shaped by rivers like the Ganges, supported civilisations and influenced religions like Hinduism, Buddhism and Jainism. Hinduism is practised by nearly 80 per cent of Indians and is named after the Sanskrit word *Sindh*, meaning river. Ancient texts like the Vedas and Mahabharata regard nature as sacred, teaching harmony through *dharma*. Dharma can be described as a person's responsibility to follow religious and cultural teachings and laws.

SOURCE 2 An excerpt from the Sanskrit verse *Srimad Bhagavata Mahapurna (2.2.41)*

Ether, air, fire, water, earth, planets, all creatures, directions, trees and plants, rivers and seas — they all are organs of God's body. Remembering this, a devotee respects all species.

Hinduism explained

Hinduism is both a pantheistic and polytheistic religion. The first term describes religions that see the entire universe as being divine. Pantheists do not believe in a single god-like being, but rather see god in all aspects of the natural world. This means that Hindus are also polytheists because they worship the natural world through a variety of divine beings.

SkillBuilder discussion

Historical significance

1. Discuss why festivals are still so important in Indian culture.
2. What makes bathing in the Ganges River an important ritual?
3. What other Indian festivals can you name?

Did you know?

During the Ganesha Festival in August, Hindus place statues of the elephant god, Ganesh, in their homes and in decorated tents to receive his blessing. On the eleventh day, the statues are taken to a river or the sea and immersed in water.

SOURCE 3 Hindus bathing in the Ganges River during a major religious festival in northern India.

A key belief in Hinduism is reincarnation. This means when someone dies, their spirit is born again in a new body. After many lives, a person can find happiness by becoming one with the universal spirit called Brahman.

A key part of Hinduism is **samsara**, the cycle of life and death, and rebirth. The soul, or atman, continues to exist eternally and is reborn into a new body which can be any living plant, animal or human. If a person has good **karma** in a previous life, then their atman will be reborn or reincarnated into something better than they were previously.

Hindus see all living things as sacred because they are a part of the universal spirit. That's why many Hindus are vegetarians, and cows are especially respected and protected.

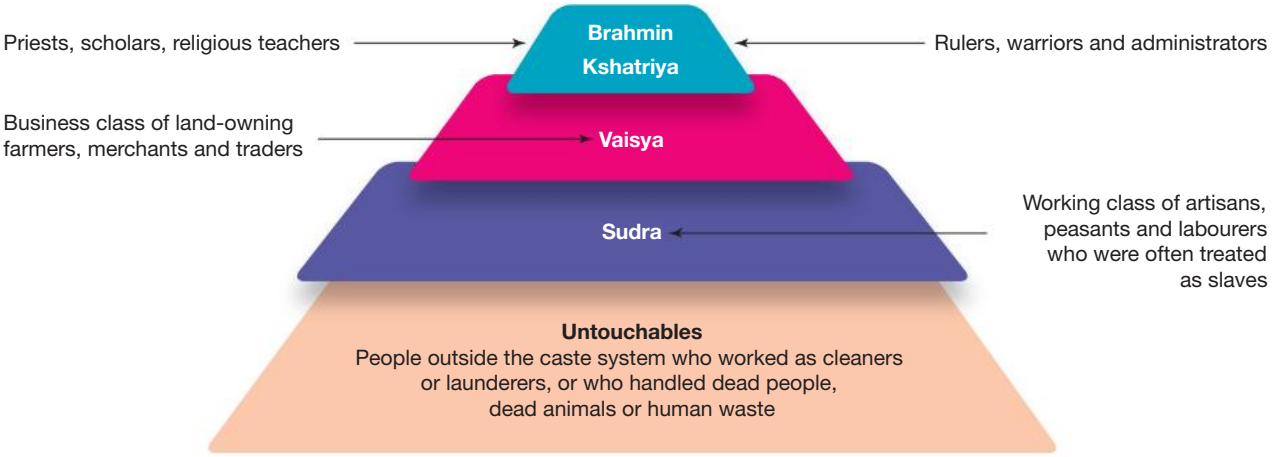
SOURCE 4 The Ganesha Festival, held in August

6.8.2 The caste system

As ancient India's socio-economic development continued, inequality between groups of people began to emerge. From Vedic times, Hinduism divided society into classes called castes. The caste system (see **SOURCE 5**) was a means of social control — of keeping people in the social classes into which they were born. By around 200 CE, the Manu code described four main castes: Brahmins, warriors and landowners, farmers and craftsmen and Untouchables.

Caste determined who they could marry and what work they could do. Higher castes had special privileges, while lower castes faced many restrictions. When Buddhism emerged, it challenged some of these social divisions by teaching that spiritual progress depended on a person's actions rather than who or what situation they were born to.

SOURCE 5 People were born into their caste, which determined their role in society.



SkillBuilder discussion

Communicating

1. Most people in the modern world regard the caste system as cruel and unjust. Discuss this viewpoint.
2. How might a caste system benefit a society?

6.8.3 The status of women in ancient India

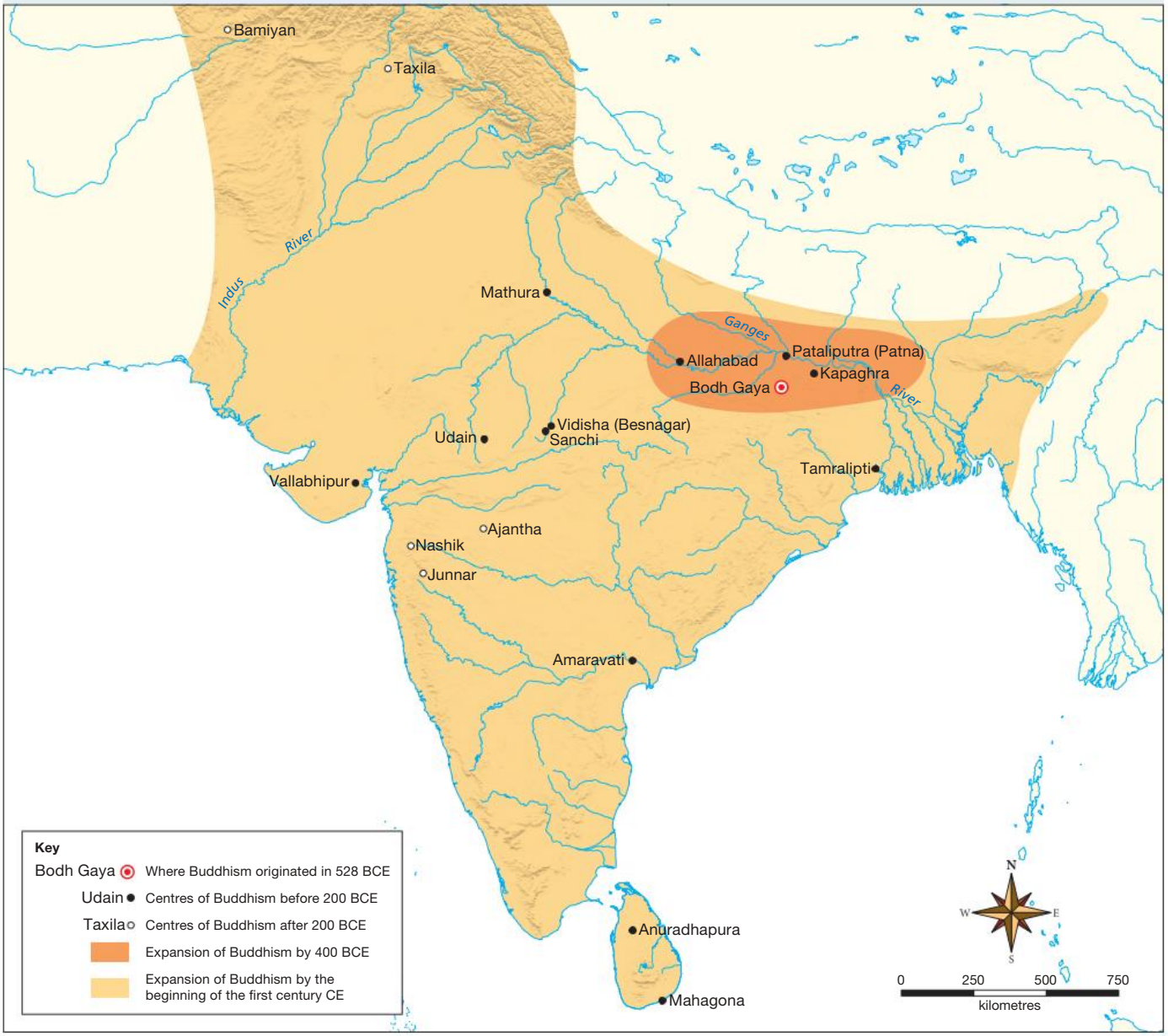
The role of women in ancient India changed significantly over time. During the early Vedic period (1500–1000 BCE), women had more freedoms — some could study sacred texts, participate in religious rituals and choose their husbands through a ceremony called 'Swayamvara'. We also know of female scholars like Gargi and Maitreyi who debated philosophy with men.

However, women's position in society gradually changed. By the time of the Mauryan Empire, many earlier freedoms had been limited. Later texts like the *Manusmriti* recommended more restrictions on women's independence. These changes affected different social classes differently — royal women often had more privileges than others.

6.8.4 Buddhism and the natural world

Buddhism spread across Asia and beyond (see **SOURCE 6**). It began in India. Buddhism emphasises contentment and respect for nature, teaching that humans are interconnected with the natural world and should meet their needs without harming the environment. A key belief is reincarnation — knowing that one could be reincarnated as an animal encourages kindness and respect for all living things.

SOURCE 6 The spread of Buddhism within India up to the first century CE



Source: Spatial Vision

Buddhism explained

Buddhism was founded by Siddhartha Gautama, a Hindu prince, in the sixth century BCE. After witnessing suffering in his kingdom, he renounced his riches to seek deeper truths. He lived as a hermit for seven years and then began teaching the Four Noble Truths. He became known as 'the Buddha', meaning 'the Enlightened One'.

SkillBuilder discussion

Using historical sources

1. What are some distinctive features of the Gandhara Buddha statue?
2. How does this statue represent the teachings and symbolism of Buddhism?

SOURCE 7 Statue of the Buddha from the Gandhara region in northern Pakistan, first century CE

The Four Noble Truths

The Four Noble Truths of Buddhism:

- All people, regardless of wealth, suffer pain.
- Pain persists as long as one is trapped in the cycle of reincarnation (birth, death, rebirth).
- Desire or craving causes pain.
- To overcome desire, one must follow the Eightfold Path.

The Eightfold Path emphasises wisdom, ethical conduct, helping others and practising right concentration or meditation. The goal is to eliminate desire and achieve nirvana, a state of peace and joy, free from desires and suffering, where the soul merges with the universe.

Buddhism spread across ancient India but declined by the 12th century CE. It spread to China, Japan, Tibet, Korea and Southeast Asia, where it remains influential today.

6.8.5 Jainism and the natural world

Jainism, another of ancient India's three religions, emphasises *ahimsa* or non-violence, teaching that harming any living being is wrong. Many Jains are vegetarians and protect the environment, even sweeping the ground to avoid harming insects.

Jainism explained

Ahimsa is one of five major vows in Jainism that all Jains must follow. By keeping these vows, Jains believe anyone can become a god.

The Five Vows of Jainism are:

- *ahimsa* — non-violence
- *satya* — truthfulness
- *asteya* — non-stealing
- *brahmacharya* — celibacy/chastity
- *aparigraha* — non-attachment.

Jains follow special vows to try to escape the cycle of reincarnation. They believe that once a person is free from reincarnation, their soul becomes immortal and stays in a state of happiness forever.

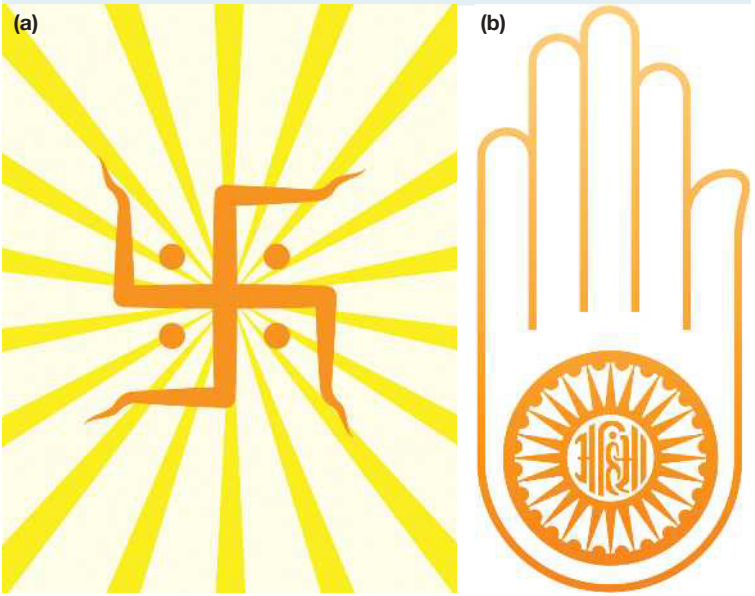
Today, Jainism is a smaller religion in India. It became better known in the western world because of Mahatma Gandhi, a famous Indian leader. Although Gandhi was not born a Jain, his non-violent protests were similar to Jain teachings.

Skillbuilder discussion

Communicating

Find out more about both of these symbols. You may discuss them with a partner or do some of your own investigating.

SOURCE 8 Two Jainism symbols: **(a)** the Hindu Swastika and **(b)** the declaration of non-violence, *ahimsa*



6.8.6 Rites of passage in ancient India

Life events are significant in many religions, such as baptisms in Catholicism and bar or bat mitzvahs in Judaism. In ancient India, *samskara* marked key moments in the lives of Hindus, Buddhists and Jains, with the most important samskara in Hinduism outlined in **TABLE 1**.

TABLE 1 The most important samskara in Hinduism

Samskara	Description
Garbhadhana	A ritual that signifies the intent to conceive a child
Pumsavana	A ritual to increase the chances of conception
Simanatonayana	'Parting of the hair' ceremony; completed to ensure the safe delivery of a baby
Jatakarman	A ritual to celebrate the birth of a baby
Namakarana	A baby-naming ceremony usually performed on the 10th to 12th day after its birth
Nishkramana	A ritual during which a baby is formally introduced to the world for the first time; the timing usually corresponds to sunrise or sunset
Annaprashana	A ritual during which a baby will eat solid food for the first time
Chudakarana	The ritual of a child's first haircut (usually involves shaving the head, especially for boys)
Karnavedha	An ear-piercing ceremony that in modern times is more common for girls than boys
Vidyarambha	A ritual to celebrate the beginning of a child's education
Upanayana	A rite of passage during which a child receives a sacred thread, usually from a teacher
Praishartha	A ritual that marks the beginning of the study of sacred texts, including the Hindu *Vedas*
Keshanta and Ritusuddhi	Rituals that mark a young man's first shave (Keshanta) and a young woman's first menstruation cycle (Ritusuddhi)
Samavartana	A ritual to celebrate graduation from the education system
Vivaha	The range of rituals in a marriage ceremony
Antyeshti	Funeral rites, often including cremation

SkillBuilder discussion

Historical significance

1. What is the Upanayana ritual, and who participates in it?
2. What does the sacred thread in the Upanayana ceremony symbolise?
3. How long is the sacred thread worn after the Upanayana ceremony?

SOURCE 9 A modern example of the Upanayana ritual

Ancient Indians took part in these rituals and continue to do so today, for many reasons. The most simple of these reasons is that the various samskara allowed people to demonstrate their commitment to what they believe. Take the ritual of *Upanayana*, for example. Conducted between a *guru* (teacher) and a student, this ritual is conducted by only the upper three castes of Indian society. The ceremony marks the beginning of a student's educational journey. Yet, more importantly, it also signifies a young person's acceptance as a full member of their community. During the ceremony, a sacred thread is tied across the student's chest. While it may need to be replaced over the years, this thread is worn for the remainder of the bearer's life — a constant reminder of their connection to their beliefs.

6.8.7 Death and funerary customs

In ancient Indian beliefs, death is seen as a transition to another life due to the belief in reincarnation. For Hindus, a funeral, called *antyesti*, is when the soul leaves the body. Adults are usually cremated, and their ashes are scattered in the Ganges or other significant places.

Did you know

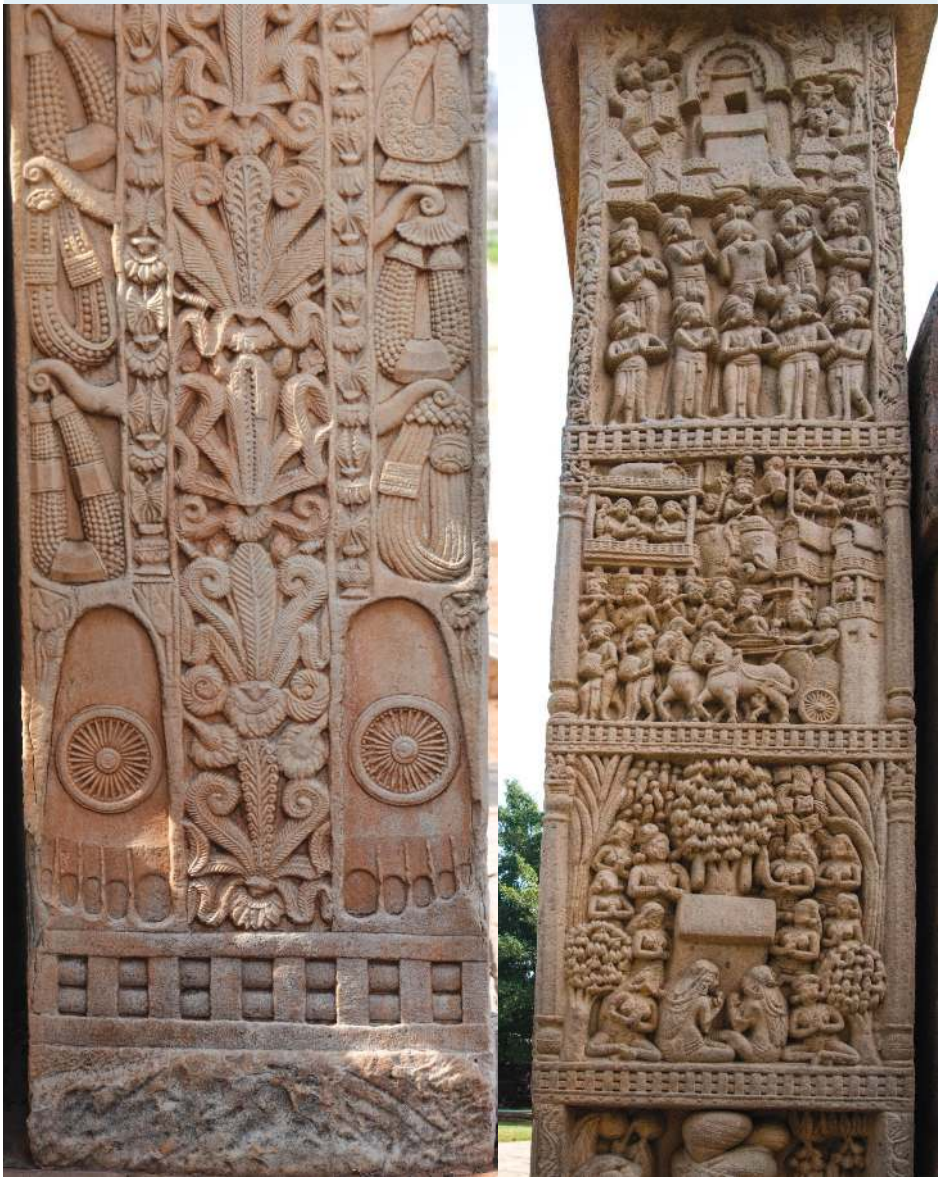
An interesting, but rare, custom in Indian funerals is the use of professional mourners. People referred to as rudaali are employed by the grieving family to attend the funeral. Rudaali are only employed by members of the upper castes who, because of their status, are not allowed to publicly show their emotions. Due to this social restriction, the role of the rudaali is to mourn on their behalf.

SOURCE 10 The Great Stupa at Sanchi and a small personal stupa

The concept of death in ancient Indian belief systems is extremely interesting. With the belief in incarnation strong in many Indian religions, death is seen as a transition from one life into another. For Hindus, the funerary ceremony, or antyesti, signifies the separation of the soul from the body. For this reason, adults are usually cremated, with their ashes scattered either in a sacred river such as the Ganges.

Buddhists in ancient India practised cremation, with monks chanting prayers to help the soul transition to its next incarnation. *Stupas*, found at monasteries, were hemispherical structures representing the burial mounds of the Buddha. While the central mound was plain, the walls and arches featured intricate engravings. The Buddha was symbolised through images like footprints shown in **SOURCE 11** rather than in human form. Stupas housed relics of Buddhist scholars and monks, and smaller stupas containing ashes were often used in family shrines.

SOURCE 11 Engraved stupa walls at the Great Stupa of Sanchi, showing footprints of the Buddha with a wheel — the Ashoka Chakra — embedded in them



6.8 SkillBuilder activity USING HISTORICAL SOURCES

Historical sources can provide information about past civilisations and what was important to them.

1. **Examine SOURCE 11**.
2. **Identify** what is located within the Buddha's footprints.
3. Conduct research to find out more about this object and answer the following questions:
   - What does the object symbolise?
   - Why has the object been added to this engraving of the Buddha's footprints?
   - Is this object displayed in modern India? Provide an example.
4. **Summarise** the significance of this object to the people of India.

6.8 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 6, 8	5, 7	4, 9, 10

REMEMBER AND UNDERSTAND

1. Select the correct words to complete the passage.
   Siddhartha Gautama was an Indian **priest**/**prince**/**worker** who founded Buddhism in the **fifth**/**sixth**/**eighth** century BCE. He gave up his worldly riches to seek the deeper truths about life, including the **Two**/**Four**/**Six** Noble Truths. People began to call him the Buddha, or the Enlightened One.
2. Reincarnation is the process through which a deceased person's spirit or soul moves to the afterlife. True or False?
3. a. From _____ times, Hinduism divided society into classes called 'castes'.
   b. The caste system was a means of _____ control.
   c. **Identify** the two groups that occupied the top caste of the system.
   d. **Recall** why the lowest ranked group was known as the Untouchables.
4. **Explain** dharma and how it relates to the natural world.
5. **Explain** why people participate in the various rituals explained in this lesson.

ANALYSE AND APPLY

6. **Consider** the sources included in this lesson. From what you have learned in this topic, **explain** why you think water plays a key role in these Hindu festivals.
7. **Propose** why the Indian subcontinent has been inhabited for so long, and by numerous civilisations.
8. Using **SOURCE 6**, **identify** in which part of India the most centres of Buddhism were located by about 200 BCE.

EVALUATE AND COMMUNICATE

9. **Describe** what you notice about the representation of the Buddha shown in **SOURCE 7**.
10. The major religions of India are closely linked through shared beliefs and customs. **Evaluate** the accuracy of this statement with examples.

Answers and sample responses for this topic are available online.

LESSON 6.9 Inquiry: What was behind Ashoka the Great's sudden change in leadership style?

LEARNING INTENTION

By the end of this lesson you should be able to **explain** the reasons behind Ashoka the Great's sudden change in leadership style and military approach.

Background

In this inquiry, you will take a closer look at the remarkable personal change made by Ashoka the Great. You may like to revisit lesson 6.7 to refresh your knowledge about the famous warrior-turned-philosopher.

SOURCE 1 An artist's impression of Ashoka the Great

Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task, you can use this rubric to self-assess.

Inquiry steps

Step 1: Questioning and researching

Find a range of primary and secondary sources to support the observations you make about Ashoka and his leadership styles. You can use this text as a starting point, but try to find additional sources using your school's library and the internet.

Step 2: Using historical sources

Analyse your research in the context of your guiding questions. In other words, once you have obtained more historical information, try to categorise this information in relation to your questions. A table like the one provided is just one way to organise and analyse your research.

Source	Primary or Secondary	Summary of source	Relevant inquiry question

Step 3: Historical perspectives and interpretations

Evaluate your information by making a judgement on the key research question — which of Ashoka's leadership and military styles were the most effective in building an empire? To assist your evaluation, you may want to revisit the table you just completed.

Step 4: Communicating

What is the answer to your research question? Present your findings in a format of your choosing. Support your answer with examples from your research, analysis and evaluation.

LESSON 6.10 Review

6.10.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

6.2 How do we know about ancient India?

- Indian history spans over 3500 years.
- The Indus Valley Civilisation has fewer surviving artefacts than the vast treasures of ancient Egypt or Rome.
- Harappa and Mohenjo-daro are key archaeological sites.

6.3 What is the geography of India?

- Unique physical factors in the Indus Valley were vital for early Indian civilisations.
- The Ganges, Brahmaputra and Indus rivers provided a steady supply of fresh water.
- The combination of fresh water and fertile soil allowed farmers to establish permanent settlements.

6.4 What are the lost cities of the Indus Valley?

- Excavations at Harappa, Mohenjo-daro and Lothal uncovered pottery, jewellery, structures and street plans, revealing India's past.
- Protecting these sites is crucial.
- Urban development, tourism and climate change threaten these important archaeological sites.

6.5 New people, new ideas

- Frequent battles and contact with invaders shaped Indian society, leaving cultural impacts.
- Trade with Europe made India a target for powerful armies.

6.6 What was significant about the Mauryan Empire?

- Ancient India was divided into tribes and had frequent conflicts.
- The Mauryan Empire unified India, bringing peace and advancements in law and governance.

6.7 Who was Ashoka the Great?

- Ashoka expanded the Mauryan Empire through military campaigns.
- After witnessing the brutality of war, he embraced Buddhism and helped popularise it in ancient India.

6.8 What was the social structure of ancient India?

- The caste system created a rigid social hierarchy. While Buddhists rejected it, remnants of this system still exist today.
- Women's status declined over time, and religion strongly influenced customs and funerary practices in Indian society.

6.9 Inquiry: What was behind Ashoka the Great's sudden change in leadership style?

- Ashoka the Great changed his leadership and military style to focus on Buddhism.
- Various sources offer insights into him.

6.10.2 Key terms

anthropomorphic describing or representing something as having human traits, despite its original lack of these characteristics
cubit an ancient measure of length, based on an adult's forearm
edict order issued by a sovereign to his or her subjects
granary place for storing grain
grid system a street network that creates square and rectangular blocks

hygienic healthy, sanitary
karma a concept from ancient Sanskrit that means the result of a person's actions as well as the actions themselves. It essentially means that your actions have consequences – what you throw out into the world, comes back to you.
Macedonian native of Macedon, an ancient kingdom north of Greece
medallion a coin-shaped, usually metallic, decorative disk
monsoon rainy season accompanied by south-westerly summer winds in the Indian subcontinent and South-East Asia
samsara the endless cycle of every soul's birth, death and rebirth
Sanskrit ancient Indian language used in classical Hindu literature
stadia the plural form of stadium, which is a measure of about 200 metres
Vedas ancient sacred texts of Hinduism, composed in India around 1500 BCE, containing hymns, rituals and spells

6.10.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

How did life and society change over time in the Indus Valley Civilisation?

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.

learnon

Post-test	Online post-test
eWorkbooks	Customisable worksheets for this topic Reflection
Digital document	Key terms glossary

6.11 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 5, 6, 10, 11	4, 7, 8, 12, 13	9, 14, 15

REMEMBER AND UNDERSTAND

1. When did the first permanent settlements of the Indus Valley Civilisation arise?
   A. About 4000 BCE
   B. About 3000 BCE
   C. About 2000 BCE
   D. About 1000 BCE
2. What natural resource was crucial to the development of the Indus Valley Civilisation?
   A. Gold
   B. Silver
   C. Water
   D. Trees

3. Why don't we know the names of any of the Indus Valley rulers?
   A. Because written language was not used at the time.
   B. Because there were too many different leaders.
   C. Because there were no leaders of the Indus Valley Civilisation.
   D. Because we do not have enough archaeological evidence of these leaders.
4. Which ancient Indian city housed a port that enabled international trade?
   A. Harappa
   B. Mohenjo-daro
   C. Lothal
   D. Sanchi
5. What is the greatest threat to the archaeological sites from ancient India?
   A. Rapid urbanisation
   B. Increased tourist numbers
   C. Increased flooding events
   D. All of the above
6. What was unique about the rule of Ashoka the Great?
   A. He abandoned his reign at the peak of its powers.
   B. He converted India from Hinduism to Buddhism.
   C. He united the warring states of India.
   D. He was assassinated by his own brother.
7. What were the *Vedas*?
   A. A group of religious texts
   B. A group of foreign invaders
   C. A group of Hindu rituals
   D. A group of young Buddhist scholars
8. Which group is at the bottom of the caste system?
   A. Brahmin
   B. Vaishya
   C. Sudra
   D. Dalit (Untouchables)
9. One method Jains take to achieve liberation is which of the following?
   A. The Eightfold Path
   B. Enlightenment
   C. Nirvana
   D. The Five Vows
10. The ancient Indian language used in classical Hindu literature is called
   A. Suscrit.
   B. Sanskrit.
   C. Sanswrit.
   D. Suskrit.

ANALYSE AND APPLY

11. Using the sources shown throughout this topic, create a map that shows the establishment and expansion of ancient Indian civilisations. Include the invasions launched by other countries.
12. **Explain** the ways in which religion influenced early Indian civilisations.
13. How did trade with the outside world affect the development of early Indian civilisations?

EVALUATE AND COMMUNICATE

14. Why is it difficult to make conclusive statements about much of ancient Indian history?
15. Throughout ancient Indian history, civilisations were rigid and resisted outside influences. **Evaluate** this statement, using specific examples to support your view.

Answers and sample responses for this topic are available online.

7 Ancient China

LESSON SEQUENCE

7.1 Overview 184
7.2 How do we know about ancient China? 186
7.3 How did China's civilisation begin? 189
7.4 What were life and death like in ancient China? 193
7.5 How did China's civilisation affect its environment? 198
7.6 What were the influences of Confucianism, religions and laws? 201
7.7 How did the first emperor change China? 205
7.8 Why did the Han dynasty rise and fall? 210
7.9 What is the heritage of ancient China? 215
7.10 Inquiry: How should we judge the legacy of Qin Shihuang? 219
7.11 Review 221

LESSON 7.1 Overview

INQUIRY QUESTION

Why and where did ancient China's civilisation emerge, and what were its defining features, achievements and legacies?

China is the world's oldest civilisation. For many years, it stayed separate from the western world. In the 1800s and early 1900s, China faced invasions and wars. Today, it is a global superpower.

China has the largest population and one of the fastest-growing economies. Big cities like Shanghai have many skyscrapers and pollution. China's industrial growth has raised concerns about global warming.

learnon

- **Pre-test**
  Online pre-test
- **eWorkbook**
  Customisable worksheets for this topic
- **Digital document**
  Key terms glossary
- **Video eLesson**
  Ancient China

c. 2100 BCE
The legendary Xia dynasty is established.

c. 1200 BCE
Silk is first made in China.

c. 500 BCE
Iron working begins in China.

BCE: 3000 — 2000 — 1000 — 800 — 700 — 600 — 500

c. 1600 BCE
The Shang dynasty begins (lasts until 1046 BCE).

1045 BCE
The Western Zhou dynasty begins (to 770 BCE).

770 BCE
The Eastern Zhou dynasty begins (to 256 BCE).

551–479 BCE
Confucius lives.

SkillBuilder

Use the SkillBuilder activities to develop these Historical concepts and skills:

- HISTORICAL QUESTIONS
- CHRONOLOGY
- USING HISTORICAL SOURCES
- CONTINUITY AND CHANGE
- CAUSES AND CONSEQUENCES
- HISTORICAL SIGNIFICANCE
- COMMUNICATING

221–206 BCE
The Qin dynasty creates the Chinese Empire.

25 CE
The Han dynasty is restored (Eastern Han).

105 CE
The Chinese invent a method of making paper from silk.

220 CE
The Han dynasty falls. The Three Kingdoms period begins.

400 | 300 | 200 | 100 | BCE / CE | 100 | 200 | 300 | CE

475–221 BCE
The Warring States period

206 BCE
The Han dynasty is established.

9–25 CE
The Hsin dynasty (Wang Mang)

65 CE
Buddhism arrives in China from India.

184 CE
Revolt of the Yellow Turbans

LESSON 7.2 How do we know about ancient China?

LEARNING INTENTION

By the end of this lesson you should be able to:

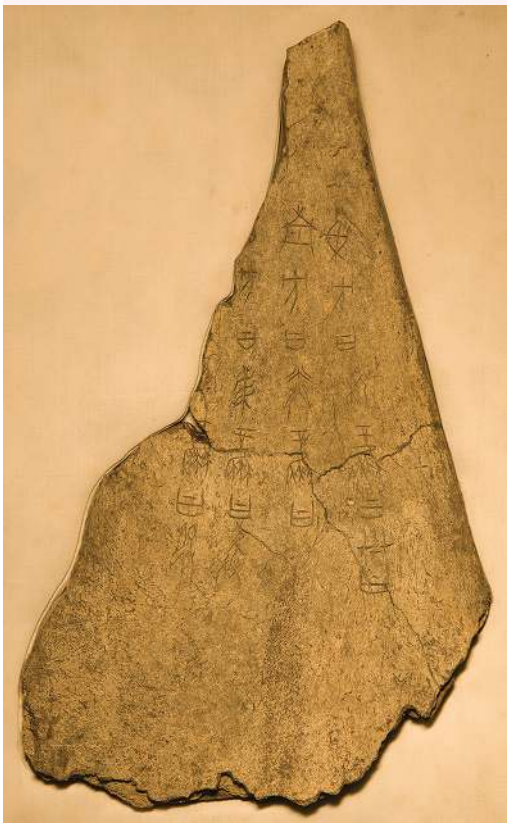
- **explain** what we know about ancient China
- **explain** how to use sources.

Tune in

In 1928, almost 100 000 engraved bones and turtle shells were found near Anyang. They had early Chinese writing on them.

1. **This bone was found covered in the earliest known Chinese writing. Mind map why you think people would have written on bone.**
2. **What do you think the writing could have been about?**
3. **How were these inscriptions important for Shang rulers or religious practices?**

SOURCE 1 Shang dynasty inscriptions on bone



7.2.1 Examining the evidence about ancient China

Many sources tell us about ancient China, from the Great Wall to writings by poets and historians.

People settled along China's Huang River about 6000 years ago. Inscriptions from the Shang dynasty mention harvests, rainfall and animals. By this time, the Chinese had developed writing on bone and turtle shells (refer to **SOURCE 1**). Inscriptions show that they believed that China was a place of civilisation surrounded by barbarians.

Archaeological finds show the rich cultures of the Qin and Han dynasties. One exciting discovery was made in 1974 when local farmers found a huge army of life-size terracotta warriors (see **SOURCE 2**). These warriors guard the tomb of China's first emperor, Qin Shihuang. Archaeologists think there are about 7000 clay warriors and 600 clay horses in the tomb.

SkillBuilder discussion

Historical significance

1. Why were thousands of terracotta warriors buried around the tomb of China's first emperor?
2. How were the terracotta warriors made, and why are they all unique?
3. What do the terracotta warriors tell us about ancient Chinese beliefs in the afterlife?

SOURCE 2 Some of the thousands of terracotta warriors that were buried around the tomb of China's first emperor.

7.2 SkillBuilder activity USING HISTORICAL SOURCES

SOURCE 3 From Sima Qian's book, *Shiji*. Sima Qian was a Chinese historian who lived from about 145 to 86 BCE (during the Han dynasty).

In the ninth moon the First Emperor was buried in Mount Li . . . he employed his soldiery, to the number of 700 000, to bore down. . . and there a foundation of bronze was laid and the sarcophagus placed thereon. Rare objects and costly jewels were collected . . . in vast quantities. **Artificers** were ordered to construct mechanical crossbows, which, if anyone were to enter, would immediately discharge their arrows . . . On the roof were delineated the **constellations** of the sky, on the floor the geographical divisions of the earth . . .

The Second Emperor said, 'It is not fitting that the **concubines** of my late father who are without children should leave him now'; and accordingly he ordered them to accompany the dead monarch to the next world . . . someone suggested that the workmen who had made the machinery and concealed the treasure knew the great value of the latter . . . Therefore, so soon as the ceremony was over . . . the **mausoleum** was closed, so that not one of the workmen escaped.

Examine **SOURCE 3**.

1. In this extract from *Shiji*, Sima Qian talks about Qin Shihuang's tomb. **Propose** what you think would have been the purpose of the mechanical crossbows.
2. **Identify** what was pictured on the roof. **Discuss** why this might have been done.
3. **Identify** what was done to the concubines and the workmen and **infer** what this tells you about the emperor's power and attitudes to human life.

7.2 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4, 5	6, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. **Identify** when farming began in ancient China.
   A. Around 6000 years ago
   B. Around 1000 years ago
   C. Around 600 000 years ago
   D. Around 100 000 years ago
2. **Examine SOURCE 1**. **Identify** the clues about ancient China's civilisation that have been provided by inscriptions and implements.
   A. They had developed writing.
   B. Iron was being used to make weapons and tools.
   C. They kept records of harvests and rainfall.
   D. All of the above
3. **Recall** and select the correct answer to complete the following sentence.
   The Chinese had developed writing by **Xia** / **Shang** / **Han** times.
4. **Discuss** the advantage that armies using iron weapons had over enemies using bronze weapons.
5. **Describe** what was discovered in the complex surrounding the tomb of Emperor Qin Shihuang.

ANALYSE AND APPLY

6. **Explain** how **SOURCE 1** provides evidence of a writing system during the Shang dynasty.
7. Study **SOURCE 2**.
   a. **Describe** the terracotta warriors.
   b. How can you know that they were not mass-produced?
   c. What do they tell you about the emperor's army, wealth and power?
8. Using **SOURCES 2** and **3**, write a one-paragraph **explanation** of the position of the emperor and the burial practices that were carried out after his death.
9. Qin Shihuang is often described as a ruthless, harsh ruler. Refer to **SOURCES 2** and **3** to either support or refute this view.

EVALUATE AND COMMUNICATE

10. Sima Qian wrote during the Han dynasty, after the Qin dynasty. **Discuss** why this should make us cautious about accepting that **SOURCE 3** is accurate.

Answers and sample responses for this topic are available online.

LESSON 7.3 How did China's civilisation begin?

LEARNING INTENTION

By the end of this lesson you should be able to **describe** China's physical environment and how it helped shape its early civilisation.

Tune in

The city of Shanghai is on the Yangtze River, one of the first places where farming and civilisation developed in China.

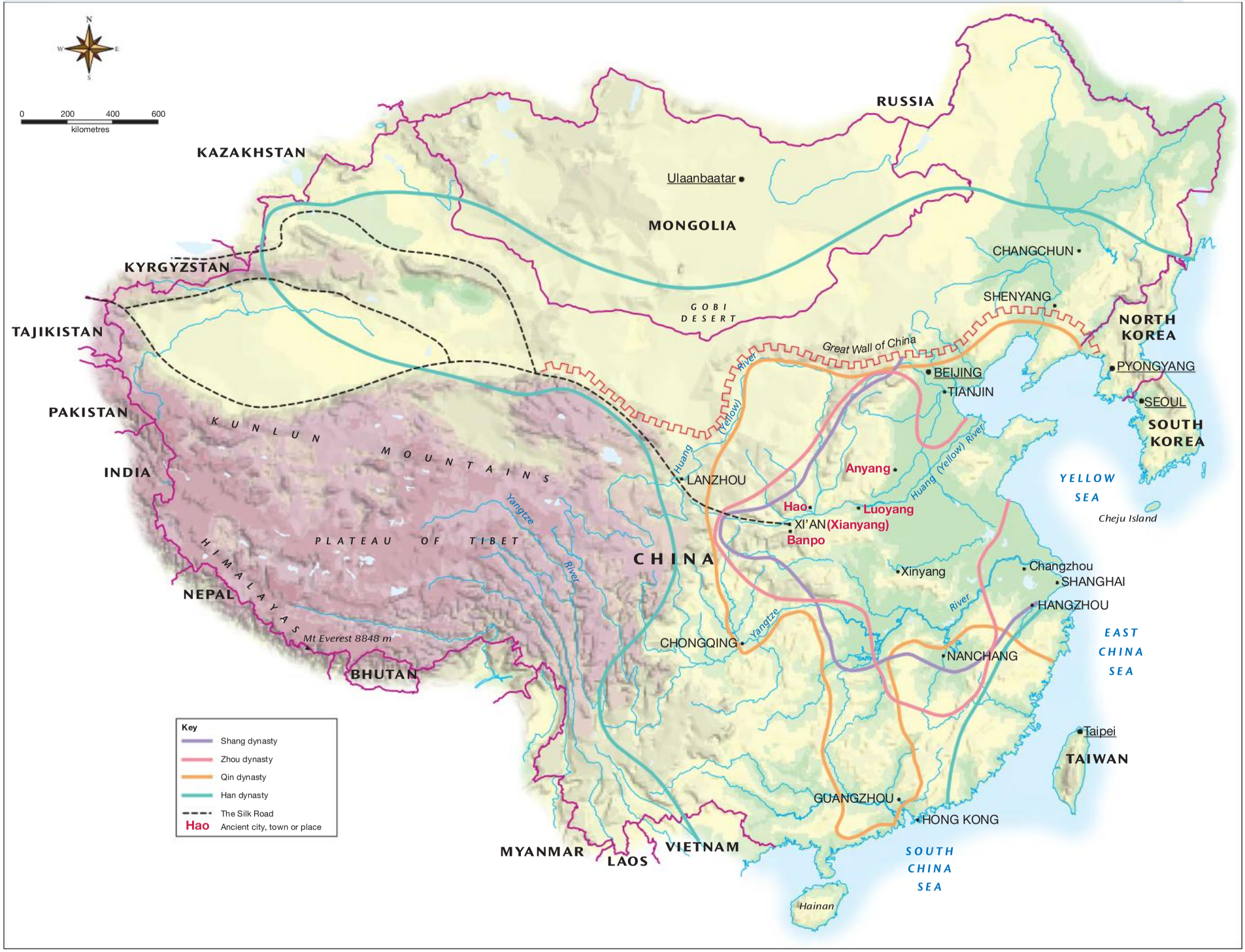
SOURCE 1 River traffic in Shanghai

1. **What advantages do you think the river provides for Shanghai today?**
2. **What advantages do you think river valleys provided for early civilisations?**
3. **What types of goods are being transported on the river in Shanghai?**

7.3.1 China's physical features and the beginning of civilisation

The ancient Chinese believed their country was the centre of the world. They didn't know about other civilisations until about 126 BCE. Legends speak of a 'golden age' and a dynasty called the 'Xia', but there is no clear evidence that the Xia existed.

SOURCE 2 A map of ancient China



Source: Map drawn by Spatial Vision.

SkillBuilder discussion

Causes and consequences

1. Study **SOURCE 2**. What major rivers are shown on the map of ancient China, and how did they help the civilisation to grow?
2. Which regions on the map were most densely populated in ancient times?
3. How did the natural borders, like mountains or deserts, impact ancient China's interactions with other civilisations?

Civilisation in China developed around river valleys, which gave fertile land for farming. However, floods could also destroy farms and villages. Chinese rulers were believed to have the **mandate of heaven**, meaning they were chosen by the gods. If a ruler failed to protect the people from disasters like floods or wars, they could lose this mandate and be overthrown.

Did you know?

The name 'China' comes from the state of Qin. By 300 BCE, people in India and Central Asia knew about Qin. Today, Chinese people call their country *Zhongguo*, meaning 'central states'.

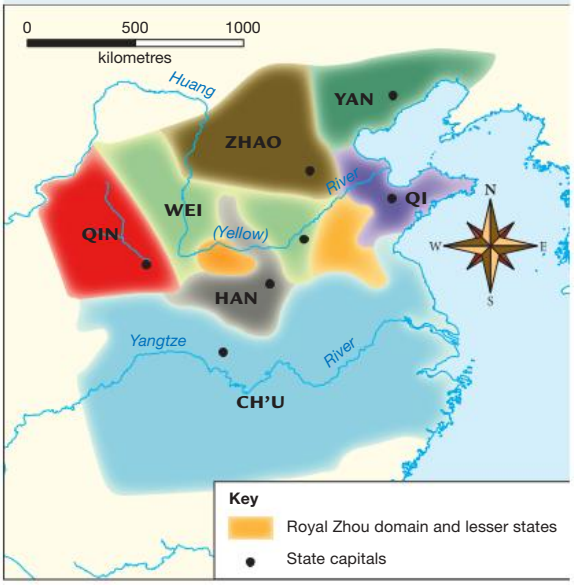
China's earliest dynasties

The first proven dynasty was the Shang (1600–1046 BCE), which was often at war with its neighbours. The Zhou defeated them and started a new dynasty. The Zhou dynasty is split into the Western Zhou (1045–771 BCE) and Eastern Zhou (770–256 BCE).

The Warring States period (475–221 BCE)

The Eastern Zhou rulers had little power. Local lords controlled their own areas, and many wars happened between them. Stronger lords defeated weaker ones and took their land. In the end, only seven states — Qin, Han, Zhao, Wei, Ch'u, Yan and Qi — were left to fight for control of northern China.

SOURCE 3 Zhou dynasty China during the Warring States period, about 300 BCE



Source: Map drawn by Spatial Vision.

7.3 SkillBuilder activity CHRONOLOGY

Create a timeline by putting these events in the right order:

- The Eastern Zhou dynasty
- The Western Zhou dynasty
- The legendary Xia dynasty
- The Warring States period
- The Shang dynasty

Identify and **describe** any continuous pattern your timeline shows.

7.3 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4, 5	6, 7, 8	9, 10

REMEMBER AND UNDERSTAND

1. **Identify** the idea of the mandate of heaven.
   A. The rulers were gods.
   B. The rulers were perceived as gods by the people.
   C. Power and authority were given to a ruler by the gods.
   D. The gods made laws that could not be broken.
2. The mandate could be withdrawn if a ruler failed to protect the people from floods, famine, war and other disasters. True or False?
3. Why is the Xia dynasty often referred to as the 'legendary' Xia dynasty?
   A. The Xia dynasty achieved great advancements.
   B. The people of the Xia dynasty were legendary warriors.
   C. The ruler of the Xia dynasty was a god.
   D. No primary evidence has been found to prove its existence.
4. **Explain** why we know more about the Shang and Zhou dynasties than some other dynasties of ancient China.
5. What was the Warring States period?

ANALYSE AND APPLY

6. Examine **SOURCE 2**.
   a. How big was China in Shang and Zhou times compared with modern China?
   b. Which major rivers can you find in the area that was part of China under the Shang and Zhou dynasties?
7. Examine **SOURCE 3**.
   a. During the Warring States period, which states occupied land around river valleys?
   b. What advantages would they have gained from that?
8. Using the sources and information in this lesson, **summarise** a list of ways in which the adoption of farming must have changed Chinese society.
9. Referring to **SOURCE 2**, **propose** how the natural features of China's varied geography would have helped to protect it against invasion.

EVALUATE AND COMMUNICATE

10. **Propose** how China's rivers would have contributed to the development of its civilisation.

Answers and sample responses for this topic are available online.

LESSON 7.4 What were life and death like in ancient China?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** how ancient China's society was organised
- **explain** how class and power were linked
- **describe** how people from different classes lived and were treated after they died.

Tune in

People's everyday lives varied between different social classes in ancient China.

SOURCE 1 Modern day in the Chinese capital, Beijing

Examine **SOURCE 1**.

1. **What can you see in this image that suggests that it is in China?**
2. **Is this how you would have expected Chinese citizens to appear?**
3. **Consider how differently ordinary Chinese people might have looked in ancient times.**

7.4.1 The ruling classes

Chinese society was led by rulers who were helped by lords, wealthy landowners and **bureaucrats**. These groups had power over many peasants, workers without land, artisans and some slaves.

- Ancient Chinese rulers had a lot of power. This is shown by Shang dynasty tombs, which had war chariots and the bodies of many followers. These people were likely sacrificed to serve the rulers in the afterlife.
- Below the supreme ruler were the powerful lords. They governed the states, such as Zhao, Qin and Wei, within the kingdom.
- Next were the landowning gentry. The warrior gentry led the lords' armies. Bureaucrats also came from the gentry, but they needed to be scholars to work in the government.

The lords of ancient China often fought with nomadic tribes to the north and west, as well as with each other. Warriors first fought in chariots and later on horseback. The lords and warriors saw war as a kind of sport. When not fighting, they spent time hunting, feasting or attending ceremonies.

Upper-class women had servants and luxuries, but they were considered less important than men. When they married, they were treated as the property of their rich husbands, who could have more than one wife.

SOURCE 2 A late Zhou dynasty bronze musical bell

SOURCE 3 An ox-shaped bronze zun (wine vessel) from the late Zhou dynasty

SkillBuilder discussion

Using historical sources

1. What techniques and materials were used in the creation of the objects shown in **SOURCES 2** and **3**?
2. Identify some of the primary uses of the bronze musical bell and the ox-shaped bronze zun during the Zhou dynasty?
3. Discuss how the designs and decorations on these objects reflect the cultural and artistic values of the late Zhou dynasty?

Did you know?

In ancient China, women and men wore ornaments and jewellery as a badge of their social rank. This made it easy to tell at a glance their position in society.

7.4.2 The common people

The struggling peasants

Most people in ancient China were peasants with little power. They reared sheep, pigs, poultry, buffalo and oxen and grew grains like wheat and barley. Many worked for lords and had to give them half of what they grew, plus pay taxes. Life was hard, and some had to sell their children into slavery. Peasants faced floods, famine and war. Most of the **infantry** in the armies were **conscripted** peasants using weapons like **halberds** with bronze blades. Many died in battle, and captured soldiers were often killed or made slaves.

The lowest classes

Below the peasants were artisans, merchants and slaves. Artisans were skilled workers like armourers, metalworkers and carpenters. Merchants traded goods but were a smaller, lower class. Some were wealthy but they were not seen as useful and ranked just above slaves. Most slaves were captured in war or were punished for crimes committed by relatives rather than by themselves.

7.4.3 Everyday life

People in ancient China had very different lives based on their social class. Rulers, lords and wealthy people had a lot of power, while peasants, artisans and slaves faced many struggles. Most people were peasant farmers living in small villages. They worked long hours on family farms and did most tasks by hand. Floods and droughts often forced families to work together on irrigation canals. In towns, crafts were passed down from father to son. Craftsmen and merchants also had hard lives, but they could travel for work and trade, which was better than being a peasant.

SOURCE 4 A bronze *mao* (spearhead) from the late Shang dynasty

Women's hard lives

In ancient China, women were seen as less important than men. Fathers were in charge of families. Women took care of the home and children, and peasant women often worked in the fields, too. Their fathers arranged their marriages, and after marriage, they lived with their husband's family. Married women had to obey their husbands' family members but could gain respect by having sons. Baby girls were not valued and sometimes were abandoned or sold.

Entertainment

Most families in ancient China worked hard with little time or money for fun, except during festivals. However, rulers and wealthy merchants enjoyed many entertainments. They had Chinese opera with stories, board games and acrobatics, which became popular during the Qin dynasty.

SOURCE 5 From Michael Lowe, *Everyday Life in Early Imperial China*

. . . evidence in the form of reliefs [sculptures] that decorated a tomb illustrates the type of entertainment that rich families could afford to stage, right at the end of the Han period. There was dancing and sword-play, juggling and acrobatic feats, accompanied by skilled players with their drums and bells, their wind and stringed instruments; and we know of other forms of amusements . . . such as cock-fighting, dog or horse racing and bird hunting.

7.4.4 Death and burials

We know little about how poor people dealt with death in ancient China, but we know a lot about the funeral customs of the rich. They could afford fancy tombs and elaborate ceremonies. Many people believed that when someone died, their soul went to a spirit world. A big funeral showed that the deceased was important in life. People thought that the living needed to help the dead so they wouldn't become evil spirits.

From about 5000 BCE to the 1700s CE, wealthy families buried goods like food and drink with their dead. Sometimes, rulers had people buried with them to serve them in the afterlife. Rich families had grand funeral feasts and ceremonies, and they were sometimes buried with puppets dressed in fine silk. Their tombs had paintings of joyful banquets. Poor people didn't have these things and were likely buried in simple pits. Many may not have had any burial during famines or wars.

SOURCE 6 Life-sized terracotta warriors were buried to guard China's first emperor, Qin Shihuang.

SOURCE 7 Jade burial suit of Princess Dou Wan, who lived before 100 BCE. The pieces of jade (2150 of them) are held together with gold wire.

SkillBuilder discussion

Historical significance

1. Why were life-sized terracotta warriors buried with Emperor Qin Shihuang?
2. How do the terracotta warriors reflect the military power of the Qin dynasty?
3. What does the burial of these warriors tell us about beliefs in the afterlife during Emperor Qin's rule?

Did you know?

Burial suits were often made of jade because it was believed that jade would stop the body from decaying and so ensure immortality.

7.4 SkillBuilder activity COMMUNICATING

In groups, write and perform a role-play of an imaginary discussion between peasants and members of the ruling classes on the following issues:

- how much of their produce tenant farmers had to give to their landlords
- the suffering of peasants who were conscripted as infantry during wars.

Distinguish the feelings that both groups would have had, and why they would have differed greatly.

7.4 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 5, 6	4, 7, 8	9, 10

REMEMBER AND UNDERSTAND

1. **Select** the correct words to complete the following sentence.
   The *gentry/lords* governed states within the kingdom. The *gentry/lords* headed the lords' armies and those who were scholars became government officials.
2. Peasants suffered in wars no matter which side won. True or False?
3. **Identify** three ways people could become slaves in ancient China.
   A. By being born as a slave
   B. By being sold into slavery
   C. By being punished for crimes they (or a relative) committed
   D. By being captured as soldiers
4. Why were merchants regarded as belonging to a very low class even though they might be wealthy?
5. **Describe** ways in which women were disadvantaged.
6. **Explain** what beliefs were held about life after death.

ANALYSE AND APPLY

7. **Examine SOURCES 2, 3, 4** and **5**. **Describe** how each of these objects was used and which social class would have used it.
8. Read **SOURCE 5** and **explain** what evidence it provides of inequality in ancient China in death and in life.
9. Study **SOURCES 6** and **7**. **Suggest** what evidence each of these sources provides about ancient Chinese society.

EVALUATE AND COMMUNICATE

10. **Explain** why the power and wealth of the ruling classes can be considered as a cause of the poverty and hardships suffered by the common people of ancient China.

Answers and sample responses for this topic are available online.

LESSON 7.5 How did China's civilisation affect its environment?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **investigate** the environmental problems China has faced for many years
- **explain** how these issues have affected the Chinese people.

Tune in

Pandas are native to China. Only a few decades ago these much-loved animals were in danger of extinction.

SOURCE 1 Pandas eating bamboo in a research base and breeding centre in China

Examine **SOURCE 1**.

1. **Why do you think the pandas shown are in a research and breeding centre?**
2. **Why do you think that such species were threatened?**

7.5.1 China's natural environments

Today, China faces big environmental problems. Since the late 1900s, its rapid growth has created thousands of factories making goods for the world. This has meant many new power stations have been built. Air pollution in cities has been so bad that during the 2008 Olympic Games in Beijing, factories had to stop working, and many cars were taken off the roads. These problems are big today, but even in ancient times, China's population affected the environment.

China is a huge country with many climates and landscapes. It has mountains and plateaus in the west, deserts in the north, forests in the northeast and plains along the coast. For example, Beijing has freezing winters, while southern China is warm.

SOURCE 2 This section of the Great Wall of China straddles mountains north of Beijing. The wall extends over 5000 km through many different landscapes.

In ancient times, China mainly covered the fertile valleys of the Huang and Yangtze rivers. More than 90 per cent of people lived in the east, where the rivers provided water for farming. However, these rivers often flooded, causing great damage and loss of life.

Did you know?

Over many years, mud from soil erosion raised the Huang River so high that it flowed above the land. When these barriers broke, floods killed many people. In 1117 CE, over a million people died in a major flood.

7.5.2 A big population

One in four people today is Chinese. Even in ancient times, China had a large population that could change quickly. They estimate:

- in Qin dynasty times (221–206 BCE), 20 million people were in China
- by 1 CE, there were about 60 million people
- by 220 CE, the population had fallen to about 40 million
- China's population then took almost another thousand years to surpass 60 million.

During the Han dynasty, China's population grew due to peace and better farming. But clearing forests and farming the Huang River caused soil erosion, turning it yellow. By 220 CE, rebellions, soil erosion and famines reduced the population. Many animals lost their homes. In ancient times, elephants and rhinos lived in China, but rhinos went extinct, and elephants now live in small protected areas.

7.5 SkillBuilder activity USING HISTORICAL SOURCES

1. **Describe** the pollution in Shanghai.

SOURCE 3 A constant haze of air pollution hangs over modern China's cities. This is a view of Shanghai.

   - What are the main sources of air pollution in Shanghai and other modern Chinese cities?
   - How does air pollution affect the health and daily lives of people living in Shanghai?
   - What measures are helping to reduce air pollution in Shanghai and improve air quality?
2. **Discuss** how concerned you think anyone living in Shanghai should be about such pollution.
3. Conduct research to find out:
   - how pollution in China became so extreme
   - what China is now doing about it.
4. Communicate your findings to the class in any format you choose.

7.5 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4	5, 6	7, 8

REMEMBER AND UNDERSTAND

1. **Identify** how China's rapid modern economic growth has affected the natural environment.
   A. It has not had any impact.
   B. It made the climate across the country the same.
   C. It reduced the population.
   D. It created high levels of air pollution.
2. **Identify** the different types of natural environment that exist in China.
   A. Mountains
   B. Deserts
   C. Forests
   D. Grasslands
   E. Coasts
   F. All of the above
3. Why have over 90 per cent of China's people lived around the river valleys in the country's east?
   A. These rivers provided water for farming.
   B. There was more space.
   C. It was easier to travel around.
   D. There was good soil for farming.
4. **Identify** the most likely reasons for China's population growth between 221 BCE and 1 CE, and for its decline by 220 CE.
5. **Describe** the way that rising populations and land clearances for farming affected China's rivers and wildlife.

ANALYSE AND APPLY

6. **Describe** the landscape in **SOURCE 2**. Then use your library or the internet to find pictures of other landscapes along the Great Wall. **Explain** why these areas could not support the large populations found in eastern China.
7. **Explain** what has remained the same and what has changed in China from ancient to modern times with regard to the following.
   a. Population levels
   b. Environmental problems
8. **Explain** how population growth could have been both a cause and an effect of the clearing of forests and cultivation of farmlands in ancient China.

Answers and sample responses for this topic are available online.

LESSON 7.6 What were the influences of Confucianism, religions and laws?

LEARNING INTENTION

By the end of this lesson you should be able to **explain** the significance of Confucianism and the beliefs of Daoism and Buddhism on the laws and government of China.

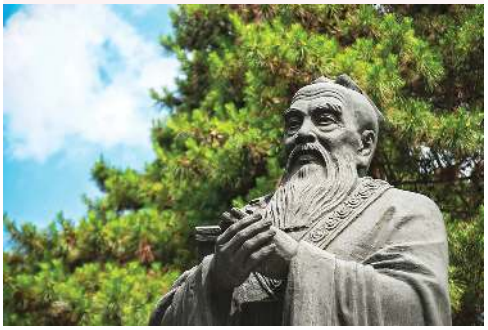
Tune in

The following is a Confucian saying:

'The man who asks a question is a fool for a minute; the man who does not ask is a fool for life.'

1. **Mind map what you think this saying means.**
2. **Have you or your peers heard of any other Confucian sayings?**
3. **Discuss whether the quote provided still applies to modern life.**

SOURCE 1 A statue of Confucius made centuries after his death



7.6.1 The ideas and influence of Confucianism

In ancient China, people worshipped nature gods and ancestors. Three main beliefs — Confucianism, **Daoism** and Buddhism — shaped life and taught tolerance. Confucianism also influenced ancient Chinese law.

Confucius (551–479 BCE)

During the wars of the Zhou dynasty, philosophers tried to solve problems. Confucius, regarded as China's greatest thinker, was born into a noble family. He chose to teach about life and government instead of becoming a high official.

The philosophy of Confucius

We know about Confucius from a book called *The Analects*, which contains his sayings written by his followers. He focused on how good behaviour could create a fair and peaceful society. Confucius taught about family duty, kindness and that rulers should lead by example. Although he didn't convince rulers in his time, his ideas lasted. His student, Mencius, did influence rulers, and Confucius's teachings shaped Chinese thought for many years, valuing wise leaders over warriors.

SOURCE 2 From *The Analects*

The princes of today are greedy in their search after material goods. They indulge themselves in pleasure and neglect their duties and carry themselves with a proud air. They take all they can from the people and invade the territory of good rulers against the will of the people, and they go out to get what they want without regard for what is right. That is the way of the modern rulers.

SOURCE 3 From *The Analects*

When the ruler himself does what is right, he will have influence over people without giving commands, and when the ruler does not do what is right, all his commands will be of no avail.

7.6.2 Religions in ancient China

Daoism

Legend says Laozi, who lived around the same time as Confucius, taught Daoism.

Daoism holds that people should live in harmony with nature to find happiness. They also thought people could become immortal. Daoists created kung fu and the idea of yin and yang, showing how opposites work together to create harmony and balance.

SkillBuilder discussion

Communicating

1. What do the yin and yang symbol represent in Daoist philosophy?
2. How does the balance between yin and yang reflect the natural world and human life?
3. Discuss the ways that the concept of yin and yang is important for understanding Daoist beliefs and practices?

SOURCE 4 The Daoist symbol for yin and yang

Buddhism

SkillBuilder discussion

Communicating

1. How did Chinese Buddhism influence the design and style of this statue in Korea?
2. What features of this statue show the connection between Chinese culture and Korean Buddhism?
3. In what ways did the spread of Chinese Buddhism impact the beliefs and practices in neighbouring countries like Korea?

SOURCE 5 Chinese Buddhism spread to neighbouring countries. This Buddhist statue in Korea reflects Chinese influence.

Buddhism began in India in the sixth century BCE and was taught by the Buddha, who gave up his life of luxury to seek enlightenment. Buddhism teaches that suffering is caused by desire and that people live many lives. In each life, they should try to live better until they reach nirvana, a peaceful state free from suffering. Buddhism came to China through the Silk Road and became important by the first century CE.

7.6.3 Laws in ancient China

Confucianism has greatly influenced Chinese traditions, especially in respecting elders and honouring ancestors. While Confucius didn't influence government during his life, his ideas became important later. He believed there was a golden age of good government in early Zhou times. After he died, many people continued to follow his teachings. One famous follower was Mencius, who lived around 372–298 BCE. He taught that five important relationships—father and son, husband and wife, older brother and younger brother, friend and friend, and ruler and subject—help create a good society. Mencius influenced some rulers during the late Warring States period.

Laws of the first Qin emperor

In 221 BCE, China's first emperor, Qin Shihuang, united the Warring States and made the laws of the state of Qin the laws for all. Confucianism had little influence, and Confucian scholars were not allowed to teach. Instead, the harsh laws followed Legalism (see **SOURCE 6**), the school of thought that believed people were bad by nature.

SOURCE 6 An extract from the laws of the state of Qin before 221 BCE. Such laws operated throughout China under the Qin emperors.

When five men jointly rob something worth one cash or more, they should have their left foot amputated, be tattooed, and be made convict labourers. If fewer than five men were involved but what they robbed was worth more than 660 cash, they should be tattooed, their noses cut off, and made convict labourers . . .

Suppose the holder of a low rank stole a sheep. Before the case was judged, he falsely accused someone else of stealing a pig . . . He should be left intact and made a convict labourer.

Anyone who kills a child without authorisation is to be made a convict labourer. This does not apply to killing a deformed or abnormal newborn.

Suppose A ran away from her husband and married B . . . After they are caught, what should the sentence be? They should be tattooed and made convict labourers . . . Convict labourers . . . are to be manacled and fettered.

SkillBuilder discussion

Using historical sources

1. Read **SOURCE 6**. What are some key rules or laws mentioned in the extract from the laws of the state of Qin?
2. How did these laws affect the daily lives of people living in Qin during that time?
3. In what ways did the laws of Qin influence the legal system of China under the Qin emperors?

Laws after the fall of the Qin

The Han dynasty replaced the Qin in 206 BCE and hired Confucian scholars as officials. They changed laws based on Confucian ideas, which shaped Chinese thought and law until 1911. These laws also influenced countries like Vietnam and Korea.

7.6 SkillBuilder activity COMMUNICATING

What might a Confucian scholar have decided to do if he recognised that the Han emperor was not providing for the people's welfare and was failing to provide a good example?

Consider how his decision might be influenced if this scholar:

a. believed that as a civil servant he had an ethical obligation to obey the emperor
b. believed that the emperor's policies were so unjust that he had lost the mandate of heaven
c. believed that, as a follower of Confucius he, the scholar, had to stand up for Confucian principles and speak critically to the emperor regardless of the consequences
d. knew that, like Sima Qian before him (see lesson 7.8), he would probably be castrated and imprisoned for speaking out.

Write a brief paragraph on each of the preceding points and then **compare** your evaluation with a partner.

7.6 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 5	4, 6, 7, 8	9, 10

REMEMBER AND UNDERSTAND

1. When did the ideas of Confucius begin to influence Chinese thought?
   A. While he was in power
   B. Before he was in power
   C. After his death
   D. None of the above
2. **Identify** the main ideas of Daoism. Select all correct answers.
   A. Living simply and in harmony with nature
   B. Immortality
   C. Revenge
   D. Yin and yang
   E. Unhappiness
3. **Identify** the central ideas of Buddhism. Select all that apply.
   A. Reincarnation
   B. Immortality
   C. Reaching enlightenment
   D. The strive to eliminate human desire
   E. Yin and yang
4. **Identify** the school of thought that was the main influence on Chinese law under the Qin dynasty.
5. How was Confucianism incorporated as an influence on Chinese law under the Han dynasty?

ANALYSE AND APPLY

6. **Identify** aspects of **SOURCE 1** that suggest that Confucius was highly regarded long after his death.
7. Read **SOURCES 2** and **3**.
   a. Why was Confucius critical of the rulers of his time?
   b. What did Confucius regard as qualities of a good ruler?
8. Read section 7.6.2 and look at **SOURCES 4** and **5**. **Explain** why ancient China was tolerant of different beliefs.

9. Read **SOURCE 6**.
   a. According to the laws of Qin, a robber should have his left foot cut off and be made a convict labourer. How difficult would such a life be with only one foot?
   b. In this source 'left intact' means not mutilated. Using this source as your evidence, **explain** which crimes were punished the most severely under Qin law.
   c. **Explain** what conclusions you can draw about the rights of women and children under Qin law.

EVALUATE AND COMMUNICATE

10. **Discuss** why Confucius might be deserving of being regarded as a very significant individual in Chinese history.

Answers and sample responses for this topic are available online.

LESSON 7.7 How did the first emperor change China?

LEARNING INTENTION

By the end of this lesson you should be able to **explain** the start of the Qin dynasty and the significant changes in China during this time.

Tune in

Qin Shihuang was regarded as a ruthless and brutal ruler in accounts of his reign that were written under the Han dynasty, which followed his dynasty.

SOURCE 1 A modern statue of Qin Shihuang, China's first emperor, at the entrance to the site of his tomb in Xian, China.

Examine **SOURCE 1** and discuss the following.

1. **What kind of image of a ruler is conveyed by this statue?**
2. **Propose why you think such a statue would be constructed in modern China.**

7.7.1 Qin rule

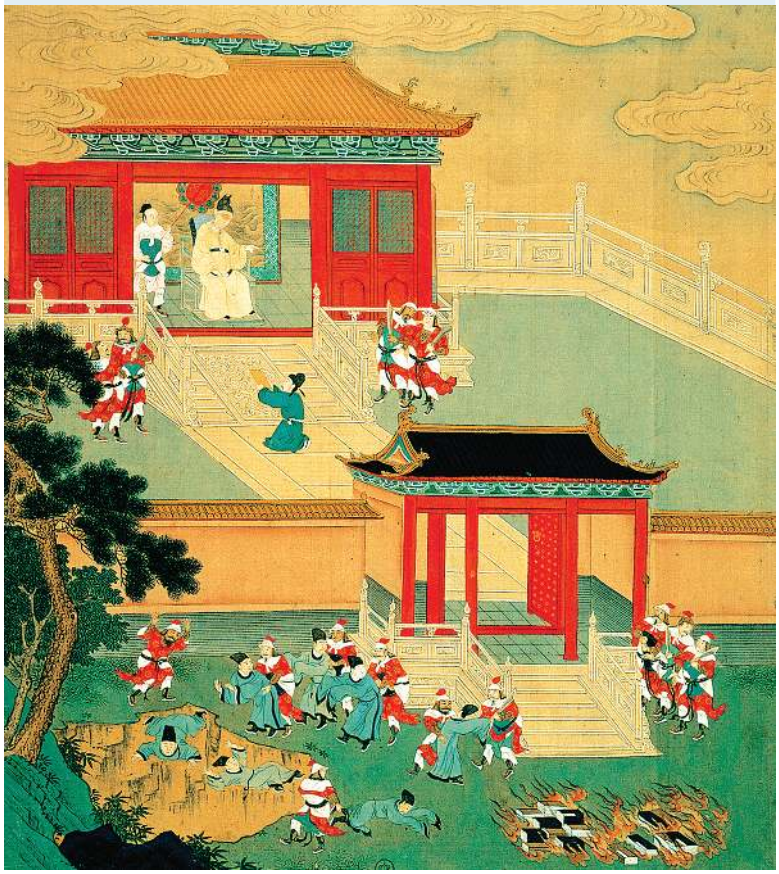
Ying Zheng, the ruler of Qin, ended the Warring States period by conquering all the other states in China. He founded the Qin dynasty (221–206 BCE) and gave himself the title 'Shihuangdi'. In modern Chinese, he is called Qin Shikuang (pronounced *chin shir hwang)* meaning 'First Emperor of the Qin'. The Qin dynasty was the shortest in Chinese history but very important. It was China's first centralised empire, and its legacies include the Great Wall.

SkillBuilder discussion

Causes and consequences

1. What message does this painting convey about Qin Shihuang's policies towards knowledge and education during his reign?
2. How did the burning of books and the execution of scholars affect Chinese culture and history?
3. What reactions might people have had to these actions depicted in the painting, both at the time and in later interpretations?

SOURCE 2 A Chinese painting illustrating Qin Shihuang's burning of the books and the execution of scholars



From 221 BCE, Qin Shihuang's harsh laws were enforced across China. He sent armies to conquer southern China and took weapons from the people. He banished many nobles and forced others to live in his capital. In 213 BCE, to stop rebellious ideas, he ordered a public burning of books, including those of Confucian scholars (see **SOURCE 2**), and executed scholars who kept their books.

Qin Shihuang ended the feudal system, where nobles controlled land, and instead divided the country into local areas run by officials. He allowed land to be bought and sold freely.

7.7.2 The Great Wall and other achievements of Qin Shihuang

As early as the seventh century BCE, Chinese states built walls to protect against the northern **Xiongnu** tribes. During the Warring States period, they also built walls between each other. To unify China, Qin Shihuang destroyed those walls and linked the northern ones, creating about half of the Great Wall (see **SOURCES 3** and **4**).

SOURCE 3 The Great Wall of China is the world's largest construction, over 5000 km long with 20 000 watchtowers. It took centuries to build and cost many lives, with the current wall much bigger than the original Qin wall.

A The height and width of the Great Wall vary along its length. On average, the wall is 7 m high and 5 m wide.

B Qin Shihuang began linking existing short walls built by earlier rulers into one continuous wall to protect his empire from attacks from the north.

C Throughout successive dynasties, the wall was extended and repaired. Most of the present wall was built between the fourteenth and sixteenth centuries.

D The wall was topped by a road wide enough in parts to accommodate marching soldiers, horsemen and chariots.

E Soldiers on the watchtowers would signal an attack by lighting a fire.

F Watchtowers were protected by battlements. Soldiers would fire arrows down on the enemy as they tried to scale the wall.

SkillBuilder discussion

Continuity and change

1. What were the main reasons for building the Great Wall of China, and how did it serve its purpose?
2. How did the construction of the Great Wall impact the lives of the workers involved in its building?
3. In what ways did the Great Wall evolve from the original Qin wall to the larger structure we see today?

Qin reforms

To strengthen central rule and make China more efficient, Qin Shihuang introduced many reforms.

- Separate states were replaced with central rule and one set of laws.
- The calendar and people's dress were standardised throughout the empire.
- A single form of writing, weights, measures and money was used in the empire. This made trade and taxes easier.
- His new capital was Xianyang. Highways were built from it to unite the country, and new trading cities were founded.
- He ordered that all carts have the same axle width. This helped carts move easier on dirt roads since their wheels could fit in the same ruts.

7.7.3 The fall of the Qin

Qin Shihuang wanted to live forever. He sent people to find the secret of everlasting life, but they never returned. He surrounded himself with fortune-tellers who promised him immortality, but he died at age 49 in 210 BCE while travelling. His minister, Li Si, and others pretended he was still alive to choose a new leader. To hide the smell of his body, they followed the emperor's carriage with a cart of rotting fish. Later, they announced his death, which might have been caused by mercury in immortality drugs.

Qin Shihuang's successor, the Second Emperor, ruled for only a few years. High taxes and forced labour made life hard for peasants, who were forced to build palaces, roads and the Great Wall. From 209 to 206 BCE, a peasant rebellion destroyed the Qin dynasty. The rebel leader, Liu Bang, became emperor and started the Han dynasty. Qin Shihuang's dream of a long-lasting dynasty failed, but he united rival states into an empire and created a government system that lasted until the twentieth century.

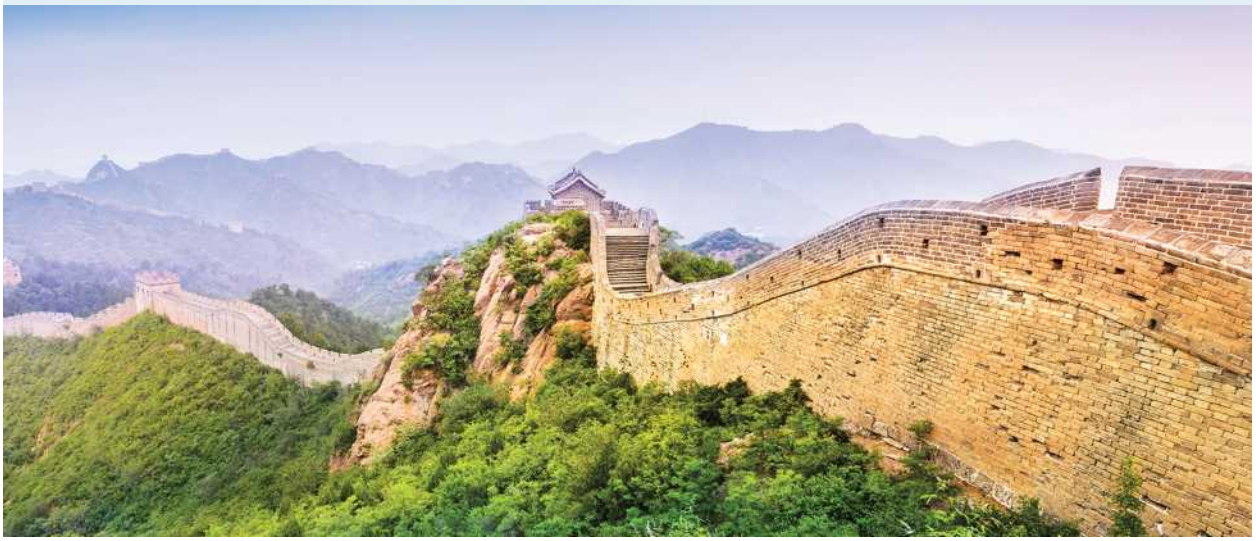
Did you know?

In ancient China, dragons were symbols of wisdom, strength and goodness. Qin Shihuang was the first to use the dragon as a symbol for emperors.

SOURCE 4 An extract from Thomas Bartlett, *Qin Dynasty: China's Ancient Revolution*

The overall image of the Qin state and its imperial phase [the period of the Qin dynasty], as transmitted through history by surviving records, is a grimly harsh one . . . These charges [against the Qin rulers] reflect early Han writers' self-interested writing of Qin history . . . Overall, the Qin reflects in concentrated form the inhumane aspects of the Warring States period . . . But, from the perspective of nation building, some modern Chinese . . . emphasise his achievements, typically saying that 'he sacrificed one generation to benefit 10 000 future generations'.

SOURCE 5 A section of the Great Wall of China



7.7 SkillBuilder activity **COMMUNICATING**

Scenario

Modern leaders sometimes use advertising teams, called 'spin doctors', to make their actions seem better. Imagine your group is hired by Qin Shihuang to create an advertisement focusing on his achievements, not the suffering or deaths caused by his rule.

Criteria

- Your message should be no longer than a TV ad or a full-page newspaper ad. You can also use social media to share your message.
- It should aim to be persuasive.
- It should be selective, using only those facts that make the emperor look good.

1. **Identify** three achievements that you think Qin Shihuang would want advertised.
2. Develop each of these into a brief, persuasive and positive message.
3. Create a simple advertisement that includes all of these messages. You may want to include images or even acting (in the case of a commercial).
4. Communicate your propaganda message to your peers.

7.7 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4	5, 6, 7, 8	9, 10

REMEMBER AND UNDERSTAND

1. Ying Zheng gave himself the title _____, which means 'First Emperor of the Qin'.
2. Qin Shihuang reduced the influence of Confucian scholars by ordering that they be imprisoned. True or False?
3. **Explain** why Qin Shihuang weakened the power of the nobles.
4. **Propose** how the emperor's attempts to live forever might have contributed to his early death.
5. **Explain** how standard calendars, laws, money, weights and measures, axle widths and system of writing would have made trade, taxation and government more efficient.

ANALYSE AND APPLY

6. **Describe** what is being done in **SOURCE 2** and why.
7. **SOURCE 3** is a secondary source and **SOURCE 5** is a photograph of a primary source. **Compare** them to judge the accuracy of **SOURCE 3**.
8. **Describe** features of the Great Wall that would have made it an effective barrier against invasion.
9. Look at the landscape in **SOURCE 5** and read the **SOURCE 3** caption. **Deduce** why so many people could have died building the Great Wall.

EVALUATE AND COMMUNICATE

10. Read **SOURCE 4** and other information in this lesson and answer the following.
    a. **Describe** how Chinese society changed under the first emperor.
    b. **Predict** how groups such as the nobles, peasants and Confucian scholars would have regarded these changes.

Answers and sample responses for this topic are available online.

LESSON 7.8 Why did the Han dynasty rise and fall?

LEARNING INTENTION

By the end of this lesson you should be able to **explain** how the Han dynasty grew, how trade connections developed, and why the Han eventually fell.

Tune in

Cavalry became a major part of the Han army because of the mobility it gave Chinese armies fighting mounted nomads.

SOURCE 1 Terracotta figures representing Han dynasty cavalry

1. **Discuss why you think the figures shown in SOURCE 1 would have been created.**
2. **Is anything similar created for the modern military? Brainstorm examples with a partner and compare with the class.**
3. **What do you think about the Han Dynasty when you see these figures?**

7.8.1 Reforms, expansion and trade

After the Qin dynasty fell, a civil war lasted four years. Liu Bang won and started the Han dynasty, which lasted for centuries. The Han made great achievements in education, science and trade. Today, Chinese people still call themselves 'Han'.

Han reforms

Liu Bang worked to make China prosperous after the Qin dynasty. He reduced the army, lowered taxes for peasants and encouraged farming. By the first century BCE, the population reached 60 million. He also started state education, where boys studied Confucian books to become civil servants, but girls were not allowed to attend.

Did you know?

The Han dynasty was generally kinder than the Qin dynasty. But when a historian, Sima Qian, defended an officer who was unfairly blamed for a Chinese defeat, Emperor Wudi had Sima Qian **castrated** and thrown into prison.

China expands

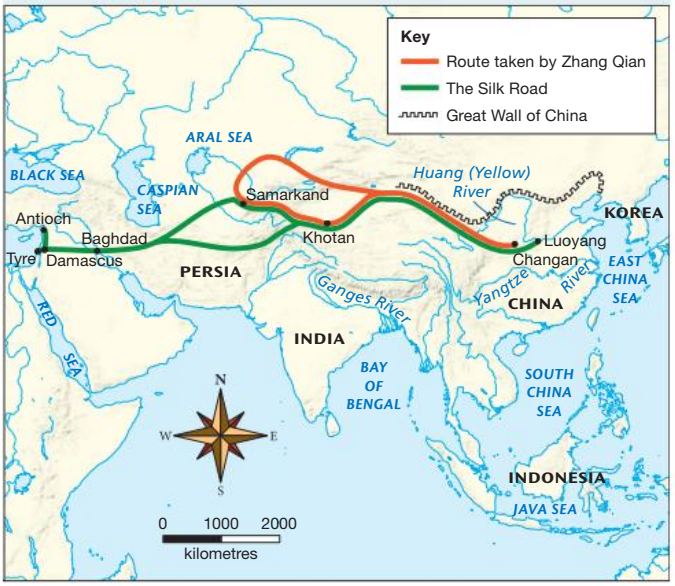
China grew larger under the Han dynasty. In 138 BCE, Emperor Wudi sent Zhang Qian and 99 others to make friends with people in the west. After being captured and escaping twice, Zhang returned in 125 BCE with stories about new places. He went on two more missions to find trade routes to Central Asia and India. By 102 BCE, the Han controlled much of southern and western China. In 109 BCE, they also reached northern Korea, spreading Chinese culture to Japan.

SkillBuilder discussion

Continuity and change

1. What goods were commonly traded along the Silk Road, and how did they influence cultures along the route?
2. How did the Silk Road facilitate cultural exchanges between different regions and civilisations?
3. Discuss the challenges that traders would have faced while travelling the Silk Road, and how did they overcome them?

SOURCE 2 The Silk Road — the world's longest trade route in continuous use



Source: Map drawn by Spatial Vision.

The Silk Road

By the early first century BCE, Chinese missions created the famous Silk Road. Camel trains carried valuable silk across deserts and mountains to India, Persia and the Roman Empire. Traders also brought jade, silver and Roman glassware to China along this route.

7.8.2 Growing discontent, rebellion and the fall of the Han

The rich get richer and the poor get poorer

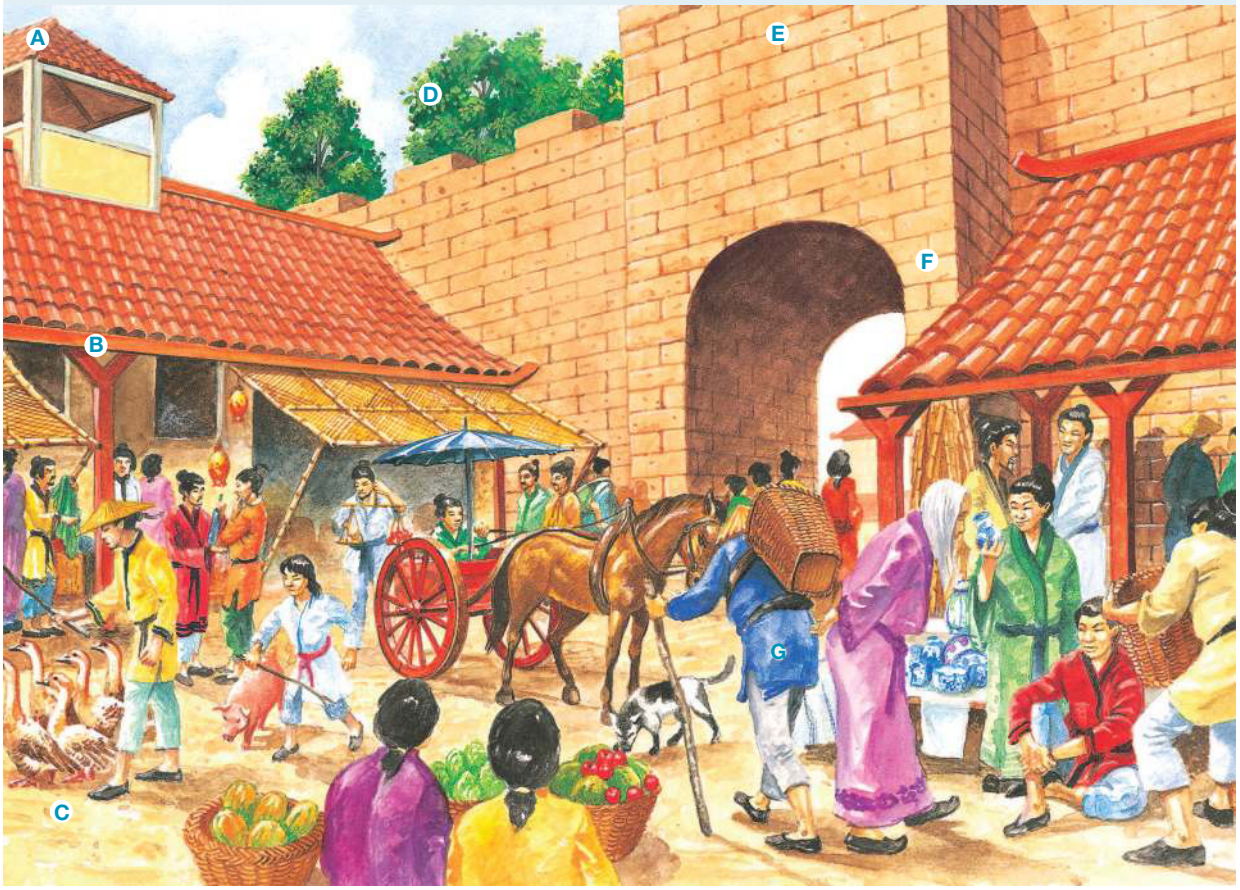
To control new lands, the Han rulers **deported** many local people and settled Chinese there. While rich merchants and rulers gained, ordinary people suffered. The Han rulers raised taxes on peasants. Many had to sell their land or even their children into slavery.

Wang Mang

Peasants grew more desperate while powerful landlords got richer. Some rich people thought this was unfair. Wang Mang was an official who had support from Confucian scholars. In 9 CE, he took control of China from the baby Han emperor and started the Hsin dynasty. In his first year, Wang Mang announced many changes.

- All land was to become the property of the emperor so that the estates of big landlords could be given to the peasants.
- The slave trade was to be banned.
- Low-interest loans were to be given to peasants so that they did not have to borrow from money lenders.

SOURCE 3 Chinese life under the Han



A In cities like Xianyang, busy marketplaces were just inside the gates for travelling merchants. Even if they were rich, merchants were not respected like farmers. The market sold and traded goods from all over China and beyond.

B In the noisy markets, people bought and sold food and animals. There were musicians, acrobats, jugglers, letter writers, dentists and craftworkers.

C Owls, panthers, deer, dogs, pigs, ant eggs, snails and turtles were all available, mostly bought by the rich.

D Ancient Chinese cities had two walls to protect the people. You can still see some of these walls today. The inner wall was called *cheng*, and the outer wall was *guo*. Moats, called *chi*, often surrounded them. The inner city was known as *geng*.

E Rich and poor people lived in large family groups. Confucian values helped strengthen family ties. Respect for elders and ancestor worship were also very important.

F Murals, jade jewellery and carvings, glazed pottery, silk goods and objects made from cast iron such as ploughs were bought and sold.

G Confucian beliefs held that women were less important than men. Girls didn't get an education and worked under their mothers. Fathers chose their husbands. After marriage, they lived with their husbands' families and obeyed their mothers-in-law. A woman had no status until she had a son.

SkillBuilder discussion

Causes and consequences

1. What were some key features of daily life for people living in China during the Han dynasty?
2. How did Han policies and governance affect social structure and relationships among families?
3. In what ways did cultural practices and innovations during the Han dynasty influence future generations in China?

The fall of the Hsin dynasty

Wang Mang's reforms were stopped by powerful people, leading to peasant revolts in 14 CE. In 23 CE, rebels called the Red Eyebrows attacked and killed him. The Hsin dynasty ended, and a new Han emperor took over in 25 CE.

The Eastern Han dynasty

The Eastern Han dynasty began when the capital moved east. Many people had died in the rebellion, so peasants got more land and paid lower taxes. However, big landowners still took half the harvest and grew more powerful than the Han government.

The Yellow Turbans and the fall of the Eastern Han

By the middle of the second century CE, more peasant uprisings started. In 184 CE, the Yellow Turbans led a huge revolt. As the government weakened, **warlords** took control of local areas. They defeated the Yellow Turbans but then fought for the throne. By 220 CE, the Han dynasty ended, and China faced years of civil war.

7.8 SkillBuilder activity COMMUNICATING

Peasants had overthrown the Qin dynasty and one of their leaders had started the Han dynasty and become the new emperor.

SOURCE 4 From a Chinese scholar of the early second century BCE, in the *Han-shu Han History*

These days a family of five peasants will have at least two persons who are liable for labour-services and conscription. What with their ploughing in the spring and hoeing in the summer, harvesting in the autumn and storing in the winter, with felling firewood, repairing government offices and rendering labour-service . . . in none of the four seasons will they have a day of rest. And, in spite of all this painful toil, they will still have to endure such natural disasters as flood and drought and also the cruelty of an impatient government which imposes taxes . . . those who own something sell it off at half its price; and those who own nothing borrow at doubled rates of interest. It is for this reason that some dispose of their lands and houses, and sell their children and grandchildren to redeem their debts.

SOURCE 5 From the statement of a Han dynasty official in 81 BCE

Those who live in . . . spreading mansions . . . know nothing of the discomforts of one-room huts and narrow hovels, of roofs that leak and floors that sweat.

Those with a hundred teams of horses . . . and wealth heaped in their storehouses . . . do not know the anxiety of facing days that have a beginning but no end.

Use evidence from **SOURCES 4** and **5** to argue that life didn't change much for China's peasants under the Han and Hsin dynasties.

Begin by outlining:

a. the social problems described in **SOURCES 4** and **5**
b. the perspectives of these writers
c. the specific evidence these sources provide for the peasants' motives for rebellion against Han rule.

Conclude by **summarising** your argument.

7.8 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 6	5, 7, 9	4, 8, 10

REMEMBER AND UNDERSTAND

1. **Recall** how Liu Bang became the founder of the Han dynasty.
   A. He inherited the position.
   B. He was elected.
   C. He defeated his rivals.
   D. He killed Qin Shihuang.
2. How did the Early Han try to win support for their rule?
   A. By reducing the size of the army
   B. By encouraging family life and farming
   C. By reducing taxes and making the laws easier to understand
   D. All of the above
3. The Chinese education system promoted critical and independent thinking. True or False?
4. **Explain** how Wang Mang tried to help the peasants.
5. **Describe** how the ruling classes regained control.

ANALYSE AND APPLY

6. **Identify** the events that brought about the end of the Eastern Han dynasty.
7. Look at **SOURCE 2** and **analyse** it using these questions:
   a. Why were the cities enclosed by walls?
   b. What role did marketplaces play in expanding trade?
   c. What can you discover from this source about activities, clothing and hairstyles in a Han-era town?
8. Look at **SOURCE 3** and **explain** what China would have gained from contacts established through the Silk Road.
9. Study **SOURCE 1** and **suggest** why the Han adopted cavalry as a major part of their army.
10. Using the information and sources in this lesson, **explain** what caused rebellions such as that of the Red Eyebrows and Yellow Turbans.

Answers and sample responses for this topic are available online.

LESSON 7.9 What is the heritage of ancient China?

LEARNING INTENTION

By the end of this lesson you should be able to **describe** ancient China's inventions and scientific ideas that influenced the world.

Tune in

China's civilisation has lasted a long time. But do you know how much we owe to ancient China? For example, they were the first to invent the compass.

1. **How do you think the compass shown in SOURCE 1 would have worked?**
2. **Refer to the list in 7.9.1 and pick three inventions. Think about how they might have been invented. What needs did they meet? How do you think the first versions compare to our modern ones?**
3. **In what ways do ancient Chinese inventions still impact our lives today?**

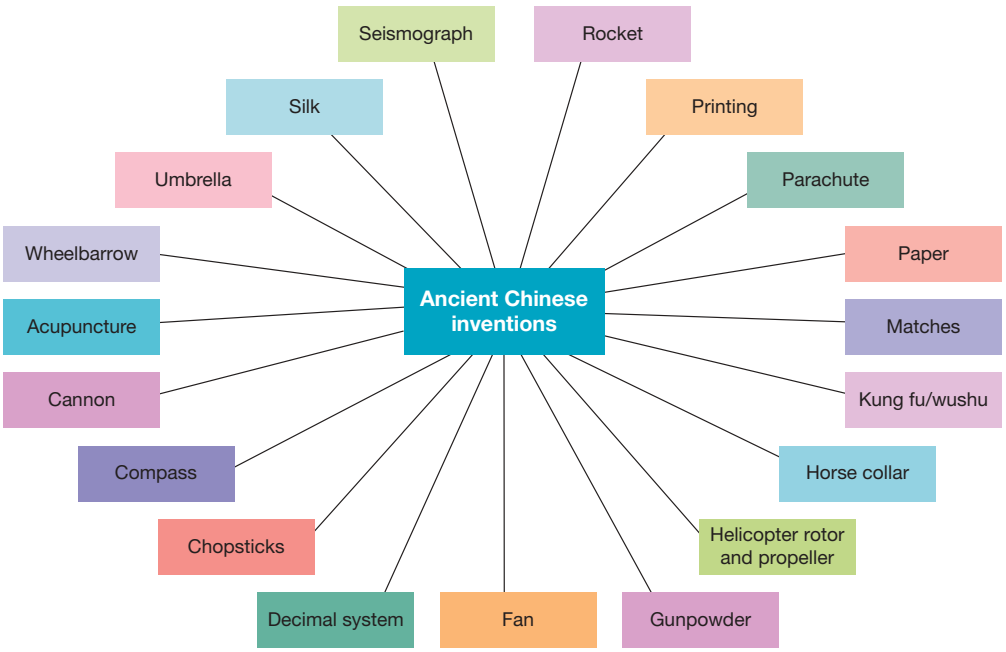
SOURCE 1 A replica of an ancient Chinese compass

7.9.1 Some great Chinese inventions

Ancient China left many legacies. One was rule by emperors, lasting until 1911. Modern Chinese leaders still have similar powers. China's heritage includes the Great Wall and discoveries from Qin and Han tombs. Many important inventions also came from ancient China, long before they appeared in the western world.

Some of the more important ones are shown in **SOURCE 2**.

SOURCE 2 Many things we take for granted today were invented by the people of ancient China.



SkillBuilder discussion

Communication

1. Identify what the material is. What do you know about how this material is made?
2. What does the colour red symbolise?
3. Why is this colour prominent in Chinese culture?

SOURCE 3 A fragment of red Chinese silk featuring dragons, a symbol of wisdom, strength and goodness

Compass

The Chinese invented the magnetic compass. It was first used to help build houses facing a direction that matched nature.

Paper and printing

Ancient China invented paper and printing, which changed people's lives. Early paper was made by mixing rags, rope and bark into a watery pulp (see **SOURCE 4**). This paper was used for many things, like umbrellas, money and writing. Before paper, people wrote on expensive silk. With the invention of block printing in 750 CE, scholars bought important books.

SkillBuilder discussion

Historical significance

1. What materials were used in ancient China to make paper, and how did the process work?
2. How did the invention of paper change communication and record-keeping in ancient China?
3. Discuss the ways that paper-making in ancient China would have influenced cultures and societies around the world.

SOURCE 4 Paper-making in ancient China

7.9.2 Also made in China

Today, we buy many goods from China. Long ago, China invented things like gunpowder, improved medicine, detected earthquakes and even created kites.

Gunpowder

Long ago, the Chinese wanted to find a drug for eternal life and accidentally discovered gunpowder. At first, it was used for fireworks and ceremonies. Later, they made bombs with bamboo and cannons from cast iron. The Chinese also created the first multi-stage rockets, flame-throwers and hand grenades for their armies.

Acupuncture has been used in China since the third century BCE. It was thought to help balance yin and yang in the body. By 200 CE, the Chinese knew about blood circulation and used hemp as an **anaesthetic**. Human **dissection** was banned because it went against Confucian beliefs.

SOURCE 5 Gunpowder was first used in fireworks.

Seismographs

Zhang Heng invented the first seismograph in 132 BCE (**SOURCE 6**). A ball dropped from a dragon's mouth into a toad's mouth, showing the earthquake's direction.

SOURCE 6 Zhang Heng's seismograph

Kites

Kites were first made from bamboo and silk, then paper. They were used in festivals, battles, fishing and scaring birds away from crops.

7.9.3 Conserving China's cultural heritage

UNESCO is a global group that protects important natural and cultural sites. These include ancient remains. UNESCO keeps a list of World Heritage Sites, which you can see online. China has many listed sites, including the Mausoleum of Qin Shihuang (see **SOURCE 7**) and the Great Wall of China (see **SOURCE 8**).

SOURCE 7 Terracotta soldiers and horses at the Mausoleum of Qin Shihuang

SOURCE 8 The Great Wall of China is over 21 000 km in length and, on average, more than 10 million people visit it each year.

SkillBuilder discussion

Historical significance

1. What were the main reasons for building the Great Wall of China, and how did it protect the country?
2. Why does the Great Wall of China attract so many visitors each year?
3. What different landscapes and features can be seen along the Great Wall's long route?

7.9 SkillBuilder activity **HISTORICAL QUESTIONS**

Look at **SOURCES 5, 6** and **7** and choose one of these ancient Chinese inventions.

1. **List** five questions that you could ask about this source to learn more about its significance.
2. **Investigate** on the internet to answer your questions.
3. **Compare** your questions to those of other students.

7.9 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 5	4, 6, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. For what purpose were compasses first used in China?
   A. To navigate complex trade routes
   B. To aid in the farming process
   C. So houses were built facing a direction that was in harmony with nature
   D. So that people could find their way through cities
2. **Identify** which material was originally used for writing in China.
   A. Paper
   B. Silk
   C. Bark
   D. Rock
3. How did the Chinese discover gunpowder?
   A. During the search for a drug for the plague
   B. During the search for a drug for immortality
   C. During the development of weapons for war
   D. During the development of materials for mining
4. **Recall** the medical advances in which China led the world.
5. **Describe** the role of UNESCO.

ANALYSE AND APPLY

6. Look at **SOURCE 4** and **explain** what you can tell about early Chinese methods of papermaking and printing.
7. Study **SOURCES 7** and **8**. **Identify** what evidence you can see of measures that have been taken to conserve these important historical sites.

EVALUATE AND COMMUNICATE

8. **Compare** the ancient Chinese inventions from this lesson. Choose one that you think had the biggest impact on people then and future generations. Create a short advertisement for it.

Answers and sample responses for this topic are available online.

LESSON 7.10 Inquiry: How should we judge the legacy of Qin Shihuang?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **assess** an important person's role and achievements
- **distinguish** different viewpoints in secondary sources.

Background

Historians have different views about the Qin dynasty's legacy. Reading the next sources will help you compare these ideas. You can also look online or in the library for more information.

Note: you will notice Qin Shihuang referred to as Qin Shi Huang, Qin Shi-Huang or Shi Huangdi in these sources. These variations are all correct.

A selection of secondary sources

SOURCE 1 From Felicity Jiang, 'The Qin Dynasy — First Imperial Dynasty in China', *China Highlights* website

The Qin Dynasty lasted for only 15 years ... But during their short reign, they destroyed more than half the population and much of the culture, literature and scholarship of the Zhou era. It is thought that the population dropped from about 40 million at the beginning of their reign to about 18 million by the end of their reign.

In carrying out their plans, they caused enormous misery and destruction, but they built a lot of infrastructure such as roads, canals and the Great Wall that benefited later empires . . . By standardizing even the writing and ideas and customs and religion, they laid the foundation for later empires.

SOURCE 2 From Joshua J Mark, 'Qin Dynasty' entry, *World History Encyclopedia* website

Although the Qin Dynasty is often referred to positively as the first political entity to unite China . . . the reigns of Shi Huangdi and his inept son and grandson were a dark time for the people of China, who were impoverished, brutalised, and kidnapped from their homes to serve the ego of the emperor. It is a chilling detail that the Qin dynasty is the shortest, only 15 years, in the history of China owing to its brutality and blatant rejection of the central value of the Mandate of Heaven that a ruler care for the people above any personal considerations.

SOURCE 3 From Claudius Cornelius Muller, 'Qin Shi-Huang emperor of China' entry, *Encyclopaedia Britannica* website

Most of the information about Qin Shi Huang's life derives from the successor Han dynasty, which prized Confucian scholarship and thus had an interest in disparaging the Qin period . . . With few exceptions, the traditional historiography of imperial China has regarded him as a villain . . . Modern historians, however, generally stress the endurance of the bureaucratic and administrative structure institutionalised by Qin Shi Huang, which . . . remained the basis of all subsequent dynasties in China.

SOURCE 4 From 'Qin Shi Huang' entry, *New World Encyclopedia* website

Because of this systematic Confucian bias on the part of the Han scholars, some of the stories recorded about Qin Shi Huang are doubtful . . . Some of the stories are plainly fictitious . . . This makes it difficult to know the truth about other stories . . .

Only in modern times were historians able to penetrate beyond the limitations of traditional Chinese historiography . . . there emerged a new appreciation of the man who had unified China . . . In the new era [since 1972] Qin Shi Huang has been seen as a farsighted ruler who destroyed the forces of division and established the first unified, centralised state in Chinese history by rejecting the past.

Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task you can use this rubric to self-assess.

Inquiry steps

Step 1: Questioning and researching

For each of the provided sources, **discuss** the following:

Is the writer's dominant judgement about Qin Shihuang and the Qin dynasty favourable or unfavourable?

State your inquiry question. Your question could be based on anything — for example, one of the following issues:

a. How significant were the changes made under Qin Shihuang to people living at the time?
b. How many people were affected?
c. To what extent were people's lives changed?
d. What is Qin Shihuang's legacy, and should he be remembered as an especially cruel ruler or as a far-sighted ruler who brought significant change to his country?

Investigate your inquiry question.

Step 2: Using historical sources

Analyse the sources you find. Some may be biased, so separate fact from opinion. Look for reasons behind Qin Shihuang's actions and their effects.

Step 3: Historical perspectives and interpretations

Evaluate the significance of the changes and how many people were affected by them.

Step 4: Communicating

What is your answer to your inquiry question? Present your findings in a way you like. Use examples from your research to support your answer. Then, complete your self-assessment using the **Inquiry rubric**.

LESSON 7.11 Review

7.11.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

7.2 How do we know about ancient China?

- Shang dynasty inscriptions are our earliest written evidence of ancient China.
- Archaeological finds provide evidence of rich cultures during Qin and Han times.
- The most exciting find was the discovery of the terracotta warriors guarding the tomb of Qin Shihuang.

7.3 How did China's civilisation begin?

- No primary source evidence has been found for the legendary Xia dynasty.
- Early Chinese rulers based their authority on the mandate of heaven.
- Early Chinese civilisation was based on farming in river valleys in eastern China.

7.4 What were life and death like in ancient China?

- Rulers were supported by powerful lords and landowning gentry, who included warriors and bureaucrats.
- Peasants formed the largest group and they suffered through natural disasters and wars.
- Merchants and slaves were at the bottom of Chinese society.
- Life for all classes of ordinary people was harsh, especially for women.
- We know much more about death and the funeral customs of the ruling classes than of ordinary people.
- The ruling classes' custom was to bury goods with the dead to provide for them in the afterlife.
- Until Han times, people were also buried with rulers to serve them in the afterlife.

7.5 How did China's civilisation affect its environment?

- China is a vast country with a wide variety of climates and landscapes.
- Of the large population, 90 per cent lived in the east, where agriculture was based along river valleys.
- Intensive clearing of land for farming caused massive soil erosion and other environmental damage.

7.6 What were the influences of Confucianism, religions and laws?

- Confucianism is not a religion. It is concerned with how good conduct can create social harmony.
- Confucianism had no influence in its founder's lifetime but had much influence in later periods.
- Daoism and Buddhism became major religious influences in ancient China.
- The laws of China's first emperor were based on the harsh laws of the state of Qin.
- Confucianism regained influence under the Han and later dynasties.

7.7 How did the first emperor change China?

- Qin Shihuang took control of China in 221 BCE after conquering other states. He changed the defensive walls into the Great Wall of China.
- He stamped out potential threats to his power through several measures, including confiscating weapons, controlling the nobles and burning books.
- By 206 BCE, the Qin dynasty had been destroyed in a peasant rebellion.

7.8 Why did the Han dynasty rise and fall?

- The Han dynasty carried out reforms to avoid the fate of the Qin, and China expanded under the Han.
- Chinese missions led to the founding of the Silk Road, which opened trade between China and India, Persia and the Roman Empire.
- Inequality grew under the Han and rebellions led to its fall in 220 CE.

7.9 What is the heritage of ancient China?

- China's legacies include an amazing number of inventions, including printing and gunpowder.
- China's cultural heritage includes many UNESCO-listed sites, including the Great Wall and the Mausoleum of the First Emperor.

7.10 Inquiry: How should we judge the legacy of Qin Shihuang?

- Traditionally, Chinese historians have regarded Qin Shihuang as a particularly cruel and ruthless ruler.
- Han dynasty historians had an interest in portraying the first emperor as a villain.
- In modern times, Chinese historians have tended to value Qin Shihuang as a far-sighted ruler who created China's first unified state.

7.11.2 Key terms

acupuncture a medical practice in which long, sharp needles are inserted under the skin as a means of diagnosing, relieving or curing illness
anaesthetic a drug to deaden pain
artificer a craftsperson or inventor
bureaucrat a government official
castrated having had the testicles cut off
concubines women who lived with the emperor in a relationship but were not married to him
conscripted forced to become a soldier
constellations groups of stars
Daoism a Chinese philosophy and spiritual tradition that teaches people to live in harmony with the Dao (the way)
deported forced to leave the country
dissection the systematic cutting up of a body for medical study
halberds daggers mounted on axe handles
infantry foot soldiers
mandate of heaven a Chinese expression meaning that a ruler had been chosen by the gods
mausoleum a large tomb structure
Philosophy study of the fundamental principles and causes of things
warlords generals from powerful landowning families
Xiongnu the ancient Chinese name for the nomadic Turkic tribes of Central Asia

7.11.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

Why and where did ancient China's civilisation emerge, and what were its defining features, achievements and legacies?

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.

learnon

Post-test	Online post-test
eWorkbook	Customisable worksheets for this topic Reflection
Digital document	Key terms glossary

7.11 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
4, 5, 9, 10	1, 2, 3, 8, 12	6, 7, 11

REMEMBER AND UNDERSTAND

1. Shang dynasty inscriptions provide early evidence of ancient Chinese what?
   A. Ironwork
   B. Gunpowder
   C. Farming
   D. Manufacturing
2. The 'mandate of heaven' meant which of the following for Chinese emperors?
   A. They were believed to be gods.
   B. They were supposedly chosen by the gods to rule.
   C. They lived like gods.
   D. They said there were no gods.
3. During the Warring States period, wars occurred between which of the following?
   A. Local lords who controlled their own states within the Zhou kingdom
   B. Local lords who controlled their own states outside the Zhou kingdom
   C. Nomads who wanted to invade China
   D. Nobles and peasants
4. Merchants occupied which of these positions in Chinese society?
   A. At the top, along with nobles
   B. Between nobles and peasants
   C. Almost at the bottom
   D. Between peasants and artisans
5. Environmental problems in ancient China were caused mainly by which of the following?
   A. Polluting the air
   B. Burning coal
   C. Polluting the ocean
   D. Clearing forests for farming
6. What were the main ideas of Confucius concerned with?
   A. Worshipping gods
   B. Conduct that ensured a harmonious society
   C. Obedience to kings
   D. Rebelling against authority
7. The martial art of kung fu was developed by which of these groups?
   A. Daoists
   B. Buddhists
   C. Followers of Confucius
   D. Qin Shihuang's army
8. Qin Shihuang changed the feudal system by which of these means?
   A. Burning books
   B. Executing scholars
   C. Confiscating weapons
   D. Allowing farming land to be bought and sold
9. Around how many people might have died constructing the Great Wall of China?
   A. Five hundred
   B. One million
   C. Two thousand
   D. Five million

10. Under Qin Shihuang's orders, scholars who refused to burn their books were what?
    A. Beheaded
    B. Fined
    C. Imprisoned
    D. Buried alive

ANALYSE AND APPLY

11. What or who were the Yellow Turbans and Red Eyebrows?
12. The Silk Road was the land route for trade between China and which places?
13. Imagine that you have been hired by the Chinese tourism authorities who erected the stone marker in **SOURCE 1**.

SOURCE 1 The stone marking the modern entrance to the Mutianyu section of the Great Wall of China, about 70 kilometres north of Beijing

Your job is to create a guide for Australian and other English-speaking tourists visiting this site. Use what you have learned in this topic and find more information online, including the UNESCO World Heritage List. Your guide should include:

a. the history of this section of the wall from the time when the various walls were joined under Qin Shihuang up to the time when this section was rebuilt during the early Ming dynasty
b. an explanation of what was involved in building the wall
c. information about what the wall would have meant to Chinese people in Qin times and later.

14. **Analyse SOURCE 2** using the following questions.
   a. **Describe** the details of the painting.
   b. **Identify** ways in which the appearance of the students and the room differ from a modern examination room.
   c. **Describe** the kinds of questions that examiners would be likely to ask.
   d. **Describe** the types of answers that students would be expected to give.
   e. To fully **analyse** this source, you would need information that is not provided here. **List** examples of such types of information.

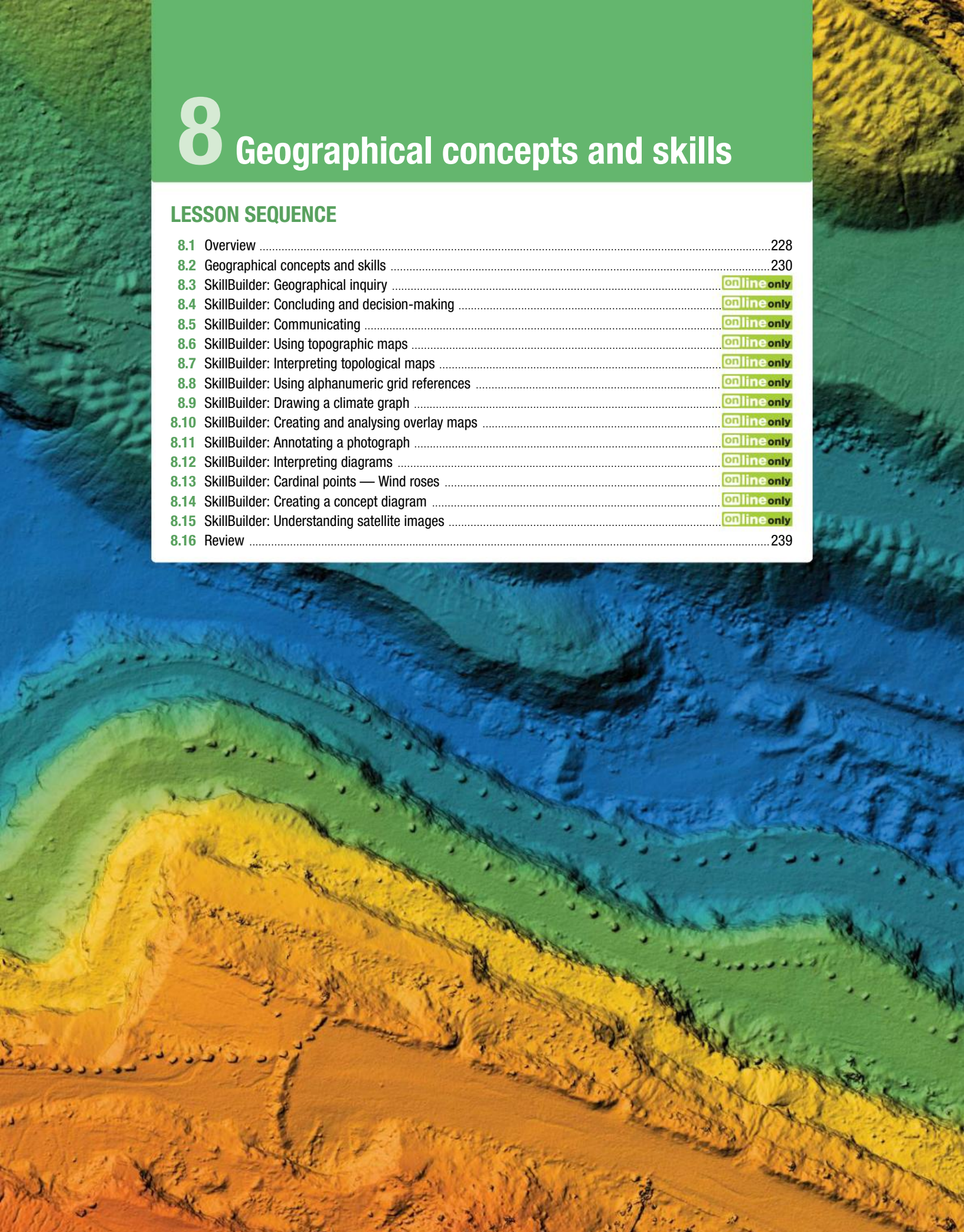
SOURCE 2 This painting depicts a Chinese emperor assessing the performance of students in exams for the civil service.

Answers and sample responses for this topic are available online.

8 Geographical concepts and skills

LESSON SEQUENCE

8.1 Overview 228
8.2 Geographical concepts and skills 230
8.3 SkillBuilder: Geographical inquiry ..... online only
8.4 SkillBuilder: Concluding and decision-making ..... online only
8.5 SkillBuilder: Communicating ..... online only
8.6 SkillBuilder: Using topographic maps ..... online only
8.7 SkillBuilder: Interpreting topological maps ..... online only
8.8 SkillBuilder: Using alphanumeric grid references ..... online only
8.9 SkillBuilder: Drawing a climate graph ..... online only
8.10 SkillBuilder: Creating and analysing overlay maps ..... online only
8.11 SkillBuilder: Annotating a photograph ..... online only
8.12 SkillBuilder: Interpreting diagrams ..... online only
8.13 SkillBuilder: Cardinal points — Wind roses ..... online only
8.14 SkillBuilder: Creating a concept diagram ..... online only
8.15 SkillBuilder: Understanding satellite images ..... online only
8.16 Review 239



LESSON 8.1 Overview

INQUIRY QUESTION

Why is geography important to study, and what skills do I need to understand geography?

The world around us is made up of a large range of interesting places, people, cultures and environments. Geography is a way of exploring, analysing and understanding this world of ours — especially its people and places. Studying Geography at school allows you to build up your knowledge and understanding of our planet, at different scales: the local area, our nation, our region and our world. Geographers investigate the characteristics of places and the relationships between people and places.

learnon

eWorkbook
Customisable worksheets for this topic

Digital document
Key terms glossary

Video eLesson
Geography concepts and skills

SkillBuilder

Use the SkillBuilder activities to develop these Geographical concepts and skills:

- GEOGRAPHICAL INQUIRY
- CONCLUDING AND DECISION-MAKING
- COMMUNICATING

LESSON 8.2 Geographical concepts and skills

LEARNING INTENTION

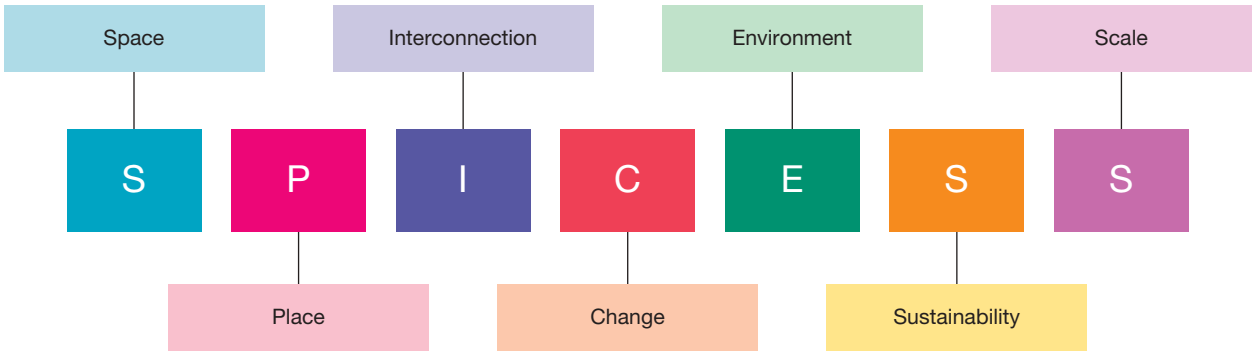
By the end of this lesson you should be able to:

- **identify, explain** and **apply** the seven geography concepts using the acronym SPICESS
- **describe** the three geographical skills.

8.2.1 Introduction

Geographical concepts help you to make sense of your world. You can use these concepts to both investigate and understand the world you live in. The concepts help you to think geographically. The seven major concepts are space, **place**, **interconnection**, **change**, **environment**, **sustainability** and **scale**. You will use the seven concepts to investigate two topics: water as a resource, and place and liveability.

FIGURE 1 A way to remember these seven concepts is to think of the term SPICESS.



What is space?

The concept of space is about where things are located and distributed on the surface of the Earth. The space can be organised and managed by people or it can simply be where it is located in the natural environment.

When referring to space in geography, we can have absolute or relative location.

- Absolute location is the unique location of a site or geographical feature. For example, the absolute location of Ballarat is at 32°.33' South latitude and 143°.51' East longitude.
- Relative location is the location of a place or feature in relation to other places. It can be described by direction and distance from other places and features. For example, Ballarat is 110 km WNW of Melbourne.

What is place?

The world is made up of places. We understand its places by studying their variety, how they influence our lives and how we create and change them.

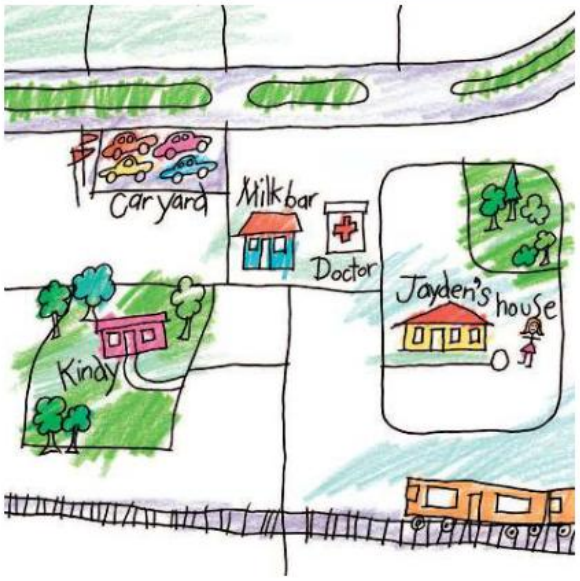
Places may be natural (such as an undisturbed wetland) or highly modified (such as a large city). Place refers to how people perceive a location. You often have mental images and perceptions of places — your city, suburb, town or neighbourhood. They may be very different from someone else's perceptions of the same places.

FIGURE 2 A map of Victoria

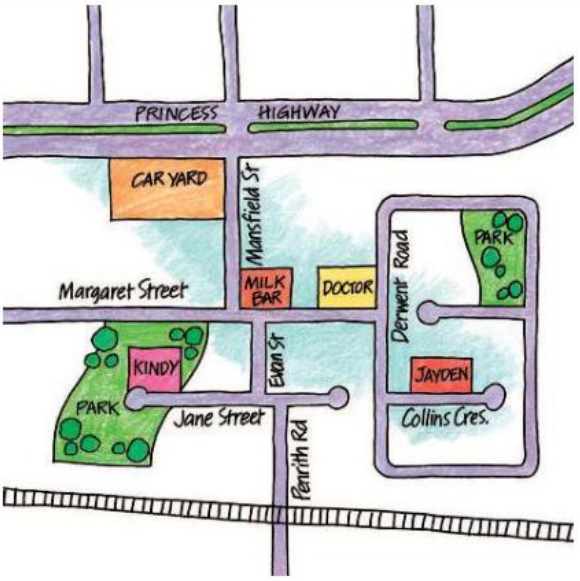
Source: Spatial Vision

FIGURE 3 Map of Jayden's local place (a) drawn by Jayden and (b) drawn by Annette, Jayden's mother

(a)



(b)



SkillBuilder discussion

Communicating

1. Why is it that Jayden and Annette draw the same place differently?
2. What things do each of them focus on?

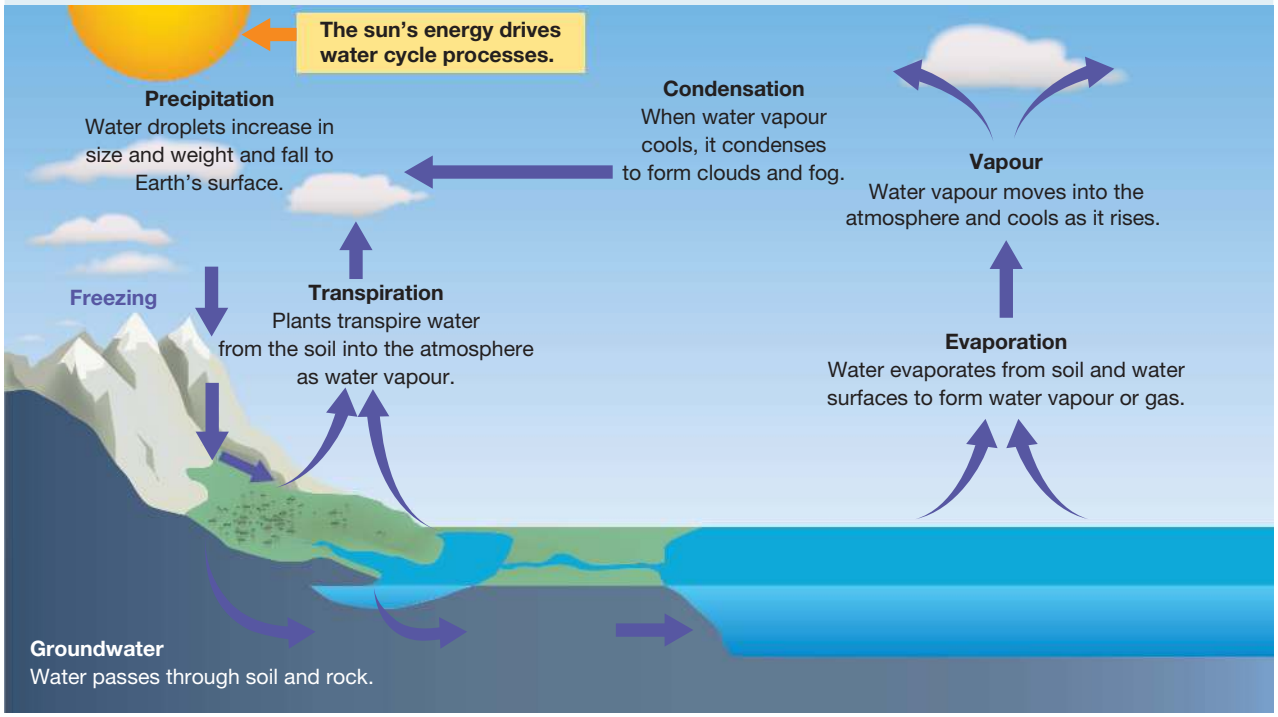
What is interconnection?

People and things are connected to other people and things in their own and other places. Understanding these connections helps us to understand how and why places are changing. Interconnection emphasises that no object of geographical study can be viewed in isolation. It is about the ways that geographical phenomena are connected to each other through environmental processes, the movement of people, flows of trade and investment, the purchase of goods and services, cultural influences and the exchange of ideas and information.

An event in one location can lead to change in a place some distance away.

FIGURE 4 Mount Tom Price township and mine in Western Australia, with fly in, fly out (FIFO) worker huts in the left foreground. It is interconnected to the rest of Australia by both the flights and the workers.

FIGURE 5 The water cycle shows many interconnections.



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.

The concept of change involves both time and space — change can take place over a period of time, or over a geographical area. The time period for change can be very short (e.g., the impact of a flash flood) or over thousands or millions of years (e.g., the development of fossil fuel resources).

FIGURE 6 Port Douglas, 60 km north of Cairns, has always been a busy area, first as a mining region and port and later as a tourist destination.

Environmental change can occur over short or long periods of time. Technology can result in rapid change — think of the explosions at a mining site that reveal mineral seams.

The degree of change occurring can be used to predict, or plan for, actual or preferred futures.

What is environment?

People live in and depend on the environment. It has an important influence on our lives.

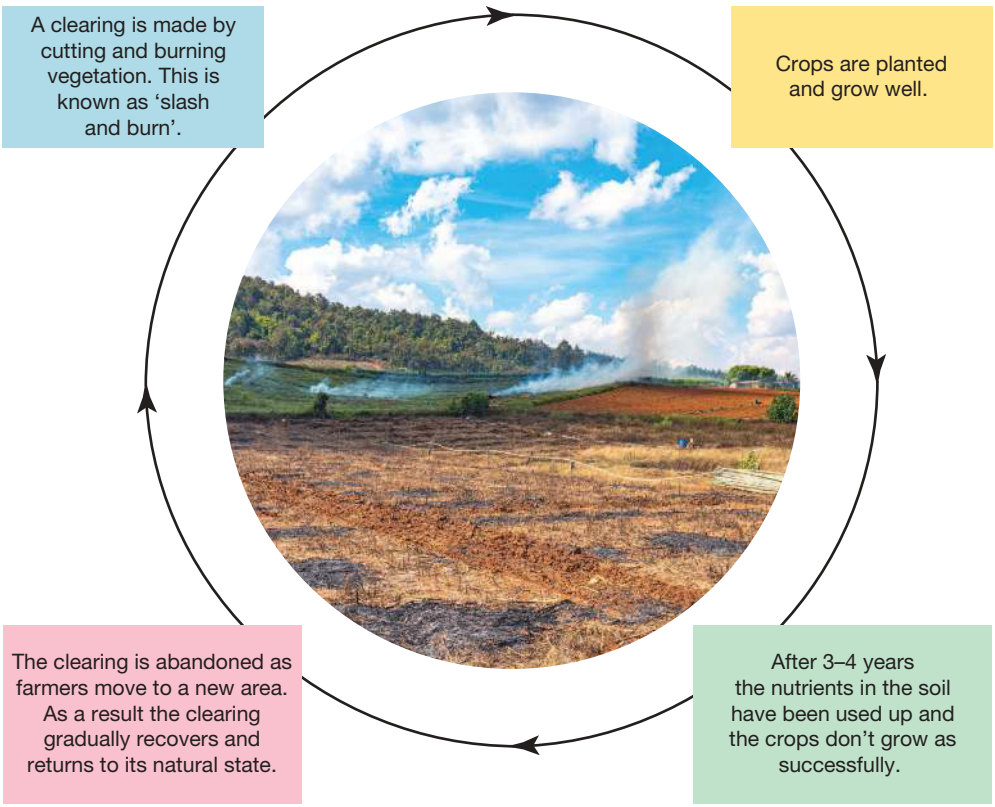
The environment is the physical and biological world around us. It supports and enriches human and other life by providing raw materials and food, absorbing and recycling wastes, and being a source of enjoyment and inspiration to people.

SkillBuilder discussion

Communicating

1. What environmental changes have occurred in the diagram?
2. Consider your environment. How is it changing?

FIGURE 7 The process of shifting cultivation alters the environment that is being farmed.



What is sustainability?

Sustainability is about maintaining the capacity of the environment to support our lives and those of other living creatures.

Sustainability considers the interconnection between the human and the natural world, and who gets which resources and where. It involves the use of resources in a responsible way that doesn't exhaust them for future generations.

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 can be applied from local, regional, national or global levels.

Looking at things at a range of scales allows a deeper understanding of geographical issues.

Different factors can be involved in explaining phenomena at different scales. Local events can have global outcomes; for example, removing areas of forest at a local scale can have an impact on climate at a global scale. A policy at a national scale, such as forest protection, can have an impact at a local scale, such as the protection of an endangered species.

FIGURE 8 Railway route and main settlements between Sydney and Perth

Source: Spatial Vision

8.2.2 Geographical skills

As you become more familiar with geography, there are three essential skills to practise and master. The skillbuilder lessons in this topic will show you how to apply the geography skills and let you practise with activities related to the topics covered in this subject.

TABLE 1 The skills that you will use in Geography.

Skill	Description
Collecting your own data and information	You will develop questions for a geographical inquiry related to a phenomenon or issue. Collect and process information from primary and secondary sources, including fieldwork. Use geospatial technologies and digital tools to make decisions and come to conclusions. You will also use a range of formats, including maps and geospatial technologies to explain patterns, relationships and trends in issues such as wealth and livability, or the relationship between mountain ranges and rainfall.

Concluding and decision-making	Geography is all about making decisions and coming to conclusions in an evidence-based manner. You will consider ethical values and analyse data using the concepts of space, change, interconnection and environment. For example, you might use an analysis of the distribution of water to determine the sustainability of a farm.
Communicating	Communicating your ideas and justifying your conclusions are key skills you will develop in the study of Geography. Using geographical concepts and knowledge and a range of digital and non-digital formats, you will express your thoughts on a wide range of concepts and issues. When communicating in Geography you need to ensure that you consider your audience, acknowledge your sources and choose appropriate methods of communication to ensure your message is clear and well-conceived. In Year 7, you will be expected to explore new ways of presenting information, take risks and develop new presentation skills.

To help develop your Geographical skills further, see bonus SkillBuilders from lessons 8.6 to 8.15.

8.2 SkillBuilder activity **GEOGRAPHICAL INQUIRY**

Investigating a river

1. Look at **FIGURE 9**. Discuss the types of data the students might be collecting. Why might this data be useful in studying a river?
2. Think of a question you could investigate about a river. Write down the question and explain how you might find out the answer. For example: How does the depth of the river change along its course? Measure using a meter stick ruler or depth gauge.
3. What patterns might you notice in the data (e.g., does the river get deeper in certain areas)? How could this information help people who live near the river?
4. Based on your question, write a short paragraph explaining why geographical inquiry is important when studying rivers.

FIGURE 9 Collecting your own data and information

8.2 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 4	3, 6, 8, 10	5, 7, 9

REMEMBER AND UNDERSTAND

1. Which of the following best defines the concept of ‘space’ in geography?
   A. The arrangement of objects and people on the Earth’s surface
   B. The physical distance between two locations
   C. An area with defined boundaries
   D. The atmosphere surrounding the Earth
2. What is meant by the geographical concept of ‘place’?
   A. A physical location with a specific address
   B. A location that holds meaning and significance for individuals or groups
   C. An area characterised by a particular climate
   D. A space used for human activities

3. How does interconnection influence geographical phenomena?
   A. It separates regions from one another.
   B. It shows how features and processes are related and affect each other.
   C. It identifies isolated geographical locations.
   D. It maps the boundaries of continents.
4. Which of the following is an example of a natural environment?
   A. A city park
   B. A rainforest
   C. A shopping mall
   D. A residential neighborhood
5. What does sustainability aim to achieve in geography?
   A. Unlimited consumption of resources
   B. Preservation of resources for future generations
   C. Economic growth without environmental concerns
   D. Expansion of urban areas

ANALYSE AND APPLY

6. **Explain** the concept of 'scale' in geography and how it helps us to understand geographical phenomena.
7. **Describe** how the concept of 'change' is important in understanding geographical processes.
8. What are the key steps involved in conducting a geographical inquiry?
9. Why is concluding and decision-making important in geographical studies?

EVALUATE AND COMMUNICATE

10. Reflect on the various ways you might collect and encounter geographical information. Suggest three ways that you could present this information to an audience.

LESSON 8.3 SkillBuilder: Geographical inquiry

online only

What are maps and why are they useful?

Maps represent parts of the world as if you were looking down from above. The mapmaker ('cartographer') simplifies the plan view from a vertical aerial photograph or satellite image. Cartographers use colours and symbols on the map to show how features such as roads, rivers and towns are organised spatially. Maps show features that give us a deeper understanding of places. When travelling, maps help us to navigate unfamiliar places.

LESSON 8.4 SkillBuilder: Concluding and decision-making

online only

What are weather maps?

Weather maps, or synoptic charts, show weather conditions over a larger area at any given time. They appear every day in newspapers and on television news. Being able to read a weather map is a useful skill because weather affects our everyday life.

LESSON 8.5 SkillBuilder: Communicating

online only

What is a pie graph?

A pie graph, or pie chart, is a graph in which slices or segments represent the size of different parts that make up the whole. The circle of 360 degrees represents the total, or 100 per cent of whatever is being examined. The size of the segments is easily seen. Presenting the parts in order, from largest to smallest, makes it easier to interpret.

LESSON 8.6 SkillBuilder: Using topographic maps

online only

What are topographic maps?

Topographic maps are more than just contour maps showing the height and shape of the land. They also show features of the natural environment, such as forests and lakes, and features of human environments, such as roads and settlements (places where a community of people live).

LESSON 8.7 SkillBuilder: Interpreting topological maps

online only

What are topological maps?

Topological maps are very simple maps, with only the most vital information included. These maps generally use pictures to identify places, are not drawn to scale and give no sense of distance. However, everything is correct in its interconnection to other points.

LESSON 8.8 SkillBuilder: Using alphanumeric grid references

online only

What are alphanumeric grid references?

Alphanumeric grid references are a combination of letters and numbers that help us locate specific positions on a map. They are linked to the lines that form a grid over certain kinds of maps. The letters and numbers are placed alongside the gridlines, just outside the map. The grid, letters and numbers allow you to pinpoint a place or feature by stating its alphanumeric grid reference.

LESSON 8.9 SkillBuilder: Drawing a climate graph

online only

What are climate graphs?

Climate graphs, or climographs, are graphs that show climate data for a particular place over a 12-month period. They combine a column graph and a line graph. The line graph shows average monthly temperature, and the column graph shows average monthly precipitation (rainfall).

LESSON 8.10 SkillBuilder: Creating and analysing overlay maps

online only

What are overlay maps?

An overlay map usually consists of two or more maps of the same area. A base map is overlaid with a transparent overlay, showing different information. Overlay maps allow users to see the relationships between the information on two or more maps.

LESSON 8.11 SkillBuilder: Annotating a photograph

online only

What are annotated photographs?

Photographs are used to show aspects of a place. Annotations are added to photographs to draw the reader's attention to what can be seen and deduced.

LESSON 8.12 SkillBuilder: Interpreting diagrams

online only

What are diagrams?

A diagram is a graphic representation of something. In Geography, it is often a simple way of showing the arrangement of elements in a landscape and the relationships between those elements. Diagrams also have annotations: labels that explain aspects of the illustration.

LESSON 8.13 SkillBuilder: Cardinal points — Wind roses

online only

What are wind roses?

A wind rose is a diagram that shows the main wind features of a place; in particular, wind direction, speed and frequency. Wind directions can be divided into 8 or 16 compass directions.

LESSON 8.14 SkillBuilder: Creating a concept diagram

online only

What is a concept diagram?

A concept diagram, sometimes mistakenly called a concept map, is a graphical tool that shows links between ideas or concepts. Concept diagrams organise links into different levels. Concept diagrams enable you to organise your ideas and communicate them to others.

LESSON 8.15 SkillBuilder: Understanding satellite images

online only

What are satellite images?

Satellite images show parts of our planet from space. They are taken from satellites and transmitted to stations on Earth. Satellites can collect a variety of data, including standard photographic imagery, colour infrared and radar data. They can show Earth in close-up or from far away.

LESSON 8.16 Review

8.16.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

8.2 Geographical concepts and skills

- The acronym SPICESS helps you remember the seven geographical concepts: space, place, interconnection, change, environment, sustainability and scale.
- The three Geographical skills that you will develop throughout your course are:
  - *Geographical inquiry:* This involves developing and refining geographical questions to investigate places and phenomena by collecting, recording and interpreting data from various sources, including fieldwork and maps. It also involves analysing information to identify patterns, trends and relationships.
  - *Concluding and decision-making:* This involves drawing conclusions based on evidence from geographical data and research; evaluating different perspectives and solutions to geographical challenges; and making informed decisions about environmental, social and economic issues.
  - *Communicating:* This involves presenting geographical findings using maps, graphs, reports and digital tools; using geographical terminology and data to support explanations; and sharing findings in different formats to inform and engage audiences.

8.16.2 Key terms

change the process by which places, environments or spatial patterns alter over time. In Geography, change can be natural (like erosion or climate change) or human-made (like urban development or deforestation).
environment the natural and human surroundings in which people, plants and animals live, including ecosystems, landscapes, and built environments.
interconnection the way people, places and environments are linked to each other through natural processes, trade, migration, culture and technology.
place a specific location on Earth that has unique physical and human characteristics, making it meaningful to people.
sustainability the responsible use and management of resources to meet current needs while ensuring future generations can also meet theirs.
scale the ratio that shows how much smaller a map is compared to the real world, e.g., one centimetre on a map equals one kilometre in real life

8.16.3 Reflection

Complete the following to reflect on your learning.

Revist the Inquiry question posed in the Overview.

Why is geography important to study, and what skills do I need to understand geography?

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

learnon

eWorkbooks Customisable worksheets for this topic
Reflection

Digital document Key terms glossary

8.16 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
3, 7, 11, 12	1, 2, 5, 6, 9, 13	4, 8, 10, 14, 15

REMEMBER AND UNDERSTAND

1. What does the acronym SPICESS mean in geography?
   A. Space, Place, Interconnection, Change, Environment, Sustainability, Scale
   B. Space, Population, Interaction, Climate, Ecosystem, Sustainability, System
   C. Soil, People, Integration, Change, Ecosystem, Species, Scale
   D. Space, People, Interaction, Climate, Environment, Sustainability, Scale
2. Which of the following is NOT a geographical concept included in SPICESS?
   A. Space
   B. Population
   C. Place
   D. Sustainability
3. Geography is a way of:
   A. playing sports
   B. analysing and understanding the world
   C. creating art
   D. reacting to sources
4. The inquiry approach in geography involves:
   A. memorising facts
   B. investigating questions by collecting, analysing and interpreting information
   C. drawing pictures
   D. reciting poems
5. What key tool do geographers use to explore the world?
   A. Books
   B. Maps
   C. Vehicles
   D. Cameras
6. Maps contain a lot of information about:
   A. animals and plants
   B. people and places
   C. weather and climate
   D. history and mythology
7. As a geographer, you will produce your own maps:
   A. by hand or digitally
   B. using paint
   C. with clay
   D. on paper

8. Geographers are most likely to use maps to:
   A. find their way around
   B. to develop a hypothesis
   C. analyse spatial information
   D. build models
9. Learning geography requires mastering a range of:
   A. practical skills
   B. artistic skills
   C. writing skills
   D. drawing skills
10. Geography is mostly helpfully in allowing us:
   A. to get from one place to another
   B. understand the world, its people and places
   C. to remember capital cities
   D. to develop creativity

ANALYSE AND APPLY

11. **Explain** what is meant by geography and why is it important?
12. **Describe** what is meant by the concept of space in geography
13. What is the difference between the concepts of environment and sustainability?

EVALUATE AND COMMUNICATE

14. **Evaluate** the usefulness of technology to a geographer
15. **Propose** how geographical skills can be useful in everyday life.

Answers and sample responses for this topic are available online.

LESSON 8.3 SkillBuilder: Geographical inquiry

LEARNING INTENTION

By the end of this SkillBuilder you should be able to read a map and understand geographic relationships.

8.3.1 Tell me

What are maps and why are they useful?

Maps show parts of the world from a bird's-eye view. Cartographers simplify aerial photos or satellite images and use colours and symbols to represent features like roads, rivers and towns. All maps should include six key elements, remembered by the acronym BOLTSS (see **FIGURE 1**). Maps help us understand and navigate places, especially when travelling.

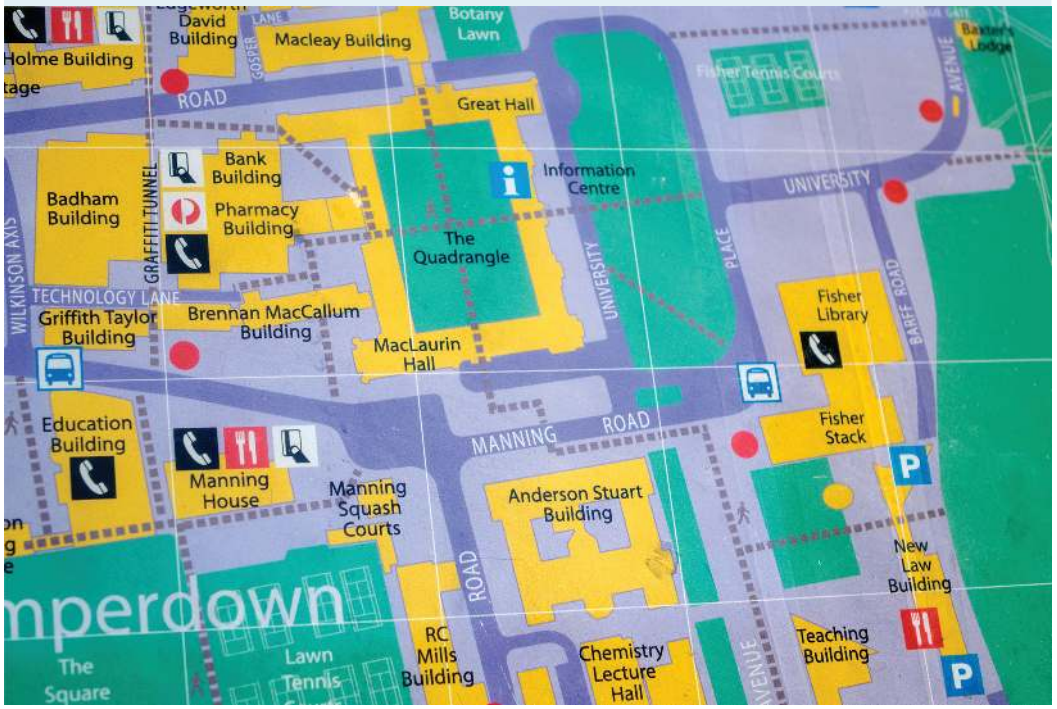
FIGURE 1 Essential map features follow the BOLTSS system

BOLTSS
Border — a box around the map to clearly show its extent
Orientation — a compass direction
Legend — a key to what the symbols and colours on the map stand for
Title — a clear indication of what the map is about or its theme
Scale — indicates distances on the map compared with the actual area being shown
Source — where possible, the information used to make the map should be sourced

Understanding map legends

Maps use various colours and symbols, explained in the legend, usually found in a corner or reference section. Cartographers represent features through point symbols (e.g., a church), line symbols (e.g., roads) and area symbols (e.g., forests). Common symbols, like blue lines for rivers, help readers quickly identify features. When creating maps, keep symbols small to maintain clarity.

FIGURE 2 Maps often show features using icons and legends.



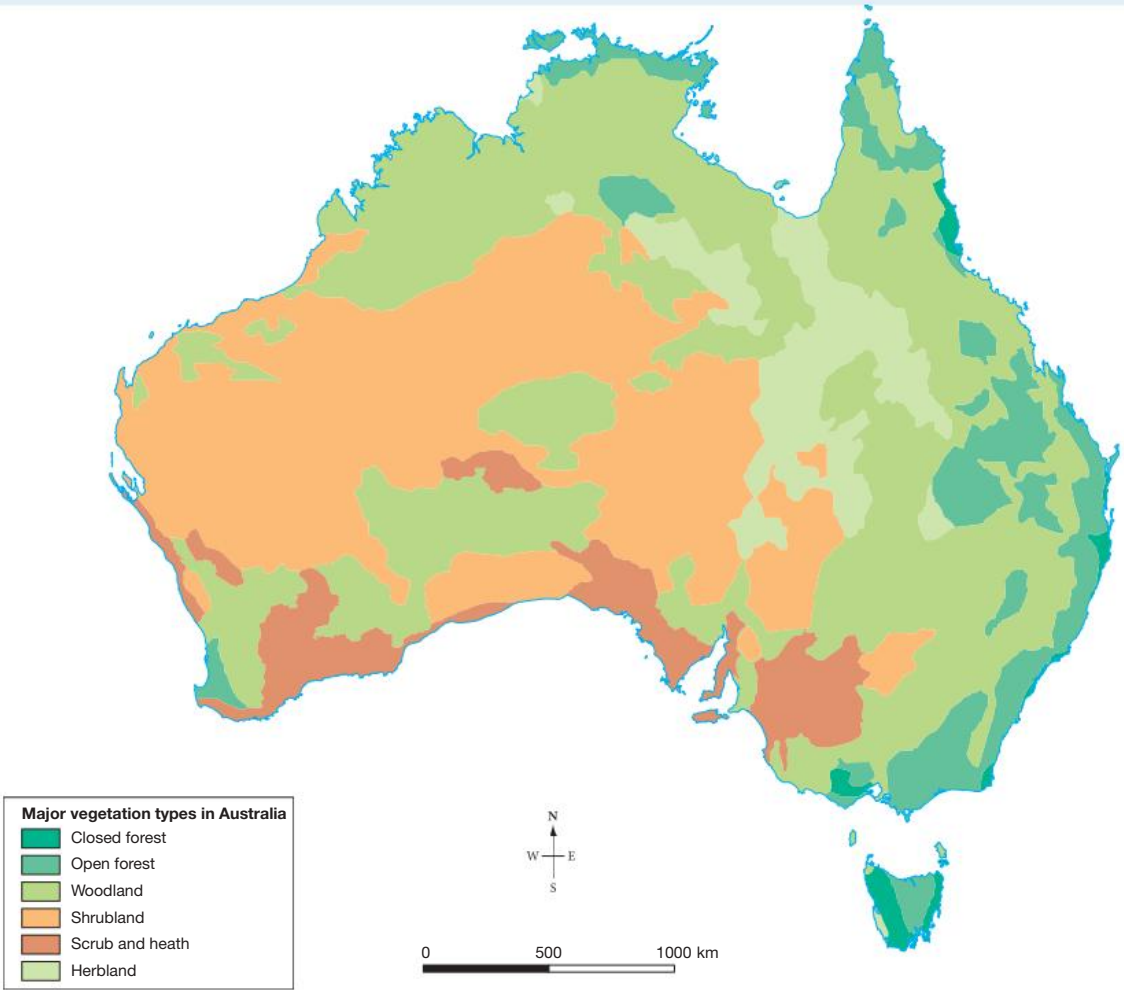
8.3.2 Show me

How to read a map

You will need:

- a map of the region being considered (see **FIGURES 3** and **4**).

FIGURE 3 Major vegetation types in Australia



Source: Map taken from http://www.anbg.gov.au/aust-veg/veg-map.html. Reproduced with permission from Sydney University Press

Procedure

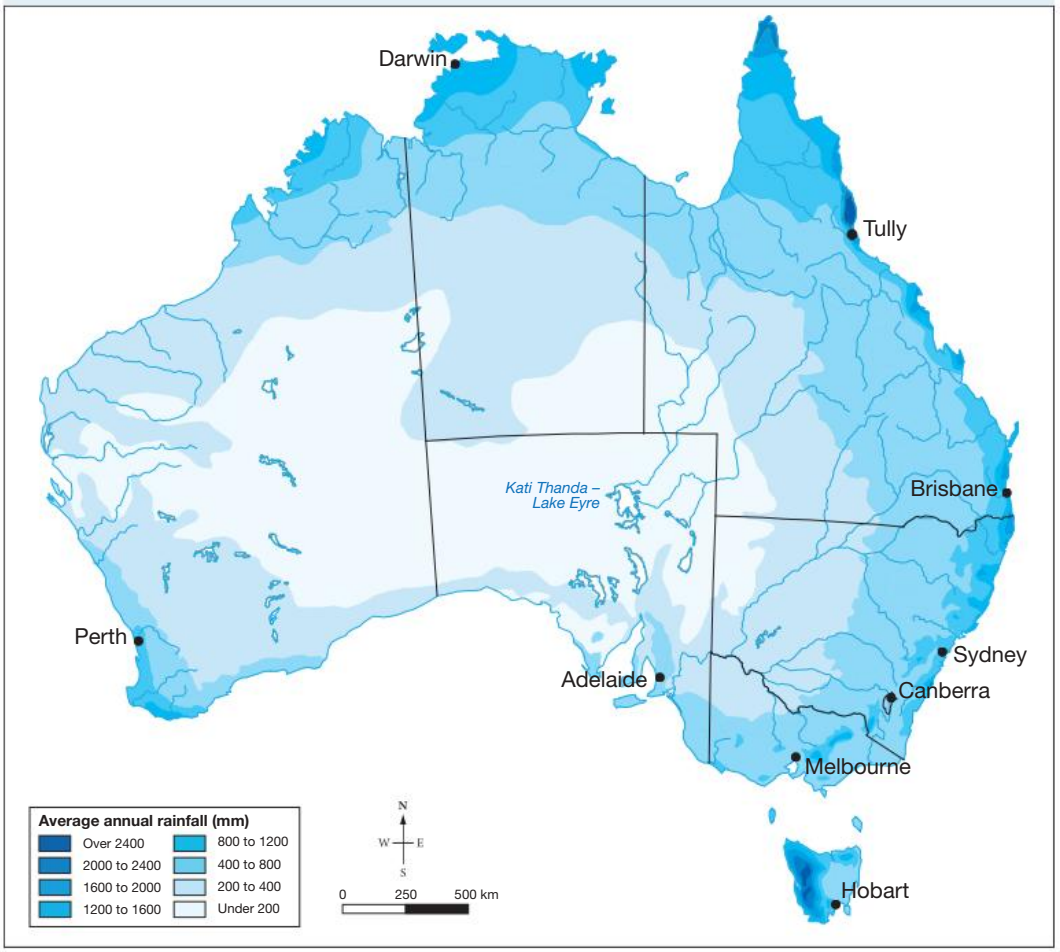
Step 1

Identify and carefully read the title of the map. This will help you understand the information you can expect to see on the map. Sometimes, the title tells you the date of the information that has been mapped. The map in **FIGURE 3** has a title that tells us it is a map of Australia showing major vegetation types. The colours in the key help us to understand the distribution of vegetation. **FIGURE 4** uses colour to represent average rainfall.

Step 2

Next, examine the key. We notice that closed forest is found in about half the area of Tasmania, in some small linear coastal tracts along parts of the east coast of mainland Australia and in the Otway region of Victoria. We could make a similar detailed description of open forest. Looking at the pattern of forests overall, we conclude that only a small area of Australia is forested — less than 10 per cent. **FIGURE 4** is a choropleth map that uses shades of one colour to reflect varying levels of rainfall.

FIGURE 4 Average annual rainfall



Source: Bureau of Meteorology, 2003

8.3.3 Let me do it

Complete the following activity to practise this skill.

8.3 SkillBuilder activity

Apply your skills to answer the following questions. Use the checklist provided to make sure you complete all aspects of the task.

Refer to **FIGURES 3** and **4** to complete the following questions.

1. a. **Describe** the area of Australia that mainly has shrubland.
   b. **Identify** where in Australia you would find closed forest.
      i. What is the average annual rainfall of Tully?
      ii. What is the average annual rainfall of each of Australia's state capital cities?
      iii. **Describe** the area of Australia that receives less than 200 mm of annual rainfall.
      iv. **Describe** the distribution of the wettest areas in Australia.
2. Using information from both maps, **identify** any interconnections/relationships between vegetation types and annual rainfall.
3. a. Create a table with the average rainfall in one column and types of vegetation in the other column. (You may have more than one type of vegetation for each amount of rainfall.)
   b. Add a third column that includes whether a capital city can be found in this range of rainfall.
   c. Explain in a paragraph any findings you have from your inquiry regarding the relationships between vegetation, annual rainfall and population centres.

Checklist I have:

- described data
- identified relationships
- created comparisons.

LESSON 8.4 SkillBuilder: Concluding and decision-making

LEARNING INTENTION

By the end of this SkillBuilder you should be able to read a weather map and make decision about upcoming weather conditions in Melbourne.

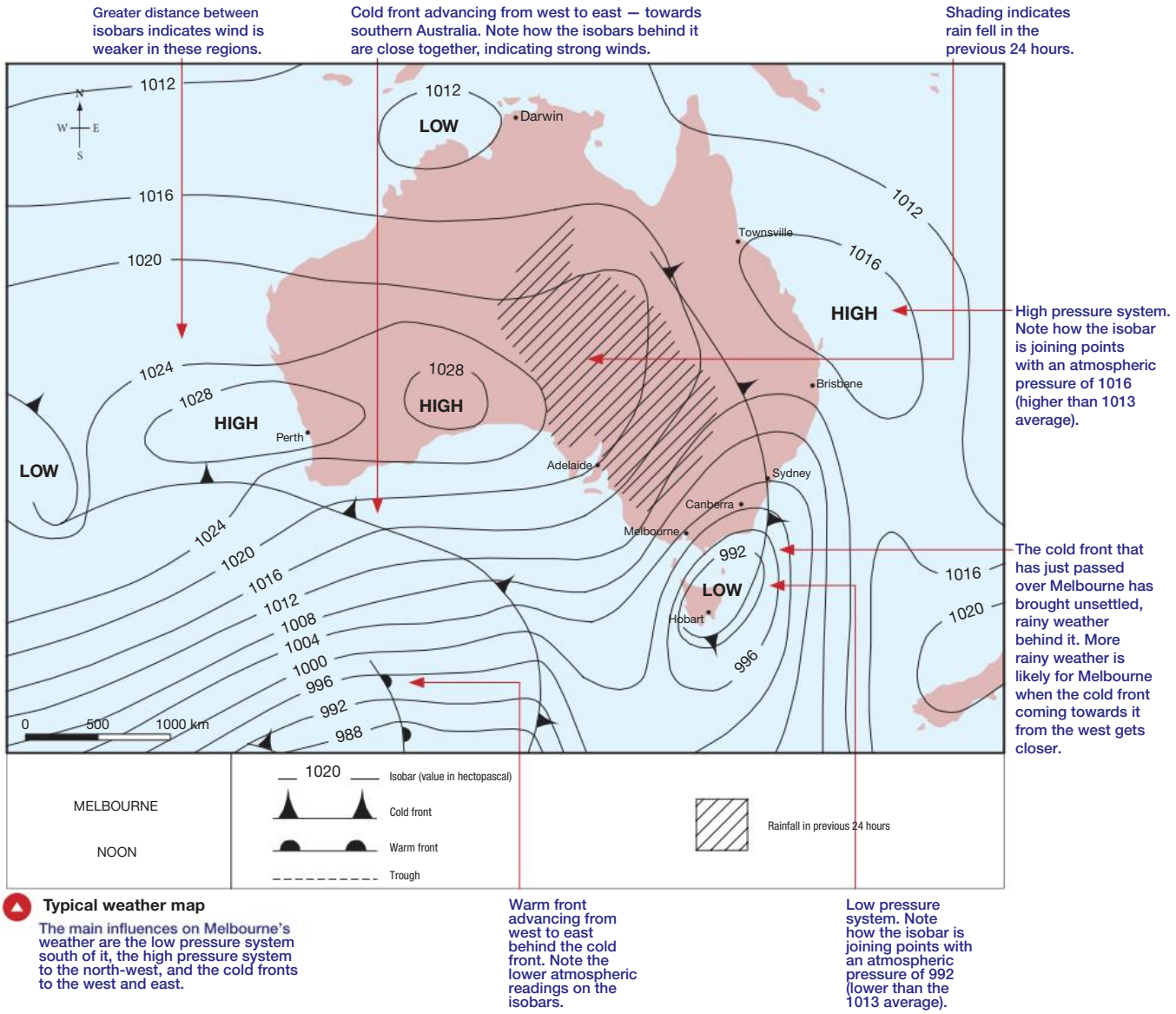
8.4.1 Tell me

What are weather maps?

Weather maps or 'synoptic charts' appear every day in newspapers and during the television news. We may see them as digital images on our phones as weather apps. Weather maps use lines and symbols to show areas of low and high pressure and weather events such as cyclones, rainfall, warm and cold fronts. The lines on a weather map are called 'isobars'.

Isobars join places with the same atmospheric pressure. The numbers on the isobars represent differences in atmospheric pressure, which is the weight of the air. This varies from place to place, depending on the air temperature. Meteorologists use sensitive instruments called 'barometers' to measure atmospheric pressure.

FIGURE 1 A weather map that you might see in digital and printed resources



Typical weather map

The main influences on Melbourne's weather are the low pressure system south of it, the high pressure system to the north-west, and the cold fronts to the west and east.

Source: MAPgraphics Pty Ltd, Brisbane

How are weather maps useful for decision making?

Understanding weather is crucial. Weather impacts everyone's lives. Reading weather maps helps you anticipate upcoming conditions. Farmers, tourists and emergency services all rely on forecasts for making decisions with respect to planning and safety.

Today, meteorologists predict weather more accurately using satellite images, radar, weather balloons, automatic stations, ships and aircraft.

8.4.2 Show me

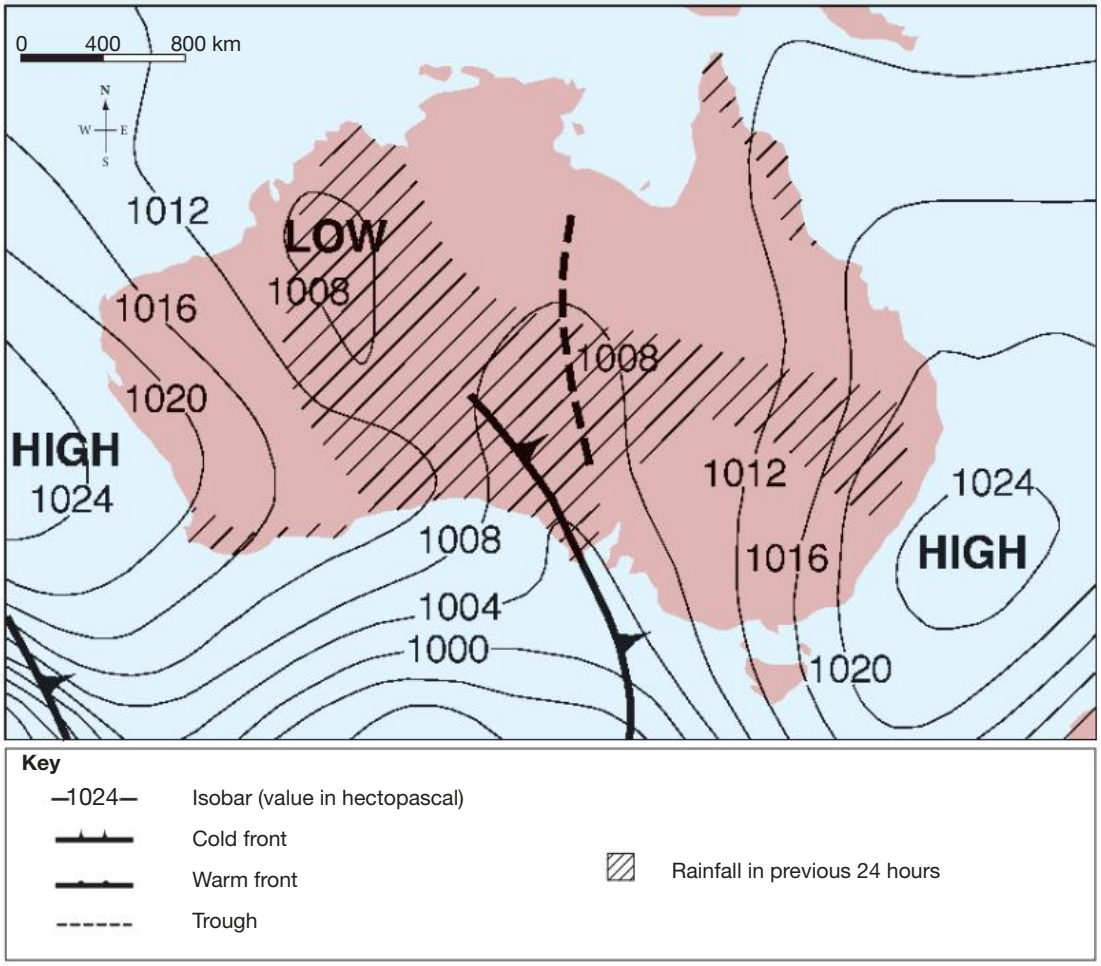
How to interpret a weather map

You will need:

- a weather map
- a key to interpret the weather map symbols.

The average weight of air is 1013 hectopascals (hPa). Measurements higher than this (e.g. 1020 hPa) indicate areas of high atmospheric pressure, where air is sinking. Measurements lower than this (e.g. 985 hPa) indicate areas of low atmospheric pressure, where air is rising. You can use this code to read the weather map in **FIGURE 2**.

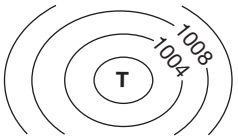
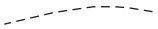
FIGURE 2 Weather map for 10 November



Source: MAPgraphics Pty Ltd, Brisbane

TABLE 1 Symbols on weather maps for the southern hemisphere

Symbol	Name	What does it mean?	Comment
1024 1020 1018	Isobars	Join places with the same air pressure	The closer together these lines, the stronger the wind.
1020 H	High-pressure area	Sinking air	Generally fine weather. Winds rotate around these areas anticlockwise.
1008 L	Low-pressure area	Rising air	Generally cooler weather, rain. Winds rotate around these areas clockwise.

	Tropical cyclone	Rapidly rising air	Strong winds, torrential rain.
	Cold front	The 'line' along which an approaching mass of cold air meets warmer air	Fall in temperature, rain. Front moves in the direction of arrowheads.
	Warm front	The 'line' along which an approaching mass of warm air meets colder air	Temperature rises, sometimes light rain. Uncommon in Australia.
	Rain	Rain in the last 24 hours	Usually associated with low-pressure areas and fronts.
	Trough	A dip in isobars	An area associated with unsettled weather and precipitation.

Procedure

Step 1

Pressure systems

Examine high-pressure systems (pressure above 1013 hPa) and low-pressure systems (pressure below 1013 hPa). Pressure systems generally move from west to east as they cross Australia and move around the world. In **FIGURE 2**, a high-pressure system is approaching south-west Western Australia. This system is likely to bring fine weather to the region. The low-pressure system east of Broome brings cooler weather and rain.

Step 2

Air masses and fronts

Examine any air masses and fronts. **FIGURE 2** shows a cold front where cold air meets warmer air. This is likely to cause a fall in temperature and rain in South Australia.

Step 3

Precipitation

Examine precipitation patterns. Precipitation includes snow, hail and dew, but rainfall is the most common form of precipitation. In **FIGURE 2**, we can see that more than half of Australia has received rain in the last 24 hours. This chart does not indicate how much rain has fallen.

Step 4

Wind

Wind is not shown on this weather map. However, the closer together the isobars are, the stronger the winds will be. There are no significant areas of high wind shown for Australia on 10 November.

Step 5

Troughs

The weather map in **FIGURE 2** shows a trough in central Australia. The trough line runs north from central South Australia towards the Gulf of Carpentaria. Troughs are usually associated with unsettled weather and precipitation.

8.4.3 Let me do it

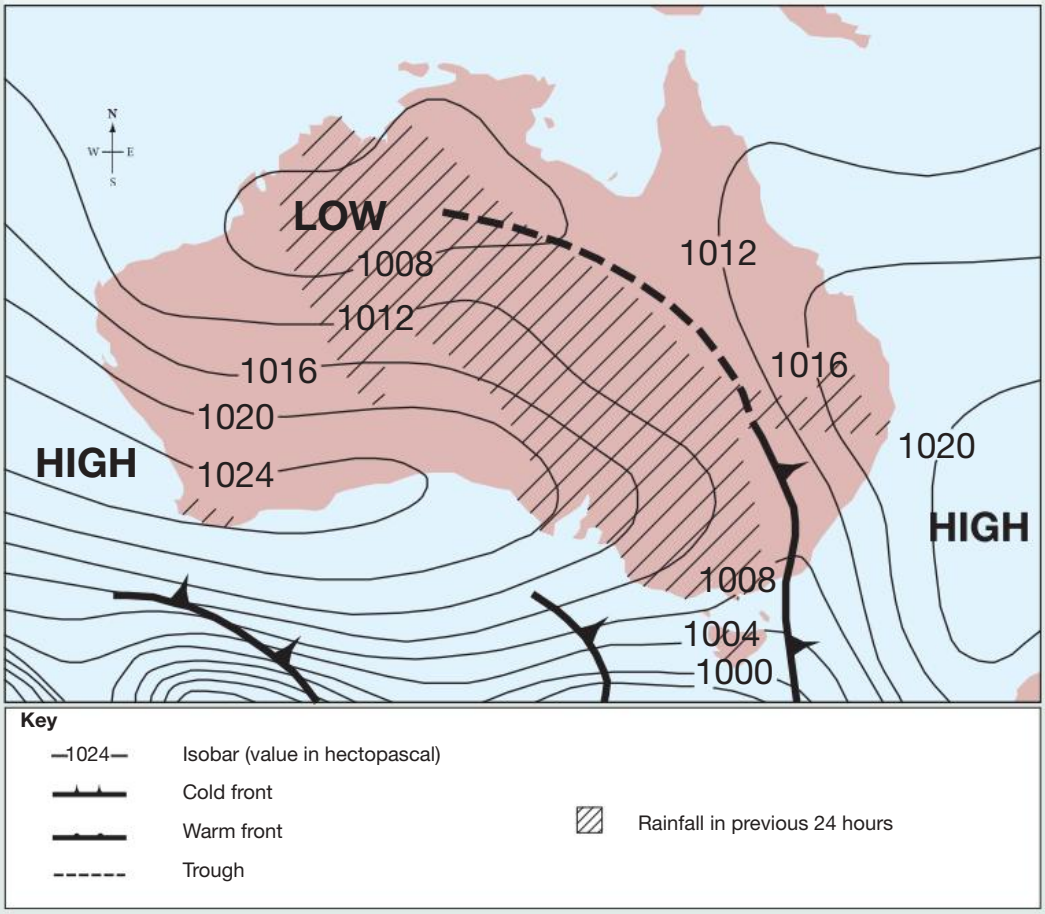
Complete the following activity to practise this skill.

8.4 SkillBuilder activity

The map in **FIGURE 3**, produced on 11 November, predicts the weather for 12 November. **FIGURE 4** shows what the weather was actually like that day. Based on the skills you have learned in this SkillBuilder, interpret the maps and answer the following questions. Use the checklist provided to make sure you cover all aspects of the task.

1. List what is different in **FIGURE 3** from the map showing actual weather for two days earlier (10 November), shown in **FIGURE 2**.
2. Decide on what Melbourne's weather for 12 November will be. Include a description of what may happen throughout the day.
3. Using Geography skills to analyse weather.
   a. Explain how the weather on November 12 would impact three different *spaces* across Australia.
   b. Discuss why the weather *changes* on a regular basis.
   c. Describe the *interconnection* between areas of low air pressure (below 2013 hPa) and rainfall.
   d. Theorise as to how the weather in different parts of Australia would determine the type of *environments* found across the country.
4. Use **FIGURE 4** to check your answers to questions 2 and 3.

FIGURE 3 Weather map showing predicted weather for 12 November



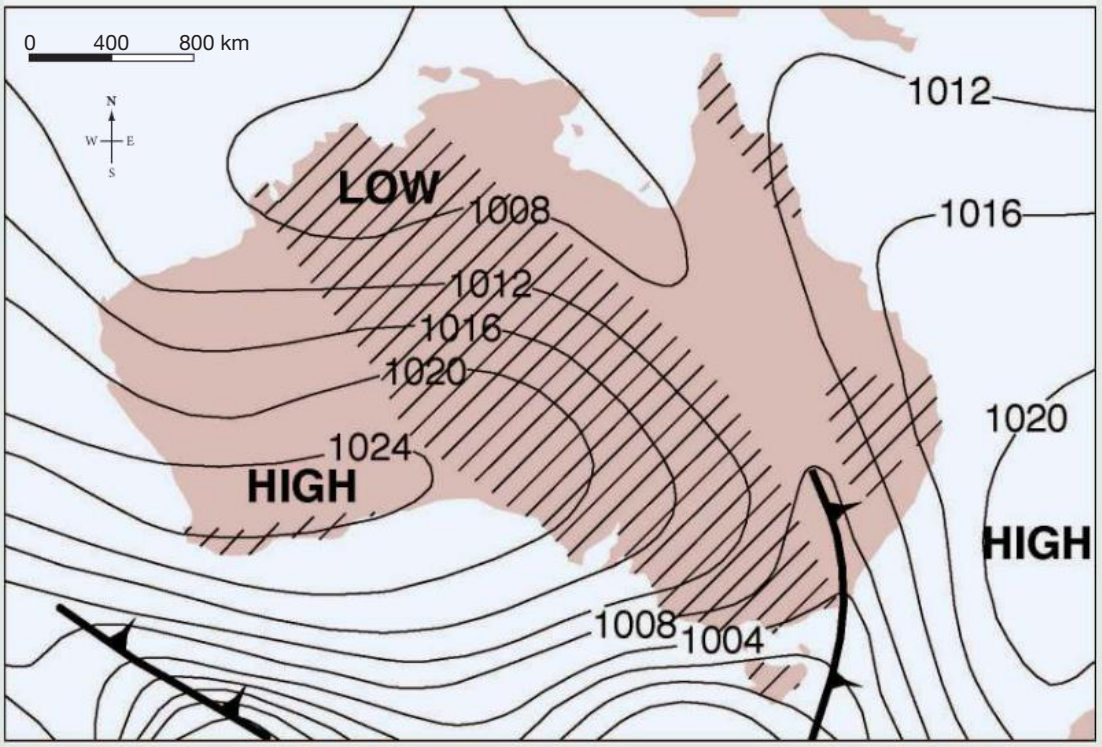
Source: MAPgraphics Pty Ltd, Brisbane

Checklist

I have:

- interpreted pressure systems, air masses and fronts, precipitation, wind and troughs
- written a detailed description of Melbourne's weather using a weather map
- used the Geography concepts of **space**, **change**, **interconnection** and **environment** to explain the impact of the weather.

FIGURE 4 Map showing actual weather for 12 November



Key

—1024— Isobar (value in hectopascal)

Cold front

Warm front

Trough

Rainfall in previous 24 hours

Source: MAPgraphics Pty Ltd, Brisbane

LESSON 8.5 SkillBuilder: Communicating

LEARNING INTENTION

By the end of this SkillBuilder you should be able to construct a pie graph to communicate information.

8.5.1 Tell me

What is a pie graph?

A pie graph, or pie chart, is a graph in which slices or segments represent the size of different parts that make up the whole. The circle of 360 degrees represents the total, or 100 per cent of whatever is being examined. Pie charts are useful for easily seeing the size of the segments. Presenting the parts in order, from largest to smallest, makes it easier to interpret.

A pie graph can be drawn by hand or using a spreadsheet program such as Excel.

How are pie graphs useful?

Pie graphs give us an overall impression of data. They are useful for comparing the proportions of categories. However, if more than eight segments are needed, the graph becomes difficult to read, and it is better to use a bar graph. Unlike line graphs, pie graphs are not useful for showing a trend over time.

A good pie graph:

- has a clear and accurate title that explains the purpose of the graph
- has segments that are either labelled directly or indicated using a colour key
- includes percentages or raw figures
- has segments drawn clockwise from largest to smallest, starting at 12 o'clock with the largest and finishing at 12 o'clock with the smallest, unless there is a segment for 'other', which is always last
- includes the source of the data.

8.5.2 Show me

How to complete a pie graph by hand

You will need:

- paper
- a pencil
- a protractor
- a ruler
- coloured pencils
- a data set — in this case, energy generated from renewables in Australia (see **TABLE 1**).

Model

TABLE 1 Percentage of electricity generated from renewables and non-renewable sources in Australia (2023)

Renewable energy	Percentage (%)
Hydro	6
Solar	16
Wind	12
Bioenergy	1
Fossil fuels	65

Source: Department of Climate Change, Energy, the Environment and Water, https://www.energy.gov.au/energy-data/australian-energy-statistics/renewables#:~:text=In%202023%2C%2035%25%20of%20Australia's,earlier%202022%2D23%20financial%20year.

Procedure

Step 1

Order the statistics from largest to smallest. If there is an 'other' category, put it last.

Step 2

If you have not been given percentages, you will need to calculate them. Add all categories together to give you your total figure. Divide each individual category by the total figure and then multiply by 100. This will give you a percentage.

Step 3

Convert the percentage to degrees of a circle by multiplying by 3.6. (100 per cent of the circle = 360 degrees, so 1 per cent of the circle = 3.6 degrees.)

TABLE 2 Converting percentages to degrees in circle

Energy Source	Percentage (%)	Degrees (°)
Non-renewables	65.0	234.0
Solar	16.0	57.6
Wind	12.0	43.2
Hydro	6.0	21.6
Biomass	1.1	4.0
Total	**100.1**	**360.4**

Source: Department of Climate Change, Energy, the Environment and Water, https://www.energy.gov.au/energy-data/australian-energy-statistics/renewables#:~:text=In%202023%2C%2035%25%20of%20Australia's,earlier%202022%2D23%20financial%20year.

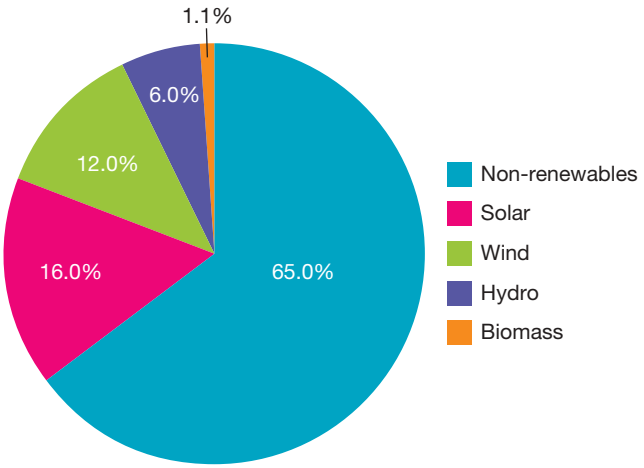
Step 4

Draw a straight line from the centre of the circle to 12 o'clock.

Step 5

Use the protractor to mark the first and largest segment, working clockwise. To do this, place the 0 degrees line on the protractor along the line you have just drawn. Now mark in the second largest group. Use the protractor to mark each of the other segments in descending size, marking the 'other' category last (if needed).

FIGURE 1 Percentage of electricity generated from renewables and non renewables in Australia (2023)



Step 6

Label and colour each segment, making sure you include the percentage label.

Step 7

Provide a clear title and source.

8.5.3 Let me do it

Complete the following activities to practise this skill.

8.5 SkillBuilder activity

1. Use the data in **TABLE 3** to **construct** a pie graph. Use the checklist provided to make sure you complete all aspects of the task.

TABLE 3 Source of electricity worldwide, 2023

Source of electricity	Percentage (%)
Coal and oil	38
Natural gas	23
Hydro	15
Nuclear	10
Wind and solar	10
Other	4

2. Once you have created your pie graph, apply the skills you have developed in this SkillBuilder to answer the following questions.
   a. What is the most common source when producing electricity?
   b. Are renewables or non-renewables the main source of electricity?
   c. Name a renewable that is part of the 'other' category.
   d. In Iceland, 70 per cent of all electricity is produced from hydro power and 30 per cent from geothermal power. Is this similar to or different from the world trend?
   e. Research the sources of energy production for another country. Compare your results to Australia and Iceland.

Checklist

I have:
- provided a clear title and source
- plotted the data accurately and labelled each segment
- included the percentages
- shown largest to smallest clockwise from 12 o'clock, with 'other' last.

LESSON 8.6 SkillBuilder: Using topographic maps

LEARNING INTENTION

By the end of this SkillBuilder you should be able to use a topographic map.

8.6.1 Tell me

What are topographic maps?

Topographic maps are more than just contour maps showing the height and shape of the land. They also show features of the natural environment, such as forests and lakes, and features of human environments, such as roads and settlements (places where a community of people live).

Why are topographic maps useful?

All topographic maps use similar symbols to show the main features of the landscape. These symbols make it easy for map readers to quickly identify the features shown in the legend or key. Topographic maps are useful for various purposes, from bushwalkers wanting to understand the landscape in which they plan to walk, to town planners and engineers needing to construct infrastructure such as roads and bridges.

FIGURE 1 This is an aerial photograph of Mount Gambier, South Australia, an area with many extinct volcanoes. Lakes have formed in the craters of several volcanoes. The most famous is Blue Lake. We can see many features in the photo, but a topographic map can give us more information, especially about the shape of the landscape — its topography.

8.6.2 Show me

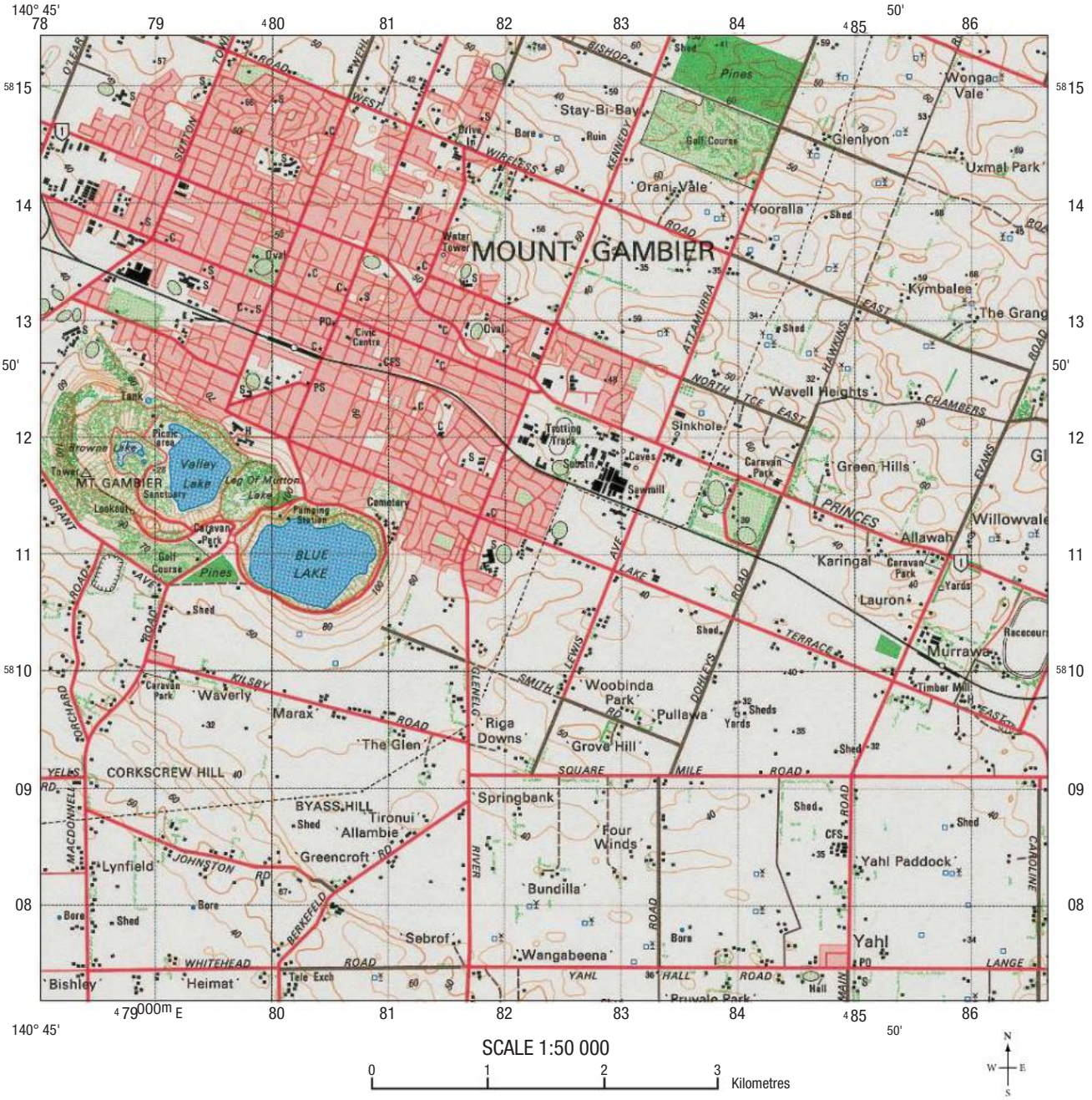
How topographic maps help us to locate places on a map

You will need:

- a topographic map (see **FIGURE 2**).

A topographic map can provide many observations. **FIGURE 2** shows Mount Gambier's map, highlighting Blue Lake with its steep surrounding slopes. The township lies north of Blue Lake, with a railway line passing through near the civic centre and post office. The town spans about 4 kilometre both east–west and north–south. The local golf club is located in the north-east. These details are noted using the legend, north arrow and scale.

FIGURE 2 This topographic map extract of Mount Gambier can be used to determine the location, direction and distance of geographical features in the area shown on the map.



Built-up area; Parks, recreation areas.	Power transmission line; Levee or bank.
Road, sealed surface, two or more lanes; National route marker.	Survey beacon; spot elevation.
Road, sealed surface, one lane.	Lake perennial; Watercourse.
Road, unsealed surface, two or more lanes; Bridge.	Lake, intermittent; Land subject to inundation.
Road, unsealed surface, one lane; Gate; Cattle grid.	Dam or waterhole on watercourse; Tank or small dam.
Vehicular track.	Contours; Depression contours.
Railway, multiple track; Station; Siding.	Cliff; Escarpment or low cliff.
Railway, single tract, Cutting; Embankment.	Pine plantation; Orchard or low cliff.
Building; Post office; Police station; School.	Windmark.
Hospital; Church; Mine; Windmill.	Trees and scrub, scattered
Fence; Guerry.	Trees and scrub, medium, dense.

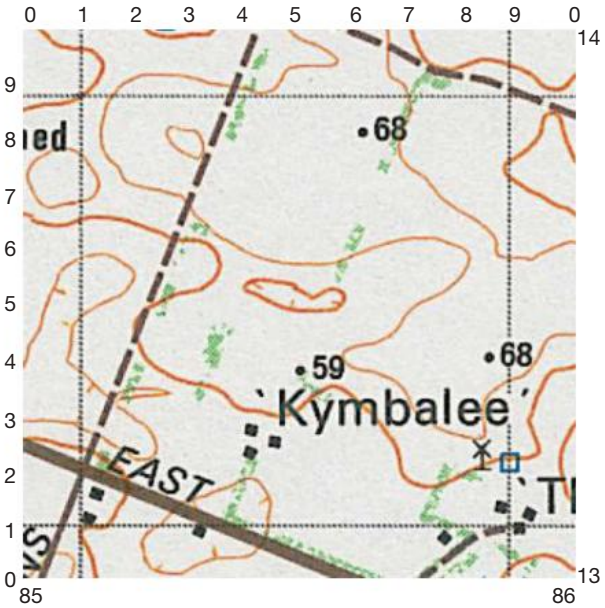
Source: Government of South Australia, Department of Environment, Water and Natural Resources.

Area and grid references

A 1-kilometre-square grid is overprinted on a topographic map. These grid lines are numbered with two-digit numbers in the map's margins. Lines that run up and down the map (north–south) are called 'eastings'. The numbers increase as you move to the east. Lines that run horizontally across the map (east–west) are called 'northings'. The numbers increase as you move north. In a grid reference, the eastings are given first, and then the northings.

Four-figure grid references tell you the grid square in which to find a feature. The letters AR are placed in front of a four-figure reference to show the area reference. For example, AR8513 contains the town of Kymbalee (see **FIGURE 3**).

FIGURE 3 Working out a six-figure grid reference



Six-figure grid references pinpoint an exact point in the grid square. The third and sixth figures represent one-tenth of the distance between the two grid numbers. These divisions are not written on the map, so they must be estimated. The letters GR are used in front of a six-figure grid reference. No spaces are used between the digits in four- or six-figure references; for example, Kymbalee's grid reference is GR854132.

8.6.3 Let me do it

Complete the following activity to practise this skill.

8.6 SkillBuilder activity

Answer these questions using the **FIGURE 1** aerial photograph and **FIGURE 2** topographic map extract of Mount Gambier. Use the checklist provided to make sure you complete all aspects of the task.

1. **Examine FIGURE 1**. From which direction was this photograph of the crater lakes taken?
2. **Examine FIGURE 2**. Look at the contour lines to the south of Blue Lake. Is the land flat or steep? How can you tell?
3. Sketch the special symbols used in the legend showing that the crater lakes:
   a. form a depression
   b. have steep sides.
4. Give the main features found in the following area references.
   a. AR8010
   b. AR8013
5. Give area references for the following features.
   a. Valley Lake
   b. The trotting track
6. Find the following features.
   a. GR858087
   b. GR816077
   c. GR807128
   d. GR812123

7. From the topographic map extract of Mount Gambier, give six-figure grid references for features that show the following.
   a. Mount Gambier has a large timber industry.
   b. Mount Gambier is a popular tourist resort.
   c. Mount Gambier has many sporting facilities.
   d. Mount Gambier is the centre of a farming region.
8. Approximately how wide is Blue Lake at its widest point?

Checklist

I have:
- identified north, south, east and west using the north point
- used the key to identify features
- used grid references to describe the location of a specific feature
- used the scale to calculate distances
- interpreted topography by considering how close together the contour lines are.

LESSON 8.7 SkillBuilder: Interpreting topological maps

LEARNING INTENTION

By the end of this SkillBuilder you should be able to interpret a topological map.

8.7.1 Tell me

What is a topological map?

Topological maps are very simple maps, with only the most vital information included. These maps generally:
- use pictures to identify places
- are not drawn to scale
- provide no sense of distance
- provide general directions
- exaggerate the size of certain places
- do not show exact routes.

However, everything is correct in its interconnection to other points.

How is a topological map useful?

A topological map is useful as a mental map to help you locate important features. Large areas can be drawn to show the viewer the important points. You could use these in class as summary maps of a topic or as quick sketch maps to illustrate a point or to clarify something for another student.

They are also useful for:
- giving tourists a snapshot of where features are located
- quickly showing how to get to a place
- showing very large transport routes such as bus and train routes across a city
- planning international flights.

A good interpretation of a topological map:
- identifies and communicates key features
- clearly represents and communicates the data.

8.7.2 Show me

How to use a topological map

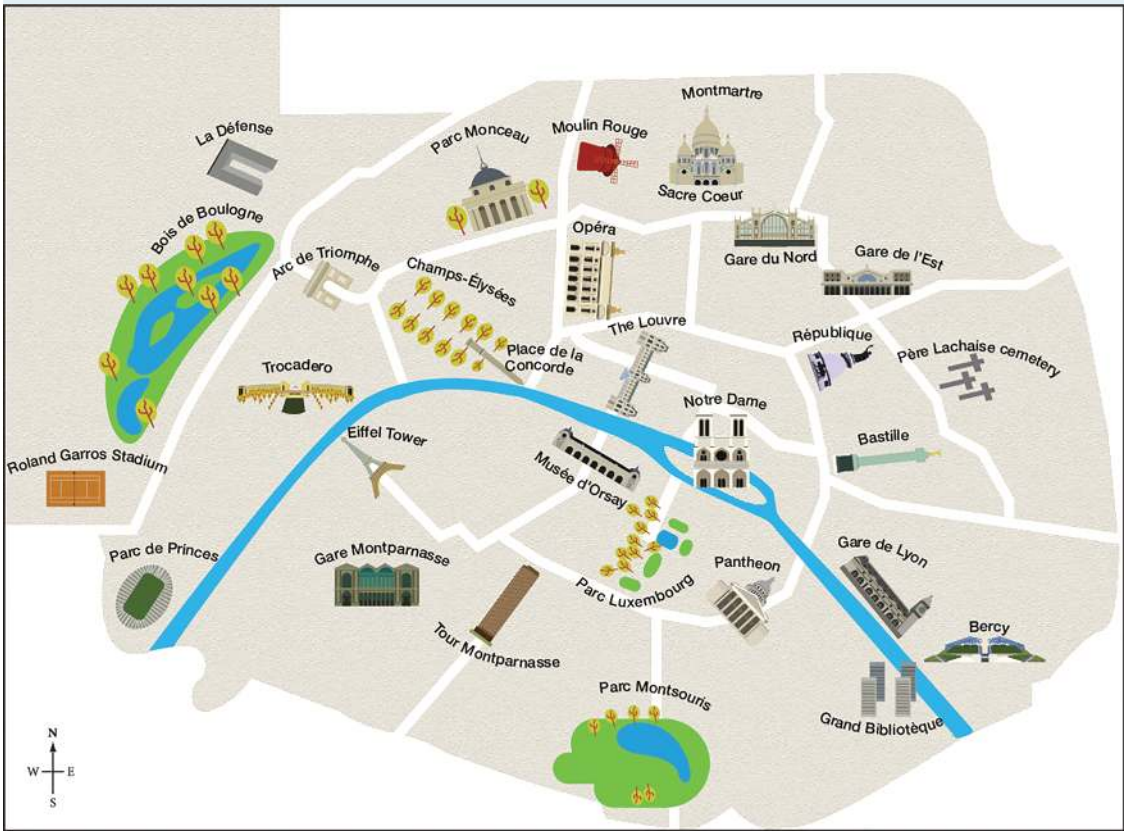
You will need:

- a topological map (see **FIGURE 1**).

Model

FIGURE 1 shows a topological map of central Paris designed for tourists. It highlights key sites and their locations relative to the river. For example, the Champs-Élysées and the Louvre are on the same side and close to each other. Major routes between monuments are indicated, though they may not be the shortest due to the lack of scale, making it challenging to judge distances accurately. Despite this, the map gives a general idea of where attractions are located, helping tourists plan their visits. For instance, deciding whether to walk along the river or take another route from the Eiffel Tower to the Arc de Triomphe might require additional maps or guidance.

FIGURE 1 A tourist map of Paris and its monuments



Procedure

Step 1

Look around the topological map and identify the key features shown. In **FIGURE 1**, almost 30 major tourist attractions of Paris are shown as drawings of each place. Some drawings are larger than others, which might show the significance and the popularity of these places with tourists.

Step 2

Think about the interconnection between features. On the map in **FIGURE 1**, the interconnection between the places is that each one is a Paris tourist attraction. Some major roads are shown, but these may not be the optimum route to travel. These pathways represent just one way to connect between the places.

Step 3

Since no scale is provided, could a tourist walk between all these places? Think about possible distances. Consider the distance from the Gare du Nord railway station to the city centre. A tourist may well have travelled this route and be able to give the map a sense of scale. Could you see all these monuments in a day? The answer to both questions is no. Interpreting a topological map gives a first impression, but it is not an accurate map. It may be useful for moving around an area, but it lacks detail.

8.7.3 Let me do it

Complete the following activities to practise this skill.

8.7 SkillBuilder activity

1. Using the child's map shown in **FIGURE 2**, **describe** the route the child takes from home to school. Use the checklist to make sure you cover all aspects of the task.

FIGURE 2 Drawing by a child who walks to school

2. Use your skill in understanding and **interpreting** topological maps to answer the following questions.
   a. What is the purpose of this topological map?
   b. **Describe** the pattern of houses along the route.
   c. What symbols have been used to show the sporting area of the school grounds?
   d. Why do you think this child drew the road at such a size and included the road markings?
   e. **Describe** the environment along the route from home to school.

Checklist

I have:
- identified and communicated key features on the topological map
- clearly represented and communicated the information in the description.

LESSON 8.8 SkillBuilder: Using alphanumeric grid references

LEARNING INTENTION

By the end of this SkillBuilder you should be able to use an alphanumeric grid reference.

8.8.1 Tell me

What are alphanumeric grid references?

Alphanumeric grid references combine letters and numbers that help us locate specific positions on a map. They are linked to the lines that form a grid over certain kinds of maps. The letters and numbers are placed alongside the gridlines, just outside the map. The grid, letters and numbers allow you to pinpoint a place or feature by its alphanumeric grid reference.

FIGURE 1 An alphanumeric grid is a simple coordinate system on a grid in which each cell is identified by a combination of a letter and a number.

	a	b	c	d	e	f
1	a1	b1	c1	d1	e1	f1
2	a2	b2	c2	d2	e2	f2
3	a3	b3	c3	d3	e3	f3
4	a4	b4	c4	d4	e4	f4
5	a5	b5	c5	d5	e5	f5
6	a6	b6	c6	d6	e6	f6

Why are alphanumeric grid references useful?

If it weren't for grid references, finding places in detailed books of maps such as street directories and atlases would be very time consuming. Grid references allow users to quickly locate the information they want among the hundreds of other features shown on a map. They also enable people to communicate precisely with one another about location using the same map.

8.8.2 Show me

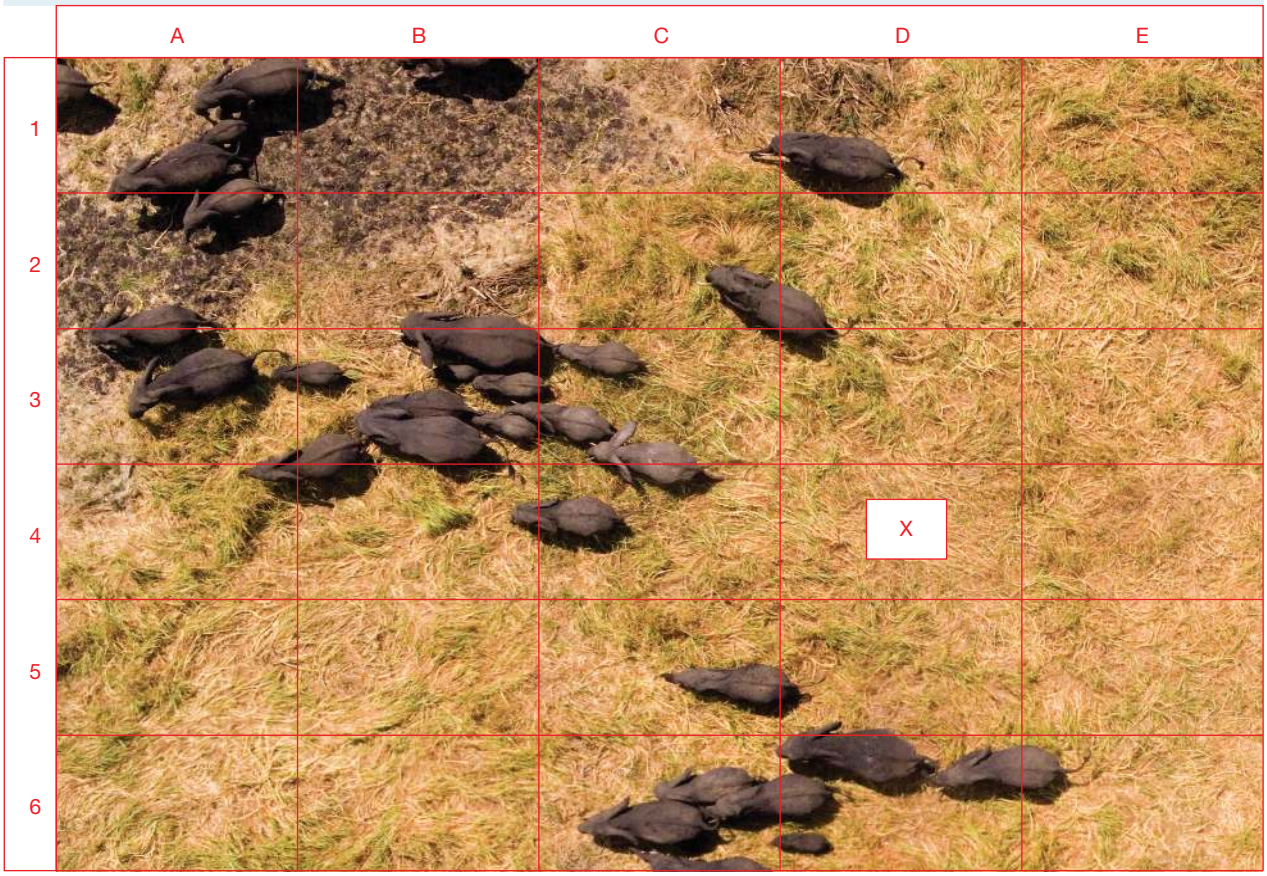
How to use alphanumeric grid references

You will need:

- a map that has alphanumeric grid references (see **FIGURE 3**)
- a pen and notebook.

Model

FIGURE 2 Aerial photo of elephants in Botswana



Procedure

Step 1

We will demonstrate this skill using the photo in **FIGURE 2**. In this aerial photograph of elephants in Botswana, we want to locate the veterinarian, Jessica, who is at point X.

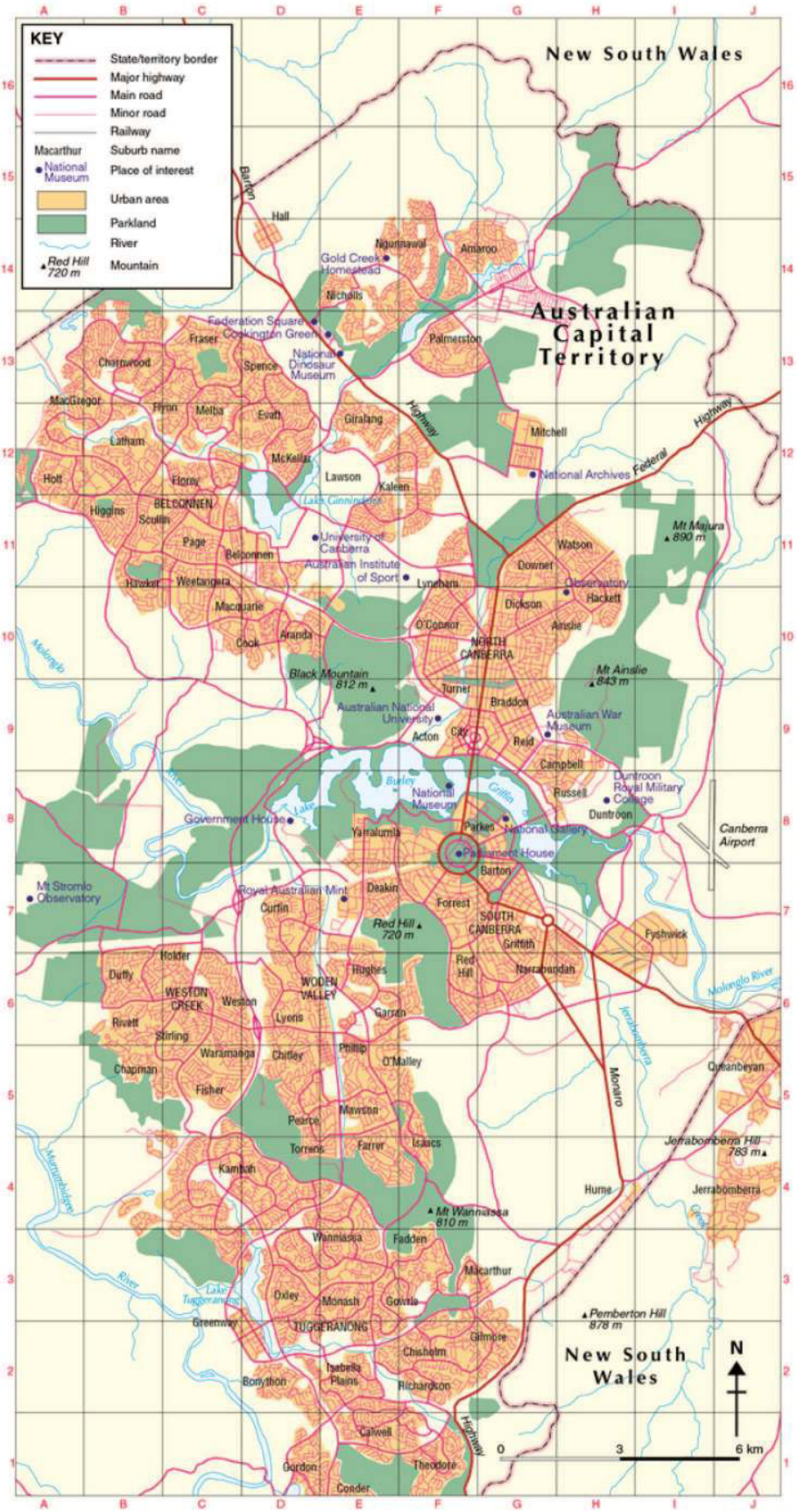
Step 2

Place your finger in the grid square that contains the X. By running your finger up the column of squares, you can see that Jessica is in column D. Write this down in your notebook.

Step 3

Now, run your finger across the row of squares, and you will see that she is in row 4. Write this down to the right of the letter D in your notebook. This gives us the grid reference for Jessica's location: D4. Now, write the name of the feature (in this case, Veterinarian: Jessica) beside the grid reference.

FIGURE 3 Canberra and its suburbs



Source: MAPgraphics Pty Ltd, Brisbane.

8.8.3 Let me do it

Complete the following activities to practise this skill.

8.8 SkillBuilder activity

1. Using **FIGURE 3**, give grid references for the following features.
   a. Canberra airport
   b. Queanbeyan
   c. Mount Ainslie
2. The Prime Minister is hosting a group of leaders from the Asia–Pacific region. The leaders will visit some local attractions in and around Canberra as part of their trip. Use the Canberra map in **FIGURE 3** and the following grid references to report on the places of interest that the group visited.
   a. Before lunch, the group went to E7, E13 and F11.
   b. They had lunch at F9.
   c. After lunch, they visited G9 and H8 before making their way to A7.
   d. That night, they had dinner at D8.

Checklist

I have:

- run up or down the column of squares first and then run across the row of squares to identify the grid references
- written the letter of the alphabet before the numeral for each reference
- double-checked my answers.

LESSON 8.9 Skillbuilder: Drawing a climate graph

LEARNING INTENTION

By the end of this SkillBuilder you should be able to draw a climate graph.

8.9.1 Tell me

What are climate graphs?

Climate graphs, or climographs, display climate data for a specific location using a column graph for average monthly precipitation and a line graph for average monthly temperature. The left axis shows temperature, while the right axis shows rainfall. Temperature may be shown as one mean monthly value or two lines for mean maximum and minimum temperatures.

Mount Isa, about 1800 kilometres northwest of Brisbane in Queensland's arid Gulf Country, is a key outback centre with around 18 000 residents, mostly involved in mining copper, silver and zinc. The climate graphs for Mount Isa in **FIGURES 1** and **2** illustrate how temperature lines help us understand the area's climate.

Why are climate graphs useful?

Climate graphs are used to show the climate of a place over a 12-month period. Because the red line on the graph shows temperature and the blue columns show rainfall, you can quickly understand the graph. It is much easier to compare the climate of two places by looking at their climate graphs than by looking at tables of statistics, so drawing and using these graphs is an important geographical skill. It also very easy to compare climate patterns for different areas when the graphs are drawn using the same conventions.

FIGURE 1 Climate graph for Mount Isa, Queensland

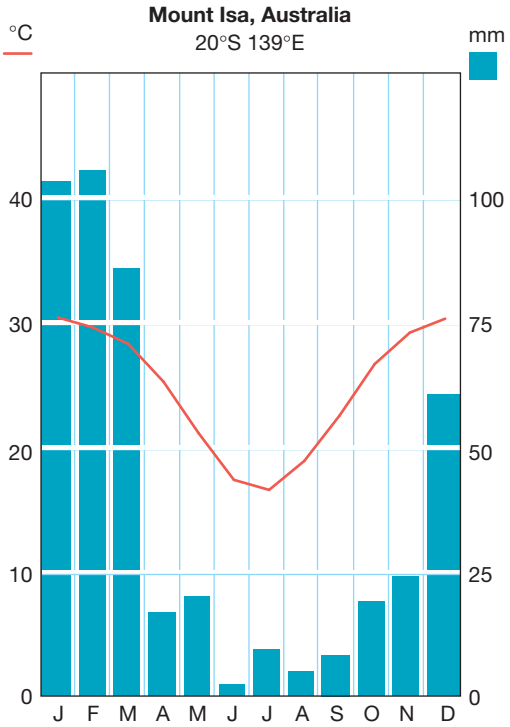
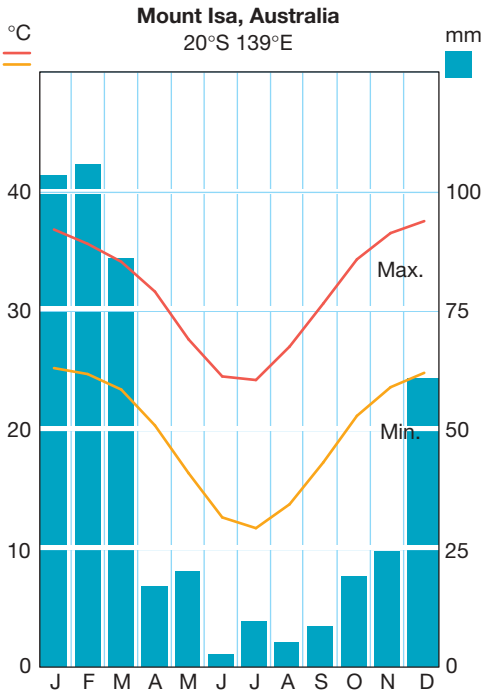


FIGURE 2 Climate graph for Mount Isa, showing average maximum and minimum temperatures



A good climate graph:

- is drawn in pencil first, and then coloured
- has ruled axes
- has labelled axes
- makes use of small dots before a line is drawn
- has a smooth curve for the temperature line in red
- has rainfall columns shaded in blue
- includes a title
- includes a source.

8.9.2 Show me

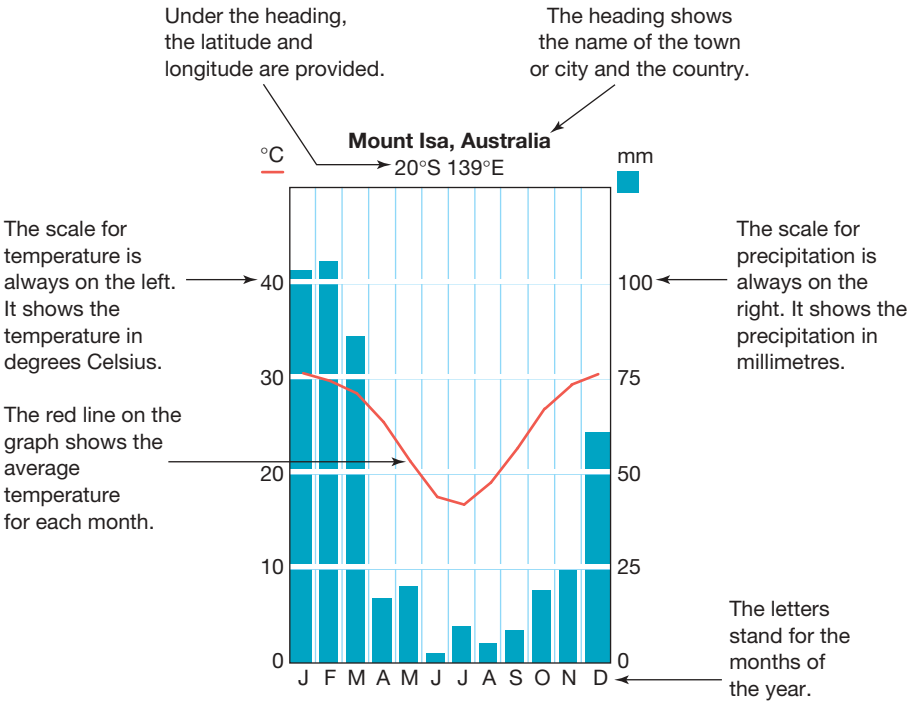
How to complete a climate graph

You will need:

- data to plot on your graph (see **TABLE 1**)
- graph paper
- a grey lead pencil
- a ruler
- a red pen and a blue pencil.

Model

FIGURE 3 Features of a climate graph



Procedure

Step 1

Look at the data in **TABLE 1**. It has two sets of data: average monthly precipitation and average monthly temperature.

TABLE 1 New Delhi, India, 28°N 77°E, average monthly precipitation and average monthly temperature

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
°C	14.1	16.9	22.4	28.6	32.8	33.8	31.0	29.8	29.2	26.0	20.3	15.4
mm	22.7	20.1	14.5	10.1	15.0	67.9	200.4	200.3	122.5	18.5	3.0	10.0

Source: www.worldclimate.com

Step 2

Consider the range of the data before you decide what scales will work for the vertical axes. For the right axis, find the wettest month. The precipitation scale begins at 0 and must extend far enough to include the wettest month. For the left axis, find the highest and lowest temperatures. A scale of 0 °C to 40 °C will suit most climate graphs. Try to use temperature and precipitation scales that prevent the line and column graphs from overlapping. This may not be possible if the place has very high rainfall.

Step 3

Use a ruler and pencil to draw the axes on graph paper. Divide the horizontal axis into 12 equal sections to represent the months of the year. Label each month with its initial. Label the temperatures on the left vertical axis and precipitation on the right vertical axis.

Step 4

Construct a column graph showing the average monthly rainfall. Make sure you use the right vertical scale to plot your data. Rule a line across each column and colour the column blue.

Step 5

Construct a line graph showing the average monthly temperature. Plot the temperature by placing a dot in the centre of each month. Make sure that you use the left vertical scale. Use a red pen to join the dots with a smooth curve; don't use a ruler.

Step 6

Add a title, giving the name of the place, the country and the latitude and longitude. You can also indicate the elevation if you wish.

Step 7

Add the source details of the data used.

FIGURE 4 Set of axes for New Delhi climate graph

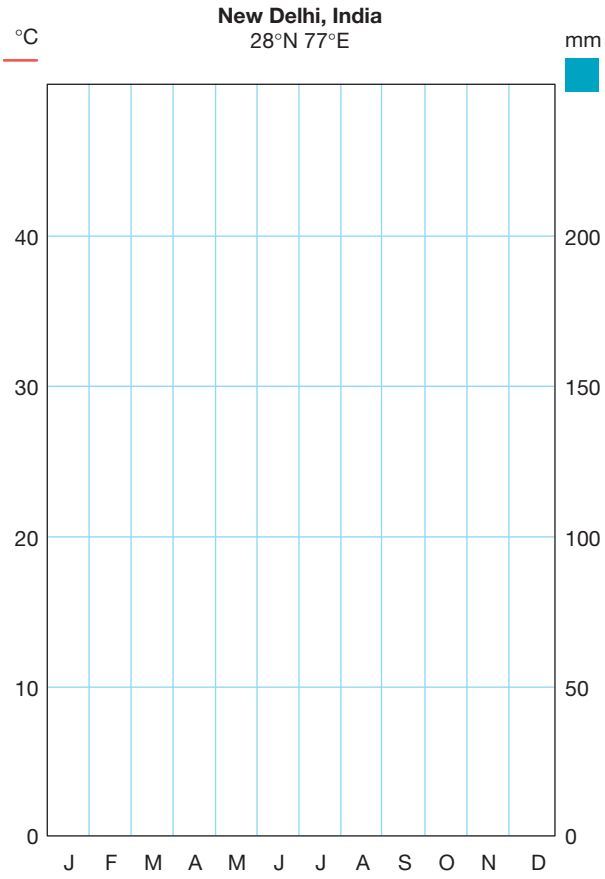
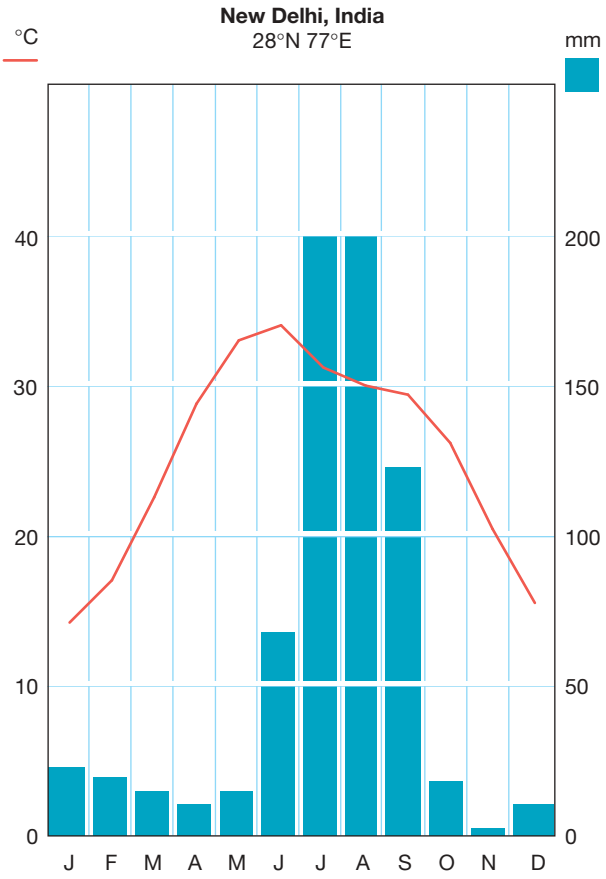


FIGURE 5 New Delhi climate graph



8.9.3 Let me do it

Complete the following activities to practise this skill.

8.9 SkillBuilder activity

1. Mount Buller is a mountain in the Australian Alps. It is three hours' drive from Melbourne and is the closest major mountain to Melbourne for skiing in winter. Use the data in **TABLE 2** to **construct** a climate graph for Mount Buller. Use the checklist provided to make sure you complete all aspects of the task.

TABLE 2 Mount Buller, Australia, 37.15°S, 146.44°E, elevation 1707 metres, average monthly precipitation and average monthly temperature

	Jan.	Feb.	Mar	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
°C	17.2	16.5	14.4	10.0	6.2	3.0	1.4	2.0	4.9	8.2	11.8	14.3
mm	59.0	68.0	44.8	76.1	110.0	154.2	161.0	145.6	143.0	110.6	126.8	84.3

Source: Australian Bureau of Meteorology

2. Apply the skills you have developed in this SkillBuilder to answer the following questions.
   a. Which month is warmest in Mount Buller?
   b. Which month is coolest in Mount Buller?
   c. Which month has the greatest precipitation in Mount Buller?
   d. Which month has the least precipitation in Mount Buller?
   e. **Describe** the climate of Mount Buller.

Checklist

I have:
- ruled the axes and labelled them
- drawn first in lead pencil and then used colour
- used small dots for the lines and then created a smooth curve with red pen
- shaded the columns in blue
- included a title and source.

LESSON 8.10 SkillBuilder: Creating and analysing overlay maps

LEARNING INTENTION

By the end of this SkillBuilder you should be able to create and analyse an overlay map.

8.10.1 Tell me

What are overlay maps?

An overlay map usually consists of two or more maps of the same area. These maps are drawn at the same size or scale but show different information. The base map often shows information that does not change very much. Another transparent overlay, showing different information, is laid over the base map.

Why are overlay maps useful?

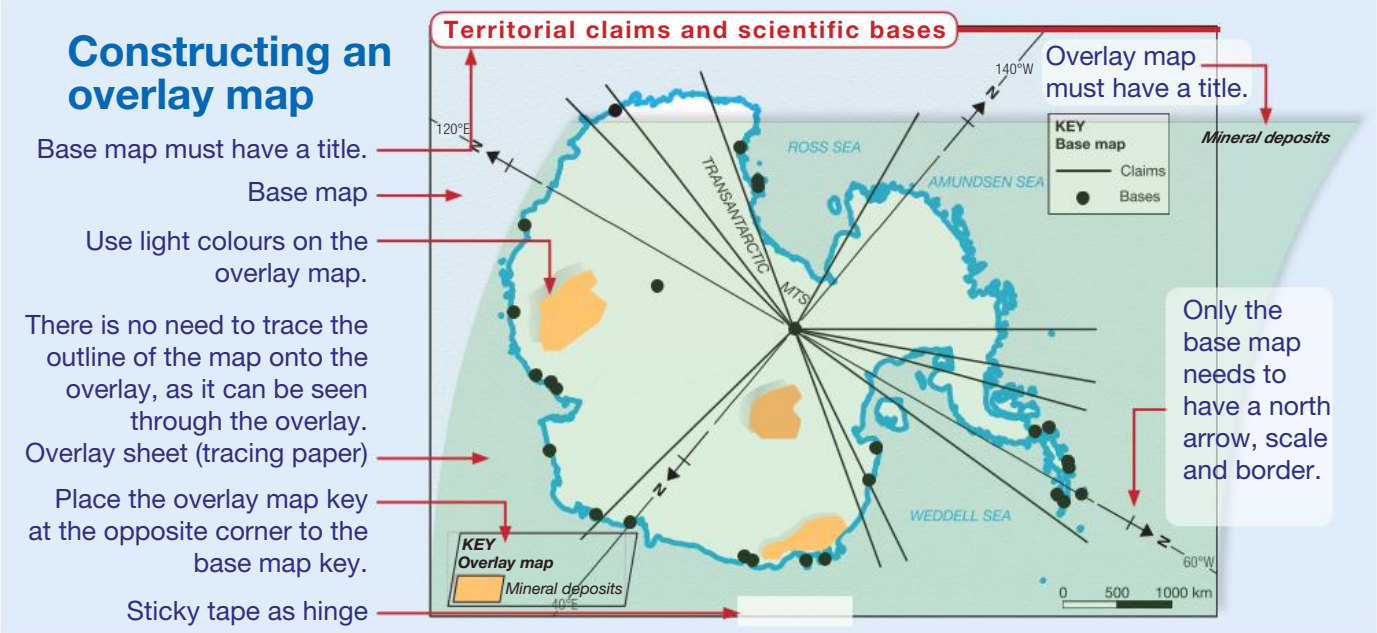
An overlay map is useful for comparing two different features on a map. It is really two maps in one — a base map drawn on paper and an overlay drawn on tracing paper to depict additional information.

Overlay maps allow map users to see the relationships between the information on two or more maps. They are useful when looking for patterns of spatial association — that is, features found in a similar distribution pattern.

Model

In the overlay map in **FIGURE 1**, the base map depicts the continent of Antarctica, territorial claims and scientific bases. The overlay illustrates mineral deposits.

FIGURE 1 Constructing an overlay map of mineral deposits in Antarctica



A good overlay map:

- is drawn in pencil first, with colour added later
- includes BOLTSS on the base map
- uses light colours on the overlay so the base map information remains visible
- includes a key for the element depicted on the overlay
- is hinged to the base map using sticky tape
- includes a title for the overlay.

8.10.2 Show me

How to complete an overlay map

You will need:

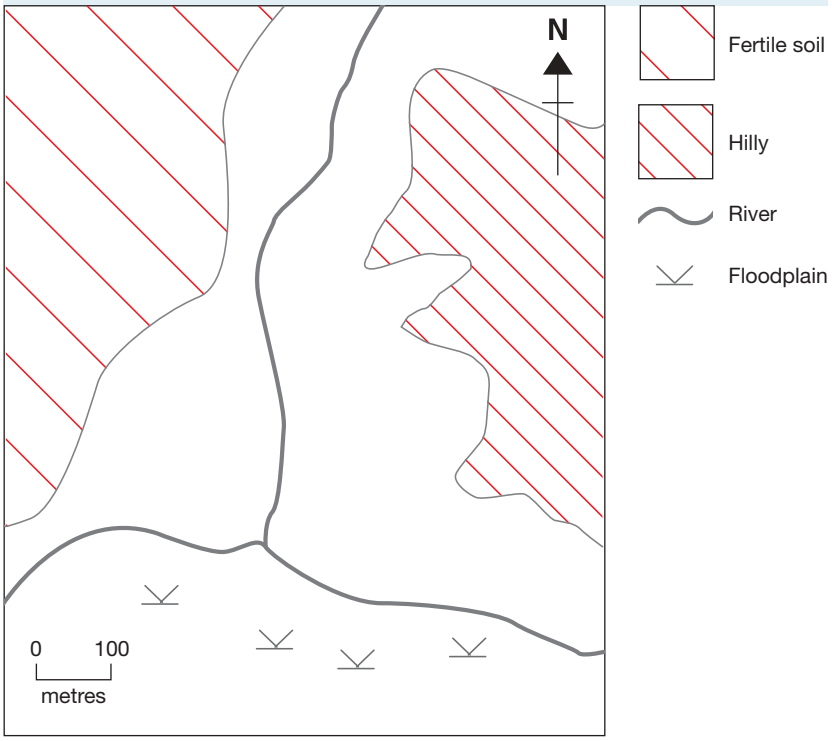
- two or more maps of the same area, drawn at the same scale, and showing different information
- tracing paper or clear transparency sheet
- cardboard (optional)
- clear adhesive tape
- a black lead pencil
- coloured pencils.

Procedure

Step 1

Create a base map of an area showing the distribution of features you want to display (see **FIGURE 2**). Base maps are drawn on clean white paper. To make a base map, find a map of the area you want to show, and trace the features relevant to your purposes. Make sure you include BOLTSS.

FIGURE 2 The fictional Price Shire



Source: Price Shire Council

Step 2

Create an overlay of a second feature on the tracing paper (see **FIGURE 3**). (Make sure you draw the second map of exactly the same area and at the same scale and size as the base map.)

FIGURE 3 Land use in Price Shire

Source: Price Shire Council

Step 3

Use adhesive tape to join the base map and the overlay (see **FIGURES 4** and **5**). Before doing so, check that key features such as coastlines and major roads line up on both maps. You may wish to attach your base map to some cardboard to make it more durable. You can create more than one overlay, each depicting a different feature. If you do this, you can hinge each overlay from a different side of the base map.

FIGURE 4 Place the overlay onto the base map.

FIGURE 5 This overlay map reveals that farmland tends to be found in areas with fertile soils, and that forest tends to be found in hilly areas.

8.10.3 Let me do it

Complete the following activities to practise this skill.

8.10 SkillBuilder activity

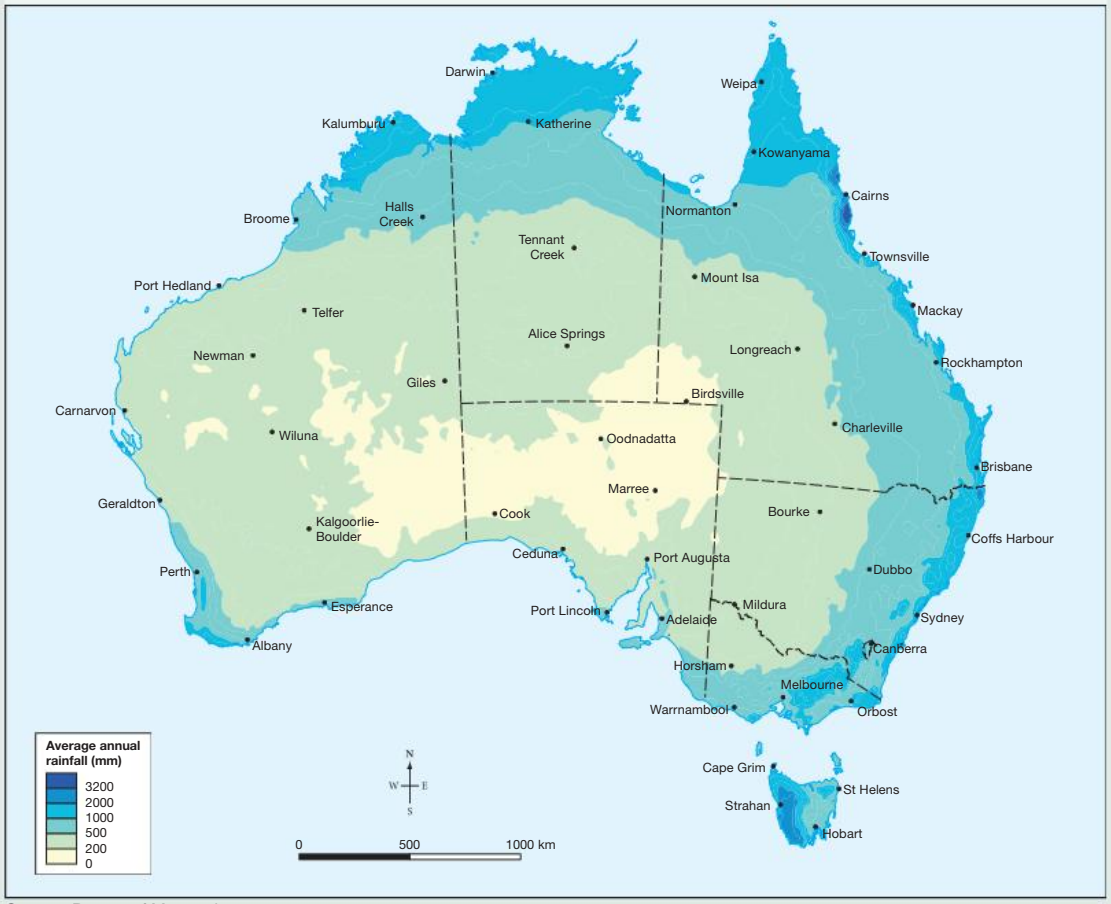
1. Create an overlay map to show the relationship between Australia's rainfall and population distribution. Use **FIGURE 6** to create a base map of rainfall patterns, and then use **FIGURE 7** to add the population overlay. Use the checklist provided to make sure you complete all aspects of the task.
2. Once you have created your overlay map, answer the following questions using the skills you developed in this SkillBuilder.
   a. Look carefully at your base and overlay maps and hunt for patterns between them. Find examples where rainfall and population:
      i. mostly coincide with each other
      ii. sometimes coincide with each other
      iii. do not coincide at all with each other.
   b. **Describe** these areas, either by percentage or by the amount of overlap.
   c. How strong is the spatial association (relationship) between the following?
      i. High rainfall and high population density
      ii. Low rainfall and a low population density

Checklist

I have:
- drawn in pencil first and then added colour
- included BOLTSS on the base map
- used light colours on the overlay
- included a key on the overlay

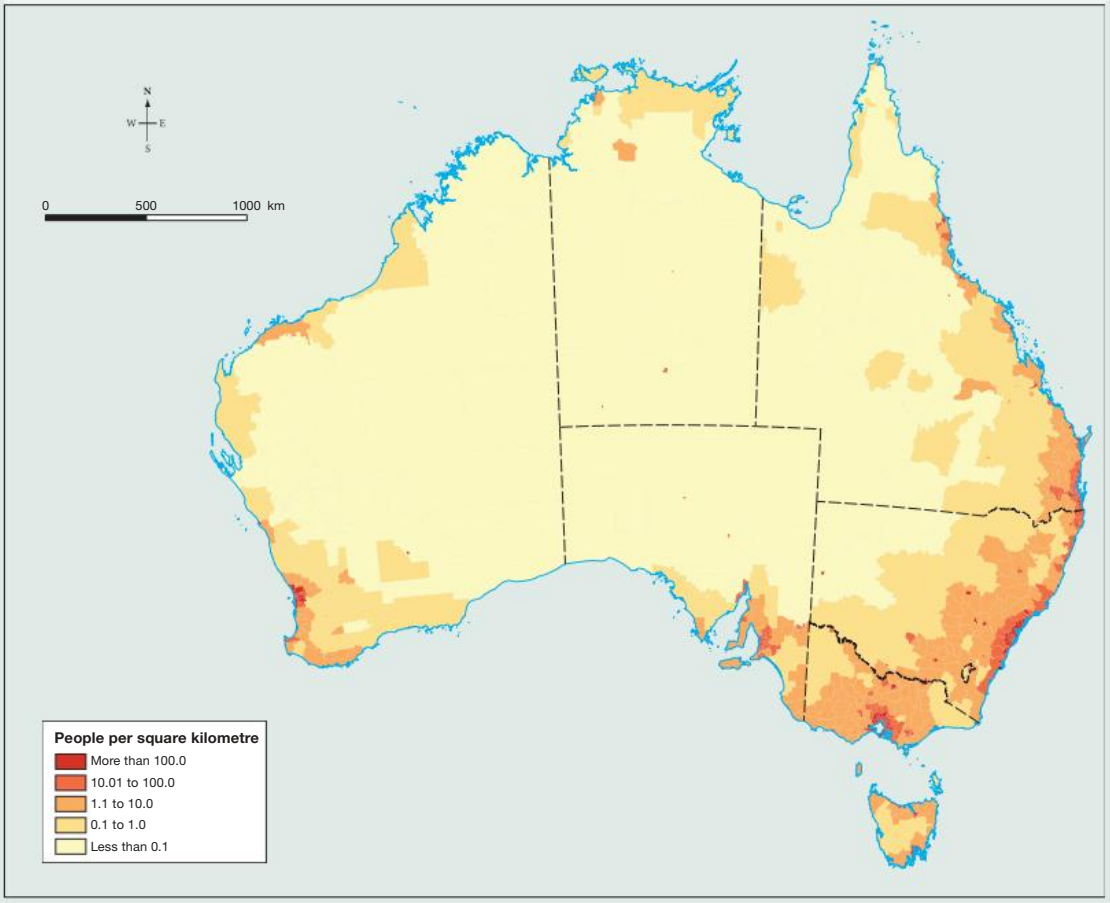
- hinged the overlay to the base map using adhesive tape
- included a title for the overlay.

FIGURE 6 Base map, Australian rainfall



Source: Bureau of Meteorology

FIGURE 7 Overlay map, Australian population density



Source: Australian Bureau of Statistics

LESSON 8.11 SkillBuilder: Annotating a photograph

LEARNING INTENTION

By the end of this SkillBuilder you should be able to annotate a photograph.

8.11.1 Tell me

Using annotated photographs in Geography

Photographs show aspects of a place but may not provide all the information. Different viewers notice different elements based on their interests and knowledge. Annotations help highlight key details. See **FIGURE 1** as an example.

Digital photographs can be cropped and manipulated, making it hard to get an accurate overview. The angle and time of the photo also affect visibility. Consider the photograph's angle and what might be outside its frame.

Why use annotated photographs?

Annotated photographs are useful in geographical inquiries. Geographers are interested in analysing places, and photographs provide a snapshot at one point in time. The annotations are vital to fully understanding the photograph. When photographs are used to show spatial change over time, the same views are photographed at different times, and you use annotations to highlight the changes.

A good annotated photograph includes:

- a clear title that includes the location of the photograph
- labels of the main features
- annotations of processes (if known)
- date and time that the photograph was taken
- the source of information — the photographer's name.

8.11.2 Show me

How to annotate a photograph

You will need

- a photograph or a print of a photograph
- a black fine-line felt-tipped pen
- a ruler.

Procedure

Step 1

Examine the photograph in **FIGURE 1** carefully, looking for the key information it shows you. This image clearly shows evidence of high water.

FIGURE 1 Main Yarra Trail underwater near Chandler Highway Bridge during Yarra River flooding

Source: Philip Mallis uploaded on 14 September 2023. Taken on 12 October 2022

Step 2

Check the date the photograph was taken. The source tells the reader who took the photograph and the time of year it was taken. In this case it was Philip Mallis who uploaded the image on 14 September 2023. The photo was taken on 12 October 2022.

Step 3

Add labels to the image, focusing on the key aspects you wish the viewer to notice. These might include *River in high flow, path covered.* Adding labels is often easier if you took the photograph and made field notes while you were on site. For example, you could have determined if the river was flowing and in which direction. Sometimes, labels need to be placed outside the photograph so that the image remains clear, and fine lines must be drawn from each annotation to the relevant feature.

8.11.3 Let me do it

Complete the following activities to practise this skill.

8.11 SkillBuilder activity

1. Annotate the following photograph - you may wish to work from a photocopy, scan or sketch. Label any physical processes that you can see. Label the human activities that are shown. Use the checklist provided to make sure you cover all aspects of the task.

FIGURE 2 Crowded beach during summer, Front Beach, Torquay, Great Ocean Road, Victoria, Australia

2. Once you have labelled your photograph, **apply** your skills to answer the following questions:
   a. Name two activities that you can see.
   b. What is the wooden fence–type structure?
   c. What time in the day might it be?
   d. What are the weather conditions?
   e. Give evidence to support the idea that beaches are an important place for people to visit.

Checklist

I have:

- a clear title that includes the location of the photograph
- labelled the main features
- included annotated processes, if known
- included the date and time when the photograph was taken
- provided the source of the information.

LESSON 8.12 SkillBuilder: Interpreting diagrams

LEARNING INTENTION

By the end of this SkillBuilder you should be able to interpret diagrams.

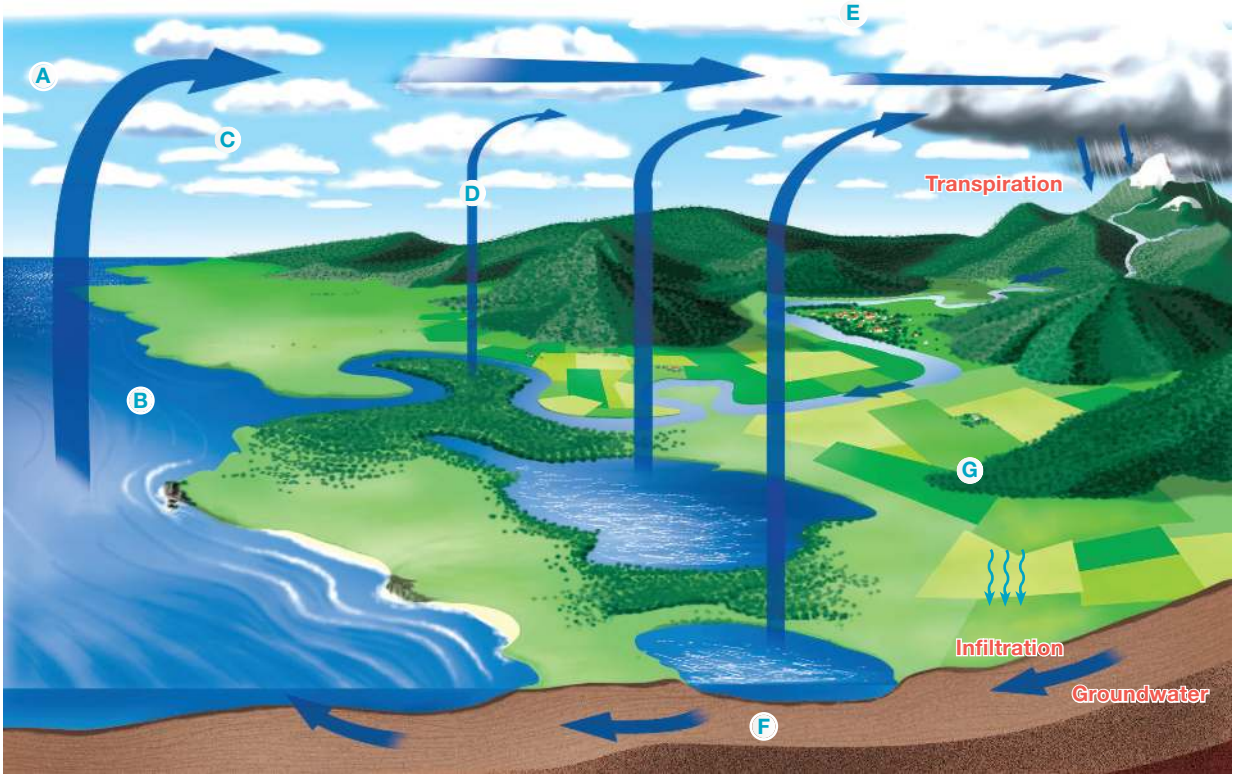
8.12.1 Tell me

What are diagrams?

A diagram is a graphic representation that shows elements in a landscape and their relationships. In geography, diagrams like the water cycle (see **FIGURE 1**) use annotations to explain aspects of the illustration. Interpreting diagrams means examining both visual and text elements to understand the information presented.

Rainfall is part of the water cycle. Water evaporates from oceans, lakes and vegetation, then condenses into clouds. Precipitation (rain, sleet, hail or snow) falls back into rivers, lakes, oceans and underground, continuing the cycle.

FIGURE 1 The water cycle



- **A** The sun's heat provides the energy for the water cycle process.
- **B** The sun evaporates water from oceans, damp soil, leaves and people's skin, turning it into water vapour.
- **C** The warm air that absorbs evaporated moisture expands and rises into the atmosphere.
- **D** As warm, moist air rises, it cools. Water vapour that cannot be held in the air condenses into tiny water droplets or ice crystals. As more of these form, clouds appear. This process is known as condensation.
- **E** When the droplets or crystals in the cloud become too heavy to overcome the pull of gravity, they fall to Earth as precipitation.
- **F** Run-off from land returns to the sea via rivers and underground channels.
- **G** Infiltration occurs when water seeps into the soil.

How are diagrams useful?

Diagrams are useful for representing ideas visually. They are often used to increase understanding of written information. They can be used to:

- illustrate a process
- simplify a concept
- show flows and movements
- illustrate relationships spatially.

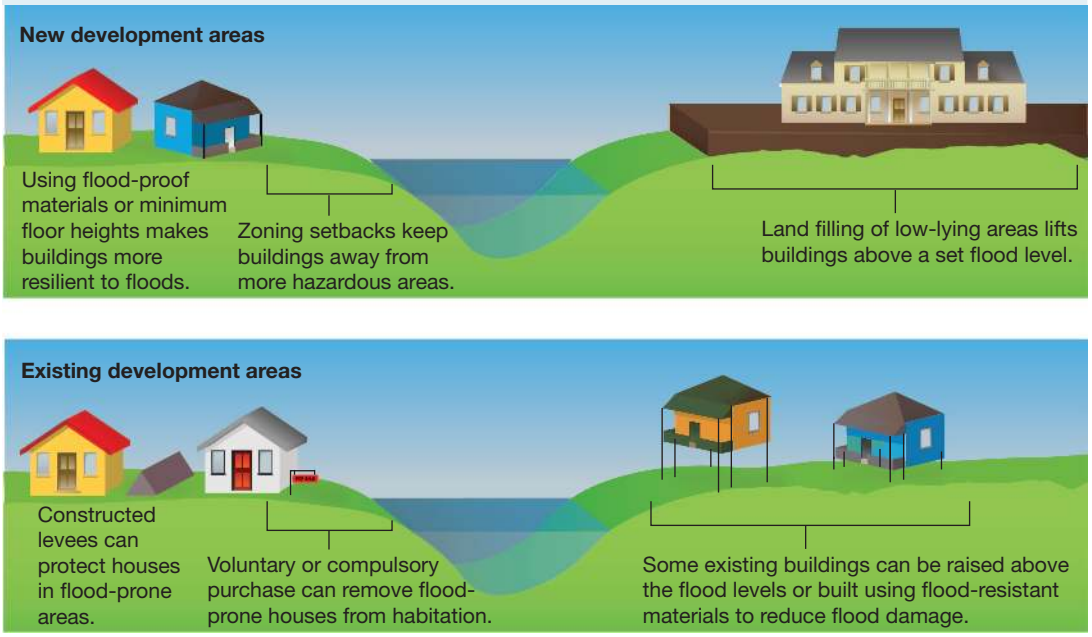
The diagram in **FIGURE 2** shows how properties can be designed to manage floods in new development areas and existing development areas.

A good diagram:

- is large so it can be easily interpreted
- has understandable annotations or labels

- is clear and simple
- includes a precise title or caption
- states the source – where it came from or who created it.

FIGURE 2 Managing flood risks



8.12.2 Show me

How to interpret a diagram

You will need:

- a diagram (see **FIGURE 3**)
- any information that is related to the diagram.

Model

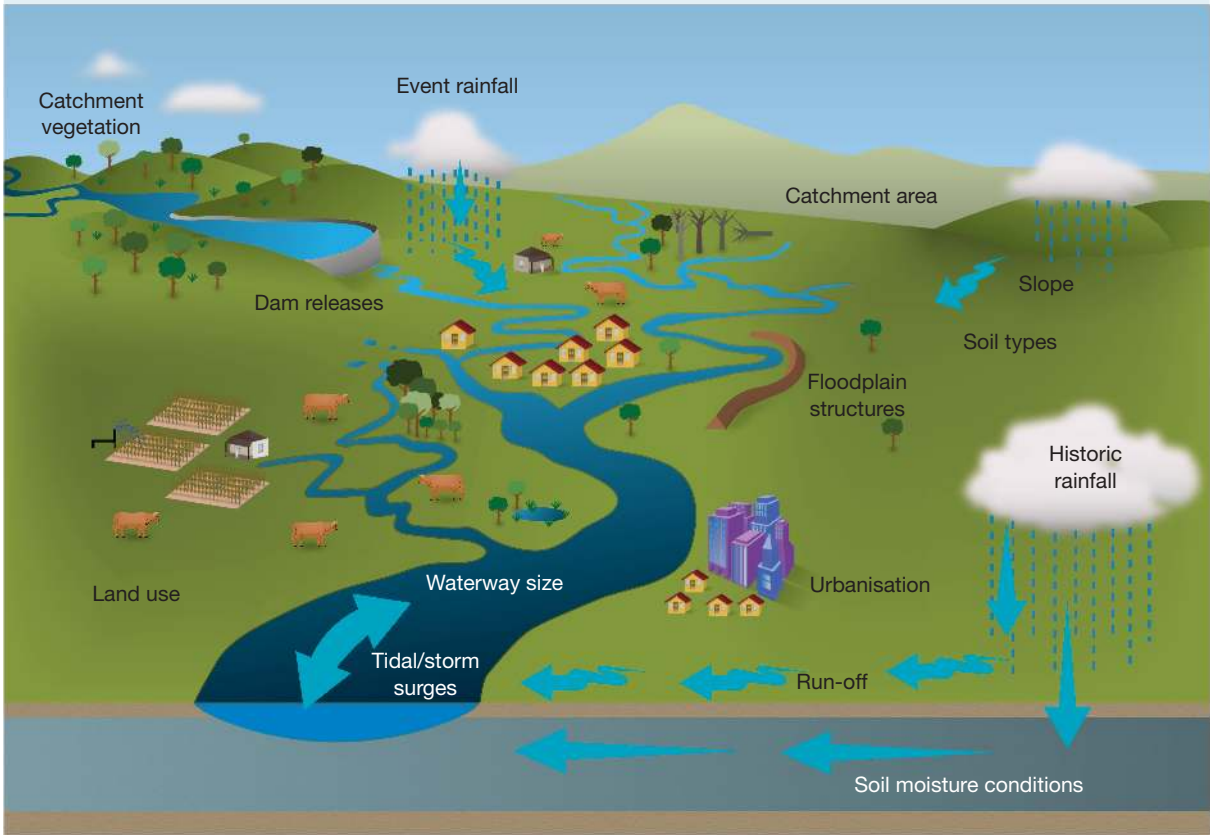
Rainfall amount and intensity are key factors in flooding, but other factors also matter. In a catchment, land use affects how much rainwater enters rivers. Water can soak into unsaturated soil, but urban areas with hard surfaces lead to more run-off into drains and creeks. Vegetation slows water movement, while dams control downstream flow. Land shape is crucial too, as water runs faster on steep slopes.

Procedure

Step 1

Identify and carefully read the diagram's title because it helps you understand its purpose. The diagram in **FIGURE 3** illustrates factors that can affect flooding, which are explained under the diagram.

FIGURE 3 Factors that can affect flooding



Source: www.chiefscientist.qld.gov.au/publications/understanding-floods/what-is-a-flood.

Step 2

Examine the diagram and the notes. Look at each part of the diagram. You will notice that various factors are identified, including rainfall, run-off, vegetation, size of waterways, soil type, slope and land use.

Step 3

Now consider the diagram as a whole. Studying the diagram helps you conclude that many factors affect flooding. It is more complicated than simply how much rain falls and how quickly.

8.12.3 Let me do it

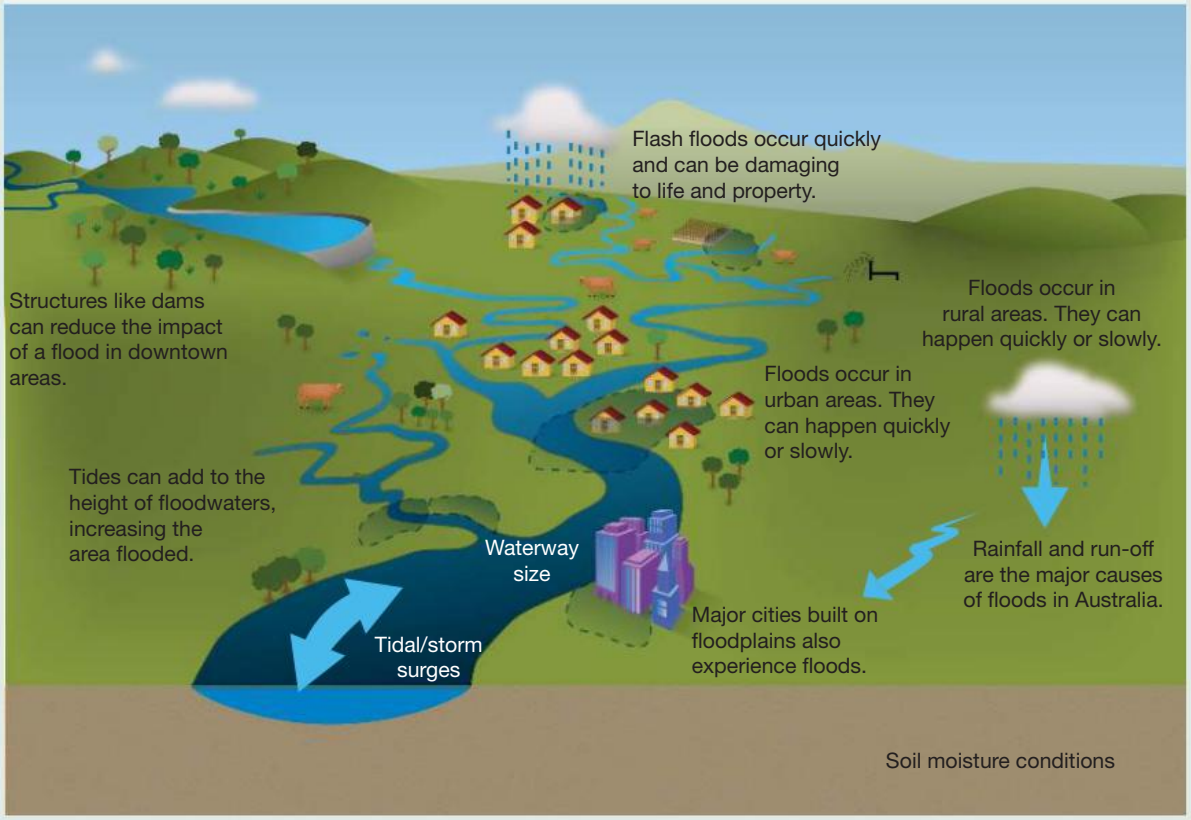
Complete the following activities to practise this skill.

8.12 SkillBuilder activity

Rainfall is the main cause of flooding in Australia. Floods can happen quickly (flash flooding) or slowly and are difficult to predict. Cities and farms are often built on floodplains (land that is subject to occasional flooding) because they provide access to water and good quality soil. In coastal areas, tides can add to flooding.

1. Apply your skills to interpret **FIGURE 4** and answer the following questions.
   - **a.** How might a dam affect flood events?
   - **b.** What is run-off?
   - **c.** What effect can high tides have during flooding in coastal areas?
   - **d.** Why are cities sometimes built on floodplains?
   - **e.** What are some effects of floods?

FIGURE 4 Characteristics of floods



Checklist

I have:

- understood the title
- **examined** all parts of the diagram — the illustrations, annotations and any accompanying text
- **assessed** the diagram as a whole.

LESSON 8.13 SkillBuilder: Cardinal points — wind roses

LEARNING INTENTION

By the end of this SkillBuilder you should be able to interpret wind roses.

8.13.1 Tell me

What is a wind rose?

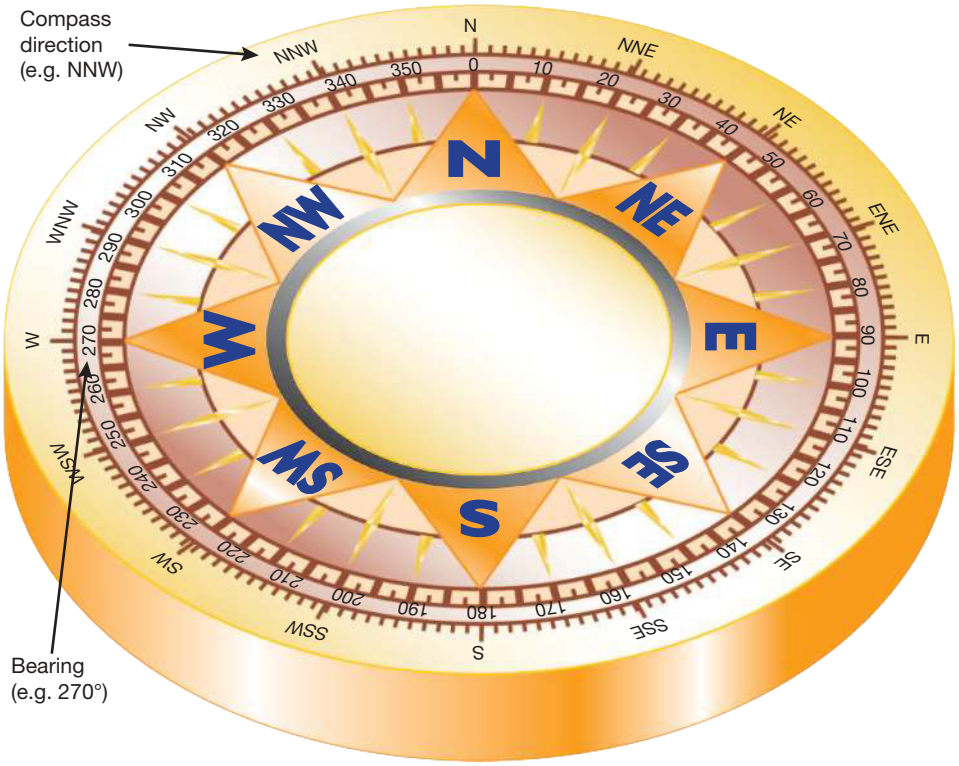
A wind rose is a diagram that shows the direction, speed and frequency of wind. We name wind direction according to the direction from which the wind is blowing. For example, a wind described as 'a southerly' is coming from the south. Wind direction can be described using 8 or 16 compass directions.

To understand a wind rose, you must know your cardinal points. Let's quickly revisit these.

What are cardinal points?

A compass has four main (or cardinal) points: north, east, south and west. These four cardinal points are used to describe direction. For example, if you are facing north, south is behind you, east is to your right and west is to your left. To give more accurate directions, the four cardinal points are divided into intermediate points: north-east, south-east, south-west and north-west. For an even finer definition, we can further divide the intermediate points (see **FIGURE 1**). For example, between north and north-west, is north-north-west (NNW); between north-west and west is west-north-west (WNW) and so on. Cardinal and inter-cardinal points are used in wind roses.

FIGURE 1 A compass



Why are wind roses useful?

Wind roses are useful because they allow us to quickly see patterns in relation to wind direction, speed and frequency.

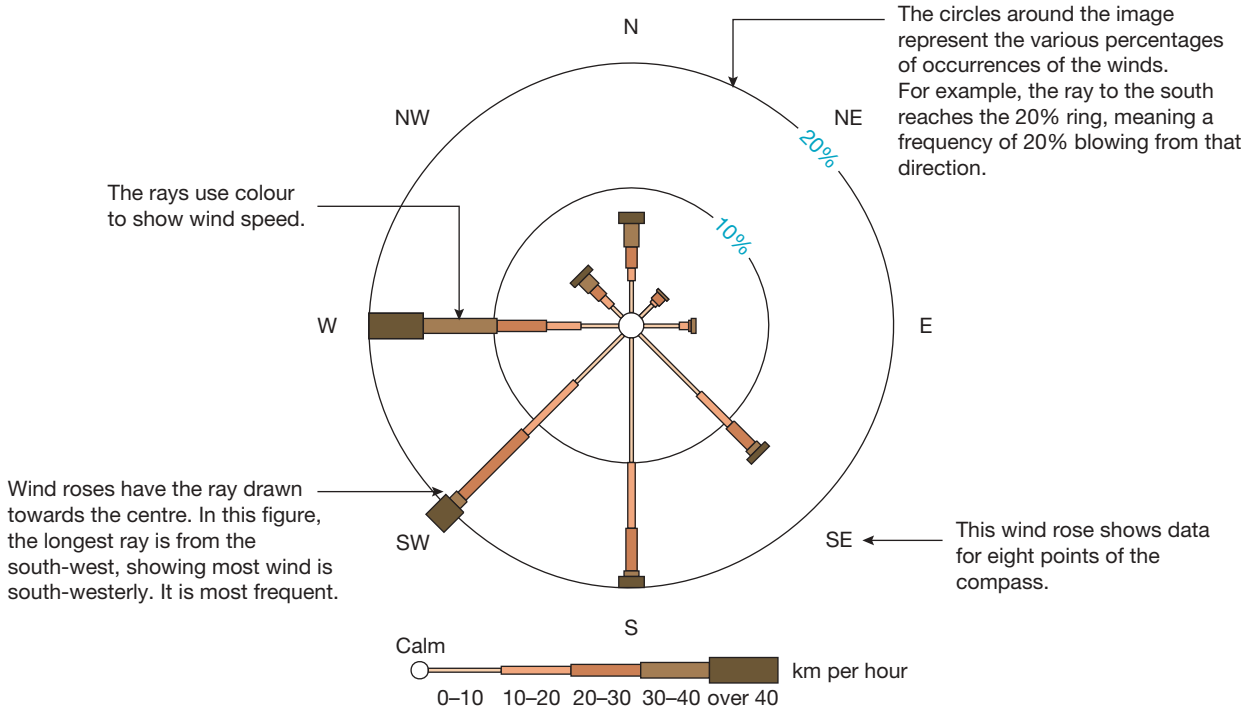
Interpreting a wind rose

To interpret a wind rose, remember the following points:

- Wind roses have the rays drawn towards the centre. In **FIGURE 2** the longest ray is from the south-west, which shows that most of the wind is south-westerly. It is most *frequent*.
- The circles around the image represent the various percentages of occurrences of the winds. For example, if the ray to the south just reaches the 20 per cent ring, it means a frequency of 20 per cent blowing from that direction.
- The rays use symbols and colour to show wind *speed*.

The **FIGURE 2** wind rose shows data for eight points of the compass.

FIGURE 2 A wind rose



8.13.2 Show me

How to read a wind rose

You will need:

- a wind rose (see **FIGURE 3**)
- a ruler.

Procedure

To describe wind patterns using a wind rose, you need to examine the rays' direction, length and width. We will use **FIGURE 3** to explore this process.

Step 1

Determine the direction of wind with the greatest frequency by finding the longest ray. In **FIGURE 3**, the longest ray is from the south, so we can say that the predominant average wind direction in Melbourne at 3 pm is a southerly.

Step 2

Determine the direction of wind with the highest speed by finding the widest ray. In **FIGURE 3**, we can see that the highest average speeds were reached by winds coming from the north (northerlies).

Step 3

Work out the general pattern and main features of wind direction and strength. The **FIGURE 3** wind rose shows us that in Melbourne at 3 pm, the predominant average winds are southerlies, occurring more than 30 per cent of the time. The next most frequent wind at 3 pm is a northerly, which blows more than 20 per cent of the time. Winds blow from the west only around 10 per cent of the time, and easterlies are very infrequent.

8.13.3 Let me do it

Complete the following activities to practise this skill.

8.13 SkillBuilder activity

Interpret the wind roses in **FIGURES 3** and **4** to answer the following questions. Use the checklist provided to make sure you cover all aspects of the task.

FIGURE 3 Wind rose for Melbourne, annual average at 3 pm

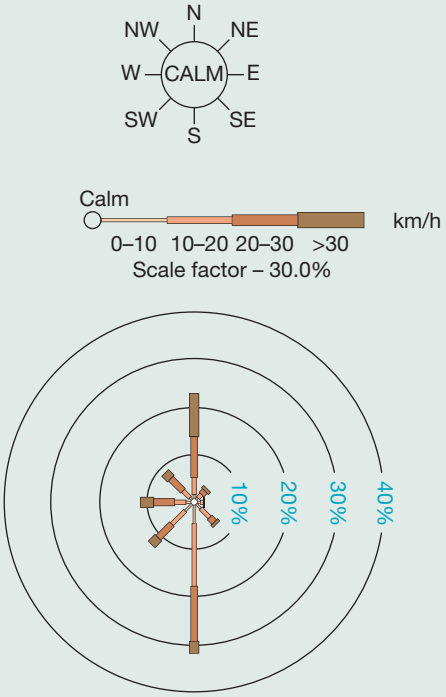
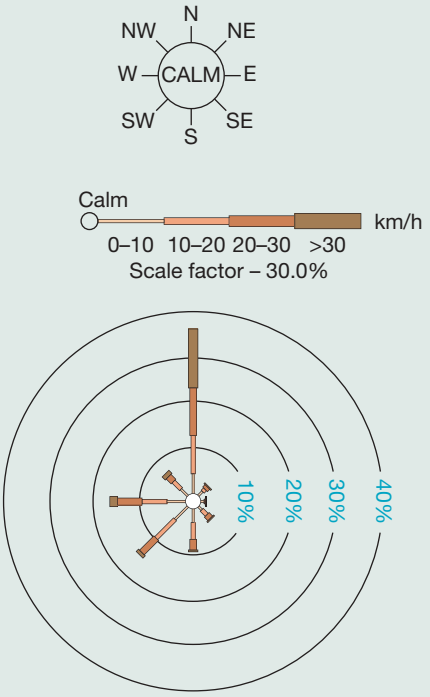


FIGURE 4 Wind rose for Melbourne, annual average at 9 am



1. In which direction are the winds at the highest frequency for Melbourne, 9 am?
2. In which direction are the winds at the highest speed for Melbourne, 9 am?
3. In which direction are the lowest frequency winds for Melbourne, 9 am?
4. In which direction are the winds at the lowest frequency for Melbourne at 3 pm?
5. **Compare** and **contrast** the wind direction patterns for Melbourne at 9 am and at 3 pm.

Checklist

I have:

- found the longest ray to determine the direction of wind with the highest frequency
- found the widest ray to determine the direction of wind with the highest speed
- worked out the general pattern and main features of wind direction and strength.

LESSON 8.14 SkillBuilder: Creating a concept diagram

LEARNING INTENTION

By the end of this SkillBuilder you should be able to create a concept diagram.

8.14.1 Tell me

What is a concept diagram?

A concept diagram, sometimes mistakenly called a 'concept map', is a graphical tool that shows links between ideas or concepts. Concept diagrams organise links into different levels.

Why are concept diagrams useful?

Concept diagrams help organise and communicate ideas, clarifying your understanding of a topic. They highlight relationships between thoughts. They are useful for reflection and identifying research aspects when brainstorming.

A good concept diagram should:

- include a clear title
- be presented neatly and clearly
- explain what each colour represents
- be easy for another person to understand.

8.14.2 Show me

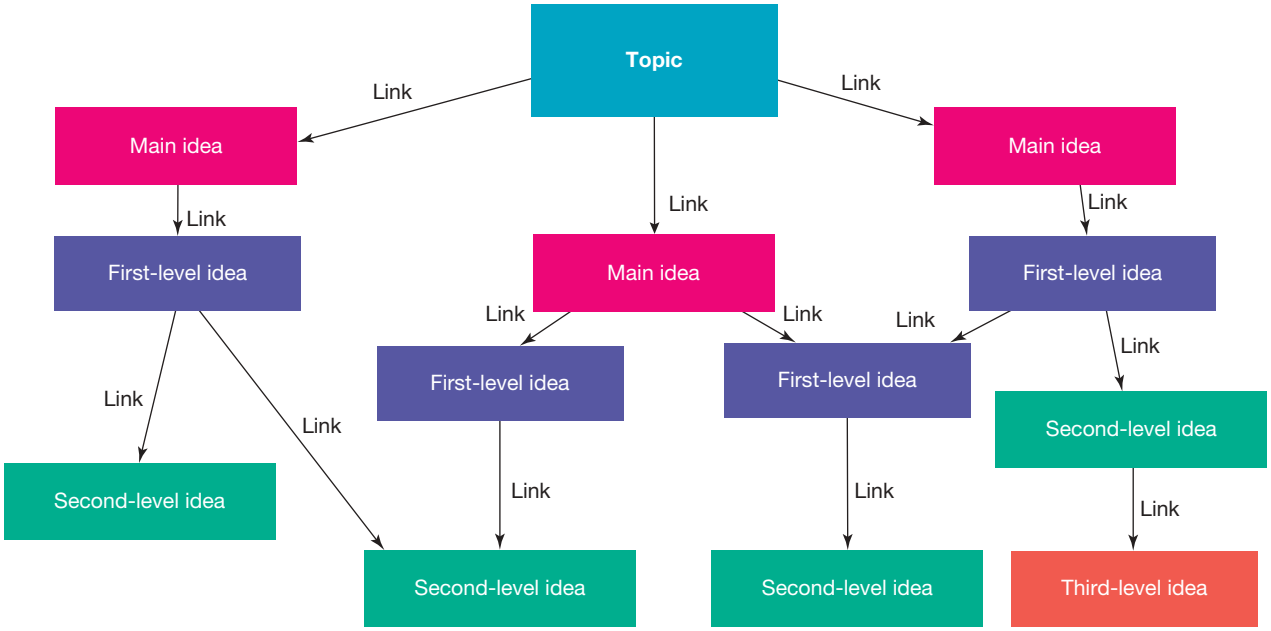
How to create a concept diagram

You will need:

- a blank sheet of paper
- a ruler
- colour pencils
- an eraser
- a black lead pencil.

Model

FIGURE 1 Example of a concept diagram

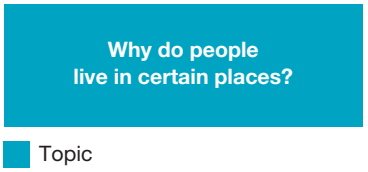


Procedure

Step 1

First, start with a topic. Place this in the middle of a blank sheet of paper. Rule a box or draw a circle around it.

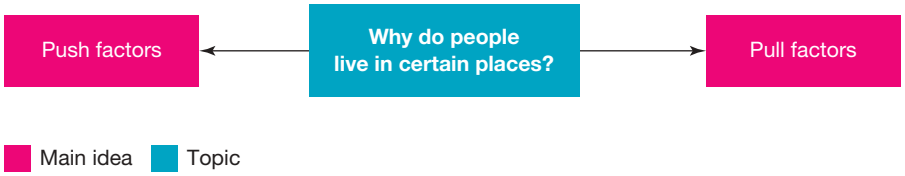
FIGURE 2 Start with the topic.



Step 2

Use your ruler to draw lines out from this box or circle and add key words about the topic or issue. This level is called the main ideas level.

FIGURE 3 Add your main ideas.



Step 3

Add other lines to each of the main ideas and add words that relate to each of them. This level is called first-level ideas.

Step 4

Add new lines and words, so that the diagram develops into something that resembles a spider web. This level is called second-level ideas. If you like, you can add extra information on some of the connecting lines. You may also choose to add colours to represent different levels or connections. Add a clear title.

FIGURE 4 Add your first-level ideas.

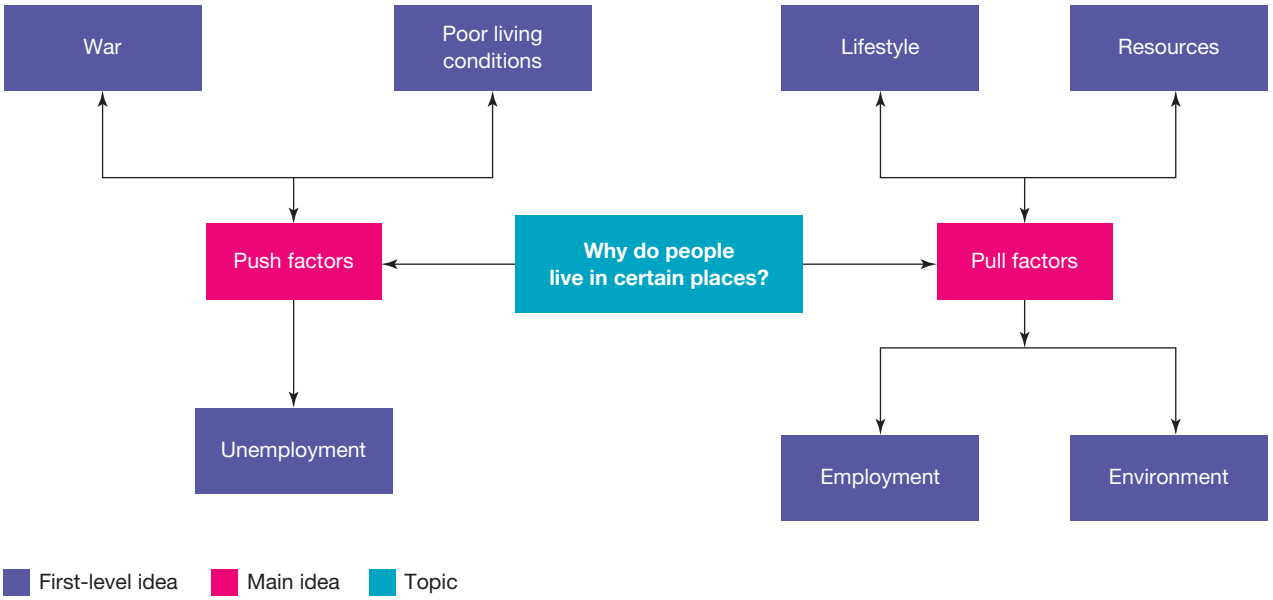
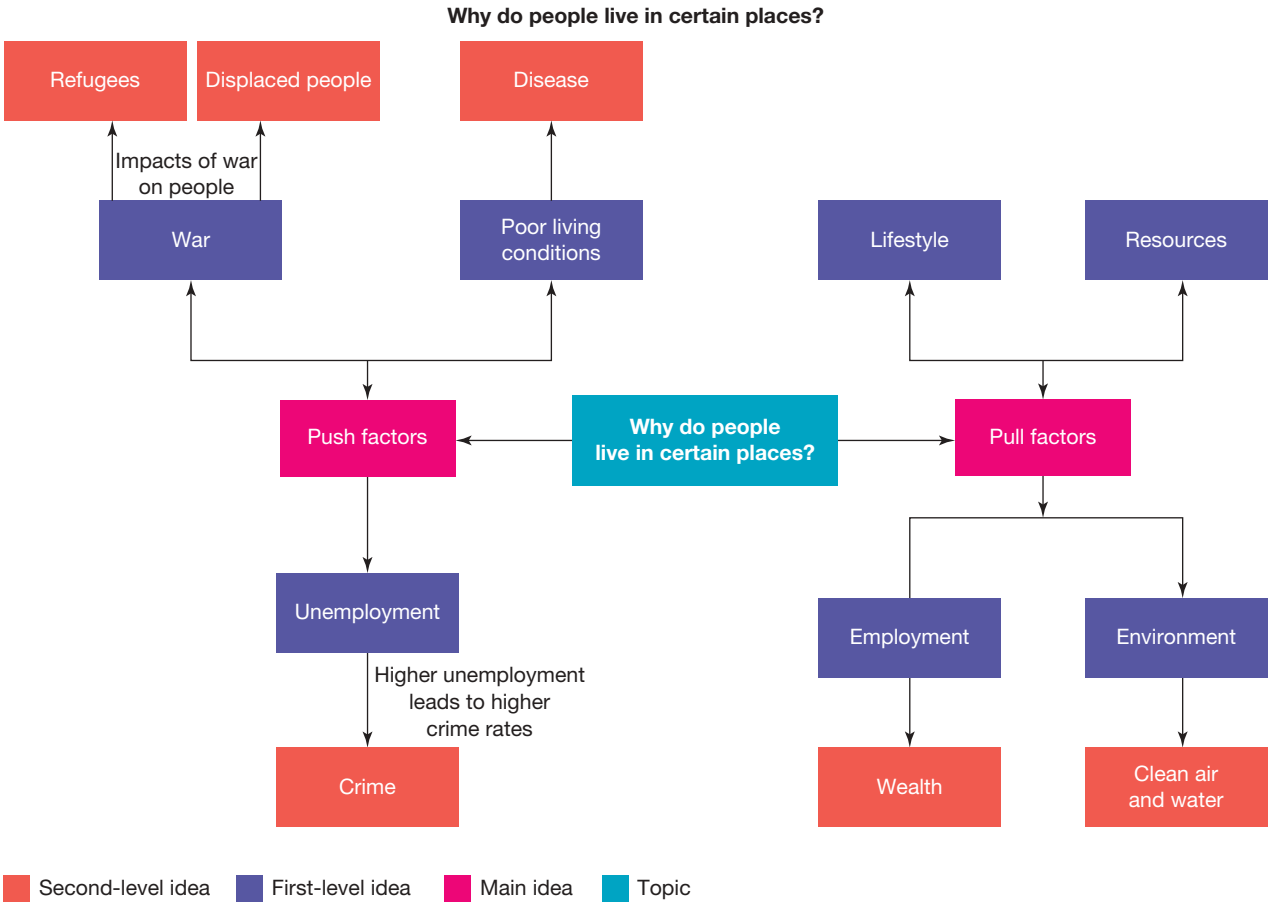


FIGURE 5 Add second-level ideas and give your concept diagram a title.



8.14.3 Let me do it

Complete the following activity to practise this skill.

8.14 SkillBuilder activity

1. **Apply** what you have learned in this SkillBuilder to **create** a concept diagram of the reasons Australians live where they do. You may want to structure your concept diagram using some of the following aspects:
   - natural features or built features that attract people to live in certain places
   - push and pull factors
   - your own family's reasons for living where they do, or your classmates' families' reasons for living where they do
   - reasons remote areas are settled
   - lifestyle choices.

Checklist

I have:
- included a title
- neatly constructed and presented the information
- explained what each colour represents
- ensured the finished diagram is easy for another person to understand.

LESSON 8.15 SkillBuilder: Understanding satellite images

LEARNING INTENTION

By the end of this SkillBuilder you should be able to understand a satellite map.

8.15.1 Tell me

What are satellite images?

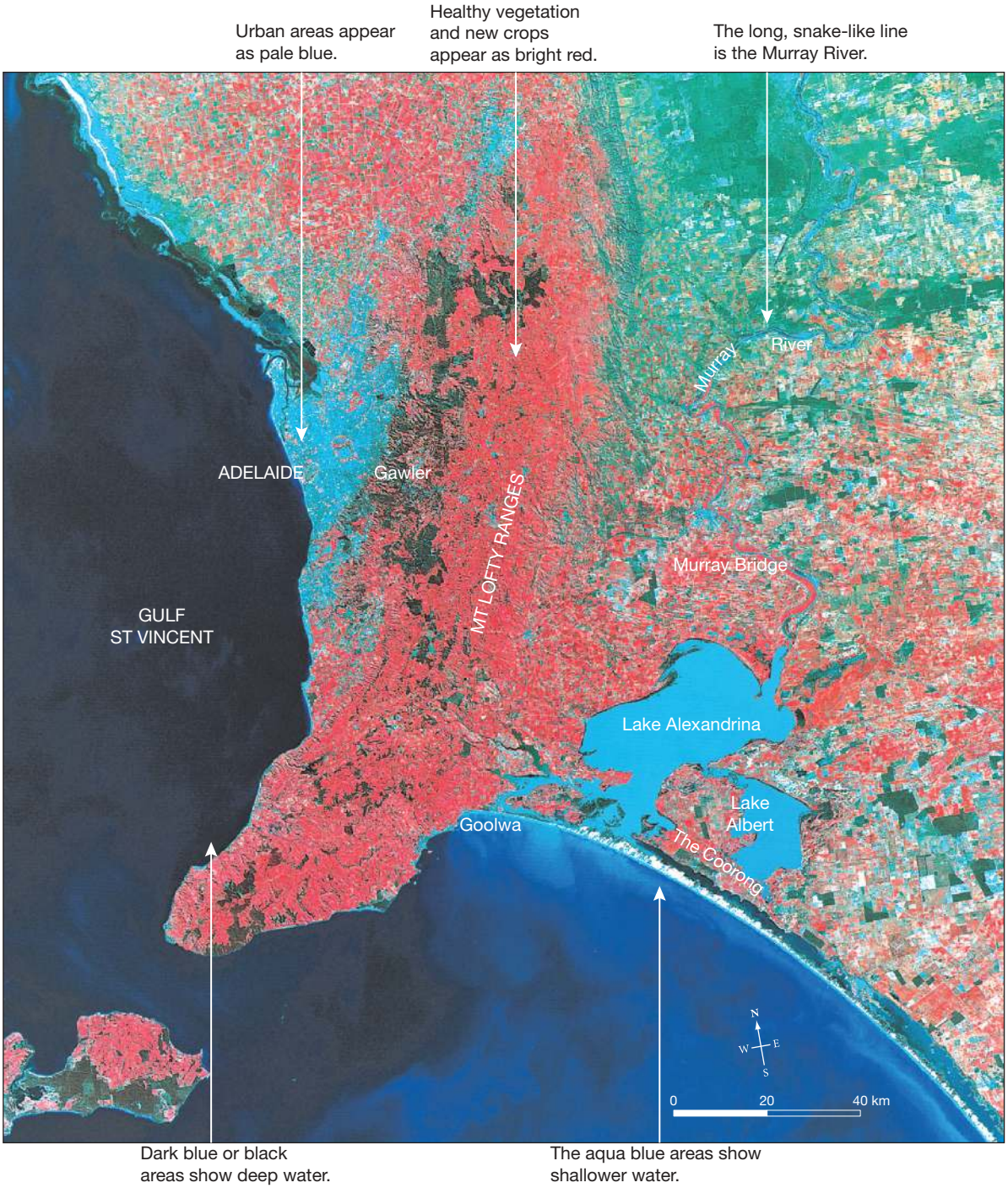
Satellite images capture views of Earth from space, providing data like standard photos, colour infrared and radar. Collected by satellites and sent to Earth, these images can show close-up or distant views. Computer techniques enhance patterns on the Earth's surface using this data.

Landsat satellites, commonly used for such images, orbit 700 kilometres above Earth every 100 minutes with cameras that detect light variations. This process, called 'remote sensing', selects specific light bands and assigns false colours to reveal spatial patterns. **FIGURE 1** shows the Mount Lofty Ranges in South Australia with labelled patterns.

Why are satellite images useful?

Satellite images help geographers observe a much larger area of the Earth's surface than photographs taken from an aircraft. They can also provide data relatively quickly. They are often used to monitor natural disasters, including cyclone activity, bushfires and floods. Digital information from satellites is beamed to stations on Earth as radar or microwave signals. A computer program is then used to enhance the images. This enables the study of landforms, farmland, disasters, environmental change, weather patterns and even military targets.

FIGURE 1 A historical infrared false colour map of Adelaide and surrounding area



Source: © Commonwealth of Australia. Geoscience Australia 1982.

8.15.2 Show me

How to interpret a satellite image

You will need:

- a satellite image (see **FIGURE 2**).

Procedure

Looking at images taken from above, including satellite images, can be confusing. Your ability to interpret what you see will improve with practice. These steps will help you to gather the most information from images.

Step 1

Read the title and check for the date when the image was taken. Read any other information on the map.

Step 2

Identify the main features of the image. What stands out? For example, roads will appear as continuous lines intersected by other lines. Rivers tend to be snake-like, and sometimes you may notice trees lining the riverbanks. Dwellings usually have rectangular roofs and are often clustered together.

The **FIGURE 2** image of Melbourne is centred on the central business district and the river Yarra. To the left and right you can see the major sporting stadiums.

FIGURE 2 High-resolution satellite image of Melbourne, Australia

Step 3

Look for and label the biophysical features. You can see designated green areas and more irregular patterns of vegetation. These have been shown in the green boxes.

Step 4

Look and label the built features, such as roads, bridges, sports stadiums and residential housing. Again, look at patterns. Areas of small roofs with road access and surrounding vegetation suggest detached residential housing. These have been shown in orange boxes.

Step 5

Some colours, patterns and shapes may still be puzzling. Obtain a map of the same area — try an atlas or street directory, Google Maps or Earth. Find names of key features to use in your description. If the features you have identified are shown on the map, check whether your analysis so far matches the map. Use the map to investigate the aspects that are still puzzling. Be aware that the image may have been taken on a different date from when the map was produced; this might explain other differences in what you see.

8.15.3 Let me do it

Complete the following activity to practise this skill.

8.15 SkillBuilder activity

If you have ever holidayed on the Gold Coast, you may have visited the Currumbin Wildlife Sanctuary. As seen in **FIGURE 3**, Currumbin generally has more natural vegetation than much of the Gold Coast, partly because it is more difficult to build on the steep hills there, and partly because the forests are valued as wildlife habitat. Currumbin is a popular surf beach and holiday destination.

FIGURE 3 Satellite image of Currumbin on Australia's Gold Coast, 8 May 2000

Source: Satellite image courtesy of GeoEye. Copyright 2009. All rights reserved

Study **FIGURE 3** and answer the following questions. Use the checklist provided to ensure you complete all aspects of the task.

1. Look carefully at the satellite image and list features you can recognise.
2. Find the bridge that crosses Currumbin Creek. Are there any cars on the bridge?
3. What impact have visitors had on the plant life behind the beach?
4. Go to Google Maps and zoom in to Currumbin Beach, Queensland, to find a map of the area shown in **FIGURE 3**. Turn the satellite layer on. What changes can you see?
5. **Suggest** how the biophysical features and topography have influenced the settlement pattern in this area.

Checklist

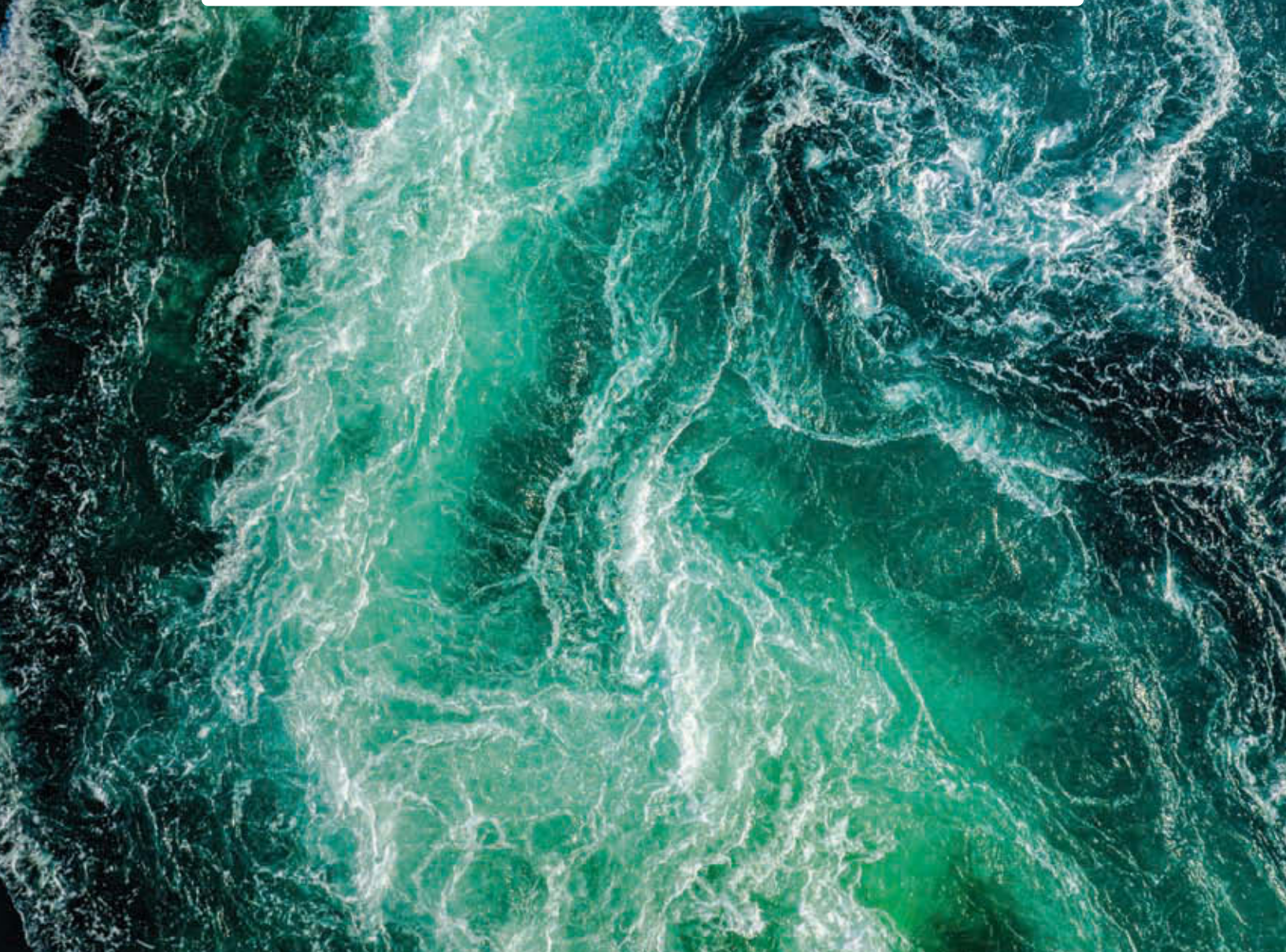
I have:

- checked the title
- **identified** biophysical and built features
- **compared** the satellite image with another map to check my interpretation.

9 Water in the world

LESSON SEQUENCE

9.1 Overview 244
9.2 What type of resource is water? 246
9.3 How does groundwater connect people and place? 252
9.4 Why is water supply variable? 259
9.5 Investigating topographic maps: The value of water in Noosa 268
9.6 Does everyone have enough water? 271
9.7 How do we overcome water scarcity? 279
9.8 What are the causes and impacts of hydrometeorological hazards? 291
9.9 What are the causes and impacts of droughts and flooding rain? 297
9.10 Why does the wind blow? 309
9.11 What are the causes and impacts of extreme weather? 316
9.12 What are the causes and impacts of cyclones? 323
9.13 Inquiry: What is the water quality of a local waterway? 332
9.14 Review 334



LESSON 9.1 Overview

INQUIRY QUESTION

What effect does the uneven distribution of water resources have on the lives of people?

The Earth is called the 'Blue Planet' because it is mostly covered by water, of which most is too salty and unusable for living things. Fresh water is limited and must be used wisely to ensure current and future populations have enough to meet their needs.

learnon

Pre-test
Online pre-test

eWorkbook
Customisable worksheets for this topic

Digital document
Key terms summary

Video eLesson
Water as a resource

SkillBuilder

Use the SkillBuilder activities to develop these Geographical concepts and skills:

- GEOGRAPHICAL INQUIRY
- CONCLUDING AND DECISION-MAKING
- COMMUNICATING

LESSON 9.2 What type of resource is water?

LEARNING INTENTION

By the end of this lesson, you should be able to:

- **classify** resources as renewable, non-renewable or continuous
- **describe** how water changes its form and location within the environment.

Tune in

Did you know that some materials sourced by humans from Earth are able to be replenished in our lifetime?

FIGURE 1 People use different kinds of resources.

1. **Which of the resources in FIGURE 1 do you think can be replaced in our lifetime?**
2. **Discuss which of the resources has an unlimited supply. What factors may control the supply of this resource?**
3. **Which of these resources causes harm to nature if not handled properly?**

9.2.1 Why do we need resources?

We need resources from Earth to live, such as water to drink, soil for food, and forests and mines for materials. **Environmental resources** are natural materials useful to people.

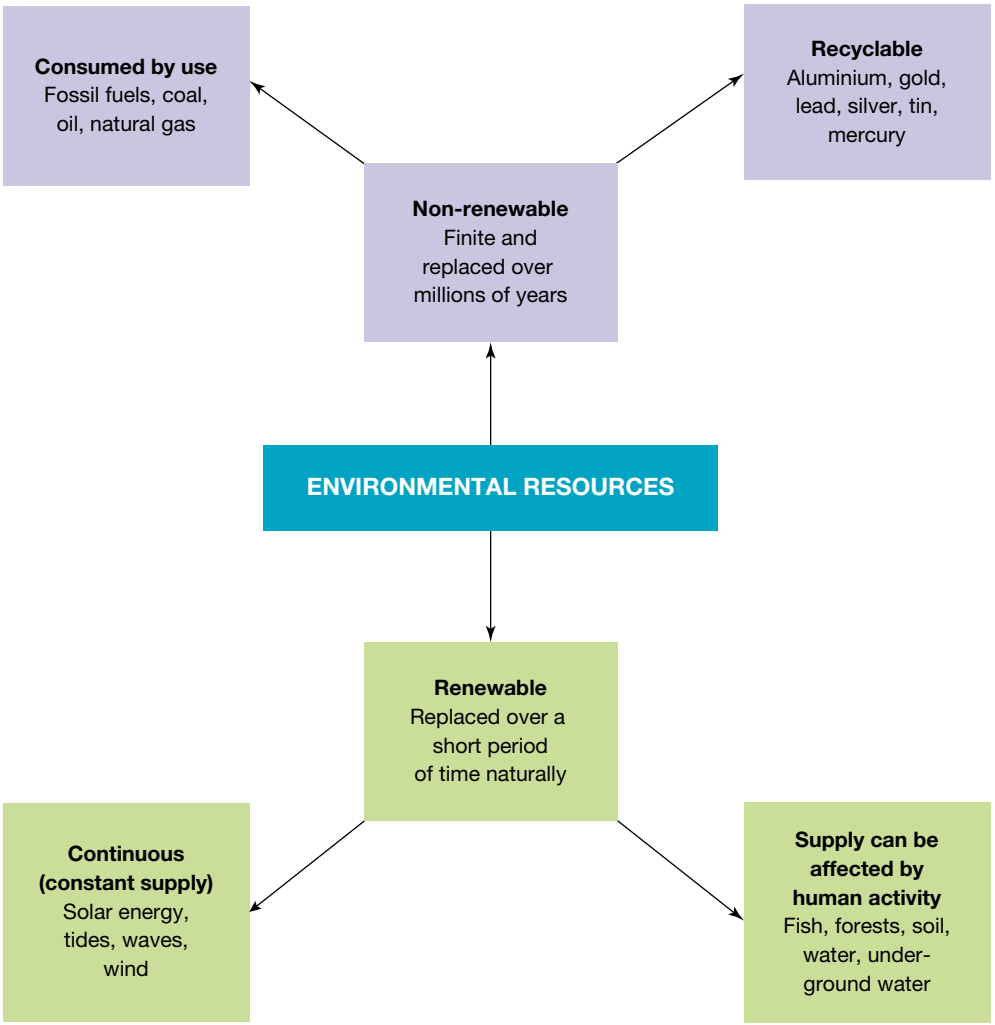
The global distribution of environmental resources depends on the Earth's rocks and climate. Some minerals, like **uranium**, are rare and mostly found in Australia. Countries in the Middle East, like Saudi Arabia and Iran, have lots of oil but not much water. Some African countries, like Botswana, have minerals but not enough money to mine them.

Human activities like farming, fishing, logging and mining all rely on natural resources.

9.2.2 How do we classify resources?

Environmental resources either have a limited supply or are constantly replenished naturally. **FIGURE 2** shows that how we use and manage these resources helps classify them. Using resources wisely ensures non-renewable ones are recycled and renewable ones are not used up too quickly.

FIGURE 2 Environmental resources — renewable and non-renewable



SkillBuilder discussion

Geographical inquiry

1. What are the two subdivisions of non-renewable resources?
2. Which category of resources do metals fall into?
3. Write two examples of situations where we use continuous energy.

Environmental resources can be classified as renewable, non-renewable or continuous.

Renewable resources can be replaced naturally if managed carefully. Fish, for example, are a renewable resource we rely on for food and healthy oceans.

Non-renewable resources cannot be replaced quickly and are limited. Fossil fuels like oil, coal and natural gas are non-renewable because they take thousands of years to form. Others can be recycled; aluminium, for example, can be melted down and turned into new products.

Continuous resources are never used up by humans. Examples include solar or wind energy.

9.2.3 What are continuous resources?

Environmental resources that never run out and aren't affected by how much people use them are called 'continuous' or 'renewable' resources. **FIGURE 3** shows a range of renewable environmental resources. Can you list the examples of continuous environmental resources?

FIGURE 3 Some sources of renewable energy: (a) solar, (b) biomass, (c) wind, (d) hydro-electric, (e) geothermal, (f) tidal

SkillBuilder discussion

Communicating

1. What is the source of geothermal energy?
2. What are the benefits of using a continuous source of energy?
3. Which type of energy do you think is the most dependable? Why?

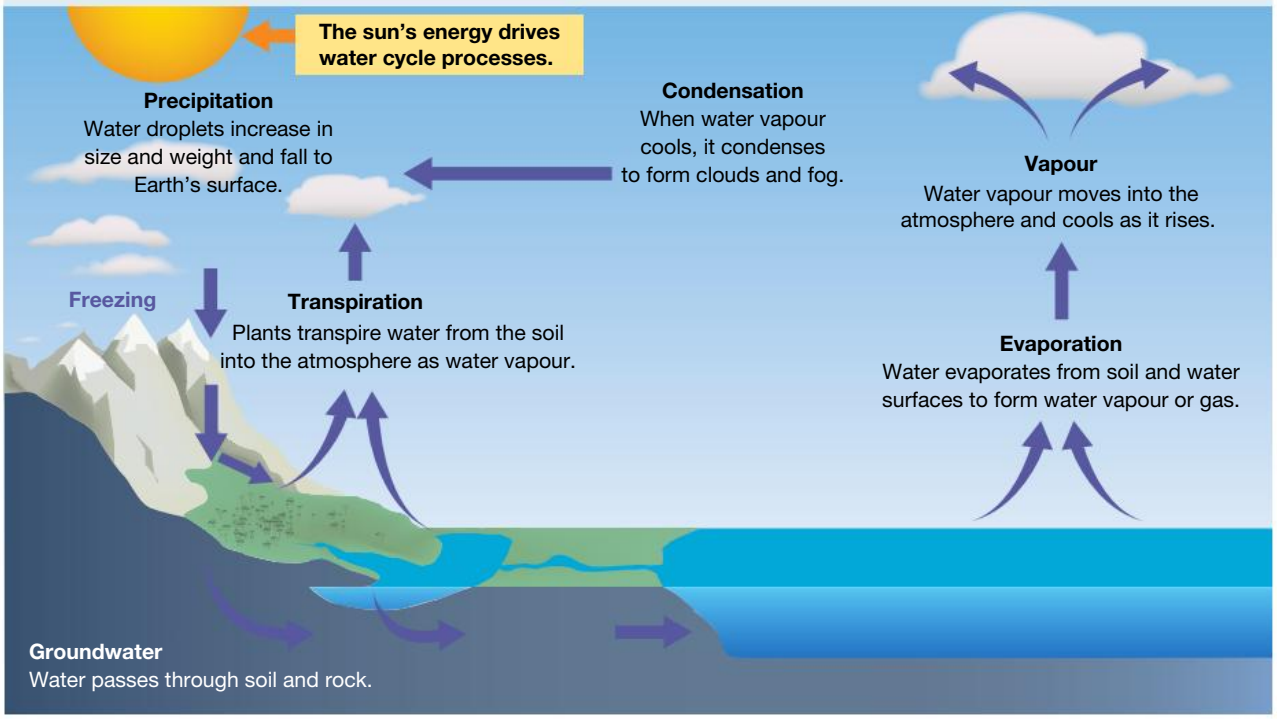
9.2.4 The water cycle

The water cycle or **hydrologic cycle** is how water moves around Earth, powered by the sun. This cycle is always changing water's form — like vapour, liquid or ice — through the processes of evaporation, condensation and freezing

Experts say up to 70 per cent of Earth's fresh water is trapped in ice in places like the Arctic and Antarctica. This water can't be used right away, so it's called a **potential resource**. Water in vapour, saltwater or wastewater is also a potential resource.

The water cycle in **FIGURE 4** shows how water connects different places. Water flows through the environment in various forms and is essential for life. People often live near rivers and lakes to have a steady water supply, which is also crucial for farming.

FIGURE 4 The operation of the water cycle



9.2.5 How long does water stay in one place?

Water can stay in one place for a short time or a very long time. It stays in the **atmosphere** for about nine days before falling as **precipitation**. In soil, it lasts one to two months.

Water stays in snow and rivers for two to six months, but much longer in lakes, glaciers, oceans and **groundwater**. In the Antarctic ice sheets, some ice is 800 000 years old, but most is around 20 000 years old.

Scientists study ice core samples taken from large ice sheets over three kilometres thick in Greenland and Antarctica to learn how the climate has changed over time.

SkillBuilder discussion

Geographical inquiry, Concluding and decision-making

1. Refer to **FIGURE 5**. What techniques might a scientist use to analyse ice core samples?
2. How do ice core samples from Antarctica contribute to our understanding of climate change?
3. What challenges do scientists face when conducting research in Antarctica and how are they overcome?

FIGURE 5 A scientist works with ice core samples in Antarctica.

9.2 SkillBuilder activity GEOGRAPHICAL INQUIRY, COMMUNICATING

Use reliable and accurate internet sources to research and complete the following.

1. **Identify** which place in the world has the highest recorded rainfall.
   a. What is the name of this place and in which country is it found?
   b. What is the average total rainfall per year (in metric)?
   c. What may be some of the locational factors that help explain this high rainfall total?
2. **Identify** which place in the world has the lowest recorded rainfall.
   a. What is the name of this place and in which country is it found?
   b. What is the average total rainfall per year (in metric)?
   c. What may be some of the locational factors that help explain this low rainfall total?
3. a. How reliable are the sources you used for this research?
   b. State one reason for your answer to part a.

9.2 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3	4, 5, 6,	7, 8, 9, 10

REMEMBER AND UNDERSTAND

1. What are environmental resources?
   A. Resources that can be replaced over a short period of time
   B. Resources that are limited and will eventually run out
   C. Radioactive metals used as fuel in nuclear reactors
   D. Raw materials that occur in the environment are necessary or useful to people

2. **Explain** the difference between renewable, non-renewable and continuous resources.
3. Complete the following table by listing two examples of each type of resource.

Renewable	Non-renewable	Continuous

4. Which renewable resources are most affected by human activity?
   A. Fossil fuels, coal, oil, natural gas
   B. Solar energy, tides, waves, water, air
   C. Fish, groundwater supply, forests, soil
   D. Aluminium, gold, lead, silver, tin, mercury

ANALYSE AND APPLY

5. **Explain** how the hydrologic cycle moves water across the Earth.
6. State if the following statements are true or false. Rewrite the incorrect statements to make them true.
   a. The sun's energy interrupts the operation of the water cycle.
   b. It has been calculated that water stays in the atmosphere for an average of nine days.
   c. It is estimated that up to 50 per cent of the Earth's fresh water is locked in ice sheets in the Arctic.
   d. Water spends between two and six months in snow and rivers.
   e. Precipitation is when water vapour cools and condenses to form clouds and fog.
   f. More liveable places are commonly situated on rivers and lakes.
7. **Identify** the place where water stays for the longest period of time during the operation of the water cycle.
8. **Explain** how ice core samples can be used to help us understand changes to the water cycle over time.
9. Refer to **FIGURE 3** to answer the following questions.
   a. List the two sources of renewable energy generated that are found in the atmosphere.
   b. **Identify** places in the world where these two power sources may be more effective. Give reasons for your answer.

EVALUATE AND COMMUNICATE

10. Write a clear passage that describes to students in Years 3 and 4 how the water cycle works.

Answers and sample responses for this topic are available online.

LESSON 9.3 How does groundwater connect people and place?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** how groundwater moves through the Earth and provides a valuable resource for people in places that have little rain
- **explain** the spiritual connection for Aboriginal and Torres Strait Islander Peoples to the land and its water

Tune in

Many countries in western Asia and northern Africa use groundwater to grow crops for food and trade. **FIGURE 1** shows circular irrigation systems that turn desert areas into farms.

FIGURE 1 How can crops be grown in a hot desert, such as this one in Dubai?

1. **What do you think irrigation is?**
2. **Brainstorm three challenges that irrigating low rainfall desert lands may create for farmers.**
3. **Is the water sourced for this farming project a renewable or non-renewable resource?**

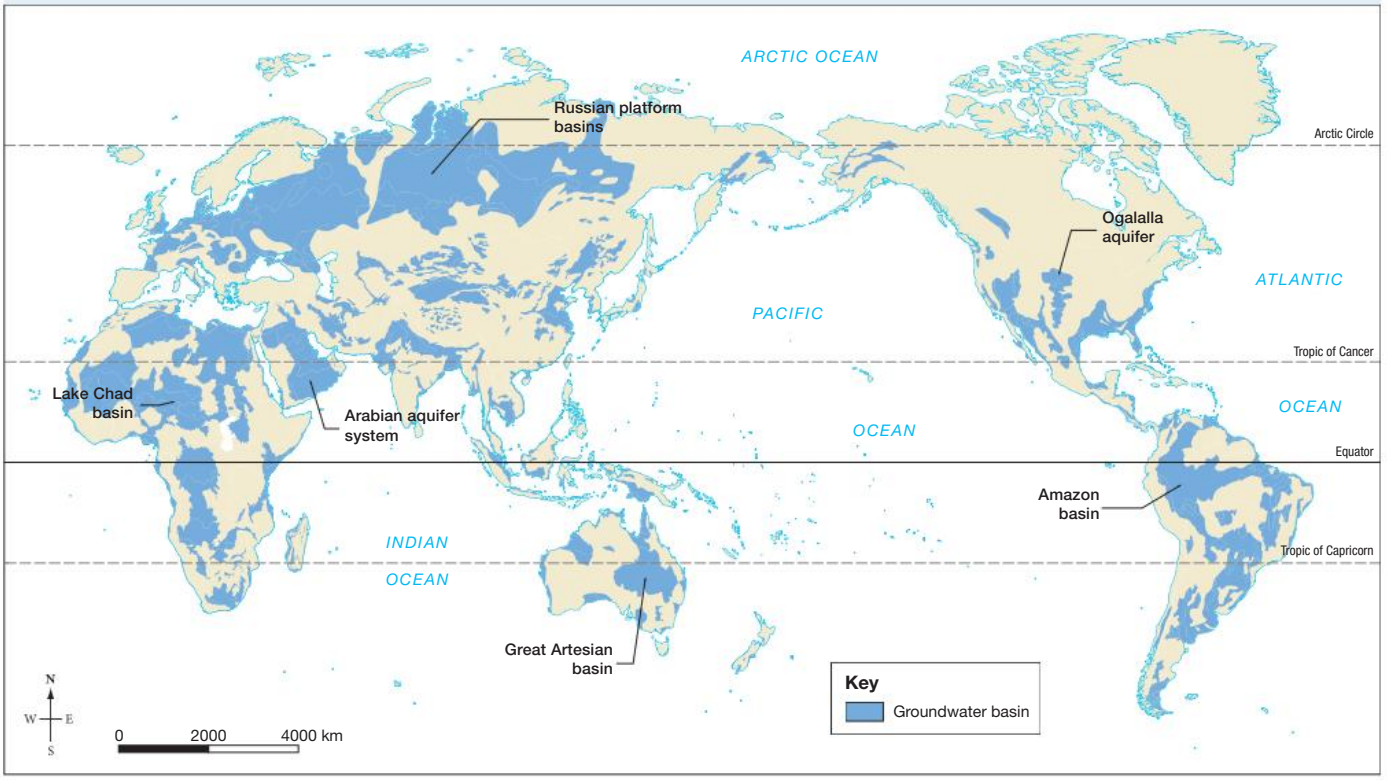
9.3.1 Groundwater and the water cycle

Approximately 1 per cent of Earth's water is groundwater, compared to 0.4 per cent in rivers and lakes, and 97.5 per cent in oceans.

Groundwater is part of the water cycle and is found under the Earth's surface.

When rain falls, some flows into rivers (surface run-off), and some soaks into the ground (infiltration). The water moves through soil and rocks with tiny pores, like pouring water into a jar of sand or stones. **Groundwater** is stored in water-bearing rocks called **aquifers**, which act like sponges, holding water in the spaces between rock particles.

FIGURE 2 The world's major groundwater basins



Source: BGR & UNESCO 2008: Groundwater Resources of the World 1 : 25 000 000. Hannover, Paris.

SkillBuilder discussion

Concluding and decision-making, Communicating

1. Which regions of the world are most reliant on groundwater from these major basins?
2. How does the distribution of major groundwater basins correlate with global population centres and agricultural regions?
3. What are some environmental concerns associated with the depletion or contamination of groundwater in these major basins?

9.3.2 Artesian water

An **artesian aquifer** is trapped between rocks that water can't pass through. When a well is drilled, water may gush out. It stops if the pressure drops, or the well is sealed.

Groundwater and surface water are linked. Groundwater refills when surface water soaks into aquifers. This is called groundwater recharge (shown in **FIGURE 3**).

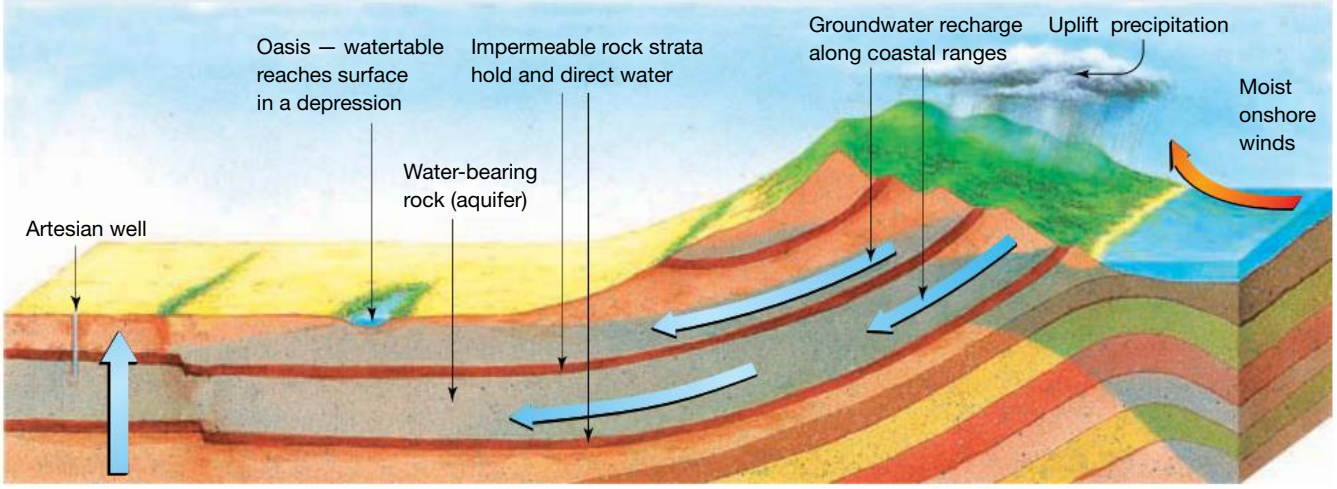
Groundwater is essential for drinking, farming and industry. Some companies bottle spring and mineral water or use it to make drinks like soft drinks and beer. Bore water is used for watering parks, golf courses and crops.

Groundwater moves very slowly and can take years to reach deep aquifers. This makes it a non-renewable resource, called 'fossil water' because it can't be replaced quickly.

Did you know?

People once thought groundwater would never run out, but in some places, it's running low. Pumping too much can make land sink. Cities like Jakarta and Mexico City are sinking because of this. If we use more groundwater than is replaced, aquifers can dry up.

FIGURE 3 How water moves from the east coast of Australia, where it rains more, into the porous rocks.



SkillBuilder discussion

Communicating

1. How does an artesian well differ from an aquifer?
2. What roles do water-bearing rock and impermeable rock play here?
3. Explain uplift and precipitation.

9.3.3 How do Aboriginal and Torres Strait Islander Peoples use groundwater?

Aboriginal and Torres Strait Islander Peoples have lived in Australia for tens of thousands of years, using their knowledge to survive many changes.

Many groundwater sources throughout Australia have long been used by Aboriginal and Torres Strait Islander Peoples. One type of groundwater source is a **soak**, where water comes to the surface, often near rivers and dry creek beds; it can be identified by certain plants. Another type is a **mound spring**, where minerals and sediments build up as water comes up from an underground aquifer.

Mound springs of the Oodnadatta Track

The Oodnadatta Track (refer to **FIGURES 4**, **5**, **6** and **7**) is located in the north-east of South Australia. It follows the edge of the Great Artesian Basin and Kati Thanda–Lake Eyre. Along this track, groundwater comes up to the surface in several places. The Great Artesian Basin covers over 20 per cent of Australia.

The Oodnadatta Track goes through the lands of three Aboriginal nations. In the south are the Kuyani people, near Lake Torrens and Kati Thanda–Lake Eyre. The Arabana people live west of Kati Thanda, and the Arrernte people live in the north.

Many springs along the track are important to local people. Their ancestors used them for water and ceremonies. Dreaming stories about these springs have been shared for many generations. Explorers and settlers also learned about the springs. In 1862, John McDouall Stuart used this track to cross Australia from south to north. Later, the overland telegraph and the Great Northern Railway were built along this route.

Mound springs were very important for Aboriginal and Torres Strait Islander Peoples. They provided water in a dry environment and were also used for trading and spiritual purposes.

SkillBuilder discussion

Geographical inquiry

1. Which states of Australia does the map cover?
2. In which state or territory is Alice Springs located?
3. Which state holds the most area of the Great Artesian Basin?

FIGURE 4 Location of the Oodnadatta Track and Great Artesian Basin, one of the world's largest groundwater basins

Source: Spatial Vision/Geoscience Australia

Witjira–Dalhousie Springs

Witjira–Dalhousie Springs is a popular oasis in the arid desert region of the northernmost part of South Australia.

SkillBuilder discussion

Geographical inquiry

1. Name a few organisms living in Witjira–Dalhousie Springs.
2. How do the Witjira–Dalhousie Springs contribute to the local Aboriginal culture and history?
3. What conservation efforts are in place to protect the biodiversity and natural beauty of Witjira–Dalhousie Springs?

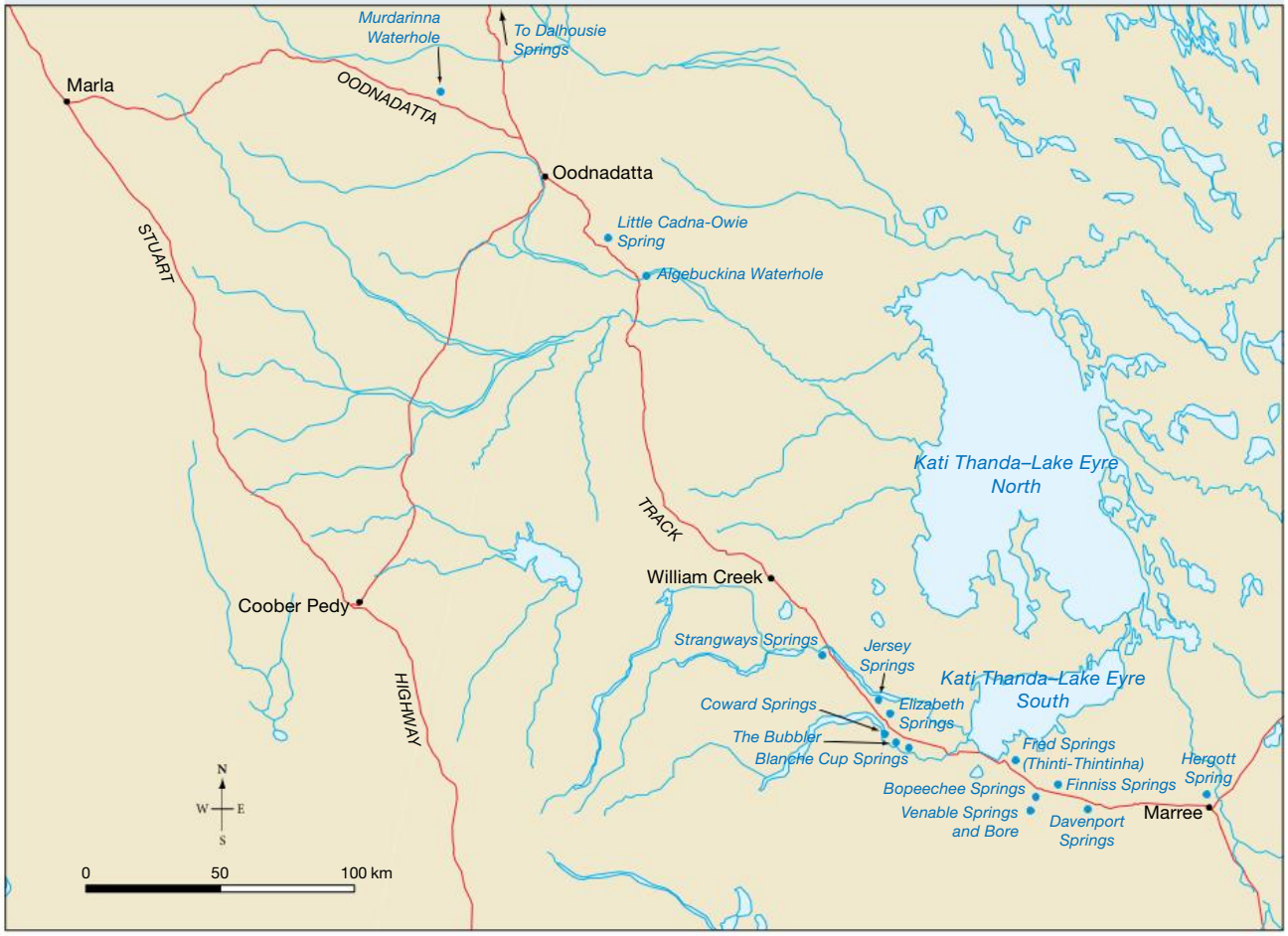
FIGURE 5 Witjira–Dalhousie Springs

The Lower Southern Arrente people have used this area for thousands of years for food, shelter, medicine and as a special cultural place. The water in the springs, fed by the Great Artesian Basin, is between 34 and 38 °C.

The springs were spread out over long distances and were part of a big network for trading and communication across Australia. They traded things like ochre, stone tools, wooden tools, bailer shells and pituri (a plant used in ceremonies and to help catch animals for food).

FIGURE 6 The Old Bubbler on the Oodnadatta Track

FIGURE 7 Groundwater springs along the Oodnadatta Track



Source: Redrawn with permission from the SA Arid Lands Natural Resources Management Board / © Copyright Commonwealth of Australia Geoscience Australia 2006

9.3.4 Locating water

Aboriginal and Torres Strait Islander Peoples' knowledge of the land and how to survive in it has been passed from generation to generation through Dreaming stories. During the dry seasons and periods of **drought**, they congregate at the mound springs. These springs were linked by songs and Dreaming stories and are often connected to rain-making rituals.

Dreaming stories

Thutirla Pula (Two Boys Dreaming)

This is an important story for the Wangkangurru and other central Australian people. It tells how **Dreaming** spirits crossed the desert called Munga-Thirri (land of sandhills). The story is about two boys travelling through the Simpson Desert and finding every waterhole along the way. This songline helped them find water and save 600 kilometres on their journey.

Thinti-Thintinha Spring (Fred Springs) was created by a willy wagtail dancing in circles.

9.3 SkillBuilder activity GEOGRAPHICAL INQUIRY

1. Complete the **Oodnadatta Track** interactivity in the Resources panel.
2. Use Google Maps (in satellite view) and enter the search terms 'Oodnadatta' or 'William Creek' to locate the Oodnadatta Track. You can also study **FIGURE 8** below.

FIGURE 8 Aerial view of the William Creek town, South Australia

   a. **Describe** the landscape you see.
   b. Why is finding groundwater so important in this environment?
3. Use internet research to **investigate** the value of the spring water found in one area of inland Australia.
   a. Locate a secondary source that shows what the springs meant to early explorers; for example, **identify** information from an explorer's journal to present a viewpoint.
   b. Locate a secondary source that shows what the springs meant to Aboriginal and Torres Strait Islander Peoples and **identify** information from it to present a viewpoint.
   c. Locate evidence to show the importance of springs water sources as social gathering sites.

9.3 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 6	4, 10, 11, 12	5, 7, 8, 9

REMEMBER AND UNDERSTAND

1. Identify what the term 'permeable' means.
   a. A barrier that blocks everything
   b. A source of renewable energy
   c. A barrier that holds back some substances and lets others through
   d. Pressure that occurs between permeable rocks
2. What is groundwater recharge?
   a. When water is trapped between impermeable layers of rock
   b. When the pressure of the water in bores raises it above the land surface
   c. When water naturally seeps or gushes from the ground
   d. When surface water seeps into the soil and filters down to aquifers
3. How do Dreaming stories help people find water in the Oodnadatta region?
   a. By providing information about rainfall patterns
   b. By including descriptions of place names and specific locations
   c. By providing information about where the lakes and rivers are
   d. By providing information about how to best extract water from the ground
4. **Explain** the difference between an aquifer and an artesian aquifer.
5. A soak is where groundwater can be found at the surface and can be identified by certain types of vegetation. True or False?

ANALYSE AND APPLY

6. **Explain** how groundwater and surface water are interconnected.
7. **Explain** what the quality of bore water is like. Is it suitable for humans to drink?
8. Water is a renewable resource. **Explain** why groundwater is sometimes thought of as fossil water and as a non-renewable resource.
9. **Explain** the importance of groundwater soaks, mounds and springs to European colonisers and explorers of Australia's inland areas.

EVALUATE AND COMMUNICATE

10. Witjira–Dalhousie Springs in the Great Artesian Basin is a cluster of around 60 mound springs that contain water that is approximately 34 to 38 °C. Study **FIGURE 5** and **propose** a reason the water in Witjira–Dalhousie Springs may be so warm.
11. The Witjira–Dalhousie Spring is a very popular tourist destination. **Suggest** three challenges that tourists may create for the team who manage this precious resource. **Suggest** one solution to overcome one of these challenges.
12. Create a diagram to show how surface water reaches the water table to become groundwater.

Answers and sample responses for this topic are available online.

LESSON 9.4 Why is water supply variable?

LEARNING INTENTION

By the end of this lesson, you should be able to:

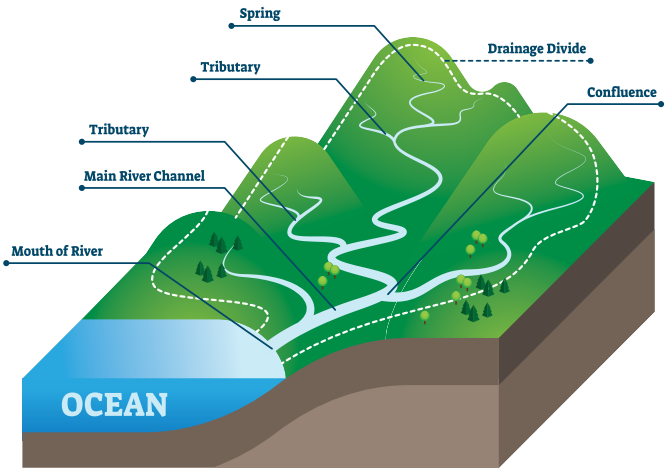
- **describe** the distribution of water across the world and explain the impact of climate change on water distribution
- **explain** how Australia's climate affects water availability
- **explain** the impact of climate change on water availability in Australia.

Tune in

Most of the water that Australians use is found in surface water such as the drainage basin shown in **FIGURE 1**.

1. **What direction is this river flowing towards? What evidence supports this response?**
2. **What do you notice about changes to the shape of the river and to the way it moves as it makes its way to the sea?**
3. **Brainstorm four ways humans could capture water in this drainage basin for future use.**

FIGURE 1 How drainage basins work



9.4.1 The world's water

Even though the Earth looks blue from space, most of the water is salt water and not usable. The small amount of fresh water available is not evenly spread around the world.

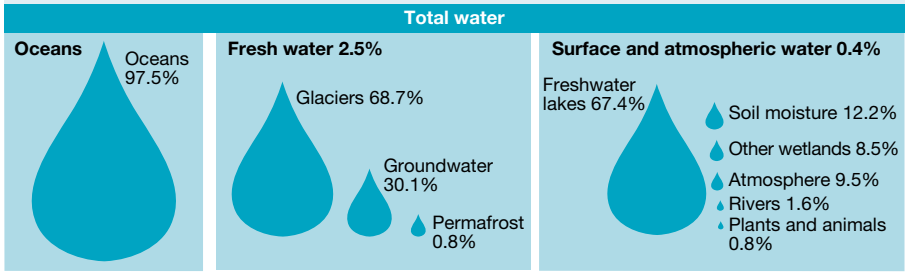
Water covers about 75 per cent of Earth's surface. But **FIGURE 2** shows 97.5 per cent is salt water, and only 2.5 per cent is fresh. Most fresh water (69.5 per cent) is locked in glaciers, ice, snow and permafrost. The rest is mostly groundwater, and only 0.4 per cent is in rivers, lakes, wetlands, and in plants and animals.

SkillBuilder discussion

Communicating

1. Which water body stores the most water?
2. What percentage of fresh water is stored in glaciers?
3. Which water body stores the most water that is not saline?

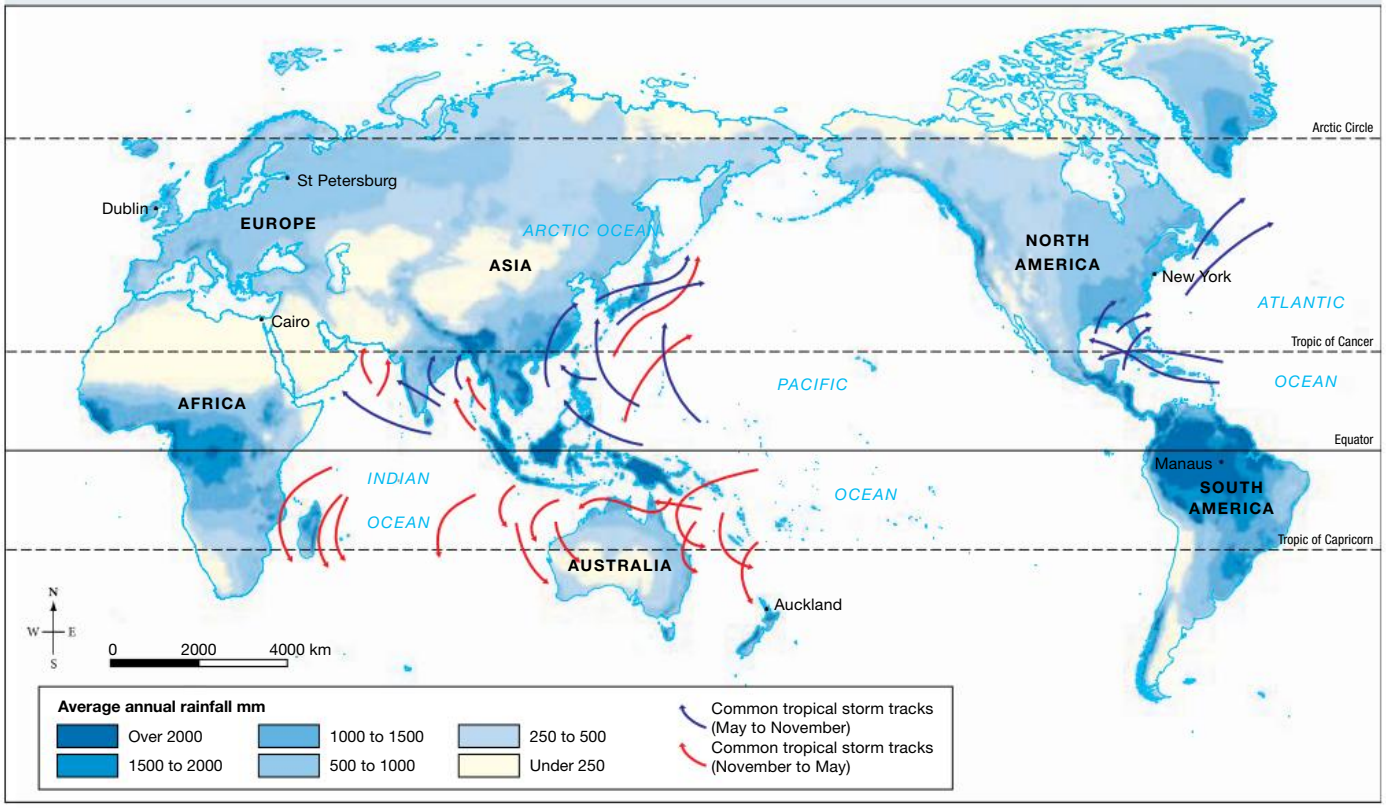
FIGURE 2 The distribution of water on Earth



9.4.2 Global rainfall

The Earth's water is constantly moving. The amount of rainfall, or precipitation, is related to the amount of water available for people. **FIGURE 3** compares global rainfall, including Australia.

FIGURE 3 The distribution of global rainfall



Source: WorldClim

SkillBuilder discussion

Geographical inquiry, Concluding and decision-making, Communicating

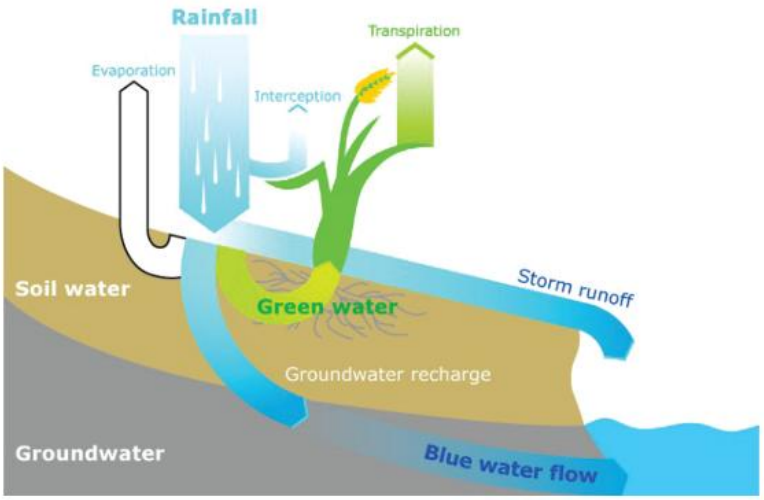
1. Where are the regions with the highest annual rainfall located on the map?
2. What continents experience the least amount of rainfall, based on the map?
3. How does the distribution of rainfall vary between tropical and temperate regions on the map?

9.4.3 Green and blue water

Water is sometimes called blue or green water. Green water is stored in soil or on plants and eventually evaporates (see **FIGURE 4**) or is used by crops, forests and grasslands.

Blue water refers to the water that flows over the Earth's surface or from groundwater sources. The amount of blue and green water changes with the seasons and the environment.

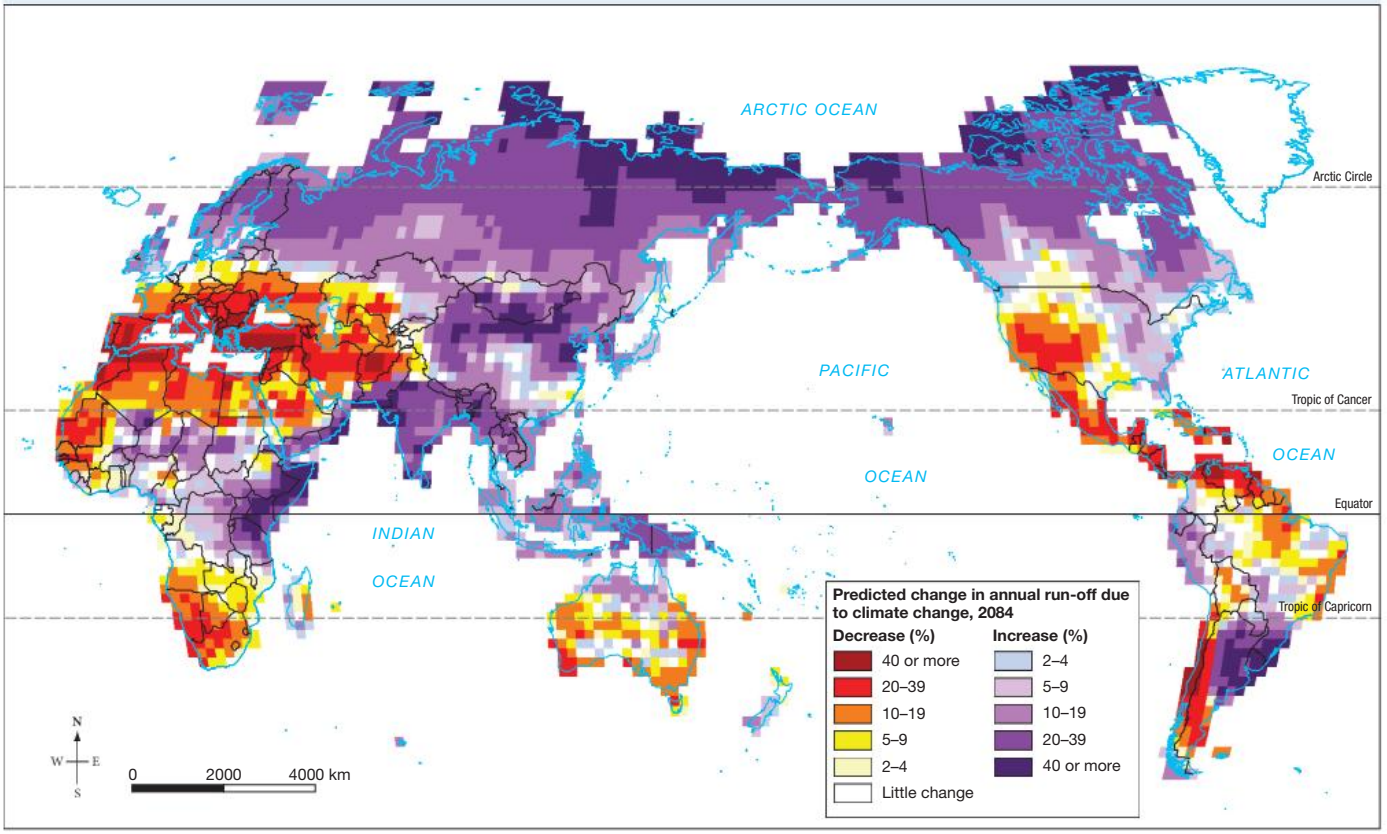
FIGURE 4 Green water can be lost through evaporation or transpiration.



9.4.4 Climate change and impact on rainfall and run-off

Most climate scientists believe **climate change** will affect rain patterns. **FIGURE 5** shows northern areas will get more rain, while places near the equator and mid latitudes will get less. Some regions may face droughts, others may have heavy rain or floods.

FIGURE 5 Predicted change in annual run-off due to climate change, 2084



Source: Geophysical Fluid Dynamics Laboratory, National Oceanic and Atmospheric Administration

In the last 100 years, rainfall has changed. Rain increased in North America, South America, northern Europe, and northern and central Asia, but decreased in the Sahel, Mediterranean, southern Africa and parts of Asia.

9.4.5 Dry, variable and evaporated

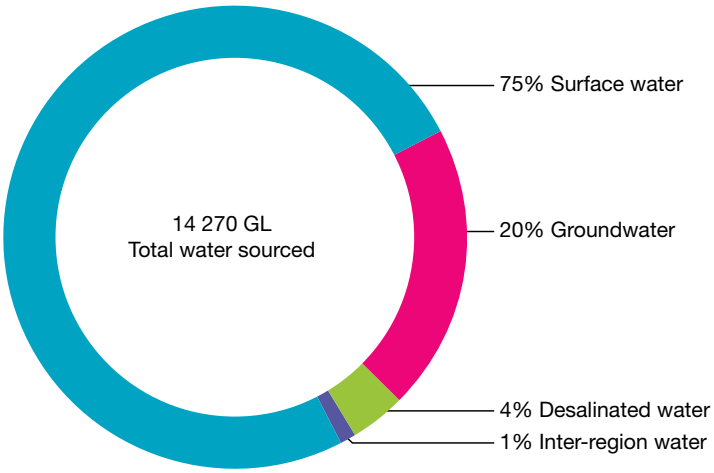
Rainfall is uneven across Australia with very little fresh water available.

Australia is the driest inhabited continent (only Antarctica is drier).

- The Lake Eyre Basin is the driest region.
- North-east Queensland and western Tasmania are the wettest. Water availability depends on climate, rainfall and evaporation.

FIGURE 6 shows that 75 per cent of Australia's water comes from surface water and 20 per cent from groundwater.

FIGURE 6 Sources of water used in Australia, 2019–20



9.4.6 Australia's climate

SkillBuilder discussion

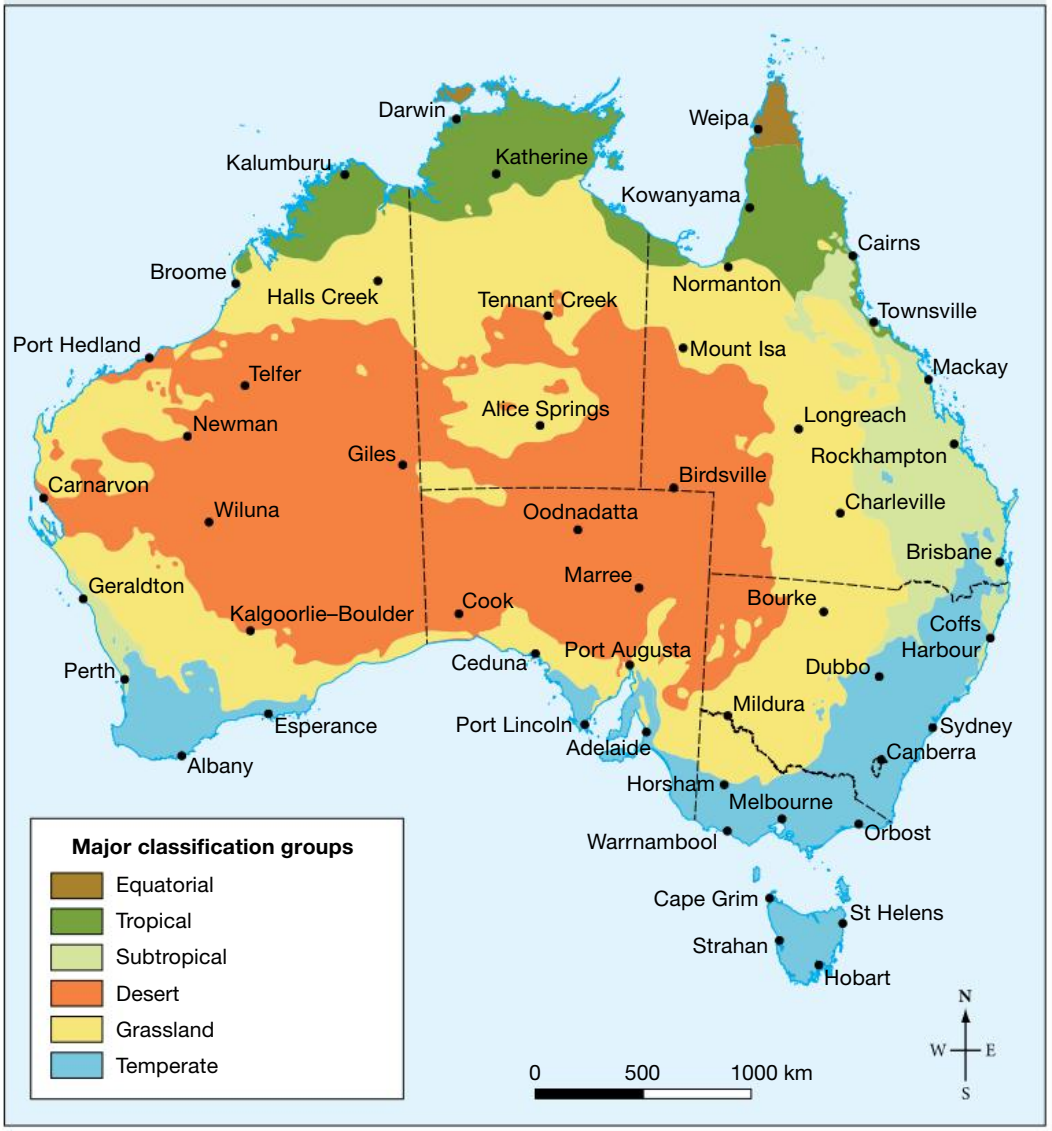
Concluding and decision-making

1. Look at **FIGURE 7**. What are the climate zones of Australia?
2. Name the two climate zones that cover most of the country.
3. How do temperate and tropical climate zones differ in location?

Weather is the daily changes in the atmosphere, while climate is the average weather over a long time. **FIGURE 7** shows Australia's climate pattern. Notice how it changes with latitude and distance from the coast.

Rainfall variability means how much rain changes each year. Coastal areas get similar rain every year. Desert areas in central Australia get little rain, but it changes a lot from year to year. See **FIGURES 4** and **5** to compare rain and variability.

FIGURE 7 Climate zones of Australia

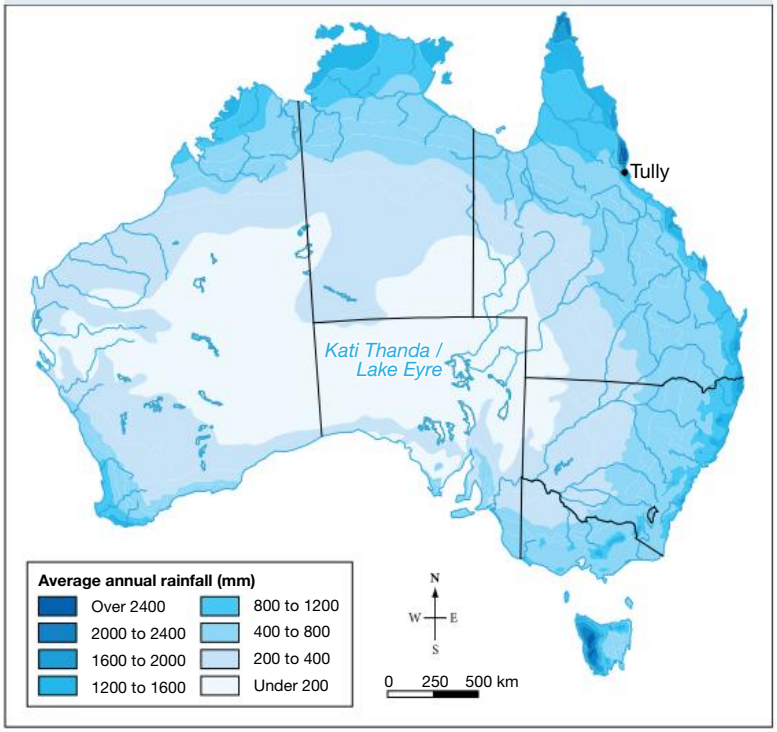


Source: Map redrawn by Spatial Vision © Copyright Commonwealth of Australia 2022, Bureau of Meteorology.

One challenge for Australians using water is that most rain doesn't end up in rivers — it evaporates. Australian rivers only hold 1 per cent of the water in the world's rivers, even though Australia makes up 5 per cent of the world's land. On average, only 10 per cent of our rain runs into rivers, streams or groundwater. This drops to 3 per cent in dry areas and rises to 24 per cent in wetter places. Central Australia is very dry and has high **evaporation** rates.

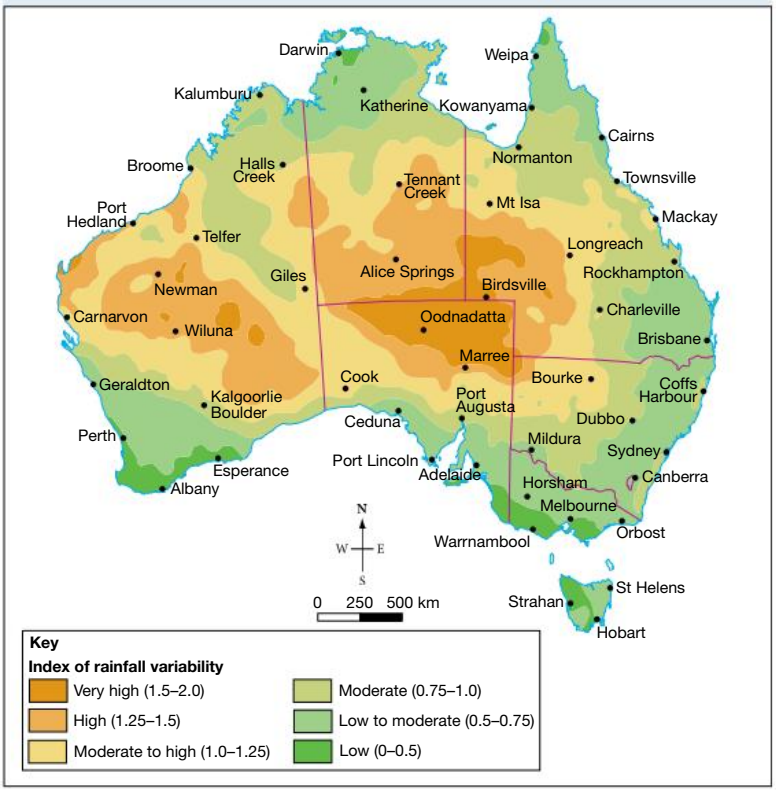
Relative humidity measures how much moisture is in the air compared to the maximum it can hold at a certain temperature. Relative humidity is usually higher in coastal areas and places with lots of rain, like north Queensland and western Tasmania.

FIGURE 8 Australia's average annual rainfall



Source: Bureau of Meteorology 2003, on the Australian Water Map, Earth Systems Pty Ltd

FIGURE 9 Australia's rainfall variability



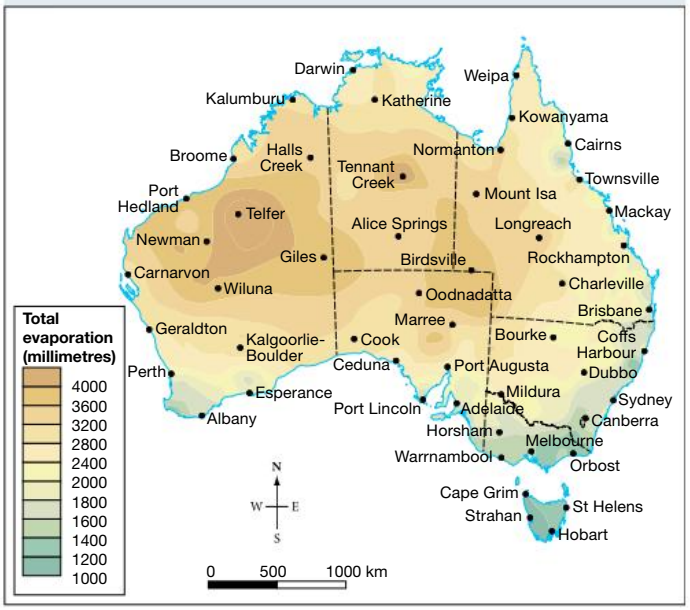
Source: MAPgraphics Pty Ltd, Brisbane

9.4.7 Climate change and water security in Australia

The effects of climate change in Australia can already be seen. Rainfall patterns are changing, less rain is falling in the southeast and southwest of Australia, while rainfall has increased in northern Australia.

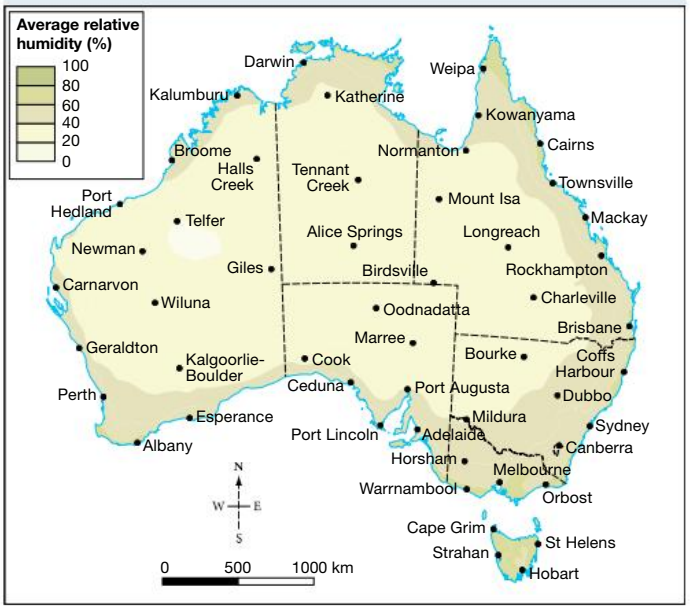
Evaporation rates have increased due to increased temperatures, reducing the availability of surface water. Higher temperatures and reduced rainfall have increased the fire season, and fires are more intense.

FIGURE 10 Average annual evaporation, Australia



Source: Bureau of Meteorology

FIGURE 11 Average relative humidity across Australia



Source: Bureau of Meteorology

Shifting rainfall patterns make Australia's climate more variable, leading to more extreme floods and droughts.

Increased rainfall variability, higher temperatures and a growing population increase the pressure on water resources for urban, agricultural and environmental use. Extreme weather events such as floods and drought have become frequent and extreme.

9.4 SkillBuilder activity GEOGRAPHICAL INQUIRY, CONCLUDING AND DECISION-MAKING, COMMUNICATING

1. Find your home on the Australia map. Look at **FIGURES 5**, **6**, and **7**, then complete a table. **Compare** your home with another place nearby and one far away.

	Average rainfall	Rainfall variability	Average evaporation	Relative humidity
Where I live: _____				
Another place in my state/territory: _____				
A place far from where I live: _____				

2. Conduct research online to **list** some of the short-term effects that drought can have on Australia.
3. **Predict** some long-term impacts that Australia and its people would experience if drought continued for up to ten years.

9.4 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 4	3, 6	5, 7, 8, 9

REMEMBER AND UNDERSTAND

1. **State** the percentage of the world's water that is the following:
   a. Salty
   b. Available for use by people
2. What percentage of the world's freshwater is locked up in glaciers?
   a. 68.7 per cent
   b. 71.9 per cent
   c. 79.3 per cent
   d. 83.9 per cent
3. Select the correct options from the list provided to complete the following statement about rainfall variability. Rainfall variability is the _____ from year to year in the _____ of rainfall in a _____ location. _____ variability means that rainfall is likely to be _____ from year to year.

amount	high	change	particular
more	irregular	variability	

4. a. **Outline** the difference between blue and green water.
   b. **List** two things that might change the amount of blue and green water available.
5. Study **FIGURE 5** and an atlas.
   a. Select three regions from the following list that are predicted to receive more run-off due to climate change.
      A. Northern, southern and north-east Africa
      B. Europe — Scandinavian countries and the United Kingdom
      C. South America — south-east Brazil, Uruguay and northern Argentina
      D. Australasia — northern Australia and the South Island in New Zealand
      E. South America — eastern Argentina and Chile, Brazil and the northern countries, and all of Central America
   b. Select three regions from the following list that are predicted to receive less run-off due to climate change.
      A. Northern, southern and north-east Africa
      B. Europe — Scandinavian countries and the United Kingdom
      C. South America — south-eastern Brazil, Uruguay and northern Argentina
      D. Australasia — northern Australia and the South Island in New Zealand
      E. South America — eastern Argentina and Chile, Brazil and the northern countries, and all of Central America

ANALYSE AND APPLY

6. Study **FIGURE 3**. **Identify** which of the following statements are true. Rewrite any false statements to make them true.
   a. Most places with very low rainfall have lower run-off.
   b. All places with very high rainfall experience increased run-off.
   c. The places with the greatest change in run-off will be northern Russia and northern Canada.

EVALUATE AND COMMUNICATE

7. Study **FIGURES 3** and **5**.
   a. **Describe** how much rain falls in North Africa and West Asia (the Middle East).
   b. **Identify** what is predicted to happen to annual run-off in the regions of North Africa and West Asia as a result of climate change. What impact might this have on people and the environment?
8. Refer to **FIGURES 7** and **9**.
   a. **Determine** the climate zone in Australia that has the most rainfall variability and the climate zone that has the least rainfall variability.
   b. **Predict** the factors that may contribute to this variation in rainfall reliability across Australia.
9. **Explain** the interconnection between climate change and extreme weather events in Australia

Answers and sample responses for this topic are available online.

LESSON 9.5 Investigating topographic maps: The value of water in Noosa

LEARNING INTENTION

By the end of this lesson you should be able to **explain** how people value water socially, culturally and economically in Noosa.

9.5.1 Noosa's beaches and rivers

Noosa is 140 km north of Brisbane, Queensland, between the mouth of the Noosa Rivers and the headland of Noosa National Park. Its beaches and Noosa rivers show how water can be valuable in many ways.

As a popular tourist spot, the beaches, rivers and lakes bring money to the area. The water also has aesthetic value, meaning it looks beautiful and attracts visitors. People enjoy relaxing and having fun with water activities like cruises, canoeing, surfing and kite-surfing, which are part of what makes Noosa special.

FIGURE 1 Visitors can enjoy the spectacular views from Noosa National Park.

FIGURE 2 An oblique aerial photograph of Noosa

SkillBuilder discussion

Concluding and decision-making, Communicating

1. Refer to **FIGURE 4**. What is the highest elevation point marked on the map?
2. Where are the lowest elevation points located on the map?
3. Which natural features are prominent in the northern part of the map extract?

FIGURE 3 Many activities for holiday makers at Noosa are water-based.

FIGURE 4 Topographic map extract of Noosa

Source: Data based on QSpatial, State of Queensland (Department of Natural Resources, Mines and Energy, Department of Environment and Science), http://qldspatial.information.qld.gov.au/catalogue/

9.5 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2	3, 5	4, 6, 7, 8

REMEMBER AND UNDERSTAND

1. **State** the contour interval of the map in **FIGURE 4**.
2. **State** the feature at the following area references.
   a. AR0376
   b. AR0470
   c. AR0583
3. **State** the spot height at AR1081.

ANALYSE AND APPLY

4. **List** different ways in which people use the water around Noosa. What evidence is shown on the map for these uses?
5. **Explain** why you think the settlements around Noosa have developed in their current locations. Support your answer with observations from **FIGURE 4**.

EVALUATE AND COMMUNICATE

6. **Predict** how more tourism and development in Noosa might affect the value of water. Think about its economic, cultural and aesthetic value.
7. What natural features around Noosa might attract tourists or new residents? Use evidence from **FIGURE 4** to support your response.
8. How might the waterways and coastline influence economic activities in Noosa? Provide examples using information from **FIGURE 4**.

Answers and sample responses for this topic are available online.

LESSON 9.6 Does everyone have enough water?

LEARNING INTENTION

By the end of this lesson, you should be able to:

- **explain** how water is used
- **explain** why there is variability in water resources

Tune in

FIGURE 1 In some countries women and girls can spend up to six hours each day collecting water. The average distance they walk is 6 km. The average weight they carry on their heads or backs is about 20 kg.

FIGURE 1 In some countries, women and girls can spend up to six hours each day collecting water.

1. **If women and children are spending this much time collecting water, what other opportunities are they missing?**
2. **Discuss this issue with a partner and document your observations.**

9.6.1 Water as an environmental resource

How much water we use can be different depending on where we live. On average, people use 1240 cubic metres of water each year. In some countries, like the United States and Thailand, they use almost twice that. In other places, like Peru and Somalia, they use much less.

FIGURE 2 shows that most of the world's water is used for farming, especially in dry areas like northern Africa and western Asia. Places with less rain need more water for farming.

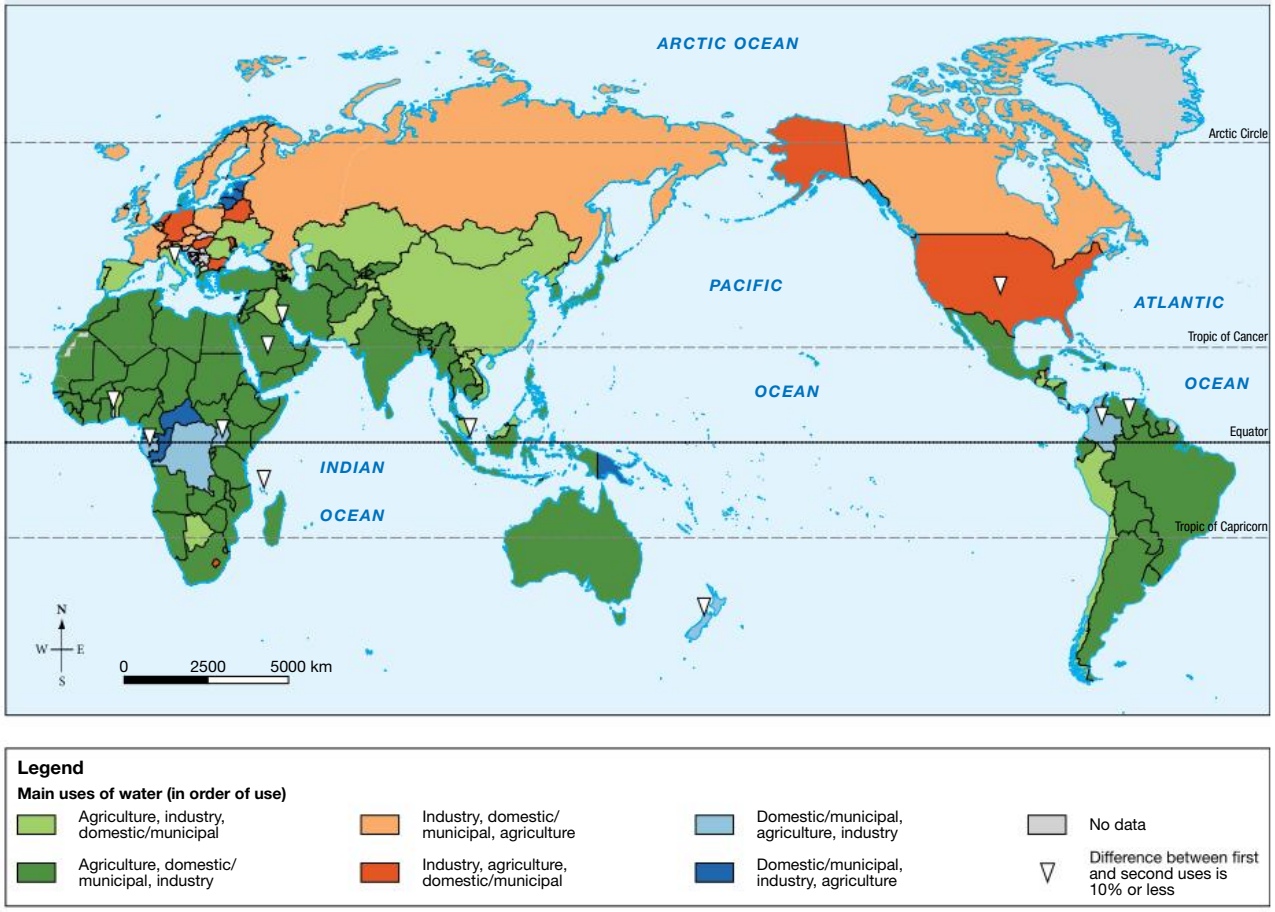
FIGURE 3 shows how water use also varies by region. In some countries, more water is used in farming and industry than at home, while in other places, people use more water at home than for farming or industry.

SkillBuilder discussion

Concluding and decision-making

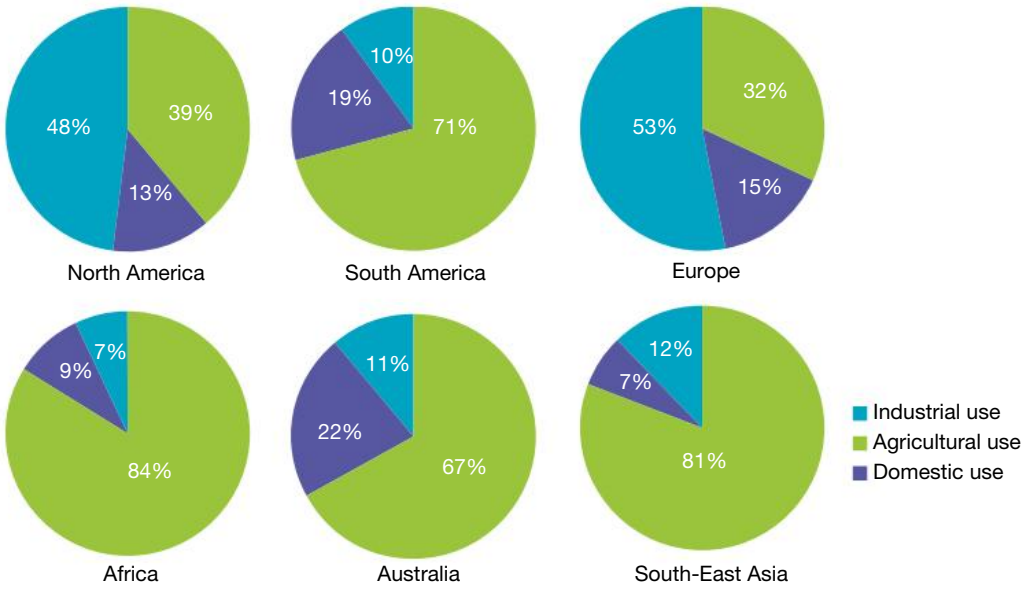
1. Refer to **FIGURE 2**. Which sectors consume the largest share of water in Australia?
2. Name any two countries that have the same pattern of water use.
3. Compare the pattern of water use in Australia with that of neighbouring countries.

FIGURE 2 Countries in the world differ in their use of water.



Source: Mekonnen, M.M. and Hoekstra, A.Y., 2011. National water footprint accounts: The green, blue and grey water footprint of production and consumption' , *Value of Water Research Report Series No. 50,* UNESCO-IHE, Delft, the Netherlands

FIGURE 3 Regional use of water for different purposes



9.6.2 How is water used in Australia?

Agriculture is key in Australia and uses a lot of water. About 70 per cent of our fresh water is used as irrigation for farming. Many crops grown in dry areas is lost due to evaporation or soaks too low into the ground.

TABLE 1 Fresh water used to irrigate different crops in Australia

Crop type	Water (gigalitres)	%
Livestock, pasture, grains and other agriculture	8795	56
Cotton	1841	12
Rice	1643	11
Sugar	1236	8
Fruit	704	5
Grapes	649	4
Vegetables	635	4

Note: One gigalitre = 1 000 000 000 litres or one thousand million litres or 400 Olympic-sized swimming pools

FIGURE 4 Australia is one of the most irrigated countries in the world.

9.6.3 What is virtual water?

Water is often a 'hidden' ingredient in making things like clothes, food and other products. For example, a hamburger 'hides' 2400 litres of water used to grow feed for cattle, wheat for the bun and all the other ingredients. The term **virtual water** refers to all the water used to produce goods and services, which is part of our **water footprint**.

In places like Australia, Africa and Asia, which often don't have enough water, exporting food and products also means exporting precious water.

FIGURE 5 Water used to wash citrus fruits

9.6.4 Water, water everywhere?

Wouldn't it be amazing if anyone, no matter where they were in the world, could simply turn on a tap to watch high-quality drinking water pour out? Wouldn't it be incredible if every farmer in the world knew exactly when and how much it was going to rain so that they could plan their planting cycles accordingly? Unfortunately, this is far from reality for millions of people around the world, and tens of thousands of people in Australia as well. In communities across the world, significant variability exists in the amount of water that is available and accessible. Before an investigation of issues such as drought, flooding and other meteorological hazards can be conducted, it is necessary to discuss the following different but connected terms: water variability, water availability and accessibility, and water scarcity.

9.6.5 Water variability

The amount of rainfall a location receives can vary significantly, and depends on a number of seasonal and environmental factors. Locations can often see inconsistency in the amount of rain received across a range of time frames. This is known as water variability, and is most severe in locations that experience extreme environmental conditions. Australia experiences a particularly high degree of water variability. This fact itself may not surprise you, especially if you live along Australia's eastern coast. However, you

may be surprised to learn that water variability also impacts some of the country's driest environments. Bureau of Meteorology Research Scientist Dr Blair Trewin explains this variability through the example of Lake Carnegie in central Western Australia. Lake Carnegie receives an average annual rainfall of only 225 millimetres per year. (For comparison, Melbourne's annual average rainfall is 518 millimetres, while Adelaide receives 547 millimetres per year, Sydney 1042 millimetres and Brisbane 1080 millimetres.) Yet on just one day in 2020, 270 millimetres of rain fell on Lake Carnegie (more than its yearly average). The difference in the landscape can be clearly seen in **FIGURE 6**. Similar variability can also be observed in **FIGURE 7**, which shows many other areas of extreme rainfall variability, including locations in outback New South Wales, Queensland, Western Australia, South Australia and the Northern Territory.

FIGURE 6 Lake Carnegie as it is regularly seen (a) and after unseasonably high rainfall (b)

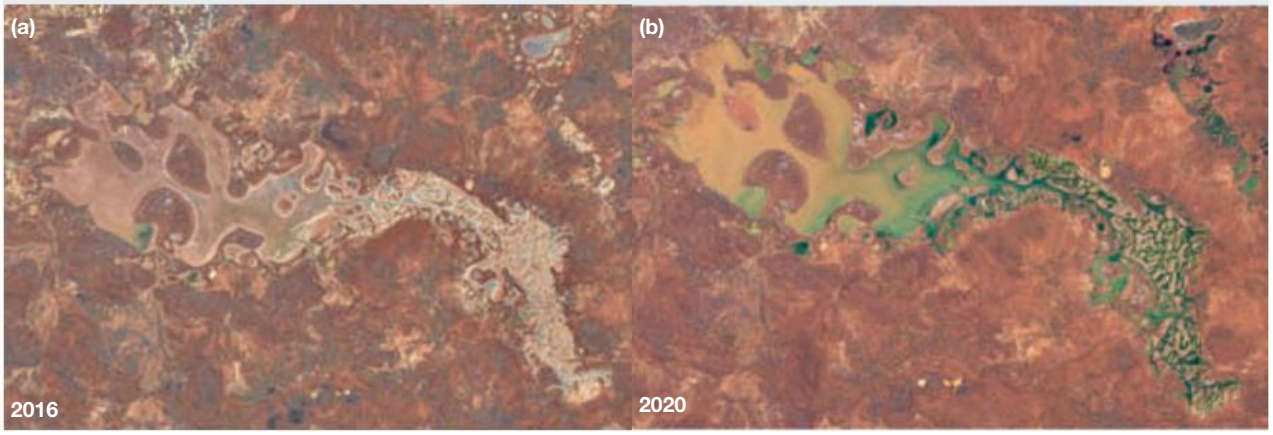
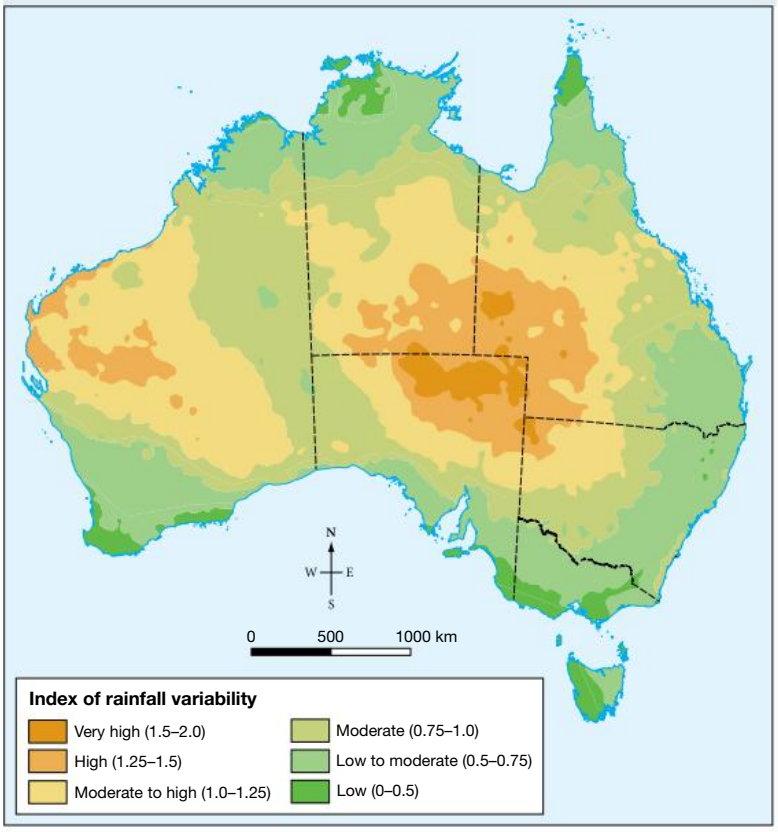


FIGURE 7 Australia's rainfall variability from 1900 to 2019



Source: Map redrawn by Spatial Vision © Copyright Commonwealth of Australia 2020, Bureau of Meteorology.

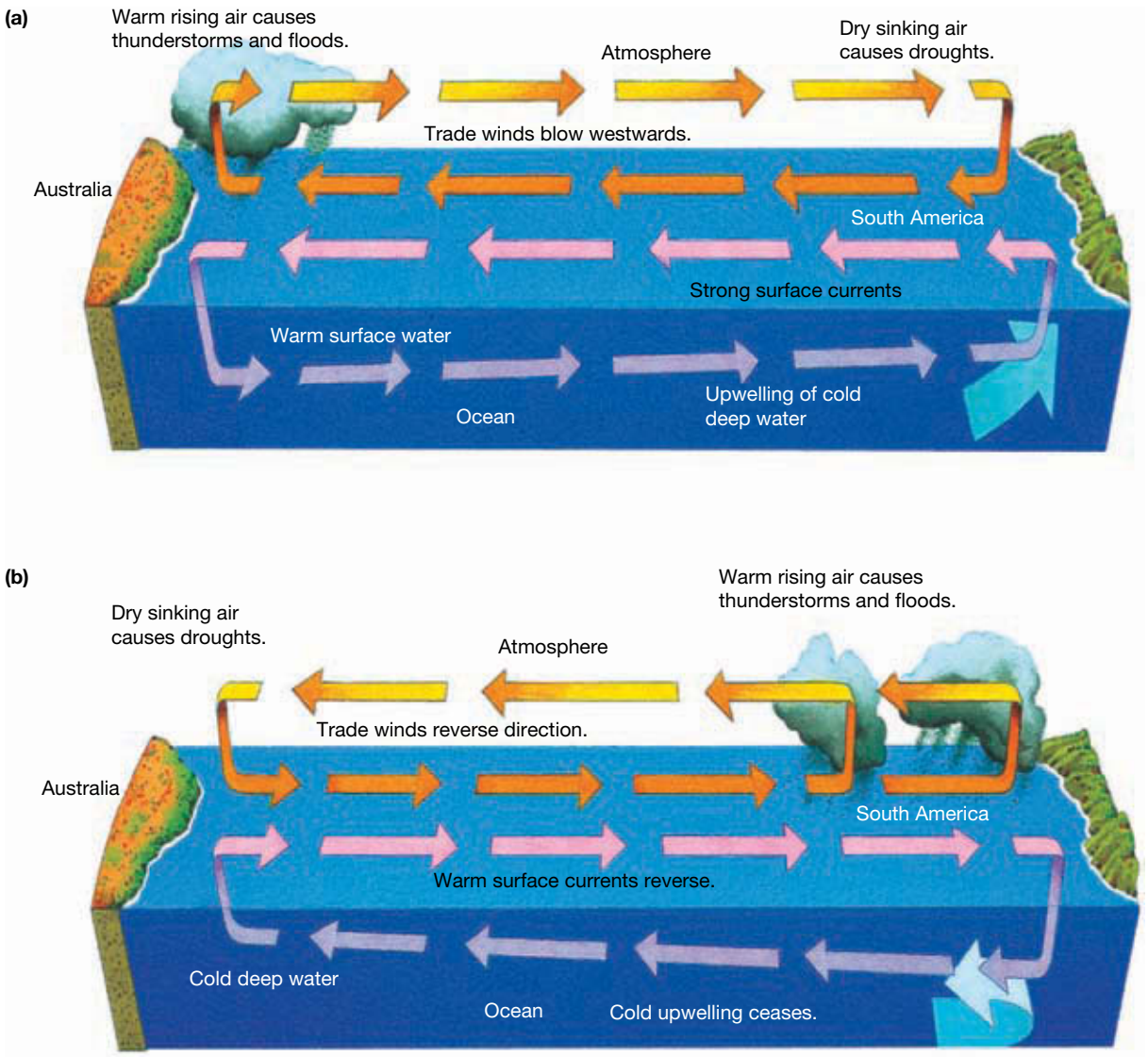
What influences Australia's water variability?

The unique characteristics of Australia's rainfall patterns are largely due to the influence of two equally unique climate events — **El Niño** and La Niña. El Niño and La Niña are the warm and cool phases of a recurring climate pattern across the tropical Pacific, known as the El Niño–Southern Oscillation, or ENSO for short.

El Niño and La Niña

Australian droughts are heavily influenced by what **meteorologists** call an El Niño event. In a normal year, warm surface water is blown west across the Pacific Ocean towards Australia. This brings heavy rain to northern Australia, Papua New Guinea and Indonesia. On the other side of the Pacific, South America experiences drought. When an El Niño event occurs, these winds and surface ocean currents reverse their direction. The warm, moist air is pushed towards South America, producing rain in South America and drought in Australia.

FIGURE 8 Weather events in (a) a typical year and (b) an El Niño year



El Niño and the southern oscillation

Fluctuations in rainfall have several causes that are not fully understood. Probably the main cause of major rainfall fluctuations in Australia is the **southern oscillation**, which is a major air pressure shift between the Asian and east Pacific regions. The strength and direction of the southern oscillation is measured by a simple index called the Southern Oscillation Index (SOI). The SOI is calculated from monthly or seasonal fluctuations in air pressure between Tahiti and Darwin. In an average rainfall year with 'typical' pressure patterns, the SOI is between –10 and +10. If the SOI is strongly negative (below –10), this means that the air pressure at sea level in Darwin is higher than in Tahiti, and an El Niño event occurs.

During an El Niño event, less-than-average rainfall is experienced over much of Australia. During this period, drought will occur. If the SOI becomes strongly positive (above +10), this means the air pressure in Darwin is much lower than normal and a La Niña event occurs. During this period, above-average rainfall will occur.

In recent years, scientists have made great advances in understanding and forecasting El Niño and southern oscillation events. The National Climate Centre in Australia produces outlooks on rainfall three months ahead. These outlooks are proving to be of great value to farmers, and especially valuable for ecologically sustainable development in rural areas.

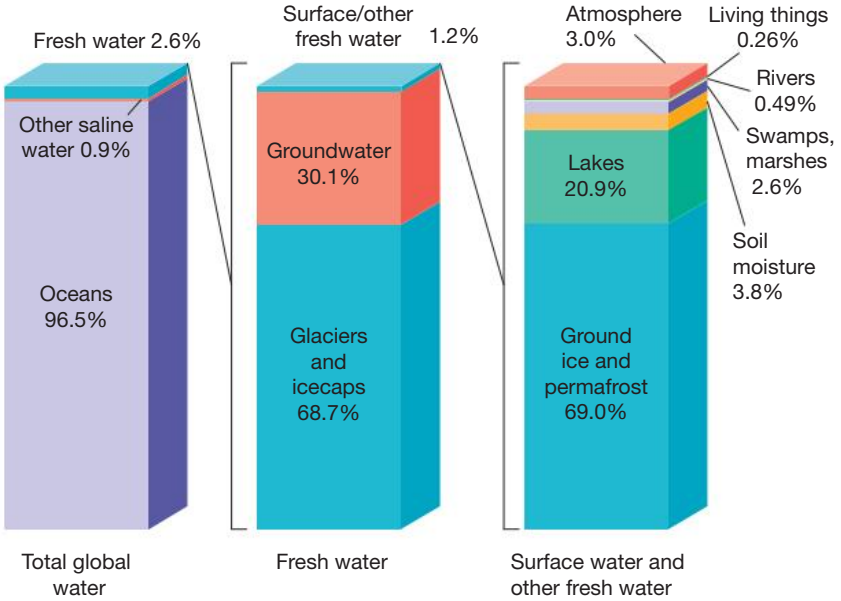
9.6.6 Water availability and accessibility

Imagine that it is lunchtime on a regular school day. Your stomach has been rumbling all morning and it is finally time for lunch. You open your bag and staring back at you is a lunchbox filled with all your favourite foods. We can say that your lunch is *available* because it is there for you, ready to be used. We can also say that your lunch is *accessible* because you can easily get to it. If you have lunch in your bag but it's not yet lunchtime, then your lunch is available but it is not accessible. This simplified example can be used to explain the difference between a location's water availability and accessibility. The distinction between these two terms is important — firstly, to understand the reasons a location may not have reliable water and, secondly, to develop solutions to improve the supply of water.

Although 70 per cent of the Earth is water, a tiny proportion of that water is available for human consumption. Of that 70 per cent, 96.5 per cent is contained in our oceans, with only 2.6 per cent present as freshwater. However, the majority of *that* water is trapped with glaciers, icecaps and groundwater, with just 1.2 per cent of that 2.6 per cent present in surface water. If we keep following this surface freshwater, we discover that, again, a remarkably small percentage of water is available for direct human consumption, largely in rivers and lakes. These statistics (see **FIGURE 9**) clearly demonstrate that the availability of fresh water on a global scale is significant issue. With the seemingly never-ending increase of human population, the scope of this issue becomes even more apparent.

For some countries, water *accessibility* is a greater concern than *availability.* Papua New Guinea can be used as an example of such a country. Located directly to the north of Australia, Papua New Guinea is the third wettest country in the world, with an average annual rainfall of over 3000 millimetres. This incredibly large amount of rain shows us that it is not the availability of water that is the problem for Papua New Guinea. Instead, the accessibility of water in Papua New Guinea is affected by the country's extremely mountainous topography and its dense jungle environments. These geographic characteristics make it difficult for the people of Papua New Guinea to collect and distribute water across the country. Sadly, this means that although Papua New Guinea has strong water availability, it has poor water accessibility. This, in turn, negatively influences Papua New Guinea's economic capability, making it one of the poorest countries in the world.

FIGURE 9 Water availability breakdown

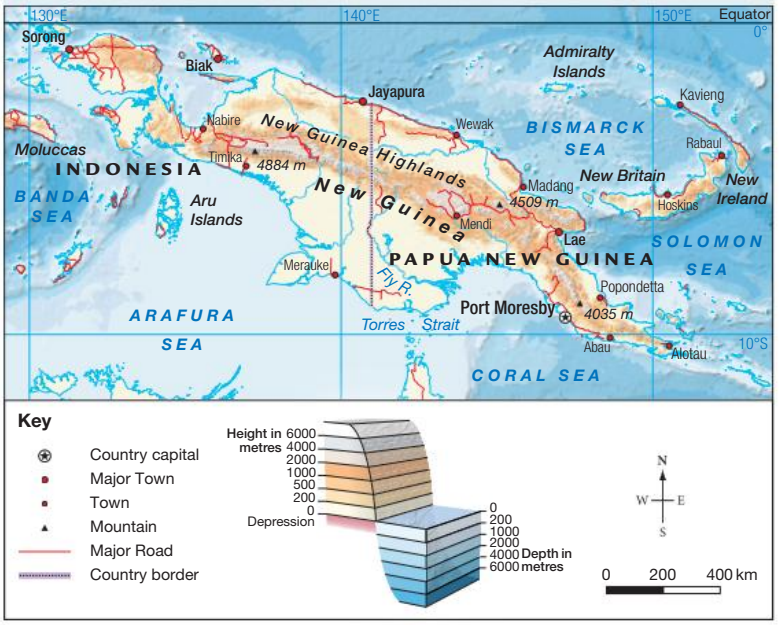


9.6.7 Water scarcity

The last aspect of water variability is scarcity. Water scarcity is defined as deficiency or lack of safe water supply. This does not simply refer to locations that lack sufficient rainfall or flow of water (often referred to as physical water scarcity).

Water scarcity can affect any location, particularly those which have rapidly increasing populations. In these locations, the demand for water is far greater than supply.

FIGURE 10 This topographic map highlights how difficult it is for the people of Papua New Guinea to collect and distribute water.



Source: Based on data from Natural Earth and ETOPO1: doi:10.7289/V5C8276M. Map drawn by Spatial Vision.

This is a particular problem in countries that have both high populations *and* low water availability or accessibility — such as those located in in Sub-Saharan Africa.

Countries with low economic capacity are also commonly affected by water scarcity. Often, the solutions to water scarcity (digging wells, effective water catchment, and water distribution and treatment infrastructure) require significant financial investment.

Unfortunately, these are investments that vulnerable countries can simply not afford to make.

9.6 SkillBuilder activity **CONCLUDING AND DECISION-MAKING**

There are a number of websites that have information on water footprints, water as a resource and water used in food production. Complete your own research to locate some reliable sources of information for each of these terms. Complete the questions that follow.

1. **Describe** the relationship between water-stressed countries and food production.
2. **Provide** an example where the water footprint figure is in conflict with the opinion of farmers.
3. **Propose** individual action to reduce your personal water footprint.

9.6 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4, 5	7, 9, 10, 11	6, 8, 12

REMEMBER AND UNDERSTAND

1. Select the best response.
   a. Identify what most of the world's water is used for.
      A. Agriculture
      B. Domestic
      C. Industry
      D. Municipal
   b. Which regions of the world use the majority of their water in agriculture? Select all that apply.
      A. South America
      B. Europe
      C. Africa
      D. North America
      E. Australia
      F. South-East Asia
   c. Which regions use water mainly for industrial purposes? Select all that apply.
      A. Europe
      B. Africa
      C. North America
      D. Australia
      E. South-East Asia
2. Examine **TABLE 1**. Select the correct options to complete the following sentences. The crop/s that use the most water are *vegetables / cotton and rice / grapes / grain and pasture*. The crop/s that use the least water are *vegetables / cotton and rice / grapes / grain and pasture*.
3. Match each of the terms to the statement that best describes it by placing the corresponding letter in the answer column.
4. **State** the key difference between water availability and accessibility.
5. El Niño is the result of the interconnection that occurs between Australia and South America. True or False?

ANALYSE AND APPLY

6. Refer to **FIGURE 3**. **Analyse** how each region uses water.
7. Study **FIGURE 2.**
   a. **Determine** which of the following statements are true and which are false. If the statements are false, rewrite the statements with the main uses of water in the correct order of use.
      A. Australia uses most water for agriculture, then industry, and then domestic/municipal.
      B. Countries in North Africa use most water for agriculture, then domestic/municipal, and then industry.
      C. Belarus uses most water for industry, then agriculture, and then domestic/municipal.
      D. Indonesia uses most water for industry, then agriculture, and then domestic/municipal.
   b. If any statements are false, rewrite the statements with the main uses of water in the correct order of use.
8. Study **TABLE 1**.
   Discuss the differing levels of water needed to produce a vegetarian diet and a meat based diet.

EVALUATE AND COMMUNICATE

9. Refer to **FIGURE 8** and **describe** the areas that become (a) wetter, (b) drier and (c) warmer during an El Nino event.
10. Papua New Guinea receives over 3000 millimetres of rain per year, yet still has poor water accessibility. **Discuss** how this is possible.
11. Consider the map in **FIGURE 10**. **Describe** the interconnection between Papua New Guinea's topography and its water accessibility.
12. What do you think is more important — water availability or water accessibility? **Justify** your response.

Answers and sample responses for this topic are available online.

LESSON 9.7 How do we overcome water scarcity?

LEARNING INTENTION

By the end of this lesson you should be able to:
- **describe** the global distribution of water scarcity
- **explain** the interconnection between water quality, sanitation and health
- **evaluate** different strategies to overcome water scarcity

Tune in

One in three people around the world do not have access to safe drinking water.

3.6 billion people do not have access to a safe toilet.

1. **Consider the ways water is used in your household.**
   - **Predict which appliance in your home uses the most water for one cycle of use: the washing machine, toilet or dishwasher?**
   - **Predict how much water is used in an average shower and in an average handwash.**
   - **Brainstorm the names of three infectious diseases linked to a lack of safe water.**
2. **Describe one social impact on people that lack of access to a safe toilet could have.**

FIGURE 1 A typical household uses water in many ways.

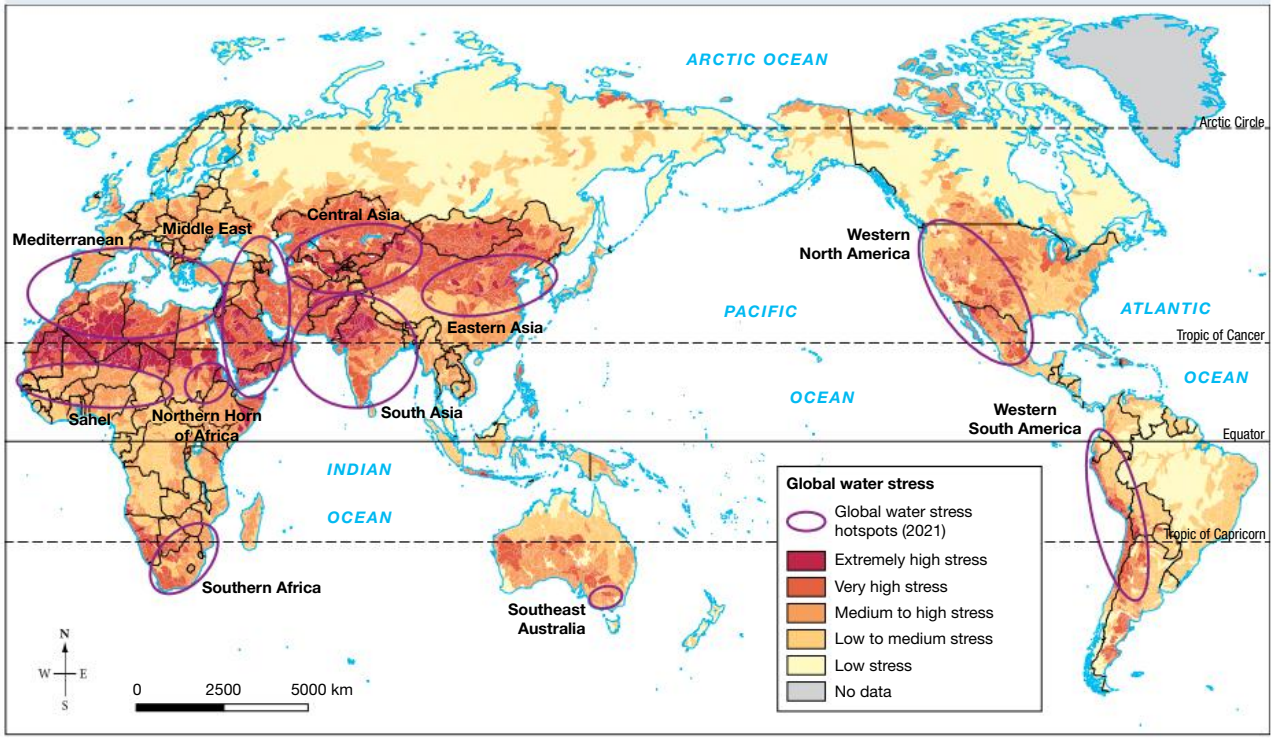
9.7.1 What is the human right to water?

Everyone has the right to water, which is very important for survival. We can go three weeks without food but only two or three days without water. Each person needs about 1000 litres of drinking water per year, 100 cubic metres for other needs and 1000 cubic metres to grow their food. **Water stress** happens when there isn't enough water for everyone. If a country has less than 1000 cubic metres of fresh water per person, it's under water stress. **Water scarcity** means not having enough water or having trouble getting it.

9.7.2 Access to water

FIGURE 2 highlights that in central Asia and northern Africa, water is very scarce. In 2024, the United Nations estimated that by 2050, up to 5 billion people (more than half the world's population) might not have enough water. Rural areas are most at risk, resulting in many people moving to urban areas. These people are referred to as water refugees.

FIGURE 2 Distribution of global water stress



Source: World Meteorological Organization, 2021 State of Climate Services — Water (Geneva, Switzerland: World Meteorological Organization, 2021), pg. 8. Map drawn by Spatial Vision.

SkillBuilder discussion

Concluding and decision-making, Communicating

1. Study **FIGURE 2**. Which regions show the highest levels of water stress on the map?
2. What factors contribute to water stress in coastal areas?
3. How does water stress vary between developed and developing regions on the map?

9.7.3 How does dirty water affect health?

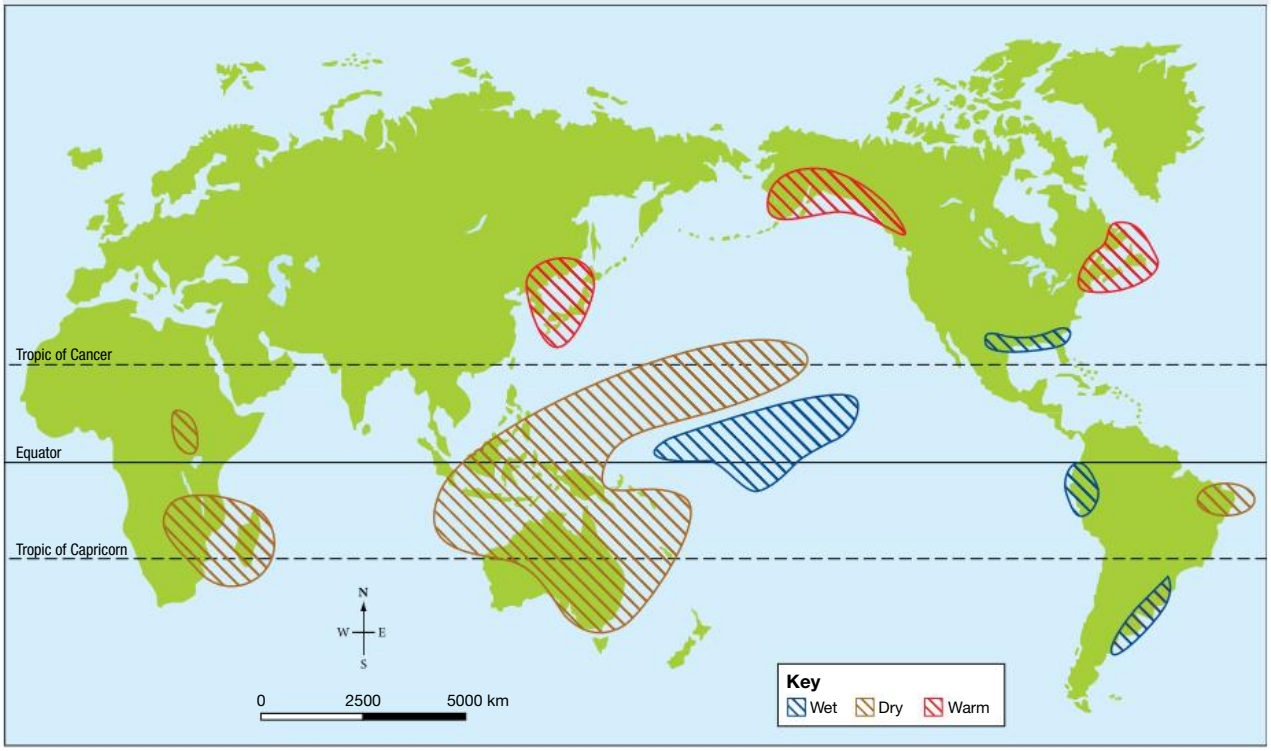
The right to water is important for other things like food and health. In 2024 the United Nations estimated that about 2.2 billion people didn't have clean water, and over 2.3 billion didn't have safe toilets. In some places, most sewage goes straight into rivers.

9.7.4 Polluted rivers

Water quality affects health. When it rains, rubbish and chemicals can wash into rivers. **FIGURE 3** shows that things like poop, food waste, pesticides and metals can pollute rivers. Some places are better at stopping pollution from getting into waterways than others.

FIGURE 3 Sources of water pollution in a drainage basin

FIGURE 4 Areas affected by El Niño



Source: MAPgraphics Pty Ltd, Brisbane

CASE STUDY

Managing water in the Nile Basin, North Africa

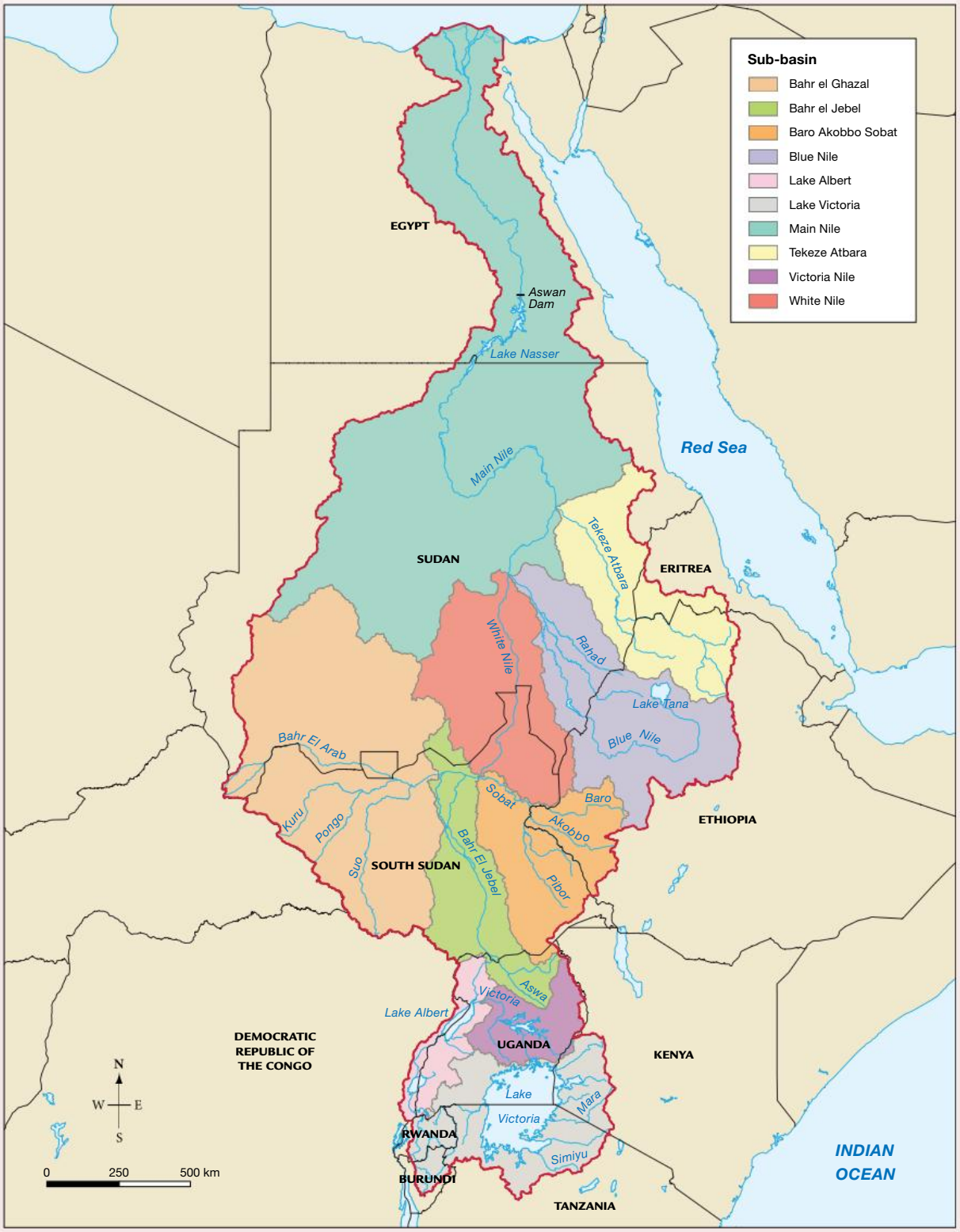
The Nile River is the longest river in the world at 6695 km long. It flows northward through the tropics and the highlands of eastern Africa and drains into the Mediterranean Sea in northern Africa. **FIGURE 6** shows how the Nile River flows through medium to extremely high water-stressed places.

The Nile Basin (the Nile River and all its tributaries) covers an area of about 3.1 million square kilometres (almost the same area as the Northern Territory). The basin covers 10 per cent of the African continent.

Ten countries share the Nile Basin: Burundi, Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Uganda and Tanzania. Over 330 million people live there, and 160 million use the Nile's water. Most people in the Nile Basin work in farming. The Nile's flow helps generate power, especially in Ethiopia.

FIGURE 5 Farming in the lower Nile relies heavily on river water.

FIGURE 6 The sub-basins and countries sharing the water and land of the Nile River Basin



Source: Nile Basin Initiative

Nile Basin Sustainability Framework

Since the 1990s, countries have made agreements to share the Nile's water. In 2011, the Nile Basin Sustainability Framework (NBSF) was approved to manage water resources. Advanced technology means the up-to-date water flow and rainfall data are available, enabling cooperation in sustainable water management.

FIGURE 7 As the Nile is a shared resource, careful management is required.

9.7.5 Sustainable Development Goals

The United Nations made 17 Sustainable Development Goals (SDGs) to help the world share water and stay healthy. These goals aim to end poverty, protect the planet and ensure peace by 2030. **FIGURE 8** shows a summary of the goals.

FIGURE 8 The UN Sustainable Development Goals

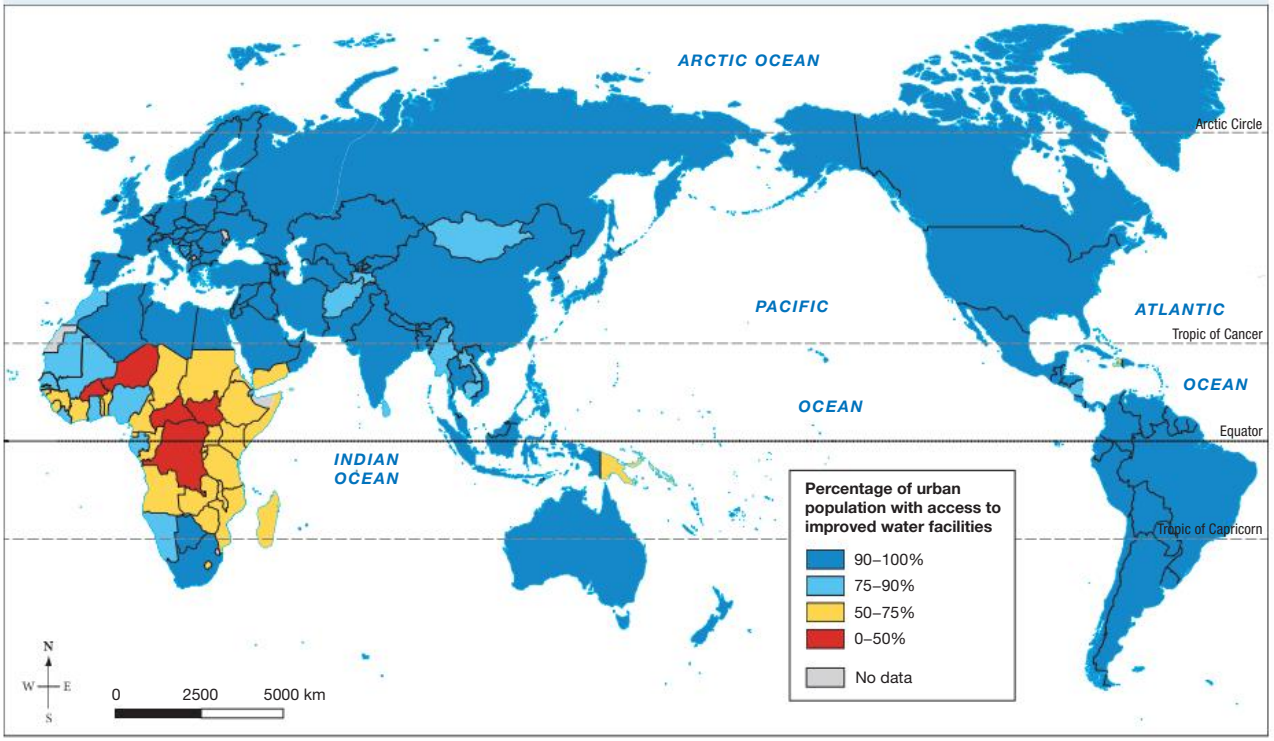
Goal 6 of the SDGs aims to give everyone clean water and sanitation.

From 1990 to 2015, access to clean water rose from 76 to 91 per cent. In 2024 almost 73 per cent of the global population had access to clean water, on demand, in their homes.

From 1990 to 2015 access to basic sanitation services rose from 49 to 68 per cent. In 2024 approximately 73 per cent of people had access to at least basic sanitation services.

FIGURES 9 and **10** show this progress.

FIGURE 9 Percentage of global population using safely managed drinking water 2022



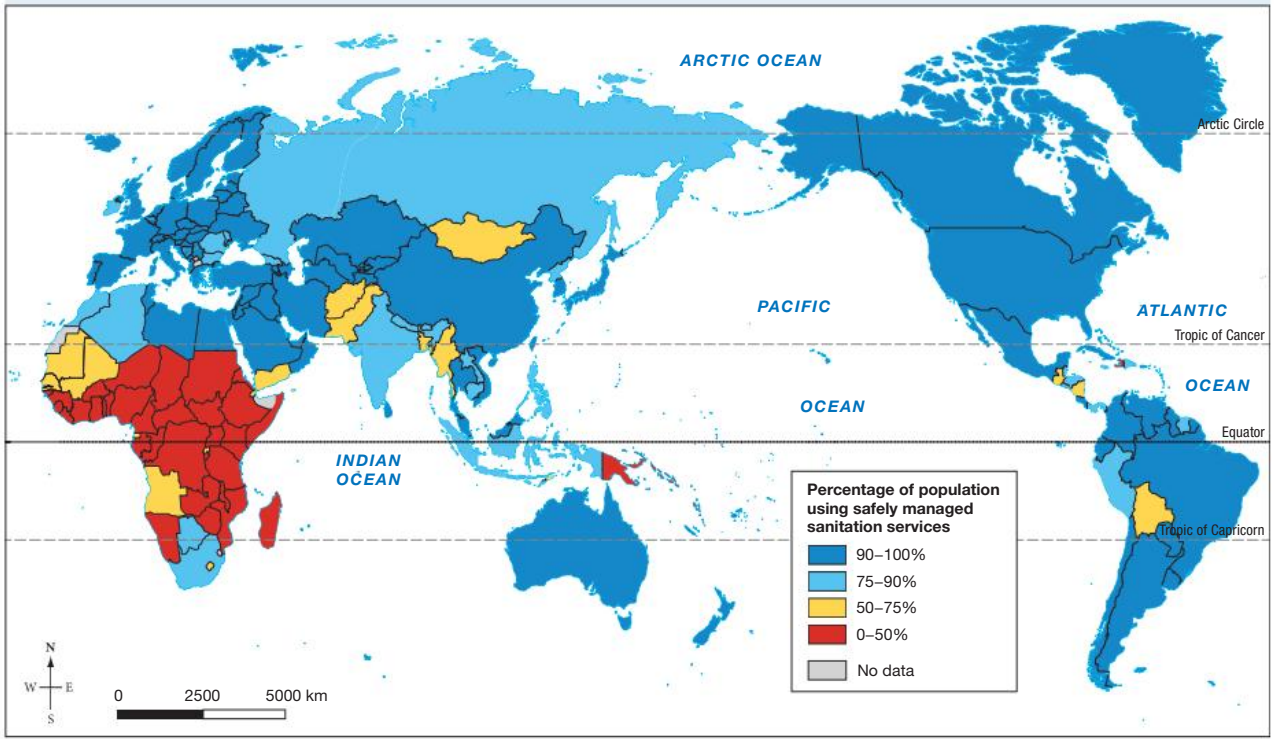
Source: © United Nations. Progress on Drinking Water (SDG target 6.1). Retrieved from https://sdg6data.org:8443/en/indicator/6.1.1. Map drawn by Spatial Vision.

SkillBuilder discussion

Concluding and decision-making, Communicating

1. Which continent shows the maximum variation in access to improved water facilities among its countries?
2. Which continents have countries with no available data regarding access to improved water facilities?
3. What is the status of Australia in access to improved water facilities?

FIGURE 10 Percentage of global population using safely managed sanitation services 2022



Source: © United Nations. Progress on Sanitation (SDG target 6.2). Retrieved from https://sdg6data.org:8443/en/indicator/6.2.1a. Map drawn by Spatial Vision.

SkillBuilder discussion

Communicating

1. Refer to **FIGURE 10**. Which continent shows the maximum variation in access to improved sanitation facilities among its countries?
2. Which continents have countries with no available data regarding access to improved sanitation facilities?
3. What is the status of Australia in access to improved sanitation facilities?

Goal 6

Some of the targets (by 2030) for Goal 6 are to:

- provide universal and equitable access to safe and affordable drinking water for all
- ensure everyone has safe sanitation, especially women, girls and vulnerable people
- end open defecation (in open areas, rather than a toilet)
- improve water quality by cutting pollution, reducing harmful waste, and increasing recycling and safe water reuse globally
- use water more efficiently and ensure everyone has enough freshwater to reduce water scarcity
- protect and restore water areas like mountains, forests and rivers.

FIGURE 11 Goal 6 of the Sustainable Development Goals

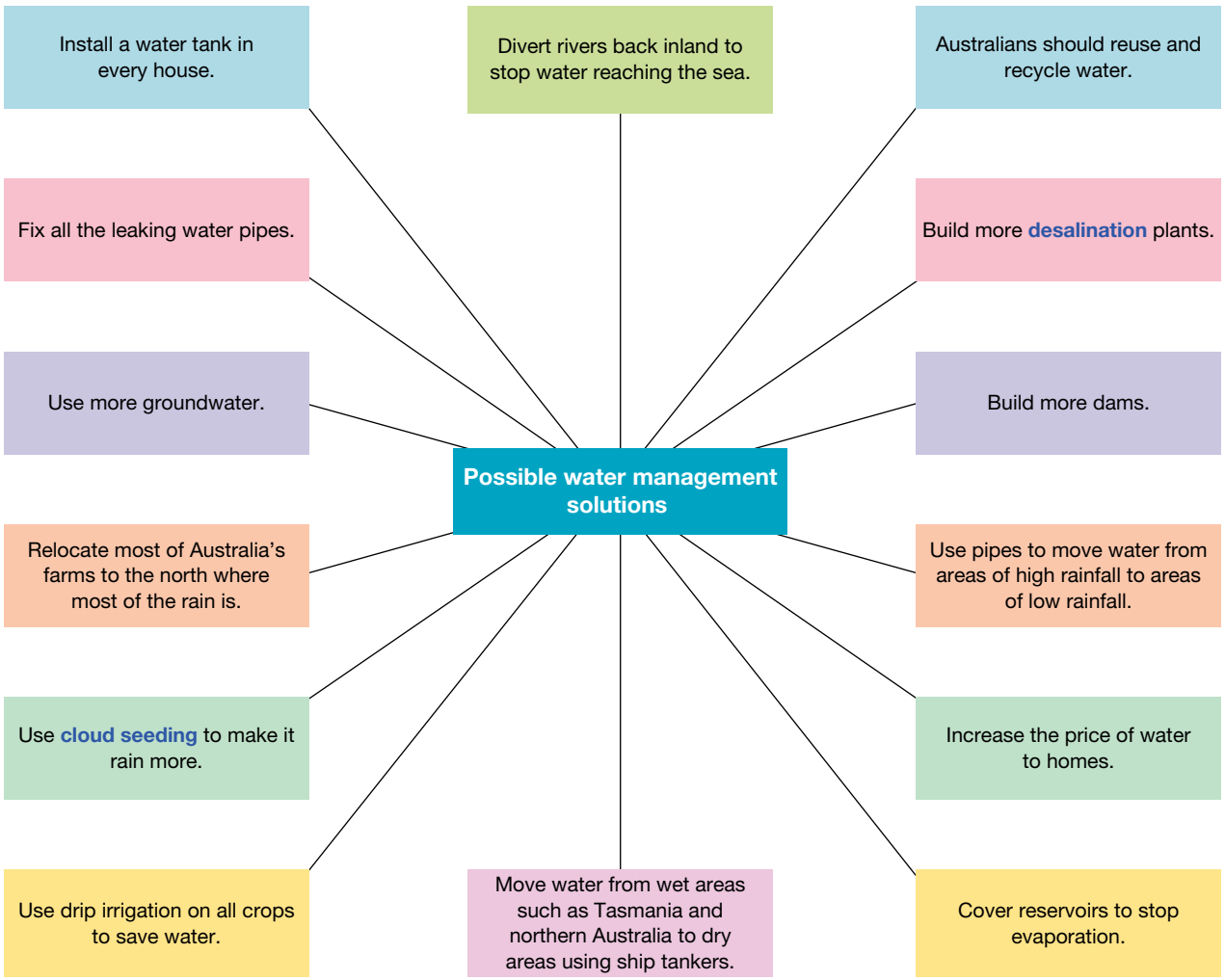
Source: The content of this publication has not been approved by the United Nations and does not reflect the views of the United Nations or its officials or Member States. https://www.un.org/sustainabledevelopment/

9.7.6 Managing Australia's water supply

We can't make more water, but we can manage it better. With more people and climate change, water needs careful management. It's often easier to manage water on a local level.

FIGURE 12 outlines some of the ways we can develop more efficient uses for Australia's valuable water resources.

FIGURE 12 Possible water management solutions



Agriculture uses the most water in Australia. To save water, we can improve irrigation systems, which sometimes waste up to 70 per cent of water. We can also recycle water, use desalinated water and collect stormwater.

9.7.7 Managing water across borders

Around the world, about 260 rivers are shared by two or more countries, and 13 are shared by five or more. When one country uses a **catchment**, it can affect others, causing problems. Conflicts have happened in places like the Nile Basin in North Africa, the Mekong River in Asia, the Jordan River Basin in the Middle East and the Silala River in South America. **FIGURE 13** shows construction of the Grand Ethiopian Renaissance Dam on the Blue Nile. This has caused a dispute with the downstream countries

of Egypt and Sudan. In Australia, states have also argued over the Murray–Darling Basin. What happens upstream in a catchment can affect water quality and supply downstream.

FIGURE 13 The construction in Ethiopia of Africa's biggest dam has caused regional conflict.

Some countries make agreements to share water from rivers, like the Rhine, Danube, Ganges and Brahmaputra.

9.7.8 How can water-borne diseases be reduced?

Just having access to water doesn't mean it's clean. Dirty water can make people sick and cause many illnesses. Each year, around 315 000 young children die from diseases like cholera, typhoid and dysentery, which spread through dirty water.

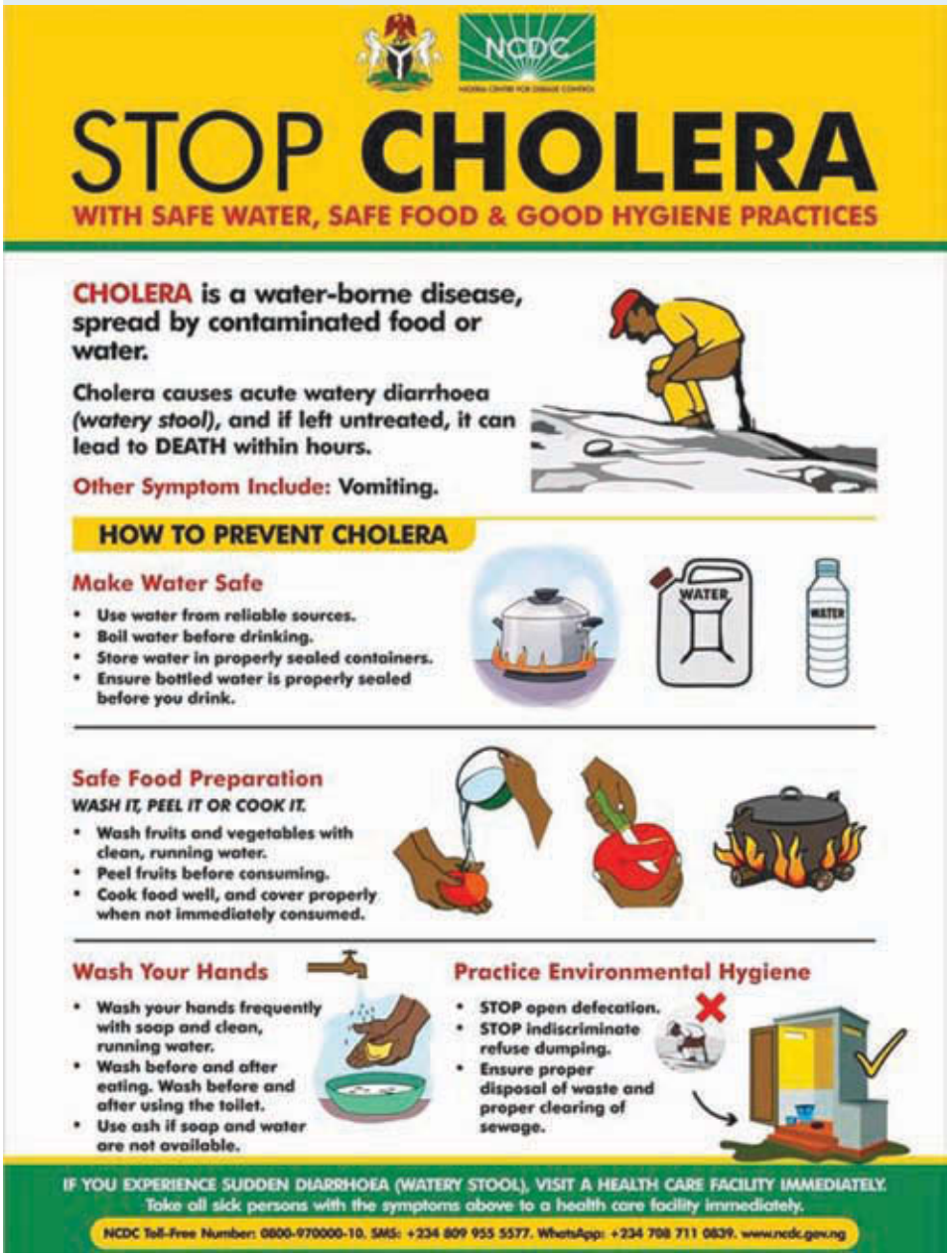
An additional one million people die from malaria, a disease transmitted by mosquitoes.

People clean water in different ways, like boiling it, using cloths or adding bleach. Some people don't clean their water at all. Groups like Water.org and The Water Project work to make clean water available and teach people how to stay healthy.

FIGURE 14 Collecting water that is unsafe to drink

FIGURE 15 The Citarum River in Indonesia is one of the most polluted rivers in the world.

FIGURE 16 A poster educating people about cholera and the measures to prevent it



9.7 SkillBuilder activity GEOGRAPHICAL INQUIRY, COMMUNICATING

Geographers study spatial patterns. Find a map of population density and compare it with **FIGURE 10**. Look at North Africa and West Asia for differences.

1. **Name** three coastal and two landlocked countries in these regions.
2. Conduct research to find out how many countries in these regions suffer deaths caused by poor sanitation and dirty water.
3. **Name** the continents and regions that have the fewest deaths.
4. Why do you think this spatial pattern exists? (Hint: look at maps in your atlas that show wealth.)
5. Choose an aid agency from this topic and learn how they help with sanitation and clean water. How does their work improve people's living conditions?
6. Plan a fun video to show how to improve access to clean water and sanitation. Use videos, editing tools and internet research to help with your planning.

9.7 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 4, 5	2, 6, 7, 10	3, 8, 9, 11

REMEMBER AND UNDERSTAND

1. Select the best answer:
   a. How many people in the world do not have access to sanitation?
      A. 660 million
      B. 90 per cent
      C. 2.3 billion
      D. 315 000
   b. What is meant by the term 'water refugee'?
      A. People who live on islands
      B. People who move because their homes were flooded
      C. People who take a boat into their homes
      D. People who move to another location because there is a lack of water where they live
2. **Define** 'water scarcity' and 'water stress'.
3. **Identify** two ways the government attempts to ensure a reliable water supply.
4. **Select** the correct options to complete the sentence. Desalination is a process that removes *pollutants / salt / clean water from sea water / river water / greywater.*
5. **Determine** if the following are true or false.
   a. Goal 6 of the Sustainable Development Goals (SDGs) focuses on clean water and sanitation.
   b. The 17 SDGs are only aimed at developing countries.
   c. Dirty water and lack of proper hygiene kill around 200 000 children around the world every year.
6. **Explain** why it is difficult to manage water when the water supply crosses country or state borders.

ANALYSE AND APPLY

7. **Explain** what community-led sanitation projects aim to do.
8. If water sanitation is a human right, **explain** why some people are unable to access fresh water.
9. Read the case study on the Nile Basin **FIGURE 6**.
   a. **Identify** the direction in which the Nile Rivers flows towards.
   b. **Outline** the potential water use conflicts along the Nile River as it makes its way to the Mediterranean Sea.

EVALUATE AND COMMUNICATE

10. Answer the following questions:
    a. From the list of strategies outlined in **FIGURE 12**, **identify** which would be the most challenging to adopt and why. Which strategy would be the easiest to adopt and why?
    b. Indicate whether each of the following factors are advantages or disadvantages of using recycled water.
       i. Reduces stress on drinking water
       ii. Creates jobs
       iii. Perception of a higher risk of contamination
       iv. Good for farming through increased nutrients for the soil
       v. Perception of a potential risk to health
11. Answer the following questions about the SDGs.
    a. **Explain** how the SDGs aim to improve accessibility to clean water and sanitation.
    b. Elaborate on two ways Goal 6 of the SDGs aim to improve global water stress and water security.

Answers and sample responses for this topic are available online.

LESSON 9.8 What are the causes and impacts of hydrometeorological hazards?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** the causes of a hydrometeorological hazard
- **explain** the impacts of the hazard

Tune in

Both of the images in **FIGURE 1** show volcanic eruptions. One image shows a hazard, and one image shows a disaster.

FIGURE 1 Hazard or disaster?

Identify the hazard and the disaster. Justify your answer.

9.8.1 How does weather change?

The Earth is surrounded by gases called the atmosphere. It protects us from the sun's heat and the chill of space, creating the conditions that support life. The atmosphere has five layers (see **FIGURE 2**). The troposphere is the layer from ground level up to 16 km. All our weather happens in this layer due to constant changes in the air.

Extreme weather events, like droughts, floods, cyclones, snow and heatwaves, all start in the troposphere. This layer has most of the water vapour, linking it to precipitation (rain, snow, hail).

Weather comes from three factors: temperature, air movement and water in the air. The sun affects them all.

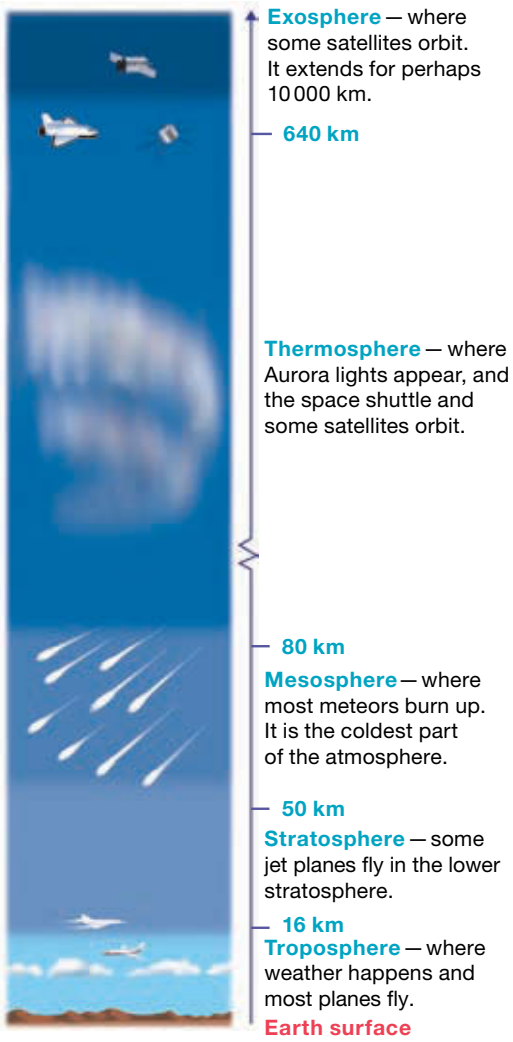
First, the sun heats the air and Earth's surface, which heats the air more. How hot it gets depends on the season and cloud cover.

Second, the sun makes air move. Warm air rises, and cooler air moves in.

Third, the sun creates moisture in the air by causing water to evaporate, forming clouds, which can become rain, snow, or hail.

These three factors can cause extreme weather, such as heatwaves, cyclones or floods.

FIGURE 2 Structure of the Earth's atmosphere (not to scale)

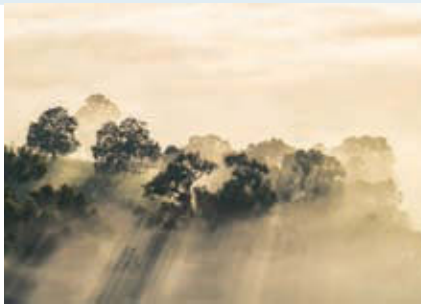


SkillBuilder discussion

Concluding and decision-making

1. Which layer of the atmosphere is where most weather events happen?
2. In which layers will you see the Aurora lights and meteors burning up?
3. At what layers of the atmosphere will you find satellites orbiting the Earth and passenger planes?

FIGURE 3 Australia has diverse weather, which greatly impacts the way we live.

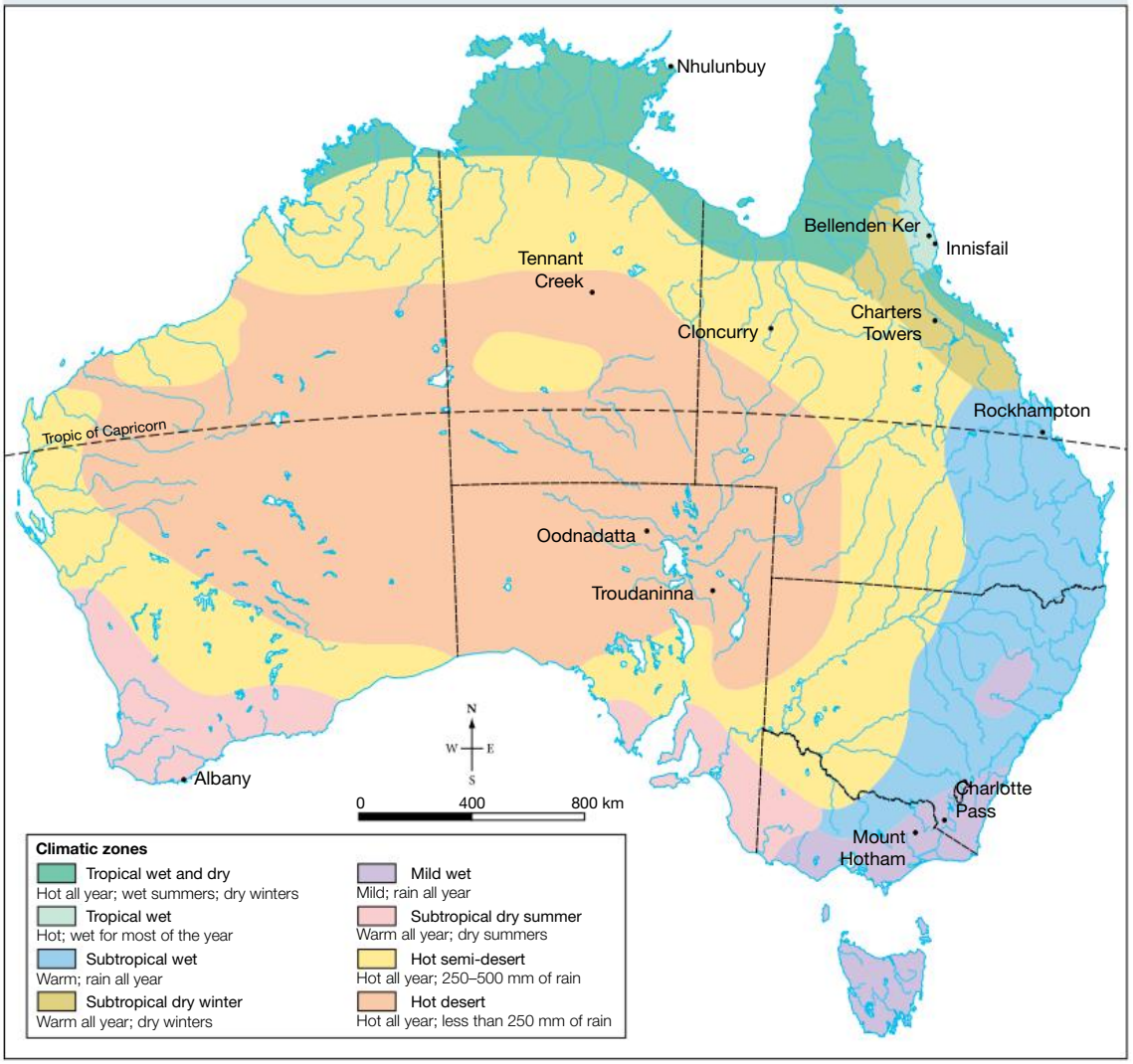


9.8.2 The difference between weather and climate

Weather is the daily change in the atmosphere at a specific location. Extreme weather events are unexpected, rare or don't follow the usual pattern.

Climate is the average weather over a long period. Regions with similar weather belong to the same climatic zone. Australia's size results in varied climates across its regions.

FIGURE 4 Climatic zones of Australia



Source: MAPgraphics Pty Ltd, Brisbane

SkillBuilder discussion

Communicating

1. How many different climatic zones are there in Australia?
2. Which parts of Australia have a tropical wet and dry climate?
3. Where do you find areas with a Mediterranean climate in Australia?

9.8.3 What are natural hazards?

Australia faces natural hazards like droughts, bushfires and floods, often as part of the weather cycle. However, human activities — burning fossil fuels, overgrazing, deforestation and altering waterways — can worsen them.

Natural hazards differ from natural disasters: hazards are events that could cause harm, while disasters occur when hazards seriously impact a community.

The four main types of natural hazards are:

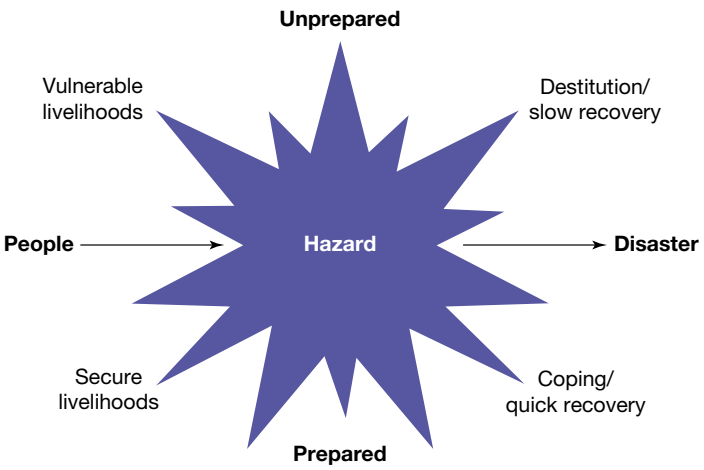
1. Atmospheric — includes events like cyclones, hailstorms, blizzards and bushfires.
2. Hydrological — includes flooding, wave action and glaciers.
3. Geological — includes earthquakes and volcanic eruptions.
4. Biological — includes disease epidemics and plagues.

SkillBuilder discussion

Concluding and decision-making

1. How can being unprepared turn a hazard into a disaster?
2. What happens to people with vulnerable livelihoods during a disaster?
3. How does being prepared help people recover quickly from a disaster?

FIGURE 5 The link between vulnerability and disaster



Some natural hazards involve both water and weather systems. These are called **hydrometeorological hazards**, and they include events such as floods, cyclones, and droughts. These hazards sit across the atmospheric and hydrological categories.

Australia's costliest natural disasters

The following are some of Australia's costliest natural disasters since 1970.

- *Floods, Queensland and New South Wales, 2022:* 22 deaths, estimated $10 billion cost.
- *Bushfire, 'Black Summer', Australia-wide, 2019–20:* 34 deaths, $103 billion cost.
- *Drought, Australia-wide but mainly in New South Wales, 2018:* $12 billion cost.
- *Floods, Queensland, New South Wales and Victoria, 2010–11:* 35 deaths, 20 000 homes destroyed in Brisbane alone, $5.6 billion cost.
- *Bushfire, 'Black Saturday', Victoria, 2009:* 173 deaths, 2029 houses lost, more than $4 billion cost.
- *Earthquake, Newcastle, 1989:* 13 deaths, 50 000 buildings damaged, more than $4 billion cost.
- *Cyclone, Cyclone Tracy, Darwin, 1974:* 65 deaths, 10 800 buildings destroyed, $4.18 billion cost.

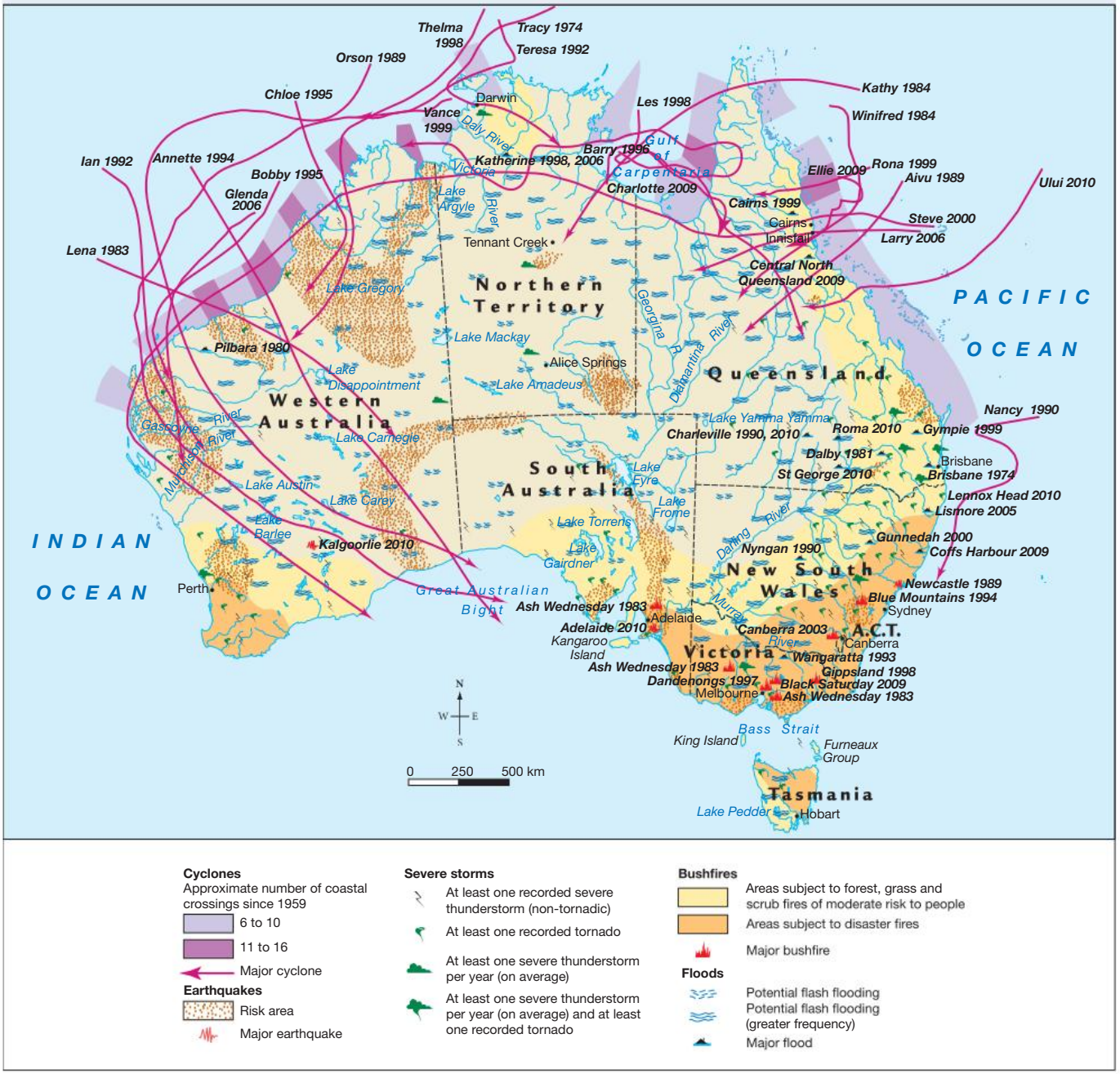
World's most deadly recent disasters

The following are the world's most deadliest disasters so far in the twenty-first century:

- *Earthquake, Haiti, 2010:* estimated range 100 000 to 316 000 deaths.
- *Tsunami, Indian Ocean, 2004:* approximately 230 000 deaths.
- *Cyclone, Cyclone Nargis, Myanmar, 2008:* at least 146 000 deaths.
- *Earthquake, Sichuan, China, 2008:* approximately 87 400 deaths.
- *Earthquake, Kashmir, Pakistan, 2005:* approximately 79 000 deaths.
- *Earthquake, Türkiye-Syria, 2023*, at least 59 488 deaths.

Risk is the possibility of harm from natural hazards. The risk is influenced by hazard type and people's vulnerability. Poorer people face higher risk due to limited recovery resources, while well-prepared regions recover faster.

FIGURE 6 Australia's natural hazards and disasters



Source: MAPgraphics Pty Ltd, Brisbane

SkillBuilder discussion

Concluding and decision-making

1. Look at **FIGURE 6**. Which parts of Australia are most affected by cyclones on the map?
2. How many major floods occurred in New South Wales from 1920 to 2010?
3. Which Australian areas are most at risk of severe storms?

9.8 SkillBuilder activity **GEOGRAPHICAL INQUIRY, COMMUNICATING**

Find a weather photo from a magazine, newspaper or online. Paste it in the centre of a page. Add labels showing how it affects the environment (e.g., puddles) and people (e.g., clothing).

9.8 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3	4, 5, 6, 9	7, 8, 10

REMEMBER AND UNDERSTAND

1. **Explain** the difference between weather and climate.
2. **Identify** the layer of the layer of the atmosphere where all Earth's weather happens.
   a. Troposphere
   b. Stratosphere
   c. Mesosphere
   d. Exosphere
3. **Explain** why the risk of experiencing a natural disaster depends on the geographic location of a community.
4. Complete the following sentence to explain the difference between risks and impacts in relation to natural disasters
   The _____ of a natural disaster is how likely it is that the event will occur. The _____ of a disaster is how the event affects people and the environment.
5. Match the following natural disasters to the correct details provided by placing the corresponding letter in the answer column.

ANALYSE AND APPLY

6. Look carefully at the photographs in **FIGURE 3**.
   a. **Describe** the weather event in each photograph.
   b. **Explain** how each weather event might affect people's lives.
7. Look carefully at the map of Australia's climate zones in **FIGURE 4**. Predict which two settlements or places might be at risk of flood. **Explain** why you chose each.
8. **Describe** the relationship between Australia's climate and the places where people choose to live.

EVALUATE AND COMMUNICATE

9. Refer to **FIGURE 6**.
   a. What types of natural disasters occur most often in Australia?
   b. **Describe** the location of Australia's cyclone hazard zone.
   c. Give one example of a place that has suffered a bushfire disaster.
   d. What type of hazards are places around Newcastle subject to?
   e. What would be the likely impact of a large earthquake occurring in the earthquake-risk area in the Northern Territory?
10. What role can Australia play in supporting countries in our region that experience frequent natural disasters?

Answers and sample responses for this topic are available online.

LESSON 9.9 What are the causes and impacts of droughts and flooding rain?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** the causes of droughts and/or floods
- **describe** the impact of droughts and/or floods on people and the environment
- **suggest** strategies for managing drought and / or flood events.

Tune in

FIGURE 1 shows Menindee Lakes, nine large, shallow lakes in southwest New South Wales on the Darling River.

FIGURE 1 Menindee Lakes, a series of lakes along the Darling River, shown during rainy and drought conditions.

Identify the similarities and differences between the two photos.

9.9.1 What is a drought?

Australia, the driest inhabited continent, lies in a high-pressure region with dry, stable air. Rainfall varies widely, influenced by the Southern Oscillation and El Niño (see lesson 9.6 extensive).

Drought conditions occur when high-pressure systems are more extensive than usual, creating rainfall shortages. Drought means below-average rainfall, when there is not enough water to meet our needs. Water needs differ so, for example, Sydney might experience drought with more rain than Alice Springs during above-average rainfall. Droughts vary in timing and duration, like the short 1982–83 drought and the longer Millennium Drought. Different weather systems make nationwide droughts rare. Drought can have a devastating impacts on both people and the environment. They can be relatively brief or last for years or decades.

9.9.2 Causes and impacts of the Tinderbox Drought

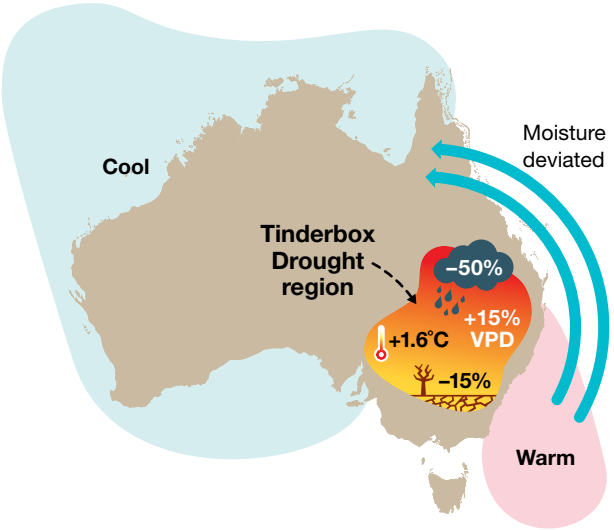
The Tinderbox Drought (2017–19) was a severe drought that affected southeastern Australia. It was characterised by extremely dry conditions, high temperatures and a dry atmosphere. This drought was driven by unusual air movement in the atmosphere, which disrupted normal weather patterns. As a result, moisture was diverted away from southeastern Australia to northern Australia. When combined

with climate change, these changes had a significant impact on water supplies, agriculture and the environment. Additionally, it set the stage for the catastrophic Black Summer bushfires that raged during 2019 and 2020.

FIGURE 2 Characteristics of the Tinderbox Drought 2017–19

VDP: Vapour Pressure Deficit shown on the map indicates that its capacity to hold moitsure is 15% greater when compared to the usual ampount of water it can hole; making the air drier that normal.

Compared to the average year:
- Temperatures are higher
- Rainfall is lower
- Vegetation cover has decreased



SkillBuilder discussion

Concluding and decision-making

1. Describe the area of Australia affected by the Tinderbox Drought.
2. Why is this region important?
3. Why do you think this drought is referred to as the Tinderbox Drought?

The region affected by the Tinderbox Drought includes the Murray–Darling Basin and is often referred to as Australia's 'food bowl'. It is a vital region for food production, producing around 40 per cent of our food and fibre, including:

- almost all of our rice
- nearly three-quarters of our grapes, stone and citrus fruits
- a third of our dairy production.

The Tinderbox Drought had a significant impact across the Murray–Darling Basin and other parts of Australia — Queensland, New South Wales, Victoria, South Australia and Tasmania, including King Island.

- *Water supplies:* Rural townships came close to running out of water. Level 2 water restrictions were implemented, restricting hose watering to specific times of the day, and with restrictions on car washing and filling pools. The concept of the two-minute shower was encouraged to conserve water.
- *Agriculture:* Yields for winter-rainfed crops such as wheat and barley declined by 43 to 73 per cent and summer irrigated rice production decreased by more than 90 per cent.
- *Environment:* Reduced stream flows, soil moisture and reduced groundwater recharge led to significant environmental stress. Wetlands habitats dried out, affecting the local ecology, dust storms remove topsoil and biodiversity declined.
- *Economy:* The drought affected the nation's food security and economic systems. Reduced crop yields and livestock losses reduced the income of farmers and lead to higher food prices. Reduced water in the environment impacted tourism, which was vital to some rural economies.

9.9.3 Managing the impact of drought

The Australian Research Council predicts that within the next 20 years Australia may experience a **megadrought**.

FIGURE 3 The Tugun Desalination Plant provides drinking water for the South-East Queensland region.

Option 1: Government action

Governments have implemented policies to support farmers and their communities prepare for and recover from the impacts of drought. Financial assistance and subsidies has been provided to enable farmers to introduce water-saving technologies such as drip irrigations systems and enclosing open irrigation channels.

Drought Resilience Mission, an initiative of the CSIRO, was launched in 2021 and brings together government, industry, communities and the research sector to develop solutions to reduce the impact of drought.

Desalination plants such as the one shown in **FIGURE 3** enable seawater to be turned into drinking water. The Tugan Plant can supply 230 megalitres per day. A similar plant in Victoria has the capacity to produce 150 000 megalitres per day (one-third of Melbourne's annual water needs). This technology is also used in places like Coober Pedy to treat bore water. Around 7500 desalination plants operate worldwide, providing safe drinking water without relying on rainfall.

FIGURE 4 Collecting roof rainwater can be used for flushing toilets, gardening or car washing. Using a shower timer or tap attachment in the bathroom also helps save water.

For instance, a digital information product helps farmers access climate data for their specific location. Using this data, farmers can make informed decisions about what to plant, the optimum time to plant and how to make efficient use of their water.

During droughts, governments may introduce water restrictions to reduce the pressure on water supplies from households and businesses. They might also offer rebates on water-saving devices, like water tanks, to help ease the demand on water resources.

Option 2: You and me — personal action

In 2022–23, Australian households used 1799 gigalitres of water, slightly less than the previous year. Given this high usage, homes are an ideal focus for water conservation.

FIGURE 5 Personal action can have a big impact if we all try to save water.

Ensure your next washing machine has lots of water-efficiency stars.

Ensure you completely fill your dishwasher before using it.

Don't keep the tap running when washing fruit and vegetables. Wash them in a bowl instead.

Install a dual-flush toilet.

Dispose of tissues in the bin — don't flush them down the toilet.

Have short showers. Try for three minutes!

Don't run the tap when brushing your teeth.

Use a water-saving showerhead and keep a bucket in the shower for excess water to use on the garden.

Cover soil in mulch and water the garden in the early morning or evening to reduce evaporation.

SkillBuilder discussion

Communicating

1. How can using a dual-flush toilet help save water?
2. Why is it better to wash fruit and vegetables in a bowl instead of under a running tap?
3. How does covering soil with mulch help in using water wisely when gardening?

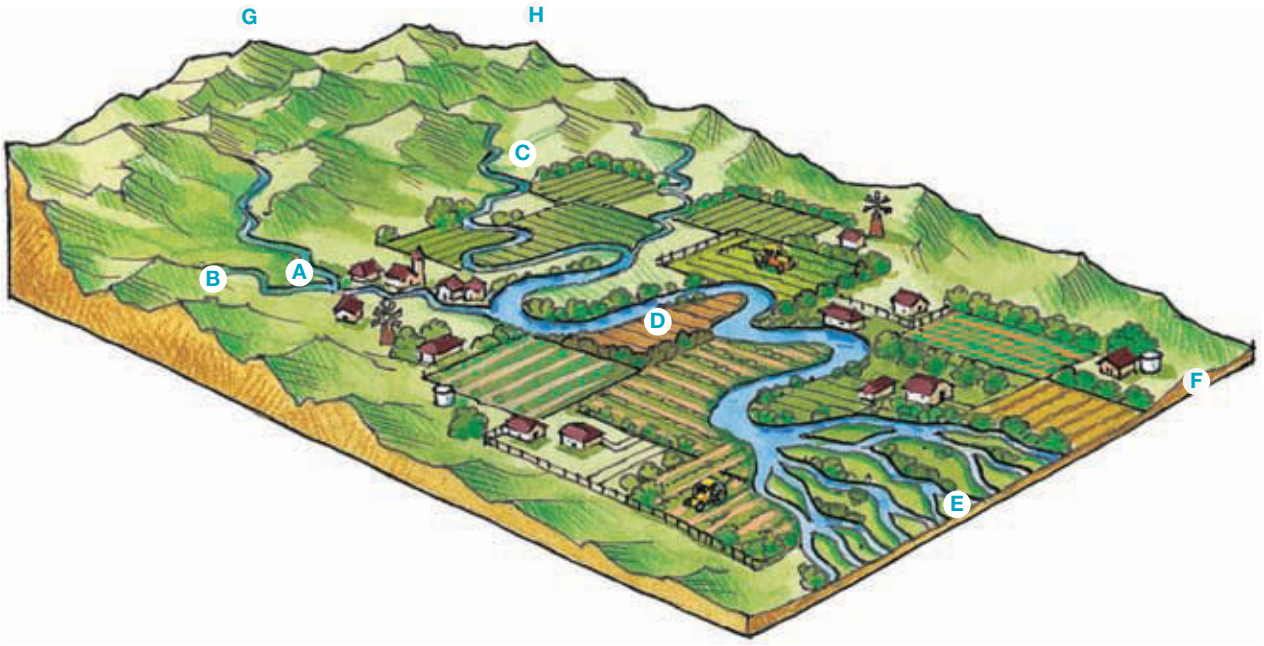
9.9.4 Why does it flood?

Floods are natural events that can cause serious damage to the environment and communities. The threat of floods is increased as human settlements are often built on floodplains.

- *Floodplains:*
  - A floodplain is a flat area next to a river that gets covered by water during floods (see **FIGURE 6**).
  - They form when rivers slow down in flat areas, depositing mud and soil called **alluvium**. This builds up the floodplain and other landforms like deltas.
- *Why we live on floodplains:*
  - Floodplains (**FIGURE 6**) have fertile soil, making them ideal for farming.
  - In Australia, many of our richest farms and towns are on floodplains near rivers, making them prone to flooding.
- *Vegetation and flooding:*
  - Clearing vegetation in catchment areas (areas that collect rainfall) increases the risk of floods.
  - Native plants help slow down water run-off, reducing the chance of flooding.

Understanding floodplains helps us manage risks and protect communities.

FIGURE 6 Flat, fertile floodplains are often chosen for farming and settlements due to their rich soil and easy access to water.



A Tributary stream
B Waterfall
C Meander
D Floodplain
E Delta
F Deposited sediment
G Mountains
H Watershed

9.9.5 Types of floods

Although Australia is the driest inhabited continent, it still experiences heavy rainfall and floods. These floods can cause:

- damage to property
- loss of livestock
- loss of human life.

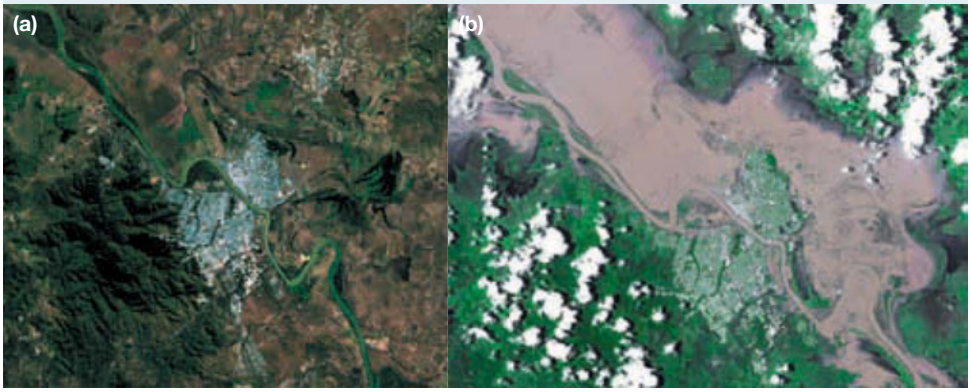
In some cases, entire parts of towns have been destroyed. For example, in 1852, one-third of the town of Gundagai was washed away.

SkillBuilder discussion

Geographical inquiry

1. How does the image show Rockhampton before and after the flood?
2. What changes are visible in the river and surrounding areas after the flood?
3. How might the flood have impacted Rockhampton's people and buildings?

FIGURE 7 How did the floods affect Rockhampton? Rockhampton (a) before the 2011 flood and (b) after the flood



There are three main types of floods.

1. *Slow-onset floods*
   - Happen along inland river floodplains and can last for weeks or months.
   - Are caused by heavy rain and run-off upstream.
   - It can take days or weeks to affect farms and towns downstream.
2. *Rapid-onset floods*
   - Occur in mountain headwaters of larger inland rivers or rivers flowing to the coast.
   - The water flows faster due to steep rivers, leaving less time to prepare.
   - Are often more damaging.
3. *Flash floods*
   - Are caused by short but heavy rainfall, such as during a severe thunderstorm.
   - They are the most dangerous, with high risks to property and life because they happen quickly.
   - Are a major problem in cities with poor drainage systems.

9.9.6 The Queensland floods, 2011 and 2022

In both 2011 and 2022, Brisbane experienced catastrophic flooding. Table 1 provides a summary of the causes of these events and Table 2 compares their impact.

In 2011, the operators of the Wivenhoe Dam were criticised for their management of the dam allowing its water level to rise to near capacity before releasing water. Earlier release may have reduced the impact of flooding as the release would have been controlled over a longer period of time. However, as the dam was close to capacity, with more rain on the way, larger volumes had to be released at once, during the peak of the flood.

TABLE 1 Causes of the 2011 and 2022 floods

	Causes of the 2011 floods	Causes of the 2022 floods
Unseasonal rain	Heavy rainfall spring rains linked to the monsoon season An unusually strong La Niña event that increased rainfall caused rivers to burst their banks Tropical Cyclone Tasha in December 2010 fed more water into already overflowing river systems	A low-pressure system over Queensland's southern coast drew moisture from the Coral Sea creating intense rainfall As the system moved south it turned into an East Coast Low, leading to more rain
Wivenhoe Dam — Brisbane's major water source	Prior to the heavy rainfall, Wivenhoe was sitting at just 40% capacity Heavy rainfall and run-off exceeded the dam's capacity — the equivalent of 191% of its capacity The spillway had to be opened to prevent the dam overflowing, adding to the flooding in Brisbane	Prior to the heavy rainfall, Wivenhoe was sitting at 58.7% capacity Heavy rainfall over three days would have raised the dam's water level to 183.9% of its capacity The spillway had to be opened to prevent the dam overflowing, adding to the flooding in Brisbane

TABLE 2 Comparing Brisbane's floods 2011 and 2022

	2011	2022
Duration	November 2010 – January 2011	February–May 2022
Rainfall	Unusually heavy — up to 600 mm in a month in some places	Record-breaking rainfall in Brisbane – around 800 mm in three days
Deaths	33	13
Damage bill	Estimated $2.38 billion	$7.7 billion
Homes affected	28 000 homes needed rebuilding, and 3572 businesses flooded	More than 23 000 homes and businesses
Infrastructure damage	19 000 km of roads damaged 28% of Queensland rail network affected	10 000 km of roads damaged 28% of Queensland rail network affected
Economic impact	Estimated $6 billion reduction in the economy	Estimated $1.25 billion reduction in the economy
Environmental impact	Wildlife displaced or died due to habitat loss and flooding Contamination of waterways reduced water quality affecting aquatic ecosystems Severe soil erosions impacted natural vegetation and agriculture Destruction of vegetations affected local ecosystems and biodiversity	

SkillBuilder discussion

Geographical inquiry, Concluding and decision-making

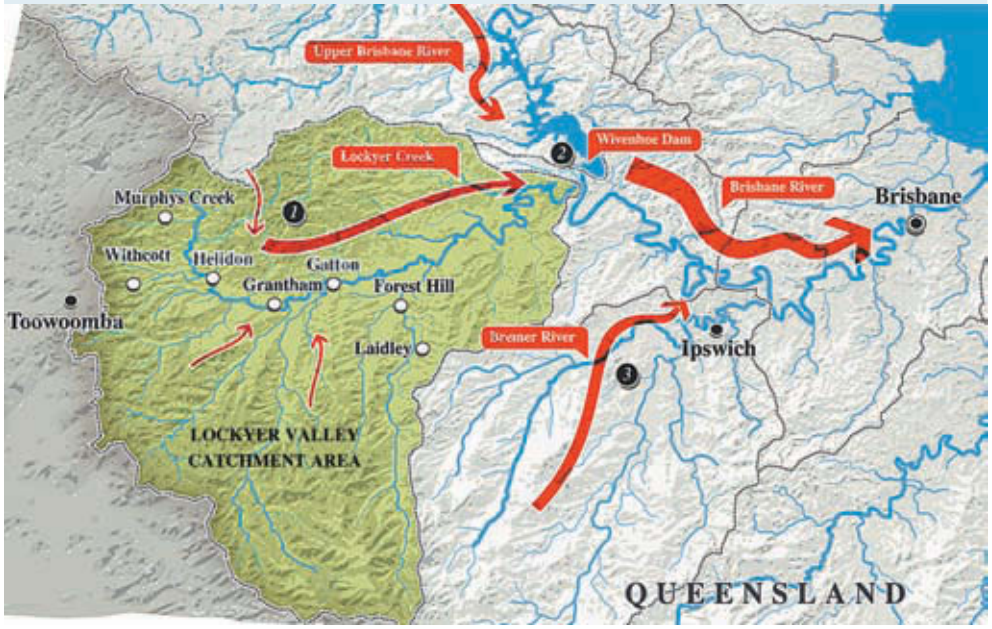
Floods are becoming more common worldwide, causing greater damage to people and the environment. Write one argument supporting and one argument challenging this viewpoint: **People should not be allowed to live in flood-prone areas**.

Assistance and recovery

Assistance and recovery efforts included the following.

- Disaster recovery payments and disaster recovery allowances were available to flood victims.
- Disaster relief appeals and organisations including the Australian Red Cross, Salvation Army and GIVIT provided aid and assistance.
- Community recovery hubs were established to provide additional support services to flood victims and their families, such as emergency accommodation and mental health support.
- The Australian Defence Force assisted with cleanup.
- The 'Mud Army', with 55 000 registered and thousands of unregistered volunteers, aided the cleanup.

FIGURE 8 Anatomy of a flood



SkillBuilder discussion

Geographical inquiry

1. Which rivers contributed to the flooding shown in the map?
2. How did the Wivenhoe Dam affect the flow of water during the flood?
3. What areas within the Lockyer Valley Catchment Area were most impacted by the flood?

Town heights above sea level (in metres):

- Toowoomba: 700 m
- Murphys Creek: 704 m
- Withcott: 262 m
- Helidon: 143 m
- Grantham: 110 m
- Gatton: 111 m
- Forest Hill: 95 m
- Laidley: 135 m
- Ipswich: 54.8 m
- Brisbane: 28.4 m

1. Floodwaters from Lockyer Creek, flowing into the Brisbane River, came from over 200 mm of rain in the Lockyer Valley.
2. Over 490 000 million litres were released from Wivenhoe Dam into the Brisbane River.
3. Floodwaters from the Bremer River, fed by the Lockyer Valley, caused flooding after bursting its banks in Ipswich before joining the Brisbane River.

9.9.7 Flood management

SkillBuilder discussion

Concluding and decision-making, Communicating

1. What is the dam's role in flood control and water management?
2. How does releasing dam water affect nearby areas?
3. Why monitor dam water levels during heavy rainfall?

Managing floods reduces damage, but not all countries have the resources. Nations with flood-prevention **infrastructure** are better at reducing risks.

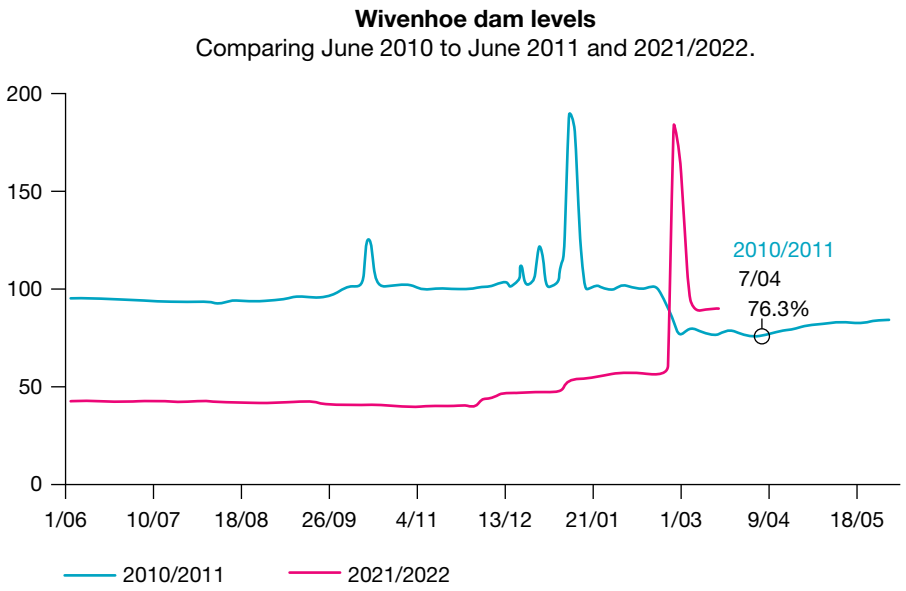
FIGURE 9 Lake Wivenhoe, Queensland, at 190 per cent capacity, January 2011

SkillBuilder discussion

Communicating

1. What years are being compared for Wivenhoe Dam levels in the graph?
2. During which year did the dam reach its highest level?
3. What was the approximate percentage of dam capacity on 7/01/2011?

FIGURE 10 Wivenhoe Dam levels, 2011 and 2022

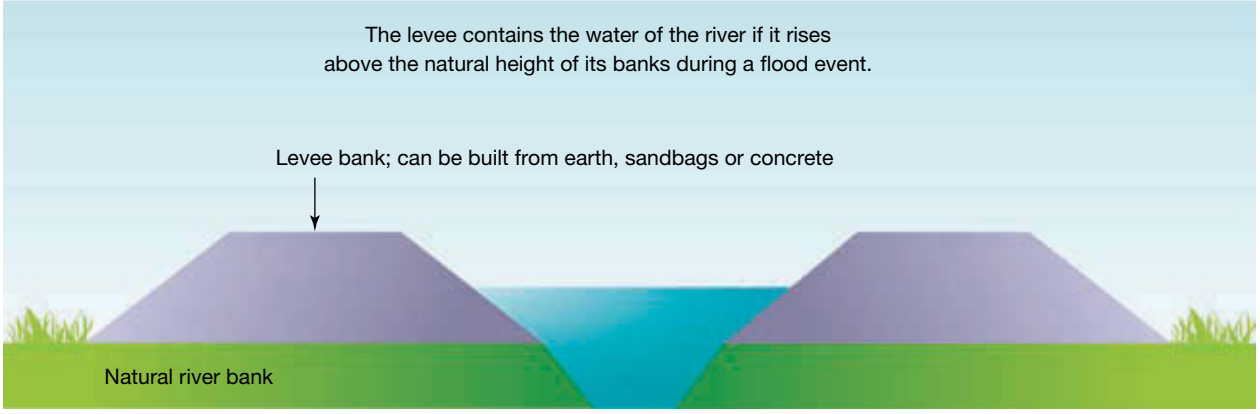


Source: ABC News and Seqwater

Floods are commonly managed by building barriers like levees (see **FIGURE 11**), **weirs** and dams. Flood control dams must stay below a set level to hold extra water. After 1974 (see **FIGURE 9**), Wivenhoe Dam was built, but its effectiveness during the 2010–11 floods was debated. Engineers had to avoid overflow, which could erode the dam wall.

Releasing water through the spillway worsened the flood. **FIGURE 10** compares Wivenhoe Dam levels in 2011 and 2022 floods; although fuller in 2011, water levels rose faster in 2022.

FIGURE 11 An artificial levee



SkillBuilder discussion

Concluding and decision-making, Communicating

1. What is the purpose of a levee during a flood event?
2. What materials can be used to build levee banks?
3. How does a levee help control rising water levels?

London built the Thames Barrier, a series of floodgates (see **FIGURE 12**), to protect against high tides and storm surges. The gates rise at a certain water level and lower once the water recedes.

FIGURE 12 The Thames Barrier

To reduce flood damage, building on flood-prone, low-lying land should stop. Brisbane City Council's 2006 buy-back scheme allows residents in high-risk areas to sell properties, preventing future construction. Of 207 offers, only 45 were accepted before the 2011 floods.

SkillBuilder discussion

Concluding and decision-making, Communicating

1. Why are these houses built on stilts?
2. How might these structures help protect against flooding?
3. What challenges could people face living in these homes during a flood?

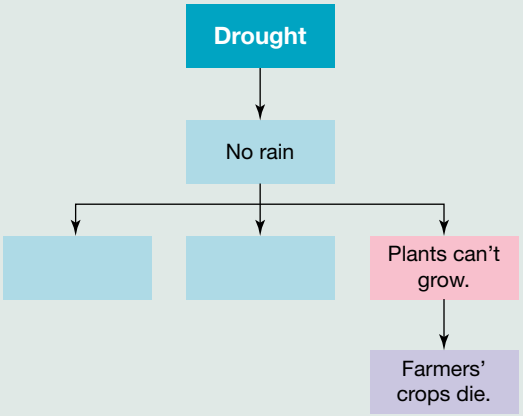
FIGURE 13 In Dhaka, homes are built on stilts to avoid the floodwaters.

Not all countries can afford property buy-backs or barriers. Bangladesh faces annual **monsoon** flooding, adapting with homes on raised land or stilts. The country has a flood forecasting system shared via newspapers, TV, radio, internet and email.

However, Dhaka's growing population builds on low-lying flood storage areas (see **FIGURE 13**), affecting many residents. In 2024, severe rains and upstream dam releases caused major flooding in Bangladesh, affecting 5.8 million people across 11 districts. Around 500 000 were displaced, and 71 people died. The floods caused over US$1.2 billion in damage, submerging homes, roads and farmland.

9.9 SkillBuilder activity COMMUNICATING

1. Think about all the environmental, economic and social impacts of floods and/or droughts. **List** these impacts.
2. Using this list, create a flow diagram to illustrate how these three groups relate to, connect to and influence each other.
   A sample flow chart based on drought has been provided to help you get started. You can add more boxes and arrows to show how elements are connected.
3. **Compare** your flow diagram with the class, and add further connections.



9.9 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3	4, 5, 6, 9, 11, 12	7, 8, 10

REMEMBER AND UNDERSTAND

1. What is a drought?
   a. A long period of below-average rainfall, when not enough water is available to supply our normal needs.
   b. A long period of average rainfall, when not enough water is available to supply our normal needs.
   c. A long period of above-average rainfall, when enough water is available to supply our normal needs.
   d. A long period of average rainfall, when enough water is available to supply our normal needs.
2. Complete the following sentence to **explain** what desalination is.
   Desalination is a process that removes _____ from _____.
3. What are the three main types of floods? **Identify** all possible answers.
   a. Slow-onset floods
   b. Rising floods
   c. Sinking floods
   d. Rapid-onset floods
   e. Casual floods
   f. Flash floods
4. What is alluvium and why is it important to agriculture?
5. How can an early warning system reduce the risk of a flood disaster?
   a. It allows people to adequately prepare for the flood.
   b. It allows people to sell their homes before the flood.
   c. People know they need to purchase extra brooms.
   d. People know they should go on holidays at this time.
6. Why is Australia so dry?
   a. The temperature is too high.
   b. Rainfall is too low.
   c. It is dominated by high-pressure systems.
   d. It is dominated by low-pressure systems.

ANALYSE AND APPLY

7. **Explain** the factors that contribute to the severity of the Tinderbox Drought.
8. Reducing personal water use is an excellent strategy to minimise the impacts of drought. **Identify** what obstacles you believe prevent people from reducing their personal water use.
9. Answer the following questions:
   a. **Describe** three ways in which droughts can affect environments.
   b. **Describe** three ways in which droughts can affect communities.

EVALUATE AND COMMUNICATE

10. Should people continue to build on floodplains? Why or why not? Think globally when formulating your argument. Consider environmental, cultural and economic factors that could have an impact on a person's reasoning when choosing a place to settle.
11. Dams are the most common method used to manage the impacts of floods. **Outline** why you think this is the case
12. **Explain** the dilemma Wivenhoe Dam operators faced in 2011. **Explain** what you would you have done in the same situation.

Answers and sample responses for this topic are available online.

LESSON 9.10 Why does the wind blow?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** how wind affects weather conditions
- **describe** the role wind plays in changing weather
- **explain** how wind patterns influence temperature and rainfall.

Tune in

Wind turbines provide clean, reliable, renewable energy.

FIGURE 1 Wind turbines generate clean, reliable and renewable energy.

1. **Do you think using more wind turbines would be helpful in Australia?**
2. **List the positives and negatives of wind turbine use.**

9.10.1 How wind influences weather

The Earth's atmosphere protects us from extreme heat and cold, creating conditions for life. The air in the lowest layer, called the **troposphere**, is where weather changes happen (see lesson 9.8).

Air has weight. The weight of air above us pushing down on the surface creates pressure. If a **barometer** is tied to a hot air balloon, pressure readings drop as it rises because there is less air higher up. This is why mountain climbers and athletes find it harder to breathe at high altitudes.

SkillBuilder discussion

Communicating

1. What is the current atmospheric pressure reading shown on the barometer?
2. According to the barometer, what kind of weather can we expect based on the current pressure reading?
3. How does the barometer indicate changes between sunny, cloudy and rainy weather?

FIGURE 2 A barometer is an instrument that measures atmospheric pressure.

9.10.2 Air pressure

SkillBuilder discussion

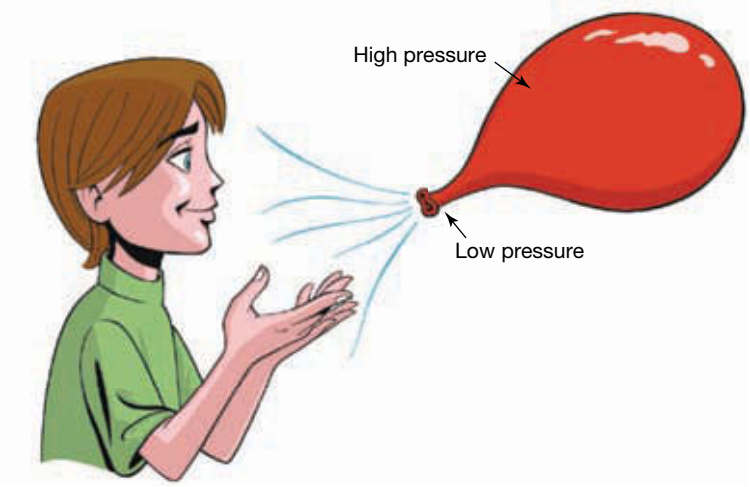
Concluding and decision-making

1. What is the person doing with the balloon?
2. Why do you think the balloon is getting bigger?
3. What happens to the air pressure inside the balloon as it fills up?

When a balloon is inflated, internal pressure is higher than the surrounding air. Upon release, air rushes out, creating wind (see **FIGURES 3** and **4**). Without wind, equatorial temperatures would rise while poles would cool. Meteorologists measure air pressure in millibars (average 1013) . High pressure indicates sinking air; low pressure indicates rising air.

FIGURE 3 The pressure inside a balloon is greater than the pressure of the surrounding air.

FIGURE 4 When the neck of the balloon is released, air rushes out, moving from a space of high pressure to one of low pressure.



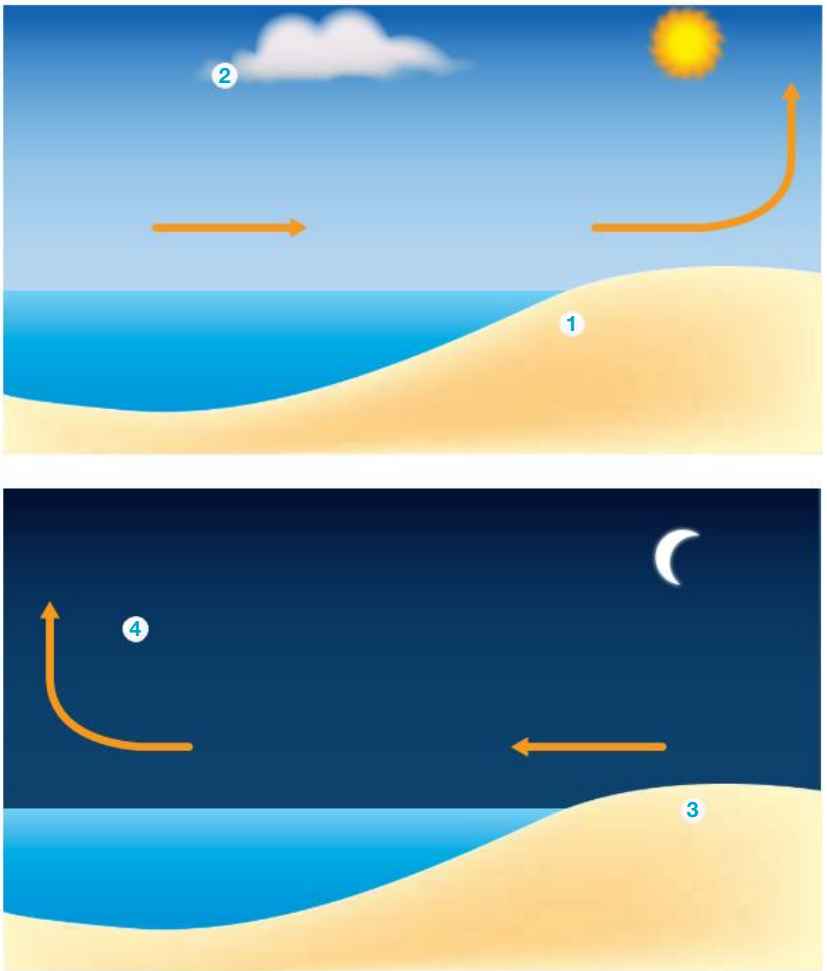
9.10.3 Effects of the sun

Variations in air pressure result from the sun's heating and the Earth's rotation. The sun's warmth changes with the time of day (see **FIGURE 5**) and distance from the equator. Temperatures are hotter at midday and warmer at the equator than at the poles.

Warm air is less dense than cold air because as the air heats, it expands, causing it to rise. Air pressure is lower at the equator than at the poles. As warm air rises at the equator, cooler air from the poles moves in to replace it. This movement of air around the Earth is called wind.

FIGURE 5 This diagram illustrates how the sun creates a sea breeze on a small scale.

Land heats up and cools down more quickly than the sea.



How sea breezes work

1. Daytime: Air above the land heats up, expands and rises.
2. Sea breeze: Air pressure drops over the land, and air moves in from the sea, where pressure is higher, creating a sea breeze.
3. Evening: Land cools faster than the sea, and the temperature of the land drops.
4. Reversed breeze: Air above the sea becomes warmer and rises, and a breeze flows from land to sea.

9.10.4 Effect of the Earth's rotation

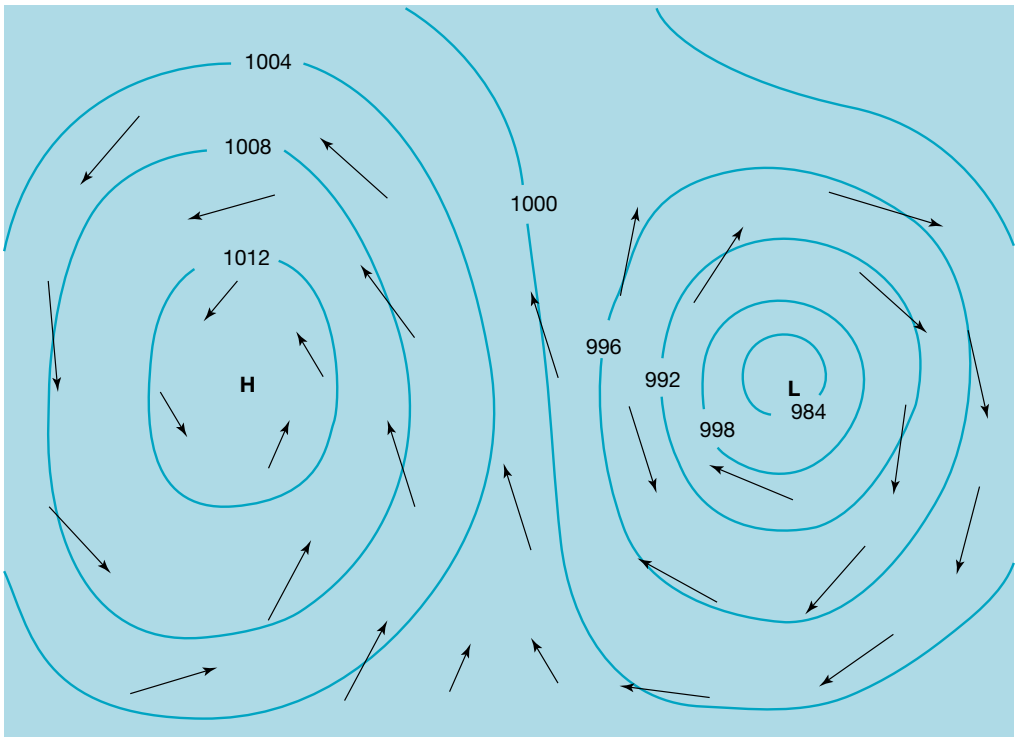
The Earth's rotation on its axis causes air to be deflected, rather than travel in a straight line. This makes winds circle around high- and low-pressure systems. The direction depends on the hemisphere. As air moves from high to low pressure, winds circle in opposite directions in each hemisphere. In high-pressure areas, winds move anticlockwise in the southern hemisphere and clockwise in the northern hemisphere. This deflection is called the Coriolis effect (see **FIGURE 6**).

SkillBuilder discussion

Communicating

1. What do the lines in the image represent?
2. Which way does the wind move around the high-pressure area (H)?
3. How does the wind move around the low-pressure area (L)?

FIGURE 6 Wind occurs when air moves from high-pressure areas to low-pressure areas, and its direction is affected by the Earth's rotation.



9.10.5 How is wind represented on a weather map?

SkillBuilder discussion

Concluding and decision-making, Communicating

1. What do the labels 'HIGH' and 'LOW' represent on the weather map?
2. Where is the wind strongest on this map, and how can you tell?
3. What does the shaded area on the map indicate?

Differences in air pressure affect wind strength. You can check wind strength using weather maps, observing objects or using instruments. Winds are named by their source (e.g., a northerly wind comes from the north).

Isobars on a weather map are not evenly spaced. In **FIGURE 7**, winds are strongest in the southern areas where isobars are close together and gentler in the northern areas where they are further apart.

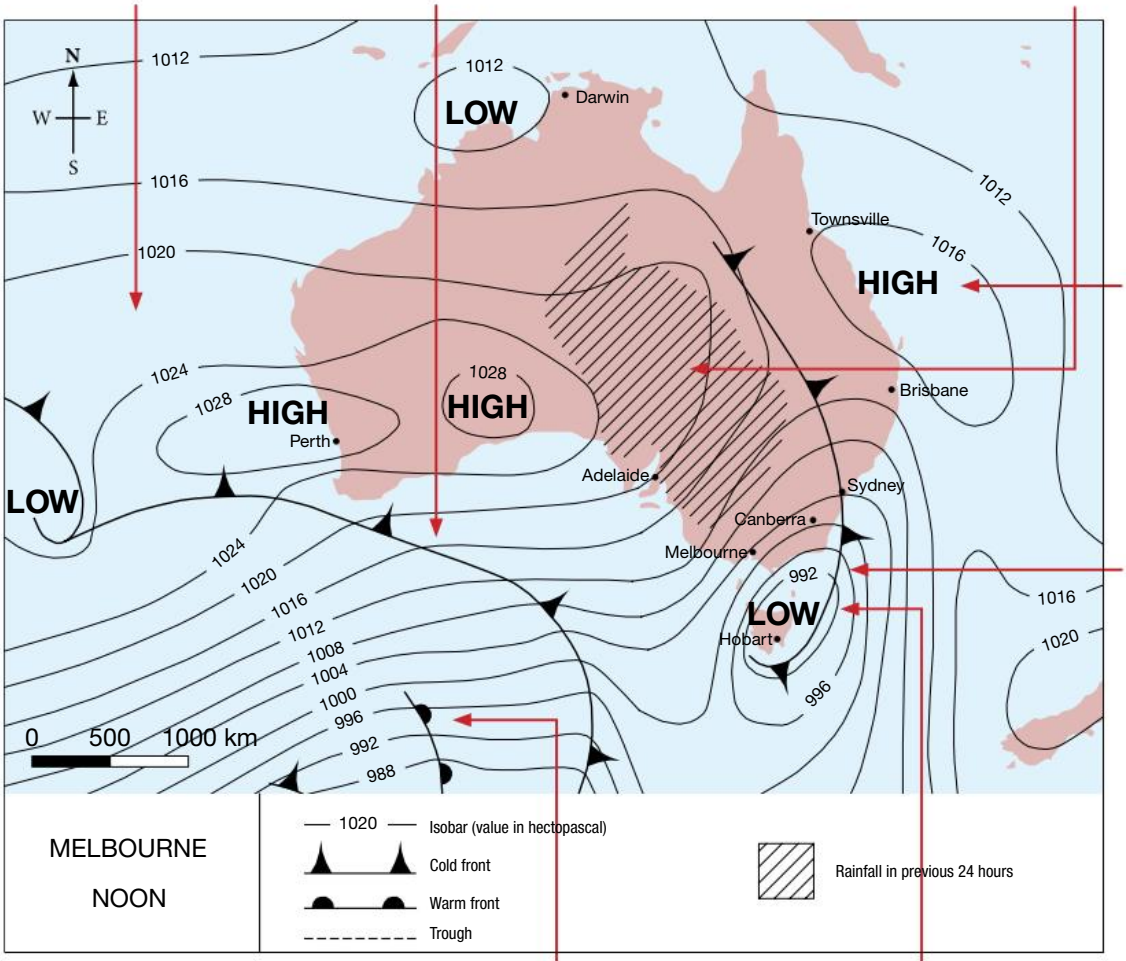
Symbols in **FIGURE 8** also show wind speed and direction more accurately on weather maps.

FIGURE 7 A typical weather map

Greater distance between isobars indicates wind is weaker in these regions.

Cold front advancing from west to east — towards southern Australia. Note how the isobars behind it are close together, indicating strong winds.

Shading indicates rain fell in the previous 24 hours.



High-pressure system. Note how the isobar is joining points with an atmospheric pressure of 1016 (higher than 1013 average).

The cold front that has just passed over Melbourne has brought unsettled, rainy weather behind it. More rainy weather is likely for Melbourne when the cold front coming towards it from the west gets closer.

Source: MAPgraphics Pty Ltd, Brisbane.

The main influences on Melbourne's weather are the low pressure system south of it, the high pressure system to the north-west, and the cold fronts to the west and east.

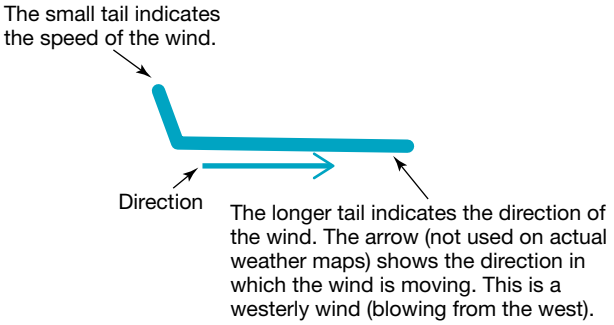
Warm front advancing from west to east behind the cold front. Note the lower atmospheric readings on the isobars.

Low-pressure system. Note how the isobar is joining points with an atmospheric pressure of 992 (lower than the 1013 average).

FIGURE 8 Symbols commonly used to show wind strength

calm (0–2 km/h)	3–7 km/h	8–12 km/h
13–17 km/h	18–22 km/h	23–27 km/h
28–32 km/h	33–37 km/h	38–42 km/h
43–47 km/h	48–52 km/h	53–57 km/h

FIGURE 9 How to read wind symbols on a weather map



SkillBuilder discussion

Communicating

1. Study **FIGURE 10**. At what wind speed does a 'strong breeze' occur on the Beaufort scale?
2. What happens to trees and branches during a 'gale'?
3. What wind speed is classified as a 'hurricane/cyclone' on the Beaufort scale?

FIGURE 10 The Beaufort scale measures wind strength based on its visible effects.

0 Calm
Less than 2 km/h
Smoke rises vertically

1 Light air
2–5 km/h
Smoke drift shows wind direction, wind vanes don't move

2 Light breeze
6–12 km/h
Wind felt on face, wind vanes move

3 Gentle breeze
13–20 km/h
Leaves and small twigs in motion, hair disturbed, clothing flaps

4 Moderate breeze
21–30 km/h
Dust and loose paper move, small branches move

5 Fresh breeze
31–40 km/h
Small trees with leaves begin to sway, wind force felt on body

6 Strong breeze
41–51 km/h
Large branches move, umbrellas difficult to use, difficult to walk steadily

7 Moderate gale
52–63 km/h
Whole trees in motion, inconvenience felt when walking

8 Gale
64–77 km/h
Twigs broken off trees, difficult to walk

9 Strong gale
78–86 km/h
People blown over, slight structural damage, including tiles blown off houses

10 Whole gale
88–101 km/h
Trees uprooted, considerable structural damage

11 Storm
102–120 km/h
Widespread damage

12 Hurricane/cyclone
Greater than 120 km/h
Widespread devastation

9.10 SkillBuilder activity GEOGRAPHICAL INQUIRY, COMMUNICATING

Over the next week, collect weather maps from newspapers or online and locate your area.

1. **Identify** if a high or low-pressure system is influencing the weather.
2. **Determine** if the wind moves clockwise or anticlockwise, explaining why.
3. Write a weather forecast for tomorrow, including wind speed and direction.
4. Collect tomorrow's weather map and record observations.
5. **Compare** your forecast with actual weather. **Assess** accuracy and factors influencing changes.

9.10 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 8	3, 4, 7	5, 6, 9, 10

REMEMBER AND UNDERSTAND

1. What is wind?
   a. Air mixing with the water in the oceans
   b. Air circulating around the Earth
   c. A noise heard when the weather changes
   d. A build-up of pressure
2. **Explain** why you are not affected by the pressure of the atmosphere.
3. **Identify** the two factors that influence wind.
   a. Air pressure
   b. Where it occurs in the atmosphere
   c. Temperature variations
   d. The number of pressure systems
4. Use the provided terms to complete the following sentence and **explain** the role the sun plays in causing wind.

sun	poles	circulation	cooling
heating	pressure	systems	air

   The _____ heats and cools the _____ above the surface of the Earth. Its _____ and cooling effects vary from the equator to the _____. This heating and _____ leads to the development of _____ systems. The sun helps drive the Earth's _____ pattern as air moves between different pressure _____.
5. **Describe** the change that difference in air pressure causes.

ANALYSE AND APPLY

6. **Explain** the interconnection between the Earth's atmosphere and the weather we experience on the surface of the Earth.
7. Using **FIGURE 7** indicate which locations will have stronger winds and where the winds will be weaker.
   a. Darwin, Townsville and Port Hedland
      Melbourne, Sydney and Canberra
   b. Justify your choice in part (a)
8. Refer to **FIGURES 8** and **9**. Create wind symbols to represent the following wind speeds and directions.
   a. Northerly; 28–32 km/h
   b. South-westerly; 8–12 km/h
   c. Easterly; 13–20 km/h

EVALUATE AND COMMUNICATE

9. Refer to **FIGURE 7**; a cold front is approaching Brisbane. **Describe** how the weather will change when the cold front arrives.
10. **Explain** the interconnection between the Coriolis effect and wind.

Answers and sample responses for this topic are available online.

LESSON 9.11 What are the causes and impacts of extreme weather?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** the causes of thunderstorms
- **describe** the characteristics of thunderstorms
- **define** the causes of other types of extreme weather
- **explain** the features of different extreme weather events.

Tune in

Extreme weather can occur in a range of different environments and take an even greater range of forms.

Recall a situation when you experienced an extreme weather event. Write a brief story about the event, including a description of the type of weather you saw and the impacts of the event.

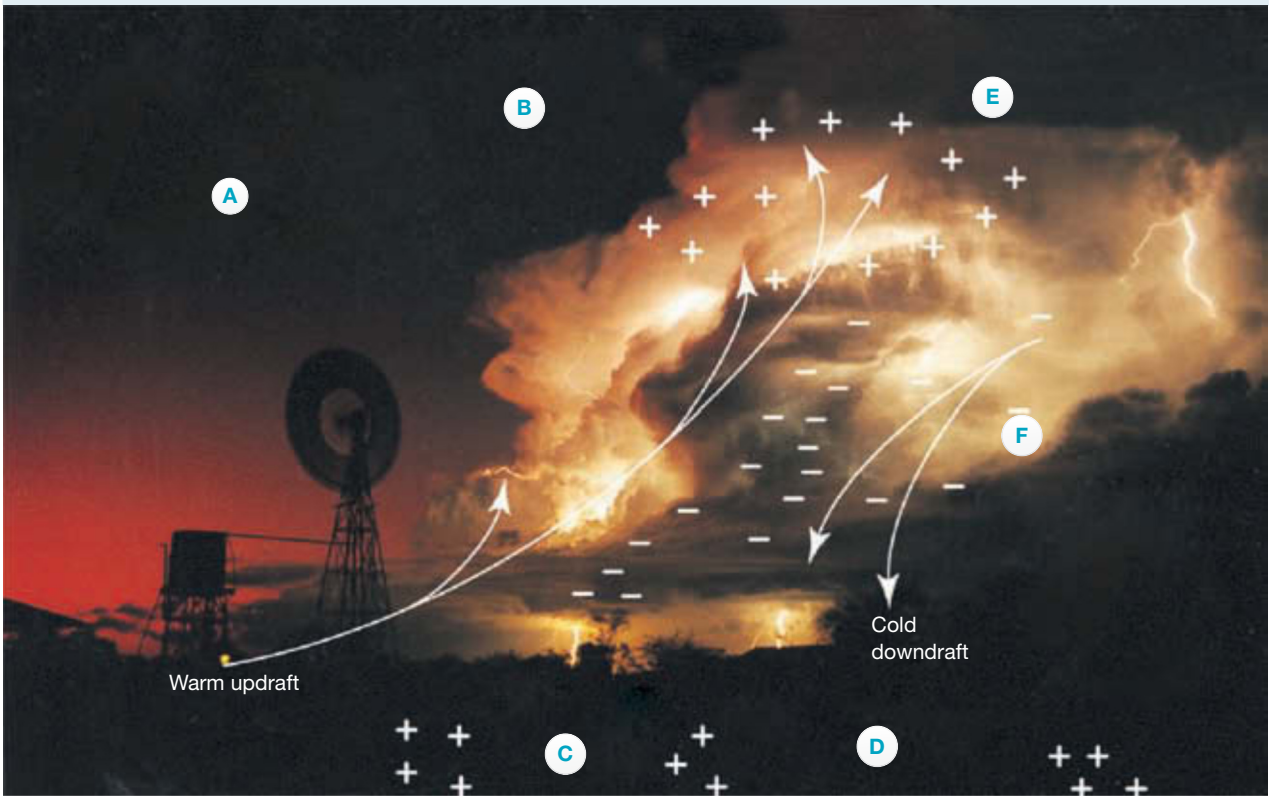
FIGURE 1 What extreme weather events have you experienced personally?

9.11.1 What are the causes of thunderstorms?

Thunderstorms, also known as electrical storms, form in unstable, moist atmospheres with strong updrafts, often near cold fronts. Approximately 1800 thunderstorms and 8 million lightning strikes occur daily worldwide. Darwin, Australia, has about 80 storms yearly, while Lake Maracaibo, Venezuela, averages nearly 300.

Ancient Vikings thought thunder was Thor's chariot and lightning marked the path of his hammer when he throw it at his enemies. Today, we know thunderstorms occur when cumulonimbus clouds generate static electricity (see **FIGURE 2**). Lightning heats air to 20 000 °C (more than three times hotter than the surface of the sun). Thunder is the sound caused by rapidly expanding air exploding. The time gap between lightning and thunder indicates distance (five seconds equals 1.6 km distance).

FIGURE 2 How a thunderstorm works



A Formation of static electricity: As air currents in a cumulonimbus cloud become more violent, ice crystals and water droplets collide more forcefully. These collisions create friction, building up large amounts of static electricity in the cloud.

B Separation of charges: Lighter particles with a positive charge drift upwards in the cloud. heavier particles with a negative charge sink to the bottom of the cloud.

C Ground charge: The ground below the cloud carries a positive charge.

D Energy difference and lightning: A huge energy difference builds up between the positive charge on the ground and the negative charge at the cloud's base. A lightning bolt helps to balance this energy difference.

E Path of lightning: Lightning travels to the ground via the shortest route, often striking tall objects like buildings or trees.

F Multiple flashes: A single lightning bolt consists of several flashes moving up and down between the cloud and the ground, but this happens so quickly that we see it as one flash.

SkillBuilder discussion

Geographical inquiry, Concluding and decision-making

1. What causes the warm updraft shown in **FIGURE 2**?
2. What do the '+' and '–' symbols represent in the cloud?
3. How does the cold downdraft affect the storm?

9.11.2 Severe thunderstorms

The Bureau of Meteorology classifies a thunderstorm as severe if it has any of these features:

- *Flash flooding:* Slow-moving thunderstorms can drop heavy rain or hail in one area, leading to flooding when the ground can't absorb all the water.
- *Hailstones:* Hailstones must be 2 cm or more in diameter. The largest recorded hailstone was 20.3 cm wide with a 47 cm circumference.
- *Wind gusts:* Wind gusts of 90 km/h or more occur when cold air rushes out of thunderclouds, spreading outwards when hitting the ground.

In the right conditions, tornadoes can also form. Violent, rapidly spinning updrafts caused by thunderstorms create a funnel-shaped column of air that touches the ground (**FIGURE 3**). Wind speeds within the funnel can exceed 300 km/h and cause significant damage. While severe tornadoes are rare in Australia, around 400 have been recorded. They are most common in Tornado Alley, a region in the central and southeastern United States.

FIGURE 3 A tornado is born when a funnel of air forms beneath a thunderstorm and makes contact with the ground.

9.11.3 When do thunderstorms occur?

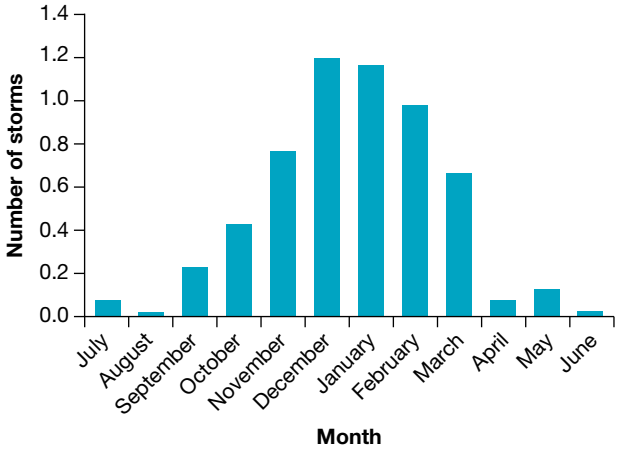
Thunderstorms can happen any time of year but are more common in spring and summer (see **FIGURES 4** and **5**). This is because the sun warms the air, and warm air holds more moisture.

SkillBuilder discussion

Communicating

1. In which month does Darwin experience the highest number of thunderstorms?
2. How many thunderstorms occur on average in February?
3. Which months have the fewest thunderstorms in Darwin?

FIGURE 4 Average monthly thunderstorm distribution in Darwin



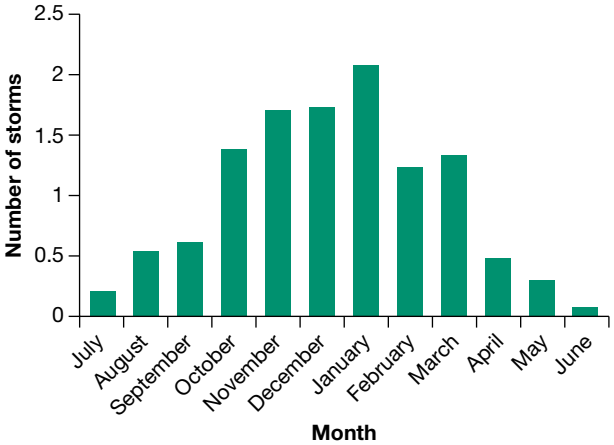
Source: Bureau of Meteorology

SkillBuilder discussion

Communicating

1. Which months have the lowest number of thunderstorms in Melbourne?

FIGURE 5 Average monthly thunderstorm distribution in Melbourne



Source: Bureau of Meteorology

Thunderstorms form when cooler air pushes warm, humid air upwards. As the warm air rises in an unstable atmosphere, clouds build and spread. Thunderstorms develop quickly if the atmosphere stays unstable or gains energy from surrounding winds.

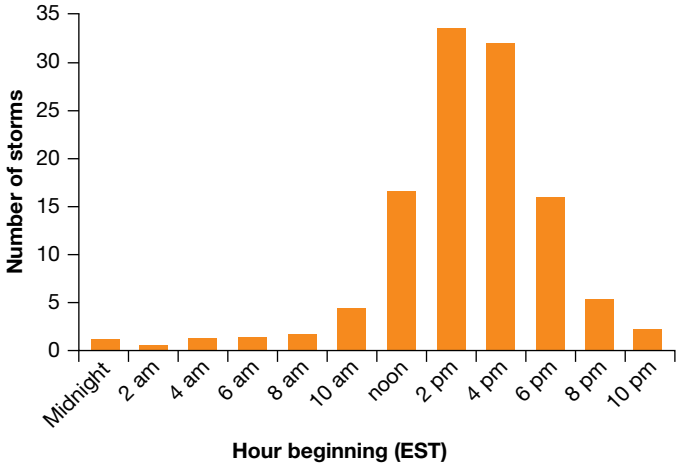
FIGURE 6 shows that thunderstorms are more common in the afternoon, due to the peak heating of the Earth by the sun.

SkillBuilder discussion

Concluding and decision-making

1. Refer to **FIGURE 6**. During which hour does the highest number of thunderstorms occur in New South Wales and the Australian Capital Territory?
2. How many thunderstorms typically occur between 4 pm and 5 pm?
3. At what time of day are thunderstorms least likely to occur?

FIGURE 6 Hourly distribution of thunderstorms in New South Wales and the Australian Capital Territory



Source: Bureau of Meteorology

We often think of thunderstorms as just high winds, thunder and lightning, but hailstones can cause serious damage too. A thunderstorm that produces hailstones reaching the ground is called a **hailstorm**. In Australia, hailstones range from a few millimetres to the size of a tennis ball

9.11.4 Inside a storm — Christmas 2023

Extreme weather conditions from 23 to 29 December 2023 led to severe thunderstorm activity, when a polar air mass originating near Antarctica pushed northwards and collided with a moist warm air mass over eastern Australia, resulting in an extensive cold front.

The Bureau of Meteorology issued severe thunderstorm warnings for Victoria, New South Wales and Queensland. Heavy rainfall, strong winds gusting up to 90 km/h, and giant hailstones caused severe damage across all three states, including localised flooding and property damage.

Queensland was the worst affected state:

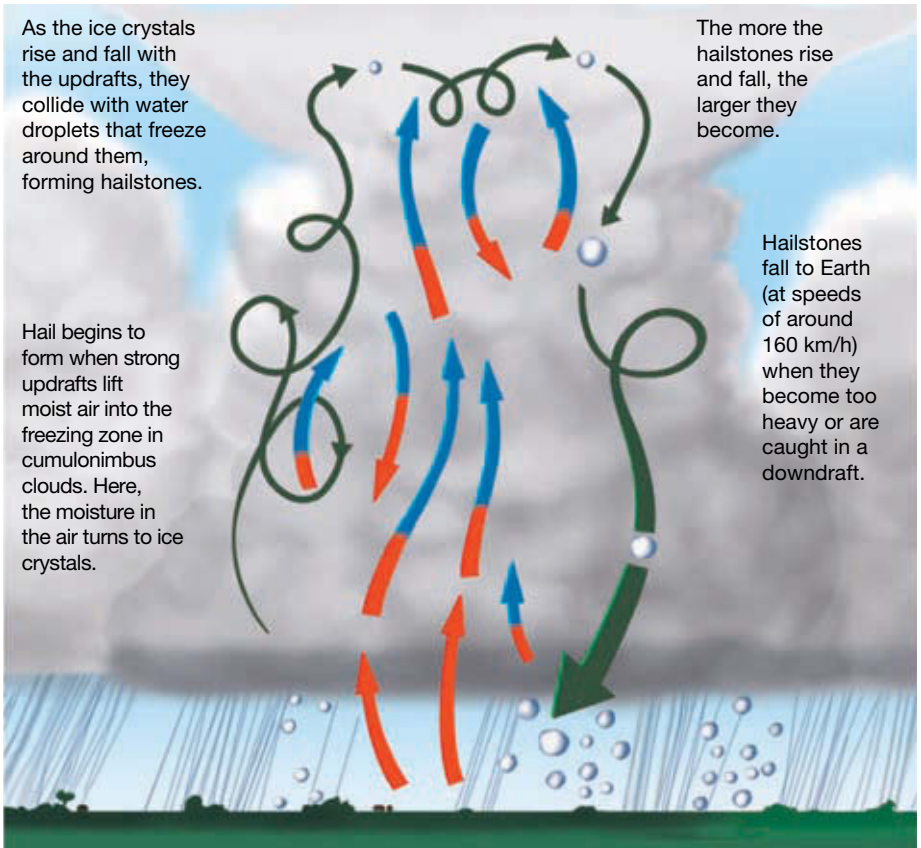
- Over 45 000 homes were left without power.
- Roofs were torn off houses.
- Concrete power poles were ripped from the ground.
- Ten people died.

SkillBuilder discussion

Communicating

1. How do hailstones grow larger inside the storm cloud?
2. What role do updrafts play in forming hailstones?
3. At what speed do hailstones fall to the Earth?

FIGURE 7 How a supercell hailstorm forms



A supercell storm has extremely strong updrafts. These keep hailstones suspended longer than regular storms, allowing hailstones to grow bigger. To form cricket-ball sized hailstones, there must be updrafts of around 160 km/h.

FIGURE 8 Powerful thunderstorms bring down trees.

FIGURE 9 Thunderstorms may lead to potholes in roads.

9.11.5 What is a blizzard?

SkillBuilder discussion

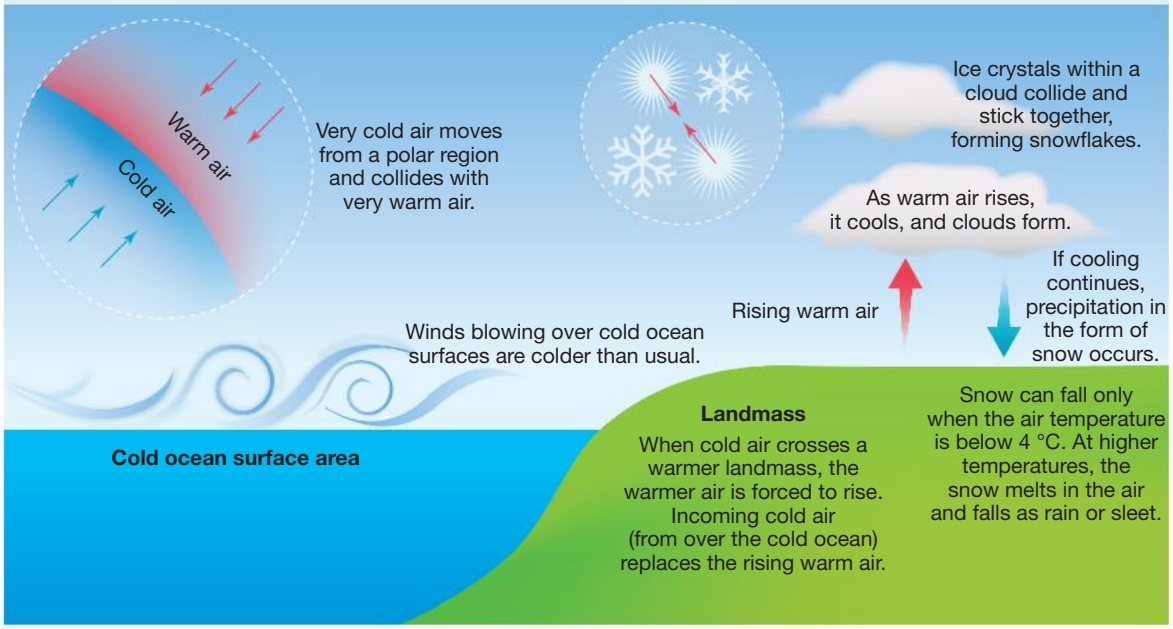
Communicating

1. What happens when very cold air from a polar region collides with warm air?
2. How do snowflakes form in the clouds?
3. What happens when warm air rises over a cold ocean surface?

Snowstorms are periods of intense snowfall with high winds. The most dangerous type is a blizzard.

A snowstorm becomes a blizzard when wind speeds stay above 56 km/h or frequently gust over this speed for more than three hours. In a blizzard, visibility drops to less than 400 m, and in extreme cases, it can be less than a metre. Often, snow isn't falling but is blown into snowdrifts that can bury people and objects. Blizzards form when warm and cold air meet, creating strong winds due to changes in air pressure.

FIGURE 10 How a blizzard forms



9.11.6 Why are blizzards dangerous?

SkillBuilder discussion

Concluding and decision-making

1. What type of building is shown in **FIGURE 12**?
2. Why do you think the building is raised on legs?
3. How might this structure be useful in a snowy environment?

During snowstorms, snow accumulates. It can be difficult to know the depth of the snow, making movement difficult. There is an increased risk of falling through thin ice or into **crevasses**. Heavy snow on slopes can trigger **avalanches** (see **FIGURE 11**), caused by earthquakes, noises or animals. Blizzards can cause **whiteouts**, reducing visibility to one metre. People and animals cannot tell the difference between the Earth and the sky, leading to disorientation. Exposure to the extreme cold increases the risk of **hypothermia**, **frostbite** and suffocation.

In Antarctica, researchers face snow build-up; the Halley VI Research Station (**FIGURE 12**) is built on steel legs with skis to be raised and moved, avoiding snow dangers.

FIGURE 11 An avalanche

FIGURE 12 The Halley VI Research Station in Antarctica

9.11 SkillBuilder activity **COMMUNICATING**

Use the lesson diagrams to help you draw and label a supercell storm. Label your diagram with terms like evaporation, condensation and precipitation to **explain** how storms form.

9.11 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 7, 8	3, 4	5, 6, 9, 10

REMEMBER AND UNDERSTAND

1. **Identify** three features associated with thunderstorms.
   a. Massive cloud build-up
   b. Thunder
   c. Lack of clouds
   d. Silence
   e. Lightning
2. List the changes to the environment and types of damage that might result from thunderstorm activity.
   a. Next to each type of damage indicate:
      - Whether the damage is caused predominantly by wind or water
      - Whether the damage tends to occur in the natural or built environment
3. Study **FIGURE 7**. Number each step in the table, in order, to illustrate how hailstones are formed.
4. **Suggest** reasons why people in earlier civilisations assumed weather events were the work of the gods.
5. **Explain** why thunderstorms can cause so much damage to the natural and human environments.

ANALYSE AND APPLY

6. Study **FIGURE 7**, which shows a supercell storm. Write a paragraph explaining why hailstones can vary so much in size.
7. During which seasons of the year are thunderstorms more likely? **Justify** your answer.
8. Study **FIGURE 6**. **Identify** which hours of the day most severe thunderstorms occur. **Justify** your answer.

EVALUATE AND COMMUNICATE

9. Think of three actions you could take to protect yourself in a thunderstorm. **Explain** the rationale behind each action.
10. **FIGURES 8** and **9** show damage that resulted from thunderstorm activity. Refer to the Beaufort scale (**FIGURE 10** in lesson 9.10) and **predict** the wind speeds that might have been associated with this thunderstorm.

Answers and sample responses for this topic are available online.

LESSON 9.12 What are the causes and impacts of cyclones?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** the nature of cyclones
- **describe** the impacts cyclones can have on environments
- **describe** the impacts cyclones have on communities.

Tune in

Some areas are more prone to cyclones, hurricanes and typhoons. In 2024, the countries most affected included The Dominican Republic, the Philippines and the Caribbean.

FIGURE 1 The aftermath of a typhoon in Iwaizumi, Japan, 2016

1. **Describe the damage you can see in the river and how it might affect the flow of the river.**
2. **What would you do if you lived in a place with frequent extreme weather events?**
3. **Discuss with your class how these weather events impact the community and environment in these locations.**

9.12.1 What is a cyclone?

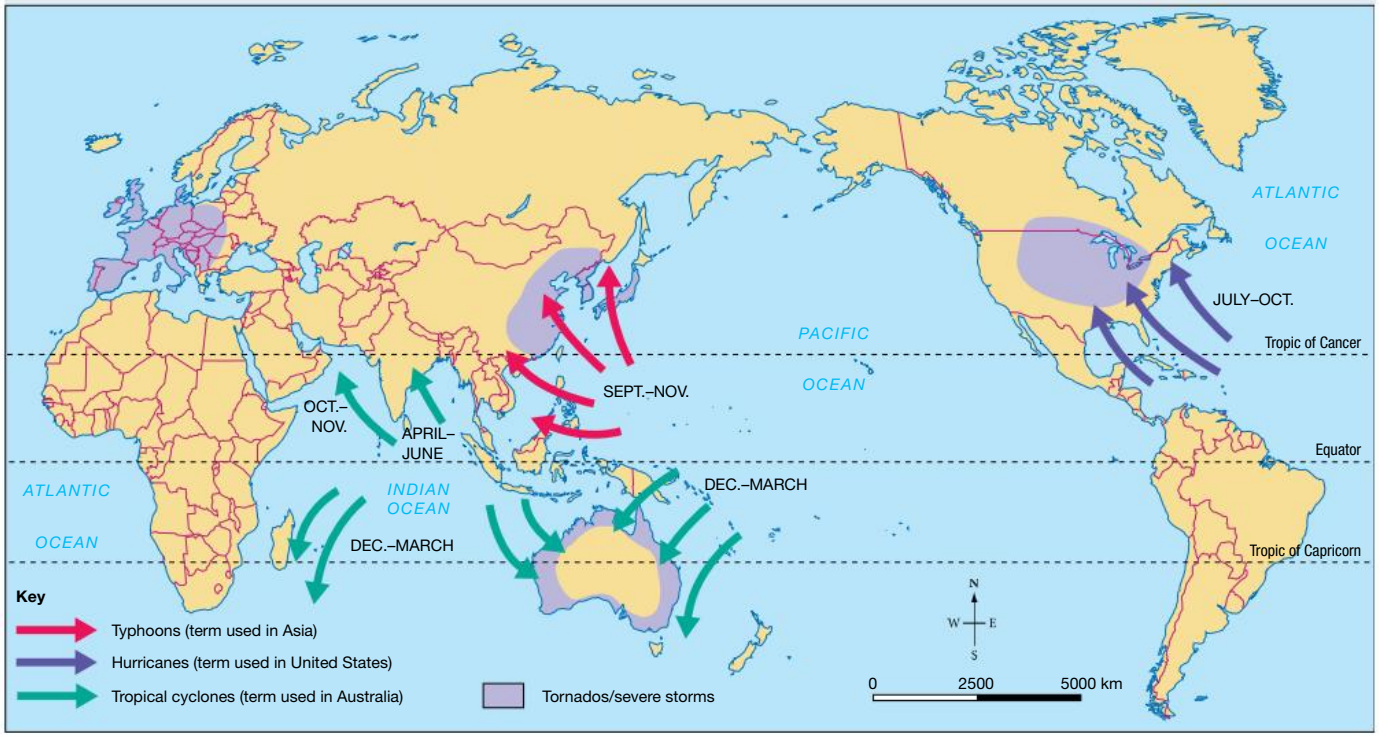
Tropical **cyclones** (called hurricanes in the Americas and **typhoons** in Asia) can cause severe property damage and loss of life. About 80 to 100 tropical cyclones occur worldwide each year, mainly in tropical coastal areas around the equator. Australia experiences around 11 cyclones yearly; four or five will make landfall (meaning they will reach land).

Cyclones form when cold air meets warm, moist air over a tropical ocean with a surface temperature above 27 °C. Cold air replaces the rising warm air, creating an intense low-pressure system. Winds can reach over 119 km/h. Cyclones are classified using the scale shown in **TABLE 1**.

TABLE 1 Cyclone classification using the Saffir–Simpson Scale

Category	Wind gust speed, ocean swell	Damage
1	Less than 125 km/h, 1.2–1.6 m	Mild damage
2	126–169 km/h, 1.7–2.5 m	Significant damage to trees
3	170–224 km/h, 2.6–3.7 m	Structural damage, power failures likely
4	225–279 km/h, 3.8–5.4 m	Most roofing lost
5	More than 280 km/h, over 5.4 m	Almost total destruction

FIGURE 2 World distribution of tropical cyclones by names used in different regions



Source: Spatial Vision

SkillBuilder discussion

Concluding and decision-making

1. Study **FIGURE 2**. Which areas are affected by typhoons, according to the map?
2. In which months do cyclones occur in Australia?
3. What term is used for storms in the United States?

SkillBuilder discussion

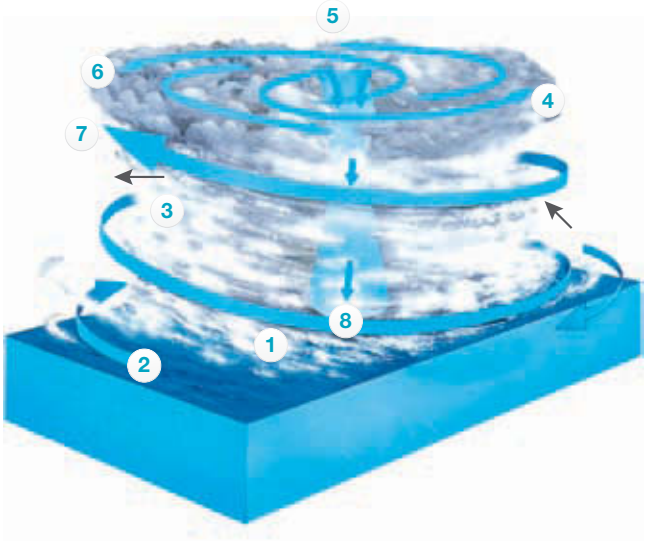
Concluding and decision-making

1. What direction is the wind spinning in the cyclone?
2. What happens in the centre of the cyclone, known as the eye?
3. How does warm air affect the cyclone's formation?

FIGURE 3 shows the continuous cycle of evaporation, condensation and precipitation in cyclones. Initially, winds spin around an area 200–300 km wide. As the winds gather energy by drawing more warm, moist air, they speed up.

In severe cyclones, winds can reach 295 km/h. The faster the winds, the smaller the spinning area (known as 'the eye'), which can be about 30 km wide. Around the eye, winds and rain are at their strongest, but inside the eye, the air is calm, and the sky may be clear.

FIGURE 3 How a cyclone forms

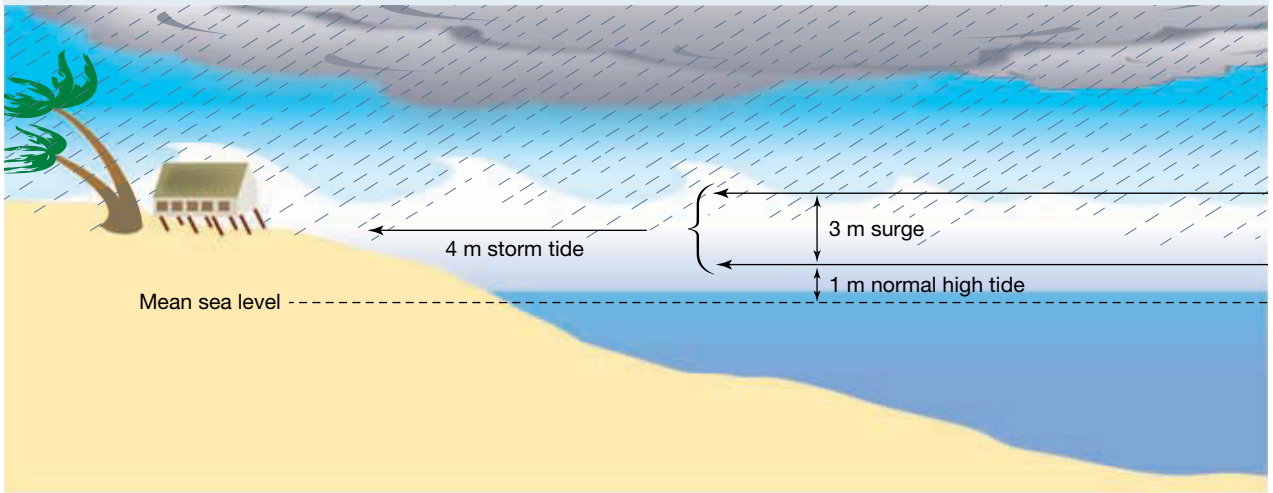


1. Warm sea water evaporates and rises.
2. Low pressure creates converging winds, replacing rising air.
3. Warm air spirals up quickly
4. Warm moist air is drawn in, providing more energy.
5. Water vapour fuels cumulus clouds.
6. Air moves away from the eye in the upper atmosphere.
7. The storm follows prevailing winds.
8. Descending air forms in the cyclone's eye

9.12.2 What damage is caused by tropical cyclones?

Tropical cyclones can cause major damage when they cross land. **Gale force winds** can tear roofs off buildings and uproot trees. **Torrential rain** and **storm surges** can lead to flooding. Low pressure also causes the sea level to rise, as shown in **FIGURE 4**.

FIGURE 4 Flooding caused by storm surges



SkillBuilder discussion

Concluding and decision-making

1. How high is the storm tide compared to the mean sea level?
2. What is the difference between the normal high tide and the storm surge?
3. How might a 4 m storm tide impact the house shown in the image?

FIGURE 5 Satellite image of Hurricane Helene (Florida, United States in 2024). The hurricane is interacting with a mid-latitude weather system, creating the illusion of two hurricanes.

9.12.3 The impact of Hurricane Milton

Hurricane Milton formed on 5 October 2024 from a tropical disturbance in the Caribbean Sea. Over the next two days it intensified rapidly, reaching category 5 status on 7 October, while it was in the Gulf of Mexico. Hurricane Milton is one of the fastest developing hurricanes on record and led to mandatory evacuation orders for the Florida coast and a predicted storm surge of up to 4.5 m. At its peak intensity, sustained wind speeds reached 290 km/h.

As Hurricane Milton continued towards the Florida coast it encountered a cooler, drier air mass, which disrupted its structure, causing it to weaken to a category 3 hurricane. By the time it made landfall near Siesta Key, Florida, it had sustained winds of 193 km/h.

FIGURE 6 A track map of Hurricane Milton

SkillBuilder discussion

Geographical inquiry

1. What path did Hurricane Milton take across the South Pacific Ocean?
2. On which date did Hurricane Milton reach its highest wind speeds?
3. Which islands were affected by Hurricane Milton's path?

SkillBuilder discussion

Concluding and decision-making

1. What kind of extreme weather event is shown in **FIGURE 7**?
2. How are the strong winds affecting the trees and buildings?
3. What impact might this storm have on the surrounding area?

FIGURE 7 The power of a cyclone

9.12.4 The aftermath of Hurricane Milton

Two weeks before Hurricane Milton crossed the Florida coast, Hurricane Helene had already carved a path of destruction. This category 4 hurricane with sustained winds of 22 km/h resulted in significant damage, leaving the region in a weakened state, making the recovery efforts more challenging.

TABLE 2 The combined impacts of Hurricanes Winston and Helene

	Hurricane Helene	Hurricane
Storm surge /coastal flooding	2.5 m — extensive flooding of low-lying areas Roads, homes and businesses submerged	2.4 m — extensive flooding of low-lying areas Roads, homes and businesses submerged
Property damage	More than 3000 homes were destroyed or suffered significant structural damage	Over 500 000 homes were damaged or destroyed due to strong winds and flooding 125 homes were lost before the hurricane made landfall
Power outages	3.4 million customers	3.3 million customers
Infrastructure damage	Almost 10 000 km of roads, more than 1000 roads, water and sewerage systems impacted, electrical	Bridges, roads and public utilities suffered significant damage
Economic loss	$200 billion (estimated)	$180 billion (estimated)
Fatalities	230	17 (estimated)
Tornadoes	6 — including one with peak winds of 250 km/h — leading to significant property damage	126 tornado warnings with 46 forming — three with winds of up to 290 km/h — leading to significant property damage

The combined impacted area of both Hurricanes Milton and Helene span a radius of around 805 km from the centre of each storm. Significant impact was experienced in Florida, Alabama, Georgia, Tennessee, and North and South Carolina. Some states bordering these areas experienced localised flooding.

Recovery

In the aftermath of Hurricanes Milton and Helene, more than 13 000 people were housed in temporary shelters and the Federal Emergency Management Agency (FEMA) has provided more than 11 million meals and 9.6 litres of water to those impacted. Additionally the FEMA worked with state and local authorities to remove debris from public roads and open areas.

The recovery effort was expected to last several years due to the extensive damage to infrastructure, private homes, businesses and local communities. The federal government provided more than $2 billion in financing assistance with around half going to those directly impacted to assist with repairs, rebuilding and the replacement of personal property.

FIGURE 8 Heavy rain and storm surges due to Hurricane Milton caused extensive flooding.

SkillBuilder discussion

Concluding and decision-making

1. Why has this home suffered so much damage?
2. Do you think this home can be repaired?
3. How would you feel if this was your home?

FIGURE 9 Homes were destroyed and trees brought down.

Hurricane Milton breathes life into tornadoes

On October 9, 2024, Palm Beach County, Florida, had its first recorded EF3 tornado. It was one of the 46 spawned as a result of Hurricane Milton. The tornado carved a 34 km path of destruction, destroying homes and businesses in new housing developments, and tossing cars like leaves swept by the wind on a windy day.

FIGURE 10 Hurricane Milton spawned powerful tornadoes

9.12.5 Twin cyclones Judy and Kevin

Tropical Cyclone Judy formed in the Pacific Ocean on 22 February 2023, moving to the south-east before making landfall in Efate, Vanuatu, on 28 February and Tanna Island on 1 March as a category 4 cyclone. At its peak, Cyclone Judy had sustained winds of 200 km/h and wind gusts of 250 km/h.

Tropical Cyclone Kevin formed off the north-east coast of northern Queensland near Cooktown. Moving south, Cyclone Kevin intensified into a category 5 cyclone with sustained winds of 230 km/h gusting to 260 km/h, On 3 March 2023, barely 48 hours after Cyclone Judy, Cyclone Kevincarved its own path of destruction through the same region of Vanuatu.

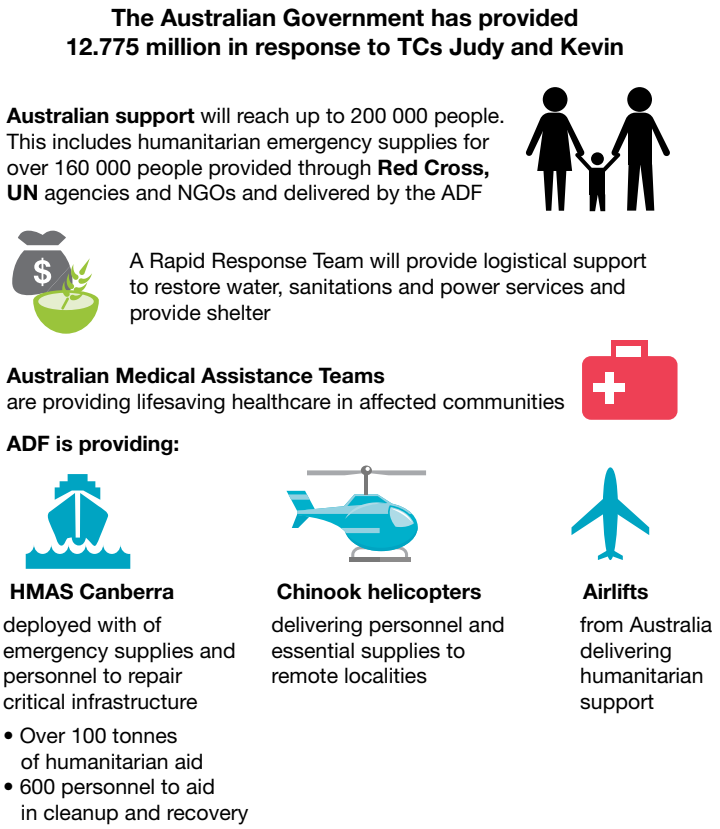
The combined impact of both cyclones had a devastating effect on Vanuatu:

- 250 000 people, more than 80 per cent of the population, were displaced.
- The estimated damage to agriculture, infrastructure and homes was around $689 million.
- 26 per cent of the nation's arterial road network was inaccessible, with northern islands most severely affected.
- Nearly 8000 hectares of land was flooded.

9.12.6 What aid did Australia provide?

Australia was quick to respond and provide aid to Vanuatu.

FIGURE 11 Australian aid and operation following Vanuatu's twin cyclones



9.12 SkillBuilder activity COMMUNICATING

Using the information in this lesson, create a news broadcast to inform people in other countries about the impact of the cyclones/hurricanes experienced in Vanuatu and Florida.

9.12 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
3, 4, 6, 7	1, 2, 8	5, 9, 10

REMEMBER AND UNDERSTAND

1. **Identify** why a tropical cyclone dies out if it moves inland.
   a. It has run its course.
   b. It loses its supply of moisture.
   c. This is the natural cycle of storms.
   d. It doesn't; it merely changes its name.
2. How does the scale of a cyclone vary?
   a. According to the wind speeds generated
   b. According to the time of the year they develop
   c. Depending on which hemisphere they form in
   d. All of the above
3. **Describe** the conditions needed for a tropical cyclone to develop.
4. In other places tropical cyclones are called hurricanes or typhoons. True or false?
5. **Explain** the changes that a storm surge can cause to a coastal area.

ANALYSE AND APPLY

6. **Describe** how the damage would differ between a category 1 and a category 5 cyclone.
7. **Suggest** a reason why people are more likely to be killed or injured after the eye of the cyclone has passed.
8. Cyclones cause significant damage. Do you think destructive winds or water displacement causes the most damage to the natural and built environment? **Justify** your answer.

EVALUATE AND COMMUNICATE

9. Study **FIGURE 2** showing the global distribution of tropical cyclones.
   a. **State** the time of the year when most cyclones occur north of the equator and south of the equator. **Suggest** a reason for this difference.
   b. **Identify** the parts of Australia most at risk from cyclone activity.
10. If the water source for cyclones is the ocean over which they form, **analyse** why strong winds and flooding occur in places inland from the coast.

Answers and sample responses for this topic are available online.

LESSON 9.13 Inquiry: What is the water quality of a local waterway?

LEARNING INTENTION

By the end of this lesson you should be able to:
- research local catchment water quality
- make a report and presentation.

Background

Water is very important and should be managed carefully everywhere. Water quality affects our health. When it rains, water can carry rubbish and chemicals into rivers.

Your team will study the water quality of a local catchment or waterway and make a report and presentation. Check different places along the river or creek to see why water quality changes.

To do this, you need both primary and secondary research. **Primary research** means looking at the water yourself, taking photos and collecting data. **Secondary research** means using published materials like maps or articles from other groups.

Examples of primary research methods include:
1. collecting and testing water samples from a body of water
2. documenting evidence of litter and water contamination
3. observing water bugs, which provide evidence of a healthy body of water.

FIGURE 1 Primary research means collecting water samples, noting litter and watching water bugs.

Before you begin

Check the **Inquiry rubric** in the digital documents to help you with this task and self-assess at the end.

Inquiry steps

Step 1: Questioning and researching using geographical methods

Research the main features of your local river catchment area.
- What sort of data and information will you need to study water quality at your fieldwork sites?
- How will you collect and record this information?

Where are the best spots to get data? You can decide once you know which waterway you're visiting.
- How will you record your information? Think about using GPS, videos, cameras or mobile devices.

Step 2: Interpreting and analysing geographical data and information

Gain some knowledge of the fieldwork location and requirements before you visit the site.

- Use topographic maps and Google Earth to learn about the location. Then, complete a sketch map of the waterway and mark the places you'll visit.

You can then scan your sketch map and have it available electronically on the field trip. Alternatively, use Google Maps to record all the sites you visit.

Determine what equipment you need for each site. Work in groups, with each group collecting different data.

- Use the data collection templates on your device or print them out.

Step 3: Concluding and decision-making

Collect and organise your data, then decide what to include in your report. Choose the best way to show your results — tables, graphs or maps. If you use a spreadsheet, you can make graphs on your computer. Add photos to your map to show features you recorded. You can also label the photos to explain what you saw.

FIGURE 2 Data can be collected at the site and then entered immediately into data collection templates.

Describing and interpreting your data is important. Answer questions about your findings to help explain them.

- Where is water quality highest (best) in the waterway studied?
- Is water quality better in the upper reaches of the river or creek?
- Does an urban waterway have better water quality than a rural waterway?
- Does surrounding land use have an impact on water quality?
- Do large waterways have better water quality than smaller waterways?
- What were the main contributors to poor and good water quality?
- How does surrounding vegetation affect water quality?

Access the digital documents section of the Resources panel to download the following:

- Data recording template
- Presentation template
- Record sheets
- Report template

Step 4: Communicating

Communicate your findings. You will create a fieldwork report and a presentation. Include all your research and evidence to support your findings. Ensure that your report includes:

- a title
- an aim
- a hypothesis (what you think you will find) — write this before you go into the field
- your findings
- a conclusion.

You'll suggest ways to improve water quality in the creek or river you visited. Use the **Inquiry rubric** to check your work.

LESSON 9.14 Review

9.14.1 Key knowledge summary

Use this dot-point summary to review the content covered in this topic.

9.2 What type of resource is water?

- People depend on the Earth's environmental resources for survival.
- Australia has an abundance of environmental resources, both renewable and non-renewable. These include minerals, soils, forests and natural scenery.
- Water is a renewable resource in most forms.
- The water cycle is a process that cycles water in different forms and connects people and places.

9.3 How does groundwater connect people and place?

- Groundwater is water stored underground and is important in dry areas.
- If more groundwater is used than replaced, aquifers can dry up, making groundwater a limited resource.
- Many groundwater sources in Australia have been used by Aboriginal and Torres Strait Islander Peoples and shared through Dreaming stories and songs.
- Many springs and soaks have cultural significance for local Aboriginal and Torres Strait Islander Peoples, whose ancestors relied on the springs for survival.

9.4 Why is water supply variable?

- Only a small fraction of global water is available for use by people.
- Rainfall varies widely across the world. Climate change is affecting the availability of water.
- Green water, blue water and potential water sources are found in places around the world.
- Australia is the driest permanently inhabited continent in the world.
- Australia's rainfall is highly variable even at a global level.

9.5 Investigating topographic maps: The value of water in Noosa

- The environment around Noosa is valued for economic, aesthetic and cultural reasons.
- Management strategies help to ensure the demands of tourist and locals are met.

9.6 Does everyone have enough water?

- Globally, water is mainly used for agriculture, but this varies from region to region.
- Australia uses 70 per cent of its water for agriculture.
- Virtual water includes the water used to manufacture food and goods.
- Some foods and goods require very large amounts of water to be produced.
- Countries that export these high-water-use products are virtually exporting their water; countries importing these goods are virtually importing water.
- Australia's rainfall patterns are influenced by El Niño and La Niña. El Niño causes drought in Australia and rain in South America.
  For some countries, water *accessibility* is a greater concern than water *availability*.

9.7 How do we overcome water scarcity?

- Access to adequate clean water and sanitation is vital to maintain health but varies across the world.
- Africa has the worst data related to water and sanitation provisions.
- Women are over-represented in the task of fetching and carrying water.
- Australia is the driest inhabited continent on Earth and, although it has several large rivers, the availability of fresh water is scarce. Weather events such as El Niño produce extended periods of drought.
- A drought is a prolonged period of below-average rainfall, when not enough water is available to supply our normal needs.

- The Sustainable Development Goals have helped more people get clean water and sanitation, but much more work is needed for others.
- Cross-boundary water management must be planned so upstream and downstream populations share water fairly.
- Personal behaviours can help minimise water use and wastage.
- Governments help manage drought and water scarcity. This includes building desalination plants and encouraging responsible water use at home.

9.8 What are the causes and impacts of hydrometeorological hazards?

- The Earth's atmosphere protects us from the extremes of the sun's heat, creating conditions that support life.
- Our weather is the result of constant changes to the air in the troposphere, temperature, air movement and moisture content. These changes sometimes cause extreme weather events.
- Weather is the day-to-day, short-term change in the atmosphere at a particular location.
- Climate is the average of weather conditions that are measured over a long time.
- Natural hazards are common in Australia, including drought, floods and bushfires.
- A hazard is an event that is a *potential* source of harm to a community, whereas a disaster is an event that has an actual impact on a community.
- The four broad types of natural hazard are atmospheric, hydrological, geological and biological.

9.9 What are the causes and impacts of droughts and flooding rain?

- A drought is a long time with less rain, causing not enough water for daily needs.
- Sustained periods of drought can have varied and significant impacts on environments and communities.
- Good planning can reduce drought impacts, but poorer countries struggle more than wealthy ones.
- A floodplain is flat land by a river that floods when the river water slows down.
- These fertile, flat areas are used for farming and settlement around the world.
- Managing floods is important, but not all countries have the resources to do so.
- Floods are managed by building barriers like levees, dams and floodgates to stop excess water.

9.10 Why does the wind blow?

- Earth's atmosphere protects us from the extremes of the sun's heat and the chill of space, making conditions right to support life.
- Wind is caused by air moving from areas of high pressure to areas of low pressure.
- The direction in which winds circle depends on whether you are in the northern or southern hemisphere. As the air moves from an area of high pressure to an area of low pressure, winds circle in the opposite direction in each hemisphere.

9.11 What are the causes and impacts of extreme weather?

- Thunderstorms, also referred to as electrical storms, form in unstable, moist atmospheres where powerful updrafts occur, which happens when a cold front approaches.
- Severe thunderstorms occur when a storm has one or more of the following features: flash flooding, hailstones, or wind gusts of 90 km/h or more.
- Thunderstorms can occur at any time of the year, but are more likely to occur during spring and summer.
- A snowstorm is officially recognised as a blizzard when wind speed is sustained above 56 km/h or has frequent gusts in excess of this speed for more than three hours.

9.12 What are the causes and impacts of cyclones?

- Cyclones form when a cold air mass meets a warm, moist air mass lying over a tropical ocean with a surface temperature greater than 27 °C. Cold air currents race in to replace rapidly rising, warm, moist air currents, creating an intense low-pressure system.

- Cyclonic wind strength is measured by the Saffir–Simpson Scale.
- When a tropical cyclone approaches or crosses a coastline, the very low atmospheric pressure and impact of strong winds on the sea surface combine to produce a rise in sea level.

9.13 Inquiry: What is the water quality of a local waterway?

- Water quality will vary depending on the location of the testing site and whether or not rain has fallen in the previous 24 hours.
- All recordings should be dated to add validity to the results.

9.14.2 Key terms

alluvium the loose material brought down by a river and deposited on its bed, or on the floodplain or delta
aquifer a body of permeable rock below the Earth's surface that contains water, known as groundwater; water can move along an aquifer
artesian aquifer an aquifer confined between impermeable layers of rock; the water in it is under pressure and can flow upward through a well or bore
atmosphere the layer of gases surrounding Earth
avalanches rapid movement of snow down a slope, usually under the influence of gravity; can also be triggered by animals, skiers or explosions
barometer an instrument used to measure air pressure
catchment the drainage basin of a river
climate change any change in climate over time, whether due to natural processes or human activities
cloud seeding implanting clouds with substances to cause rain
continuous resource a resource that is never used up by humans
crevasses a deep crack in ice
cyclones intense low-pressure systems producing sustained wind speeds in excess of 65 km/h; they develop over tropical waters where surface water temperature is at least 27 °C
desalination a process that removes salt from sea water
Dreaming The Dreaming in Aboriginal and Torres Strait Islander spirituality explains the beginning of Earth, life cycles, creation, and nature. It shows everyone's place in the world and the importance of rituals and traditions.
drought a long period of time when rainfall received is below average
El Niño the reversal (every few years) of the more usual direction of winds and surface currents across the Pacific Ocean; this change causes drought in Australia and heavy rain in South America
environmental resource a material found in nature that is necessary or useful to people
evaporation the process by which water is converted from a liquid to a gas and thereby moves from land and surface water into the atmosphere
frostbite damage caused to the skin when it freezes, brought about by exposure to extreme cold; extremities such as fingers and toes are most at risk, along with exposed parts of the face
Gale force winds wind over 62 kilometres per hour
Groundwater water that is stored underground in the cracks and spaces in soil, sand and rock. It comes from rain and water that soaks into the ground and collects in areas called aquifers.
hydrologic cycle another term for the water cycle
hydrometeorological hazards natural disasters caused by weather or water, like floods, storms or droughts.
hypothermia when a person's core body temperature falls below 35 °C and the body is unable to maintain key systems; risk of death without treatment
infrastructure the basic physical and organisational structures and facilities that help a community run, including roads, schools, sewage and phone lines
Isobars lines on a map that join places with the same air pressure
megadrought a drought lasting more than 20 years.
meteorologists a person who studies and predicts weather
monsoon rainy season accompanied by south-westerly summer winds in the Indian subcontinent and South-East Asia
mound spring mound formation with water at its centre, formed by minerals and sediments brought up by water from artesian basins
non-renewable resource a resource that cannot be renewed in a short time and is finite

potential resource a resource that exists but is unusable in its current state, such as salt water, ice and water vapour
precipitation a form of water from the atmosphere; e.g. rainfall, snow
primary research collection of original information
rainfall variability the change from year to year in the amount of rainfall in a given location
relative humidity the amount of moisture in the air
renewable resource a resource that can be naturally replaced if carefully managed
secondary research collection of resources on an issue, prepared by others and offering different viewpoints
soak place where groundwater moves up to the surface
southern oscillation a major air pressure shift between the Asian and east Pacific regions; its most common extremes are El Niño events
storm surges a sudden increase in sea level as a result of storm activity and strong winds; low-lying land may be flooded
Torrential rain heavy rain often associated with storms, which can result in flash flooding
troposphere layer of the atmosphere closest to the Earth, extending about 17 kilometres above the Earth's surface, but thicker at the tropics and thinner at the poles; where weather occurs
typhoons the name given to cyclones in the Asian region
uranium a dense grey radioactive metal used as a fuel in nuclear reactors
virtual water all the hidden water used to produce goods and services
water footprint the total volume of fresh water that is used to produce the goods and services consumed by an individual or a country
water scarcity when the demand for water is greater than the supply available
water stress a situation that occurs in a country with less than 1000 cubic metres of renewable fresh water per person
whiteouts a weather condition where visibility and contrast is reduced by snow; individuals become disoriented because they cannot distinguish the ground from the sky

9.14.3 Reflection

Revisit the inquiry questions posed in the Overview:

What effect does the uneven distribution of water resources have on the lives of people?

How does weather and climate, including severe weather events, influence the distribution and wellbeing of human populations?

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

learnon

Post-test	Online post-test
eWorkbook	Customisable worksheets for this topic Reflection
Digital document	Key terms glossary

9.14 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 5, 8	3, 4, 6, 7, 9, 10	11, 12, 13, 14, 15

REMEMBER AND UNDERSTAND

1. What is the main difference between a renewable and a non-renewable resource?
   A. Renewable resources are cheaper than non-renewable resources.
   B. Renewable resources are more expensive than non-renewable resources.
   C. Renewable resources can be replaced in a longer period of time than non-renewable resources.
   D. Renewable resources can be replaced in a shorter period of time than non-renewable resources.
2. Only 2.5 per cent of the world's water is fresh water. Where is most of this locked up?
   A. Groundwater
   B. Wetlands
   C. Glaciers, snow and ice
   D. Atmosphere
3. How are groundwater and surface water interconnected?
   A. They are not interconnected but are two different water systems.
   B. Surface water is evaporated and then precipitated back to Earth.
   C. Rivers slowly fill up aquifers.
   D. Groundwater is replenished when surface water infiltrates deep into water-bearing rock or aquifers.
4. When does water scarcity occur?
   A. When the demand for water is greater than the supply available.
   B. When the demand for water is less than the supply available.
   C. When too much water is available to fulfill all demands.
   D. When not enough water is available to fulfill all demands.
5. Approximately 10 per cent of people in the world do not have access to water that is safe to drink. Approximately how many people in the world do not have access to safe drinking water?
   A. 84 million
   B. 8 billion
   C. 844 million
   D. None
6. Our weather is the result of changes in what?
   A. The distance of the Earth from the sun
   B. The composition of gases in the Earth's atmosphere
   C. The numbers of hours in a day
   D. The constant changes to the air in the troposphere
7. What is the risk a hazard poses to a community determined by?
   A. The type of hazard and the vulnerability of the community
   B. The type of hazard and the size of the community
   C. The type of hazard and the demographics of the community
   D. The type of hazard and the location of the community
8. What are Australia's weather patterns heavily influenced by?
   A. El Niño and La Niña
   B. Our extreme southerly location
   C. The relative dryness of our country
   D. Our lack of mountainous regions
9. Floodplains provide what benefits to human civilisations?
   A. Reliable access to water
   B. High-nutrient soil
   C. Enabling agricultural activity
   D. All of the above

10. What is the effect of differences in air pressure on the wind?
    A. Changes its direction
    B. Changes its temperature
    C. Changes its strength
    D. All of the above

EVALUATE AND COMMUNICATE

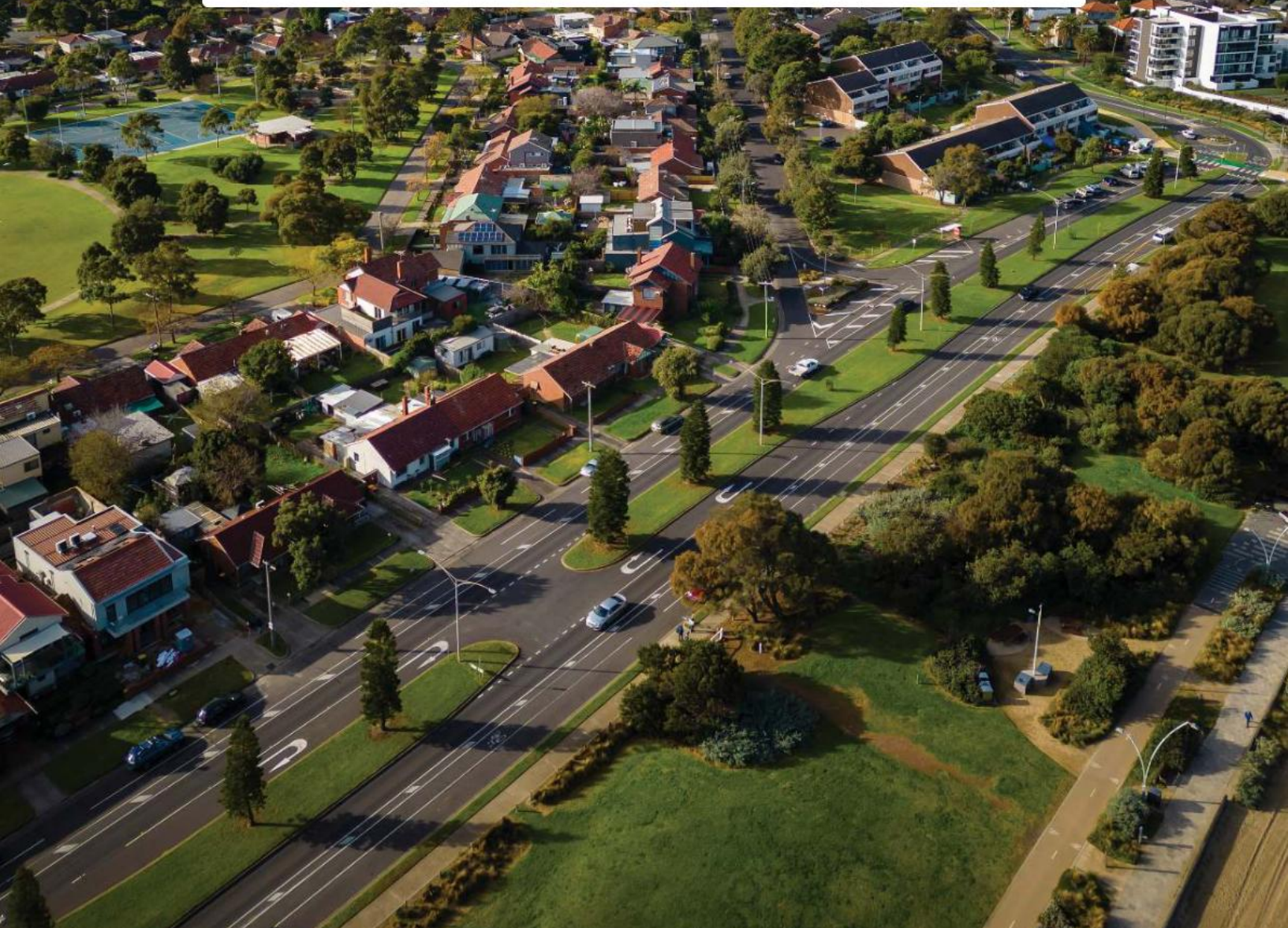
11. Answer the following questions:
    a. **Suggest** three ways that people use groundwater as a resource.
    b. **Explain** how groundwater is used unsustainably.
    c. **Explain** the significance of groundwater to Aboriginal and Torres Strait Islander Peoples.
12. Drinking unsafe water creates a number of problems. **Identify** two impacts of unsafe drinking water on the lives of people in developing countries.
13. **Explain** two water management strategies used by communities to improve the sustainability of water as an environmental resource.
14. Drought presents a far greater risk to communities than floods. Do you agree or disagree with this statement? **Justify** your opinion.
15. **Explain** how climate change is increasing the risk of hazards becoming disasters.

Answers and sample responses for this topic are available online.

10 Place and liveability

LESSON SEQUENCE

10.1 Overview 342
10.2 What is liveability? 344
10.3 What makes a place liveable? 348
10.4 Where are the most liveable cities? 356
10.5 What is it like to live in remote places? 360
10.6 Country vs city living 369
10.7 What makes a liveable and non-liveable city? 377
10.8 What makes communities liveable? 385
10.9 What is connection to Country? 391
10.10 Investigating topographic maps — Liveability in Badu and Moa 399
10.11 How do places change? 401
10.12 What is the connection between liveability and sustainable living? 409
10.13 How can liveability be improved? 413
10.14 Inquiry: What are the characteristics of liveable cities? 420
10.15 Review 422



LESSON 10.1 Overview

INQUIRY QUESTION

What is meant by the concept of liveability? How is liveability measured and how does this combine with other factors to influence where someone may choose to live?

We all live in different **places**. Places are important to people, whether they are regional or metropolitan, **remote** or central. No two places are alike; they differ in appearance, size, features and access.

Your quality of life depends on things like where you live, climate, landscape and **community** facilities, and how connected you feel to others. You might have a favourite place to live, which could be different from what others like. This is because everyone values different things. This topic explores why people chose a particular place to live and how they define and enhance liveability.

learnon

- **Pre-test**
  Online pre-test
- **eWorkbook**
  Customisable worksheets for this topic
- **Digital document**
  Key terms glossary
- **Video eLessons**
  Place and liveability

SkillBuilder

Use the SkillBuilder activities to develop these Geographical concepts and skills:

- GEOGRAPHICAL INQUIRY
- CONCLUDING AND DECISION-MAKING
- COMMUNICATING

LESSON 10.2 What is liveability?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **define** what is meant by liveability
- **explain** how places are viewed differently by people
- **suggest** reasons why people's perceptions of liveability differ.

Tune in

Think of your favourite place. Make a mind map of what makes it special. An example has been provided in FIGURE 1.

FIGURE 1 Ballarat is a city in the Central Highlands of Victoria, Australia. Below are the features that make Ballarat special.

10.2.1 A sense of place

Places are central to the study of Geography. They have unique identities and special features. The characteristics of a place come from:

1. natural features
2. human features — that is, features built by people
3. a combination of natural and human features.

FIGURE 2 Some important places. From left to right: Christ the Redeemer statue, Rio de Janeiro; Disney World, Orlando, Florida, the United States; Taj Mahal in Agra, India; and the Grand Canyon, Utah, the United States

SkillBuilder discussion

Geographical inquiry

Look at the images in **FIGURE 2**.

1. Write some questions that someone might have in relation to these images.
2. Why do you think these are important places for people?

10.2.2 Perception of liveability

If you heard that Vienna or Melbourne was the world's best place to live, what would you think this meant? Is it just city councils boasting, or can we actually measure liveability? Does liveability mean the quality of life for city residents?

The characteristics of a place influence our opinion of that place and whether we consider it as a place where we would like to live.

TABLE 1 Here's what some fictional characters say about their community's liveability. They are from different places and share what liveability means to them.

	'I think a liveable city is a city where I can have a healthy life and where I can safely and quickly get around on foot or by bicycle or public transport, or even by car — as a last resort. A liveable city is a city for everyone, including children and old people, rich and poor, and people of different religions, races and fitness levels. A liveable city should be attractive, and have good schools, a choice of things to do and fresh air.' *John from Perth*

	'I think that a place is liveable if I have food every day, I do not have to walk more than ten minutes to collect water for cooking and my father has work close by, so he is home for dinner. Liveability means warm weather, enough rain and being able to go to school every day.' *Nafula from Kenya*
	'Liveability is all about the **natural environment**. I think a place is liveable if the air is clean, there is plenty of water in the river and there is a healthy forest nearby. Being able to grow your own food, use renewable energy and live a simple life are all a part of what is important to me and can make a place liveable.' *Joy from Huon Valley, Tasmania*
	'The community is what makes a place liveable. Being connected with my neighbours through the community gardens, food co-op, volunteer network at our kids' school and the car-share scheme all makes me feel a valued member of my community. I like knowing people who care and that we all care for each other.' *Laura from Bristol, United Kingdom*

SkillBuilder discussion

Geographical inquiry

1. What does John from Perth think makes a city liveable and how is this different from Laura?
2. What things does Nafula from Kenya say are important for liveability?
3. What natural features does Joy think are needed for a place to be liveable?

10.2 SkillBuilder activity GEOGRAPHICAL INQUIRY

1. Interview an older person about what they remember about the place or community that they grew up in.
2. Ask how they measured liveability back then.
3. Ask if they found their described place liveable and reasons for any changes they would make.
4. **Reflect** on your learnings from the conversation.
5. **Compare** your community's current liveability to their descriptions of liveability. Which community would you prefer to live in?

10.2 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4	5, 6	7, 8, 9, 10

REMEMBER AND UNDERSTAND

1. Liveability means the same to everyone. True or false?
2. **Identify** the elements that contribute to liveability.
   A. Community
   B. Housing
   C. Transport
   D. Food and water
   E. Education
   F. All of the above
3. Which of the following are most likely to be important aspects of liveability for a woman in Kenya? **Select** all that apply.
   A. Having choices in places to eat and sleep
   B. Having food every day
   C. Being able to go to school every day
   D. Having a good job and a nice car
   E. Being near clean water
4. **Identify** the correct definition of the term 'place'.
   A. A specific area on the Earth's surface that has been given meaning by people.
   B. Any area of varying size that has one or more characteristics in common.
   C. A point on the Earth's surface where something is to be found.
   D. Any location that is being used by humans.

ANALYSE AND APPLY

5. Study **FIGURE 2**. **Describe** five characteristics in the environment of each feature that creates its individual sense of place.
6. Do you think that people's favourite places would vary with the age of the individual? **Explain** your answer.
7. Study the images in **FIGURE 2**. **Suggest** reasons for why these places have become famous around the world.
8. Think about different places that you have visited.
   a. **Name** and **describe** a place that you have visited and enjoyed that is predominantly made up of natural characteristics.
   b. **Name** and **describe** a place that you have visited and enjoyed that is predominantly made up of human characteristics.

EVALUATE AND CREATE

9. Liveability means different things to different people.
   a. Write a statement similar to those in section 10.2.2 about the community that you live in that **explains** what makes it liveable.
   b. **Consider** how your liveability statement might be if you were blind, unemployed, elderly or unable to speak English. **Create** community liveability statements that reflect two of these residents.
10. Think about your community 50 years from now. **Predict** how the characteristics of your community might be different. Include your thoughts on aspects such as housing, traffic, number of people, age of the population and the types of facilities.

Answers and sample responses for this topic are available online.

LESSON 10.3 What makes a place liveable?

LEARNING INTENTION

By the end of this lesson you should be able to:

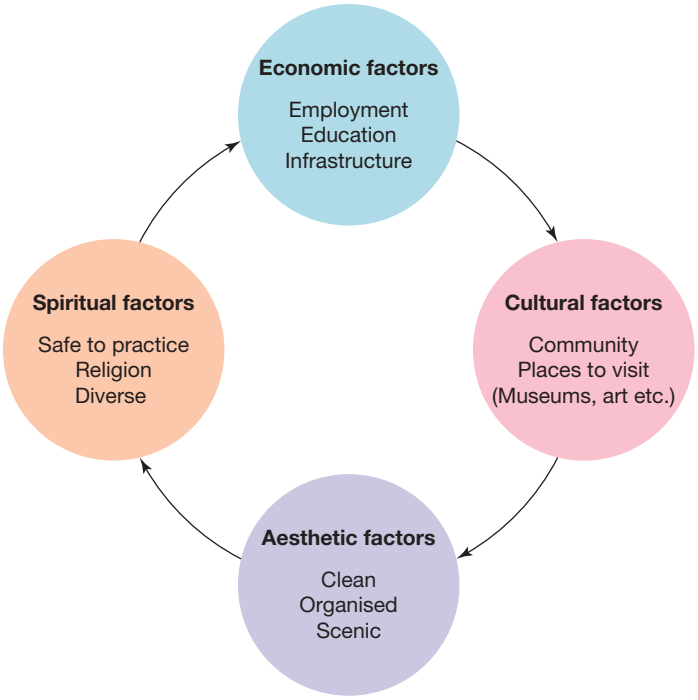
- **explain** the factors that influence peoples decisions about where to live
- **describe** how places change over time.

Tune in

Why would someone choose to live in a busy city, or a rural town with only a couple of stores? We choose places to live for many reasons, and **FIGURE 1** shows the four factors that guide these decisions.

Imagine you had to select a new place for your family to live. Refer to the four factors in **FIGURE 1** and, in pairs, discuss the features you'd be looking for in each factor.

FIGURE 1 Economic, cultural, aesthetic and spiritual factors influence where you live.



1. **How could spiritual factors influence people in the present times?**
2. **How does the aesthetic aspects change a person's behaviour?**
3. **Which of the four aspects influences a person's decision?**

10.3.1 Push and pull factors

People live in different places for many reasons. **Pull factors** attract people, while **push factors** drive them away. Everyone has different views.

Reasons for living in a place can change over time.

Four factors influence the liveability of places or why people decide to live there:

- available financial resources (money)
- employment
- relationships with other people (e.g. wanting to be near family or moving for a partner's job)
- lifestyle.

People's living choices change as they grow up. For example, a young adult may want city life, while a parent may prefer a quiet suburb.

Some towns in Australia, like Kanowna, 22 kilometres east of Kalgoorlie, grew quickly after gold was found in 1893. They built hospitals, schools and other **infrastructure** to support a town of 12 000.

As gold ran out, people left Kanowna, and it was mostly empty by the 1950s. The discovery of new gold deposits in the 1970s led to the Kanowna Belle Gold Mine opening in 1993. Most workers live in Kalgoorlie, except **fly in, fly out (FIFO)** employees. Only ten people lived in Kanowna by 2016.

Similarly, Cossack, near Port Hedland, was established in the late 1860s as a pearling base. Development of the pastoral industry in the Pilbara **region** and gold discoveries attracted more people to the port town.

As the pearling industry continued to grow, the size of transport ships grew bigger and the harbour couldn't keep up. However, by the 1950s, Cossack had fallen into **urban decay** and was eventually abandoned due to the relocation of the pearling industry in Broome. Today, Visitors can explore historic buildings on the 5-km Heritage Trail.

FIGURE 2 The restored courthouse is one of the attractions on the Cossack Heritage Trail.

FIGURE 3 The Customs House and Store is another attraction on the Cossack Heritage Trail.

10.3.2 Economic, cultural, aesthetic and spiritual factors

Push and pull factors help explain why people choose where to live. They might move for work but stay for other reasons. These reasons are broken into economic, cultural, aesthetic and spiritual factors. A brief outline of each of these factors is provided in **FIGURE 1** at the start of this lesson.

One example of these different liveability factors is illustrated in **FIGURE 4**. People are attracted to many places and stay for different reasons.

SkillBuilder discussion

Communicating

1. London has some distinct features — can you list them?
2. What kind of liveability factor is the bus and underground system? Can you categorise the other features on your list?

FIGURE 4 London's famous double-decker buses and underground, a key feature of the city's public transport system.

10.3.3 Objective and subjective measures

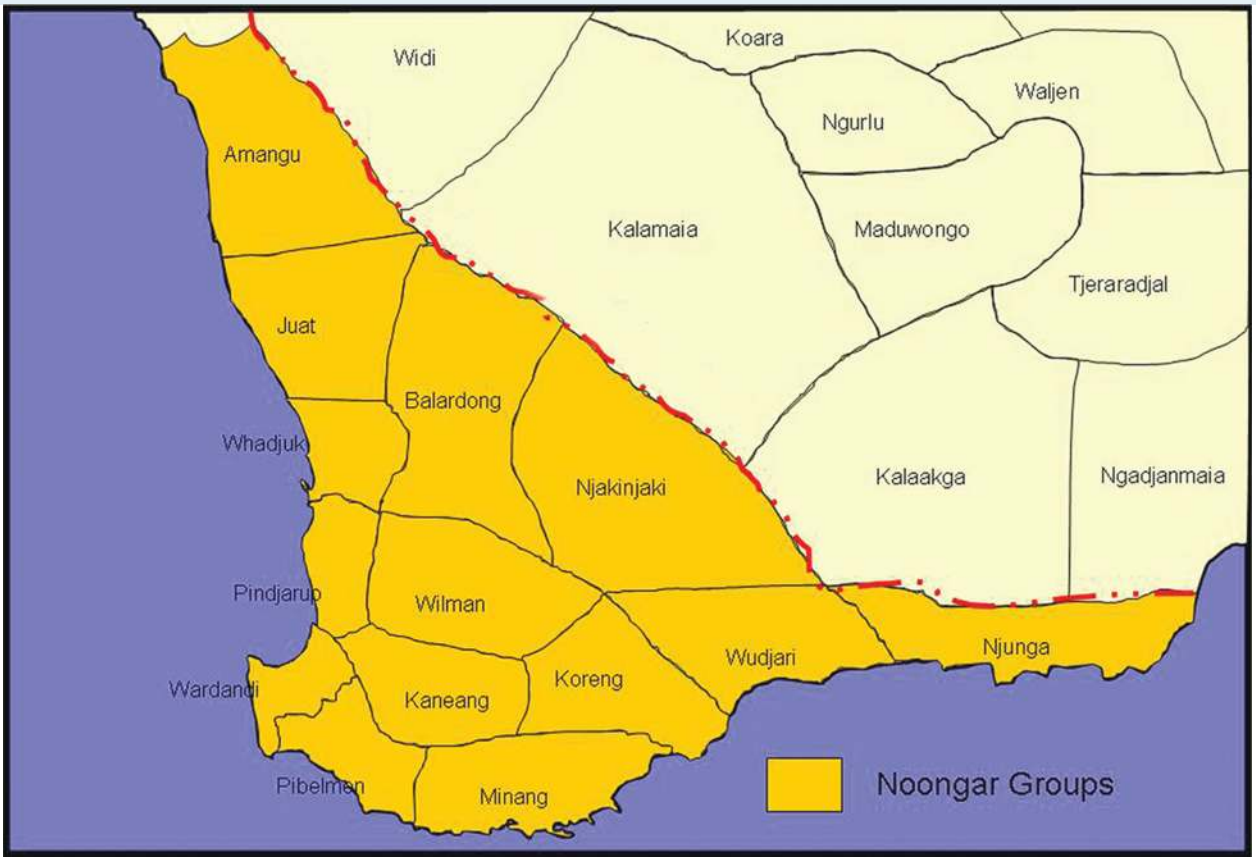
When moving, people hope to find all four factors. Sometimes this doesn't happen. For example, Shaun moves to Darwin for work (an economic factor) but misses the nightlife (a cultural factor). Shaun's job is an **objective** reason for living somewhere, whereas nightlife is a **subjective** reason, as many people in Darwin enjoy the nightlife.

10.3.4 My place

What is your **neighbourhood** or local place like? All of us live in a community, and these are often centred on the place where we live or go to school or work.

Teenagers have special places that matter to them: their bedroom, home and neighbourhood.

FIGURE 5 Aboriginal and Torres Strait Islander Peoples' groups of south-west Western Australia



In a neighbourhood, you get to know what makes it special. Some have people with similar interests, while others are mixed and multicultural. This variety makes Australia an interesting place to live.

Neighbourhoods have always been part of Australia. For many Aboriginal and Torres Strait Islander Peoples, **Country** is linked to language. The Noongar people, for example, have 14 communities in south-west Western Australia. Each community spoke its language and shared customs, keeping people connected.

Almost 90 per cent of Australians live in towns and cities. Some live in unique communities outside cities. Describing our local place can be hard, but geographers use maps to help.

10.3.5 What makes Australia so liveable?

Where is your favourite place in Australia? Is it a holiday **location**? Is the climate nice, the scenery beautiful and is it fun? Is it in a city, the **wilderness,** or nearby, with a great **built environment**?

Some of Australia's most popular places to visit are the Great Barrier Reef, Uluru, Sydney and the Gold Coast. Sydney and the Gold Coast are built environments. The other two are known for their beautiful remote nature.

Some great places are near cities, while others are remote. They attract many visitors who enjoy different **aspects** of the local environment.

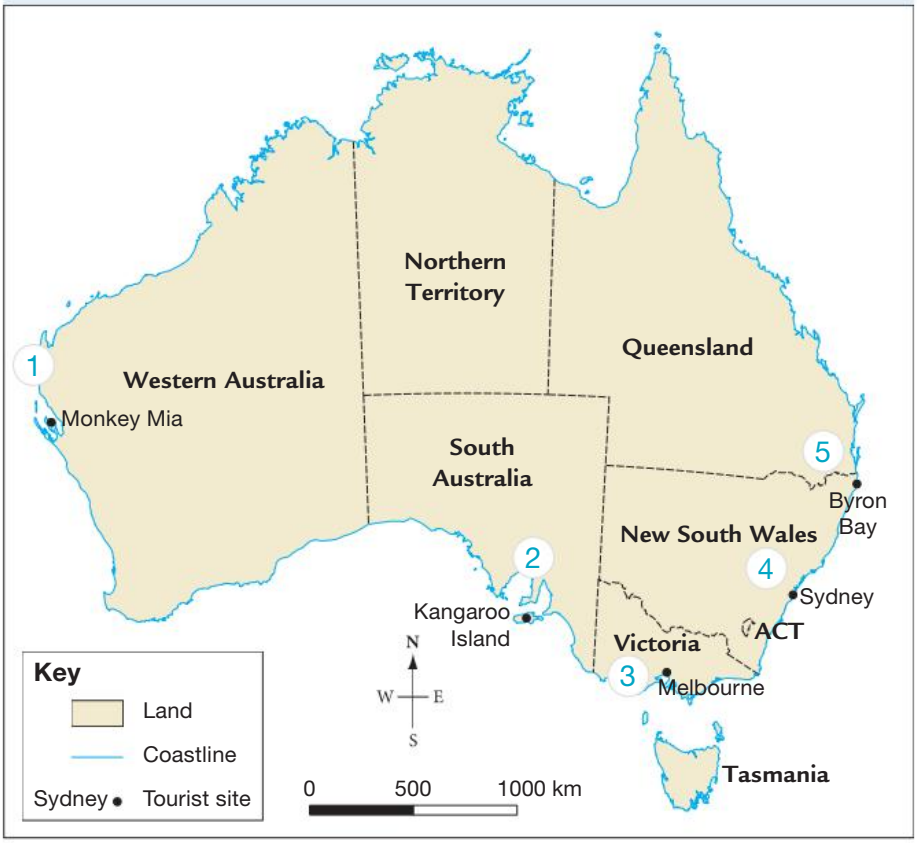
FIGURE 6 shows the location of five of Australia's most popular places for tourists.

SkillBuilder discussion

Communicating

1. Look at **FIGURE 6**. Have you been to or heard of any of the special places on the map? If so, what did you enjoy?
2. What do you notice about the locations of these popular attractions?

FIGURE 6 Five popular tourist destinations in Australia



Source: Spatial Vision

Monkey Mia

Monkey Mia is in Shark Bay, Western Australia. For many decades dolphins have come to the beach to interact with fishermen and then tourists. It's beautiful and not too crowded, with most people camping nearby.

FIGURE 7 Wild dolphins up close is an attraction for tourists to Monkey Mia.

Kangaroo Island

Kangaroo Island is Australia's third largest island, located 160 km south of Adelaide. It's a beautiful place for wildlife lovers, being home to koalas, kangaroos, seals and penguins. With stunning beaches and rocky outcrops, it's now a popular tourist spot.

FIGURE 8 Kangaroo Island is known for its abundance of wildlife.

Melbourne

Melbourne is Australia's second-largest city and ranks highly as a **liveable city** on global liveability listings. Tourists enjoy Melbourne's sports, culture, shops and restaurants. It's known for its laneways and café culture.

FIGURE 9 Melbourne is attractive for both residents and tourists.

Sydney

Sydney is Australia's largest and oldest city, often called the 'Harbour City'. It has great beaches, restaurants, theatres and famous landmarks, making it a popular destination.

FIGURE 10 Sydney has many cultural and environmental attractions.

Byron Bay

Byron Bay is a relaxed beach town in northern New South Wales, 160 km south of Brisbane. It's famous for surfing and beautiful beaches.

FIGURE 11 Byron Bay's natural beauty and laidback atmosphere attract residents and tourists.

10.3 SkillBuilder activity COMMUNICATING

1. Use a map to locate the current settlement of Cossack in Western Australia.
   a. **Calculate** the distance between Cossack and the nearby towns of Wickham and Port Samson.
   b. **Study** the land use features of the environment around all three locations. **Identify** the economic, aesthetic and spiritual uses of the land. **Classify** these uses as possible push or pull factors.
2. **Design** a map of your most liveable place. Consider the natural and built environments; distance to a city, services, job and recreational opportunities; climate; and lifestyle. **Annotate** your map to **explain** why this is where you would like to live.

10.3 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 5	4, 6, 9	7, 8, 10

REMEMBER AND UNDERSTAND

1. **Select** the correct option:
   a. When choosing a place to live, **employment / religion / education** is a subjective factor.
   b. When choosing a place to live, **spirituality / the nightlife / employment** is an objective factor.
2. **Determine** whether the following statements are true or false.
   a. Pull factors are negative aspects of a place; they don't attract people to come and live in a place.
   b. Push factors are reasons that encourage people to leave a place and go somewhere else.
   c. Access to employment and education are cultural factors.
3. Briefly **explain** what happened in Cossack, Western Australia.
4. In your own words, **define** the term 'liveable city'.
5. **Select** the correct option. Approximately **10 / 30 / 60 / 80 / 90** per cent of Australians live in towns and cities.

ANALYSE AND APPLY

6. **Define** the term 'urban decay' in your own words.
7. **Suggest** reasons why some people continue to live in decaying urban environments, and why others might choose to move.

EVALUATE AND COMMUNICATE

8. Consider the information on Kanowna and imagine that you have been employed at the Kanowna Belle Gold Mine. You have been given the option of housing within Kalgoorlie or within the original Kanowna township. Consider the potential advantages and disadvantages of both options and **explain** what your final decision would be.
9. After reading about the five places described in section 10.3.5, which of these places is most similar to your most liveable place? **Explain** your answer.
10. If you wished to live in a relaxed coastal environment close to a capital city, which of the places in **FIGURE 6** would be best? **Justify** your response

Answers and sample responses for this topic are available online.

LESSON 10.4 Where are the most liveable cities?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **discuss** the concept of liveability and how it is measured
- **describe** the location of the most and least liveable cities
- make connections between places based on liveability factors.

Tune in

Did you know the Economist Intelligence Unit ranks the world's most liveable cities?

TABLE 1 shows the 2024 rankings, with Melbourne in the top five.

Mind map seven criteria you would choose to measure liveability. For example, your first criterion for themost liveable city could be access to clean water.

TABLE 1 Most liveable cities, 2024

Rank	City	Index
1	Vienna	98.4
2	Copenhagen	98.0
3	Melbourne	97.7
4	Sydney	97.4
5	Vancouver	97.3
6	Zurich	97.1
7	Calgary	96.8
7	Geneva	96.8
9	Toronto	96.5
10	Osaka	96.0
10	Auckland	96.0

Source: *The Economist Intelligence Unit*

10.4.1 What is liveability?

Cities often boast about being the best — safest, richest or fastest growing — to attract visitors and attention. Liveability is defined as the features making a place desirable and enjoyable to live in, measured by safety, health, comfort, community facilities and freedom.

10.4.2 Who says which city is the most liveable?

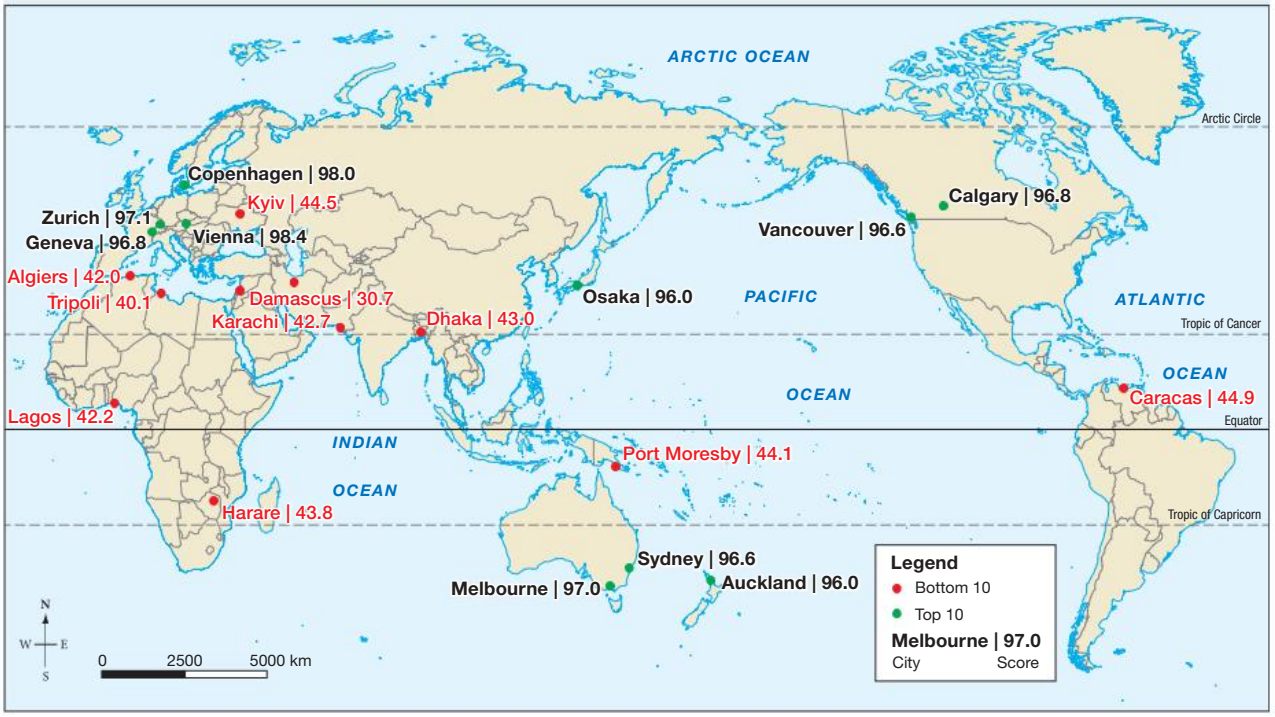
International organisations media and educational establishments rank the world's most liveable cities by comparing data. These rankings help workers considering moving and companies determining extra pay for less liveable cities. They also attract migrants, tourists and investors.

Rankings are based on:

- stability (crime, terror threats, civil unrest)
- healthcare
- culture and environment (religious tolerance, corruption, climate, natural disasters)
- education
- infrastructure (transport, housing, energy, water, communication)
- economic stability
- recreational and sporting facilities
- availability of consumer goods (food, cars, household items).

FIGURE 1 shows the top and bottom 10 cities from the Economist Intelligence Unit's 2024 liveability rankings. The survey reviews 173 cities; a score of 100 would equate to the perfect or ideal city. In previous years, Vienna, Melbourne and Vancouver shared the top ranking. In 2019, Vienna gained top spot with Melbourne falling to second and Vancouver to sixth. In 2021, Auckland was the top city, with Adelaide second. Melbourne tied for eighth with Geneva, while Vancouver and Vienna dropped out of the top 10.

FIGURE 1 City liveability rankings



Source: Data from The Economist Intelligence Unit Limited. The Global Liveability Index (2024), The world's most liveable cities. Retrieved from https://www.eiu.com/n/campaigns/global-liveability-index-2024/. Map made by Spatial Vision.

SkillBuilder discussion

Geographical inquiry

1. Identify the top and bottom ranked cities in 2024.
2. Make a list of reasons you think would contribute to a city achieving a top 10 and bottom 10 ranking.
3. Match each city shown on the map with the continent it is on. Explain where most of the top and bottom cities are located.

The map shows the top cities' scores are close, with only a 2.4 point difference among the top 10. From 2008 to 2019, the global average liveability score increased by about one percentage point, with approximately 60 per cent of surveyed cities improving. However, due to the COVID-19 pandemic, there were significant ranking shifts between 2019 and 2021.

Countries' responses to COVID-19 greatly influenced their rankings. Strict lockdowns and high COVID-19 cases lowered many cities' scores, particularly in Europe. Island nations, such as Australia and New Zealand, with quick actions to control cases fared better. The pandemic's impact on healthcare and lockdowns affected rankings more than education, safety or infrastructure. Six cities, including Vancouver, Calgary and Toronto — the only North American cities in the top 10 in 2019 — dropped out.

During this period, the average liveability score decreased by seven percentage points, before rebounding in 2024. See **TABLE 2** for changes in rankings from 2019 to 2024.

TABLE 2 Changes in EIU city liveability ratings from 2019 to 2024

City	2019 ranking	2021 ranking	2024 ranking
Vienna	1	12	1
Melbourne	2	8	4
Sydney	3	11	7
Adelaide	10	3	11
Auckland	12	1	10
Perth	14	6	15

10.4.3 What do these top 10 liveable cities have in common?

Four of the most liveable cities are located in Europe, followed by Australia and Canada with two apiece, then Japan and New Zealand. They are all mid-sized cities, with a low **population density**, low crime rates and mild weather.

They are planned cities with good infrastructure and transport links. They are modern places, not more than 300 years old and found in some of the world's wealthiest nations.

Cities in the United States do not feature in the top rankings due to their higher crime and congestion rates. The highest ranked city is Honolulu at 23. **TABLE 3** provides an insight into the various ratings.

TABLE 3 Decoding the ratings

Rating	Description
80–100	There are few, if any, challenges to living standards
70–80	Day-to-day living is fine, in general, but some aspects of life may entail problems
60–70	Negative factors have an impact on day-to-day living
50–60	Liveability is substantially constrained
50 or less	Most aspects of living are severely restricted

10.4 SkillBuilder activity GEOGRAPHICAL INQUIRY

1. Use a spreadsheet to collect data on the top and bottom 10 cities from **FIGURE 1**. Focus on:
   - population
   - population density
   - number of universities
   - number of hospitals
   - **literacy rates**
   - recent violence, civil unrest and crime rates
   - traffic issues
   - public transport
   - infrastructure
   - water/sanitation.
2. **Create** graphs to show your data, following geographic conventions and citing data sources.
3. Interpret your graphs. Discuss the differences between the most and least liveable cities, citing specific places and datasets.

10.4 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 3, 4, 7	2, 6, 8, 9	5, 10

REMEMBER AND UNDERSTAND

1. **Select** the correct option to complete the sentence. The Economist Intelligence Unit ranks **50 / 99 / 140 / 173/ 205** cities in their liveability rankings.
2. **Identify** the type of climatic region where most of the liveable cities are found.
   A. Hot and dry climate
   B. Cold climate
   C. Wet climate
   D. Mild climate
3. Refer to **FIGURE 1**. **Identify** the three lowest ranked cities in the 2024 liveability ranking.
   A. Algiers
   B. Adelaide
   C. Tripolin
   D. Damascas
   E. Calgary
   F. Karachi
   G. Honolulu
4. **Analyse** the information in **FIGURE 1**.
   a. How many of the top 10 most liveable cities are found in each of the following regions?
      i. Australia and the Pacific
      ii. Africa
      iii. Europe
      iv. North America
   b. **Identify** how many of the most liveable cities are found in the Northern Hemisphere.
   c. **Identify** the two continents where most of the least 10 liveable cities are located.
5. London and Los Angeles have a similarly low ranking. **Propose** why these two well-known cities are ranked so low.

ANALYSE AND APPLY

6. **Predict** why you think a city might suddenly fall down the liveability rankings.
7. **Propose** a strategy to improve a city's liveability ranking.
8. Refer to **TABLE 3** and use the Economist Intelligence Unit Weblink in the Resources panel to **identify** three cities that match each rating category description.

EVALUATE AND COMMUNICATE

9. **Suggest** at least two reasons why Auckland might have moved from ranking 12 in 2019 to first position in 2021 and back to tenth position in 2024.
10. **Propose** and **justify** two reasons why Australian cities outperform cities in the United States in the liveability rankings.

Answers and sample responses for this topic are available online.

LESSON 10.5 What is it like to live in remote places?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** how access to and availability of services and facilities in rural areas affects liveability
- **discuss** strategies that could be used to ensure the sustainable survival of rural and remote places.

Tune in

Deciding to move can be a big decision, especially if you are moving from a busy urban city to a remote or rural area.

1. **What do you think of when you hear 'remote' and 'rural'?**
2. **Why might someone move to a rural or remote area?**

FIGURE 1 Would you move to a rural area?

10.5.1 Settling inland Australia

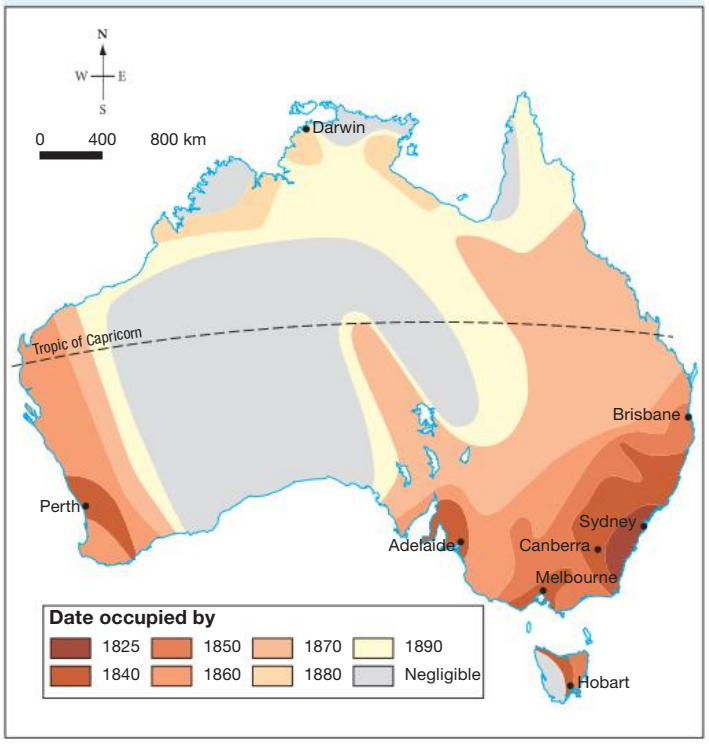
European settlers have occupied Australia for over 200 years — in this time they have moved from cities and coastal regions to more remote locations where they have searched for farmland and minerals. These moves inland mean that sometimes people can be 50 km from the nearest neighbour and 6 hours away from the nearest city shops.

Moving inland is easier now with better transport and internet. For 100 years, governments and private industry have attempted to encourage people to move to remote places. Examples include soldier settlement programs and mining projects. But many Australians still prefer cities.

Soldier settlement schemes

After both World Wars, Australia gave land to returned soldiers. This helped them find work and settle in empty areas.

FIGURE 2 Stages in European land occupation in Australia



Source: © Spatial Vision

SkillBuilder discussion

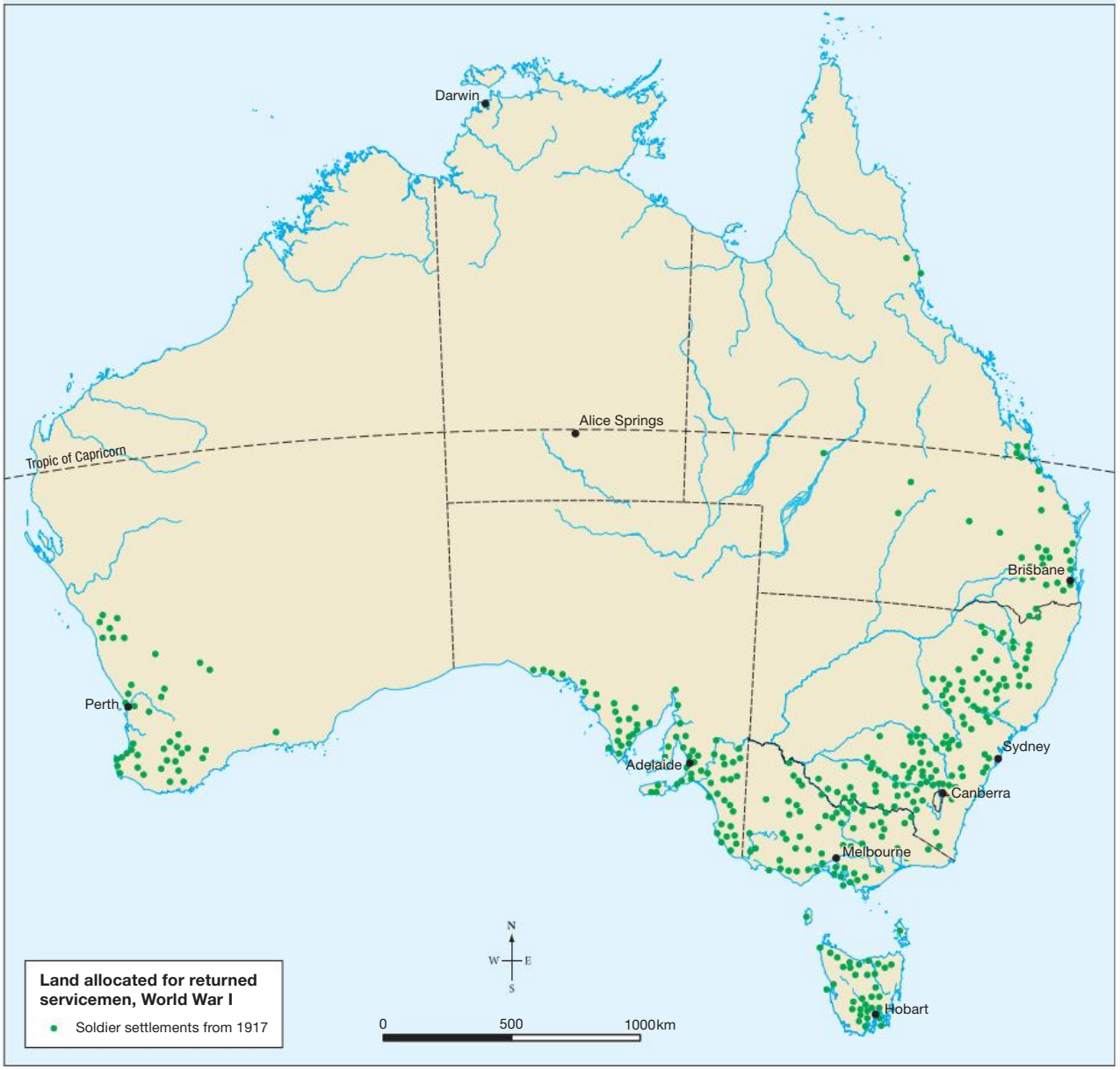
Geographical inquiry

1. What regions are highlighted for early European settlement in **FIGURE 2**?
2. What time periods are shown on the map?
3. How did land occupation change over time?

After World War I, more than 25 000 soldiers were resettled in rural farming belts in all Australian states. They had to stay for 5 years and improve their land. Many struggled because they were not suited to farming, the farms were too small to be viable and they did not have money to invest in stock or equipment.

After World War II, a similar scheme was more successful; farms were bigger and roads, housing and fencing were supplied.

FIGURE 3 Location of solder settlement areas, 1917



Source: Spatial Vision

SkillBuilder discussion

Geographical inquiry

1. Look at **FIGURE 3**. Where are soldier settlement areas located?
2. What types of land were typically used for soldier settlements?
3. Mind map and discuss some of the reasons for the soldier settlement schemes.

Remote mining communities

Karratha, Broken Hill and Tom Price are remote mining towns. Skilled and semi-skilled workers can earn high salaries for working in these remote locations. Many fly in and fly out (FIFO). In 2024, it was estimated that 60 000 workers fly in for a shift that may last up to 2 weeks and fly home for 2 weeks off. Mining companies provide accommodation in mining camps with meals and work gear included.

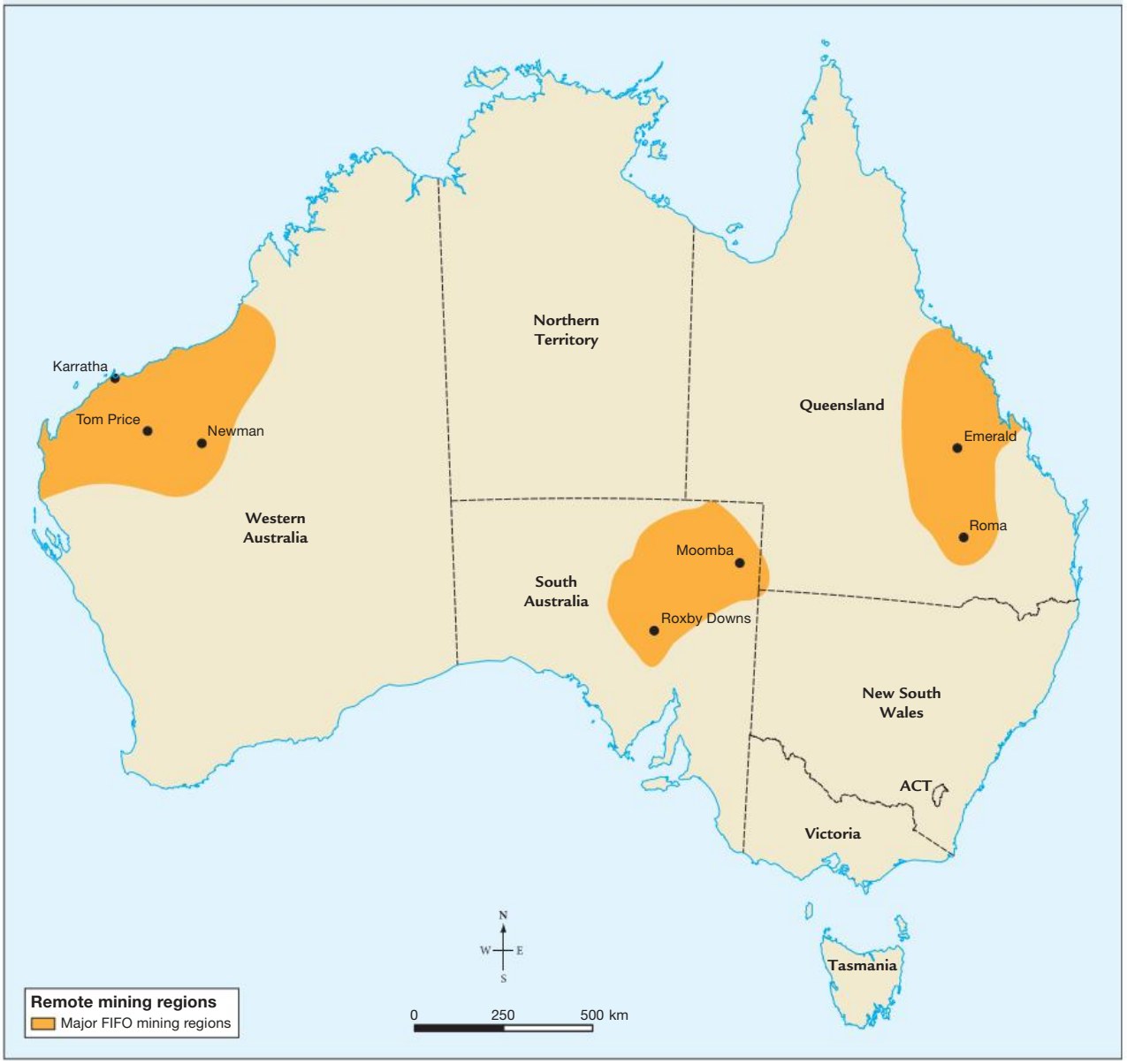
FIGURE 4 Mount Tom Price mine and Tom Price township

SkillBuilder discussion

Geographical inquiry

1. Describe the landscape around Mount Tom Price mine and township shown in **FIGURE 4**.
2. Why do you think the mine and township have the same name?
3. Would you like to live here? Give reasons for your answer.

FIGURE 5 Location of remote mining regions



Source: Spatial Vision

SkillBuilder discussion

Concluding and decision-making

1. What do you know about the remote mining regions shown on the map?
2. Make a list with a partner of the advantages and disadvantages of this kind of remote working.
3. Discuss how remote working might affect the concept of interconnection.

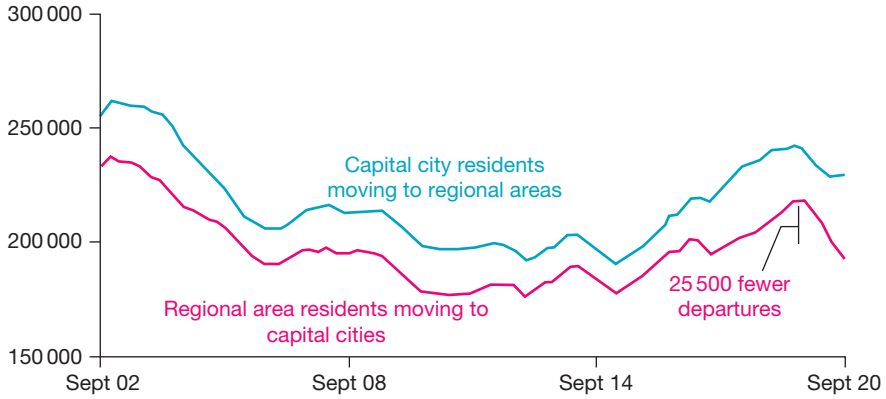
10.5.2 Moving for more space

During the COVID-19 pandemic, many Australians left big cities for the countryside. They wanted more space, a garden and a nice view while learning and working from home.

Fast internet allowed students to learn and parents to work from home. After lockdowns in Melbourne and Sydney, a population shift occurred from the city to the country. In 2020, regional areas gained

36 200 people, and this regional growth has continued, with a 1.1 and a 1.4 per cent increase in 2023 and 2024 respectively.

FIGURE 6 Movement between capital cities and regional areas in 2020



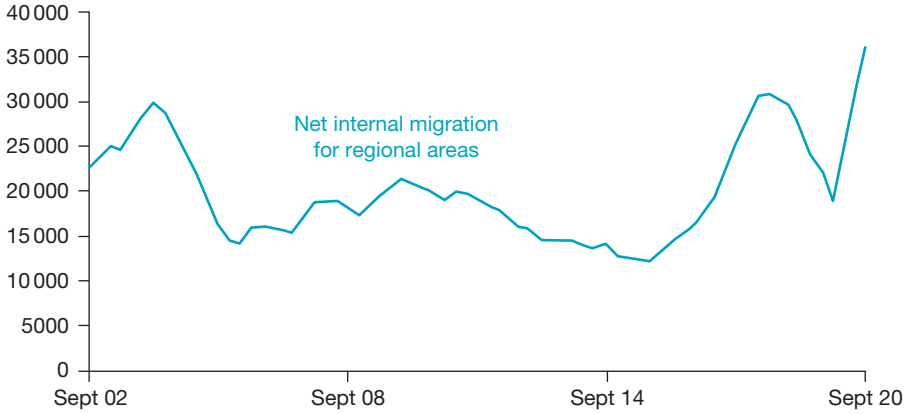
Source: Migration between cities and regions: A quick guide to COVID-19 impacts, Centre for Population, 2020.

SkillBuilder discussion

Geographical inquiry

1. Look at **FIGURES 6** and **7**. Describe what was happening to the movement of people in Australia in 2020.
2. Decide on the reasons for this movement.

FIGURE 7 Net internal migration for regional areas in 2020



Source: Migration between cities and regions: A quick guide to COVID-19 impacts, Centre for Population, 2020.

10.5.3 Rural settlements

Some people live in rural areas as they are involved in farming or provide services. Griffith is a large regional town in New South Wales (population 28 000). The climate is warm with unreliable rainfall. The introduction of **irrigation** in 1912 made the area suitable for farming. Residents have the benefit of a country lifestyle with the convenience of urban living.

Two main types of farm are in this area.

- Type A farms are about 220 hectares.
  - They grow rice, corn, wheat, vegetables and raise cattle.
  - Require less labour per hectare of land.

FIGURE 8 Farms in the Griffith area support businesses in the town.

- Yield per hectare is lower; however, low levels of labour enable crops or **livestock** grazing over a large area.
- Irrigation is usually used.

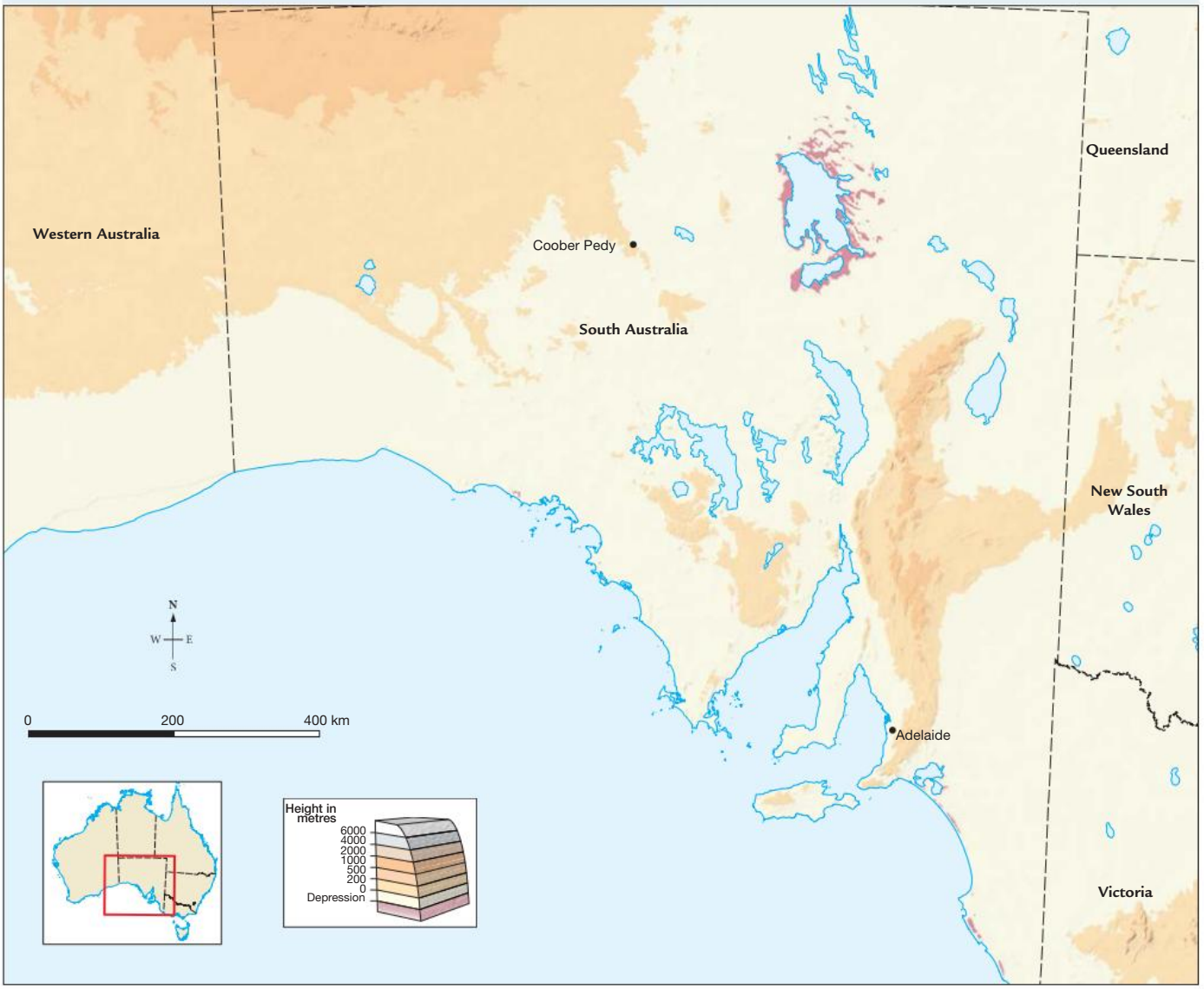
- Type B farms are **horticulture** farms (usually 20 hectares).
  - They grow permanent crops like grapes, peaches, plums and oranges.
  - Require more labour per hectare.
  - Yields per hectare are high.
  - They always need irrigation.

10.5.4 Are rural communities sustainable?

Rural communities are important to Australia. Many are experiencing a decline because young people are leaving for jobs and education, making some towns struggle to survive.

Coober Pedy is a lively multicultural town in northern South Australia, 800 km north of Adelaide. It's in a very **arid** area and the traditional custodians of the land are the Antakirinja people. Opal was found there in 1915, and the town grew quickly in the 1960s. It's known as the 'Opal Capital of the World'.

FIGURE 9 Coober Pedy location map



Source: Spatial Vision

Opals are still important to Coober Pedy; however, the town now draws its income from mining services, tourism and public services. Coober Pedy has a large Antakirinja community. In 2024 the estimated population was almost 2000 people.

What does the future hold for Coober Pedy?

Coober Pedy is famous for its underground homes (see **FIGURE 12**) — an environmentally friendly way of keeping people cool in summer and warm at night. Recently, significant deposits of valuable minerals like iron, copper, gold and coal have been found.

Yet in 2014, the Cairn Hill iron ore/copper/gold mine 55 kilometres south-east of Coober Pedy was closed due to low iron ore prices.

Coober Pedy is ideally located to act as a centre for mining and government services. This could help the town grow and attract more people.

Coober Pedy has good hospital and medical services, primary and secondary schooling, a TAFE campus, childcare services and police.

But these services are struggling to keep doctors and nurses.

This area is very remote, so farms have used phones since 1987. The Stuart Highway is the main road for the town.

FIGURE 10 Climate graph for Cooper Pedy, South Australia

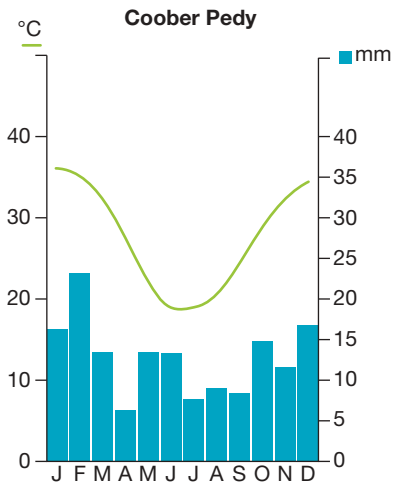


FIGURE 11 Along with other South Australian fields, Coober Pedy produces most of the world's opal. Mullock heaps create Coober Pedy's distinctive landscape.

FIGURE 12 Much of Coober Pedy's population lives underground to take advantage of the cooler and more stable underground climate.

SkillBuilder discussion

Concluding and decision-making

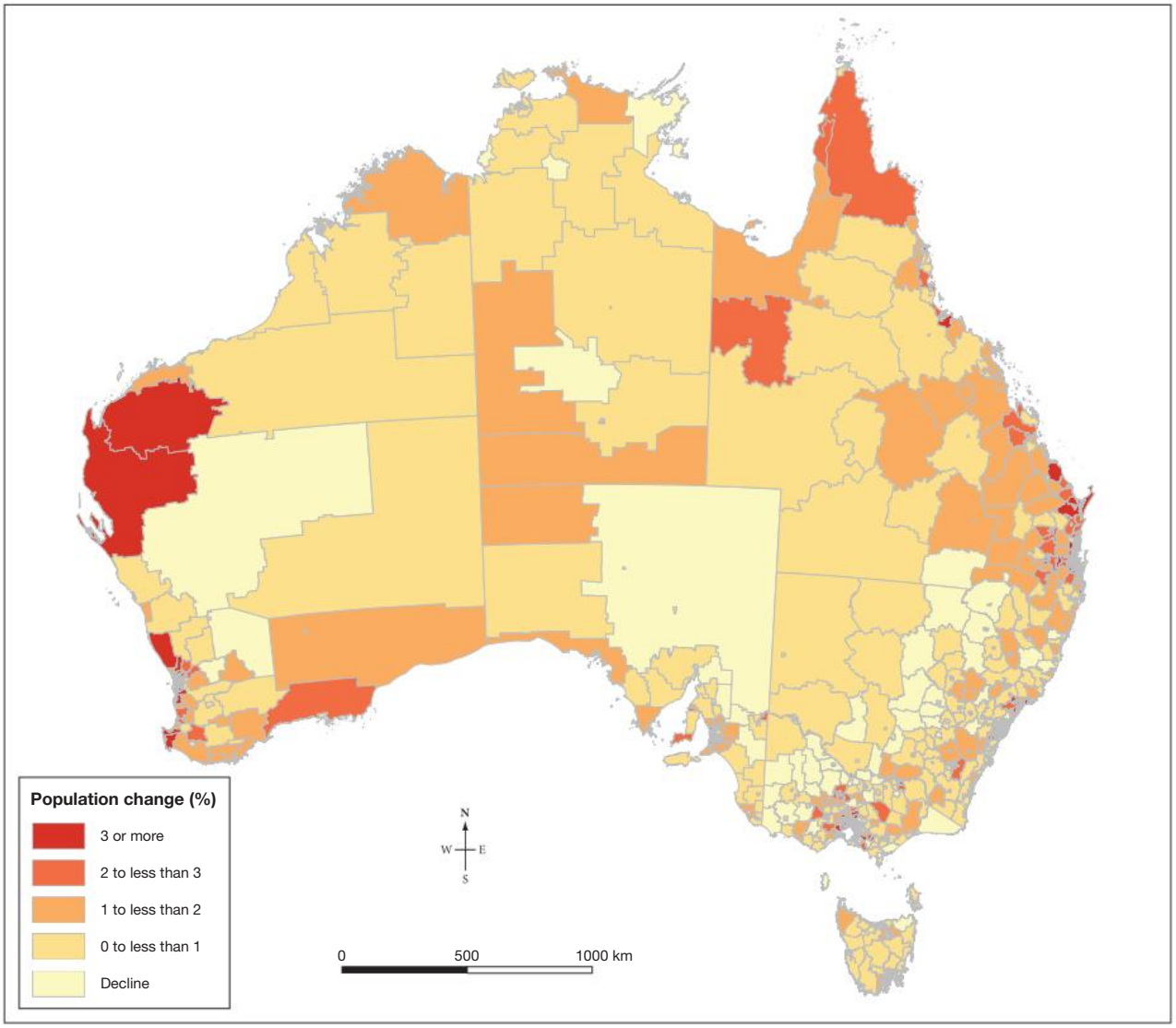
1. Discuss strategies that could be implemented to entice more people to live in Coober Pedy and reverse its population decline.
2. Develop a shortlist of possible strategies that could be implemented.

10.5.5 A question of survival

Many rural communities are facing tough times. They deal with increased overseas competition, the changing value of the Australian dollar and climate change. Towns that are not experiencing a population decline (see **FIGURE 13**) have found new ways to generate an income. They have changed their primary crops to olives or grapes or use nearby national parks to promote tourism.

Sometimes, a rural community can't change or solve problems. If mining jobs disappear, people may earn less and find it hard to get new jobs.

FIGURE 13 Australia's population increase and decrease 2019–2023



Source: Data from Australian Bureau of Statistics. Retrieved from https://statmaps.abs.gov.au/portal/apps/storymaps/stories/2453e03f096e43548d5d2a2b80baf0e4. Map drawn by Spatial Vision

10.5 SkillBuilder activity GEOGRAPHICAL INQUIRY

1. Do you think the population shifts caused by events such as the COVID-19 pandemic and lockdowns will remain permanent or were they just a reaction to the pandemic? Conduct some research to help you decide.
2. **Report** your findings back to the class. Your report must include up-to-date data, graphs and charts, and be multimodal (using PowerPoint, Prezi or Google Slides, for example).

10.5 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4	5, 6, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. **Define** what makes a place remote.
   A. It is close to a city centre
   B. It is in the countryside
   C. It is a long way from major population centres
   D. It has a population of less than 1000
2. **Determine** whether the following statements are true are false.
   a. FIFO reduces remoteness.
   b. During 2020 the number of people moving to the regions increased.
3. Which of the following is *not* an incentive to leave the hustle and bustle of the city and move to a remote location?
   A. Good internet access
   B. The ability to work from home
   C. Busy streets
   D. Increased variety and number of cultural events
4. Many remote communities struggle to survive.
   a. **Identify** one factor that led to the growth of Coober Pedy.
   b. **Explain** why Coober Pedy has not suffered significant decline.
5. Which of the following factors is *not* an incentive work in a remote mining community?
   A. High wages
   B. Long stretches of work followed by an extended period of leave
   C. Distance from family and friends
   D. Living in an accommodation camp

ANALYSE AND APPLY

6. Answer the following questions:
   a. **Explain** why soldier settlement schemes were used after each of the two World Wars
   b. Which of the two schemes was the most successful? **Justify** your answer.
7. **Describe** why rural communities are under threat.
8. Refer to **FIGURE 2**. **Describe** the settlement of Australia from 1825 to 1890.

EVALUATE AND COMMUNICATE

9. Study **FIGURE 3**. **Compare** the location of soldier settlements with a rainfall map of Australia. **Discuss** the relationship between the locations of soldier settlements and rainfall.
10. How would you promote Coober Pedy as a tourist attraction? Create a list of factors which would encourage someone to visit.

Answers and sample responses for this topic are available online.

LESSON 10.6 Country vs city living

LEARNING INTENTION

By the end of this lesson you should be able to:

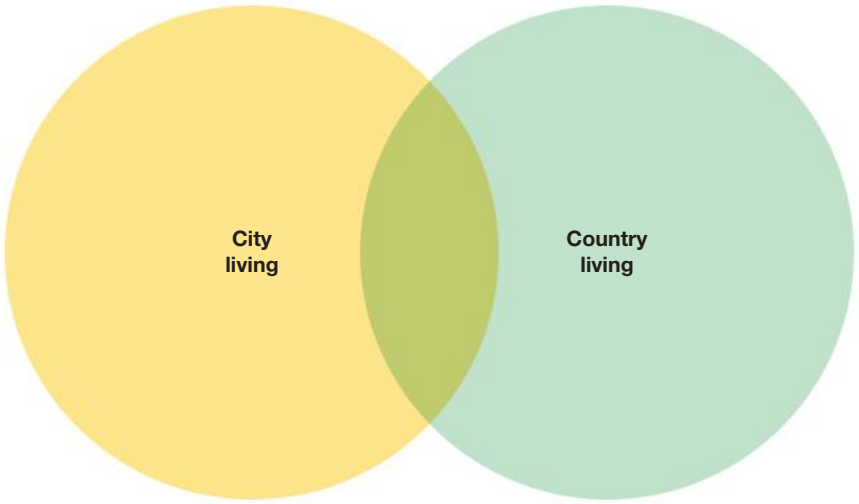
- **compare** the availability of services and facilities in different types of residential area
- **explain** the interconnection between push and pull factors and the growth of cities
- **identify** the characteristics of a country town
- **explain** why country towns are becoming more popular
- **identify** places in Australia that are growing at the fastest rate.

Tune in

City and country living have similarities and differences. Think about your own experience to help you.

Create a Venn diagram similar to the example in **FIGURE 1** to list the similarities and differences between city living and country living.

FIGURE 1 City living vs country living



10.6.1 The attraction of the country

Country towns vary. Some are tiny with a post office and shop, while others are bigger.

Most Australians live in large urban centres; but country areas are important for food and **natural resources.** Many dream of country life for its beauty and space. Many Australians holiday in country places and dream of moving to the country; attracted by cheaper housing, less traffic, a sense of safety and the natural environment.

10.6.2 Demographic features

The **demographic** features of country towns depend on their location and local activities. Leongatha is 135 kilometres south-east of Melbourne. It has good rain and soil, making it one of the most productive farming areas in Victoria. The milk processing factory is the biggest employer. Coleraine is 350 kilometres west of Melbourne. It has large farms for sheep and cattle, but there are no big businesses in the town.

TABLE 1 Predicted population for selected Victorian places

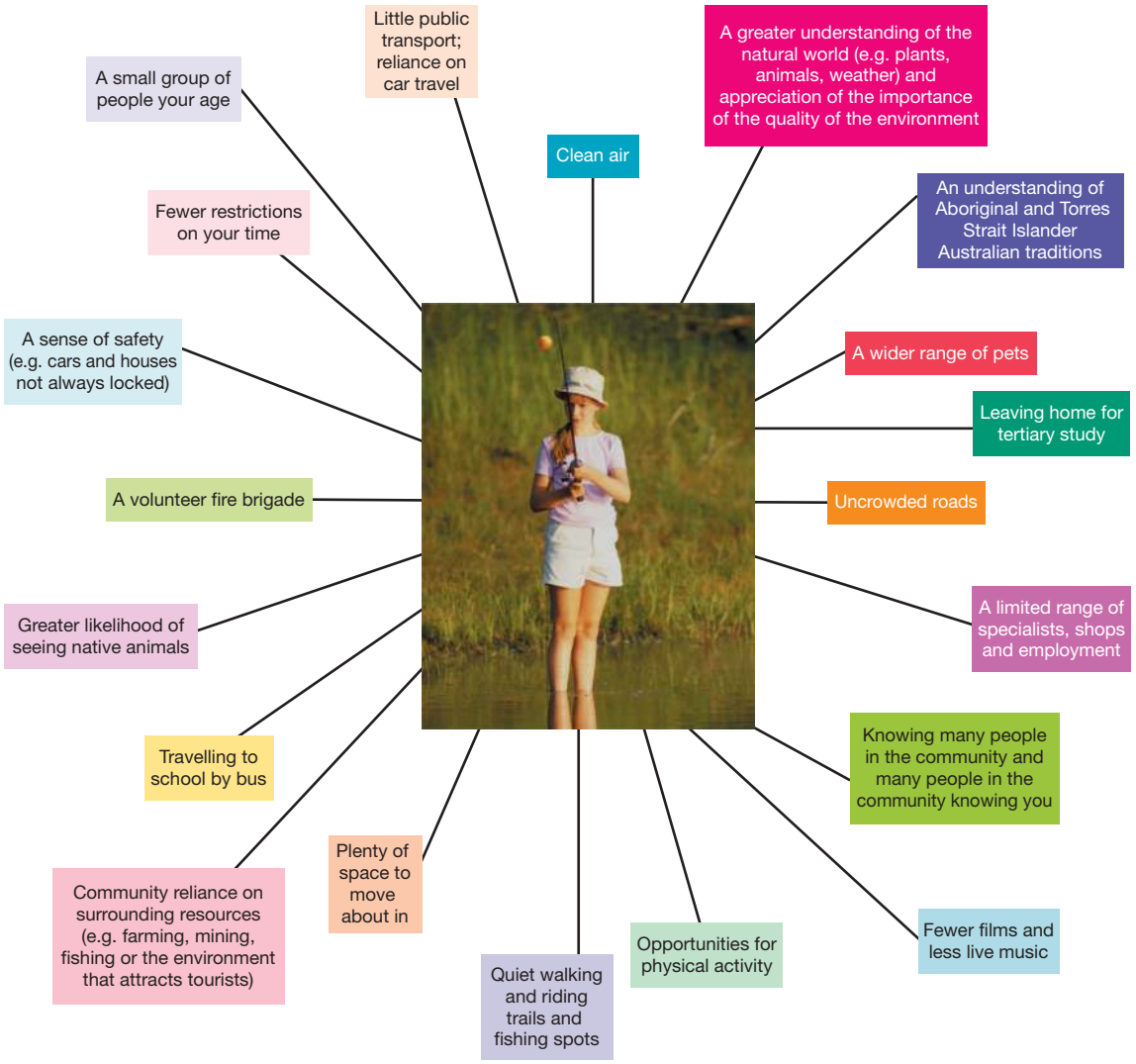
Local government area	2011		2031	
Municipality	% aged under 20	% aged over 65	% aged under 20	% aged over 65
Melbourne (urban)	24.3	23.8	13.0	17.1
South Gippsland Shire (rural includes Leongatha)	24.8	21.9	19.5	28.1
Southern Grampians Shire (rural includes Coleraine)	25.8	21.6	19.6	30.3

A sense of belonging

Living in the country lets you join many community activities. These can be about money (such as fundraising), the environment (such as Landcare) or social groups. They help people feel connected.

Small towns often have many sports. In Leongatha, you can play Australian Rules football, cricket, tennis and more. There are also cultural activities and entertainment like films, dancing and art groups.

FIGURE 2 Growing up in a country town might mean ...



SkillBuilder discussion

Geographical inquiry

1. What are some benefits of living in a country town?
2. How does school life differ in a country town compared to a city?
3. What types of activities are common for kids in country towns?

Transport — road and rail

Transport is very important to people when they choose where to live. In Australia, we use roads and trains to travel. Regional towns are linked to cities by a network of roads, highways and railways that move people and goods.

All of Australia's regional towns are linked to capital cities through the National Land Transport Network (see **FIGURE 3**). The National Broadband Network also helps more people connect online, making distance feel smaller.

FIGURE 3 National Land Transport Network, including road and rail.

Source: Department of Infrastructure, Transport, Regional Development and Communications

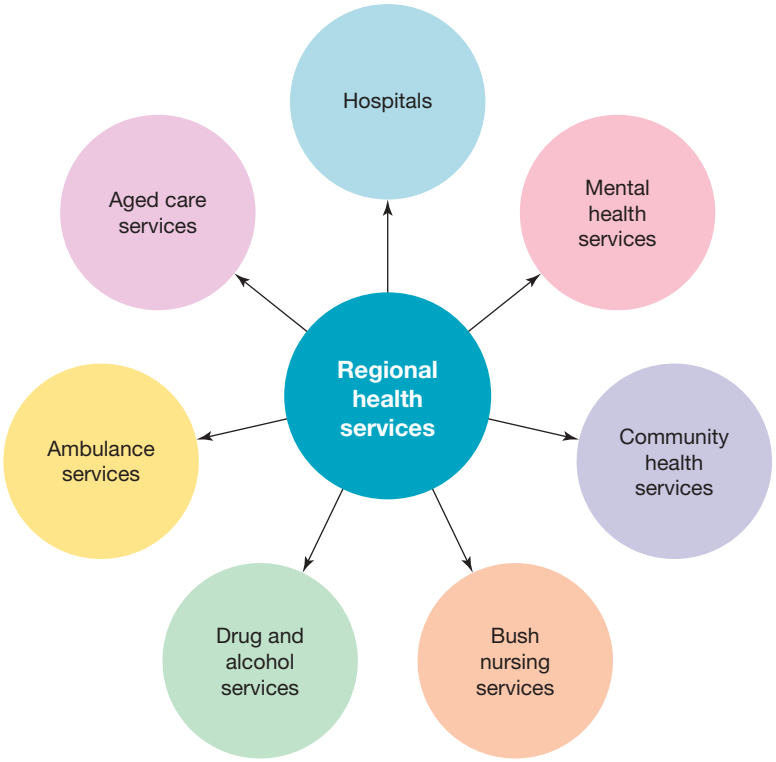
Medical

As with their city counterparts, a range of health services are available to people in regional locations across Australia.

In regional areas, fewer people mean less healthcare is available. This can be tough, but the internet helps connect people to services.

Telehealth helps people in remote areas get good healthcare. From March 2022 to February 2024 nearly 120 million services helped almost 20 million patients. There are also state/territory programs to assist with transport for medical needs.

FIGURE 4 A range of regional health services are available

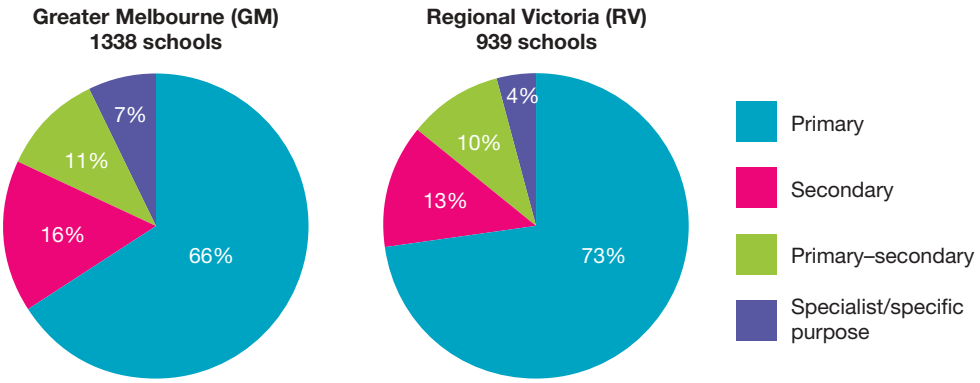


Education

There are more schools in cities than in regional areas. However, students in rural areas can still attend schools, universities and TAFE. Students do face extra challenges getting good education.

The internet helps schools, universities and TAFE offer online courses. This lets students study from home and increases the number of students in regional and rural areas completing university or TAFE courses.

FIGURE 5 Breakdown of metropolitan and regional schools in Victoria



Source: Victorian Registration & Qualifications Authority.

The internet helps education in rural areas, but challenges still exist. These are outlined in **FIGURE 6**.

FIGURE 6 Advantages and challenges of education in regional Australia.

Advantages	Challenges
Smaller class sizes	Fewer resources
Teacher knows all of their students	Fewer subjects offered
Smaller schools	Specialist teachers difficult to find
A strong sense of community. The school can become the heart of the town	Post-school employment opportunites can be limited

10.6.3 The growth of suburbs

Which place in Australia is growing the fastest? Do popular places mean they're the best? What makes a suburb the most popular? Coastal areas are popular for holidays. Is the fastest growing place near the coast?

People move for many reasons. As seen in lesson 10.3, pull factors attract them, like cheaper housing, improved lifestyle and good jobs. Push factors force them to leave, like losing a job, poor facilities or natural disasters.

After the 2021 **census**, two of the five fastest growing suburbs in Australia were in Melbourne, two were in Queensland and one was in New South Wales. While Brisbane was the fastest growing capital city in 2021, in 2024 this switched to Melbourne.

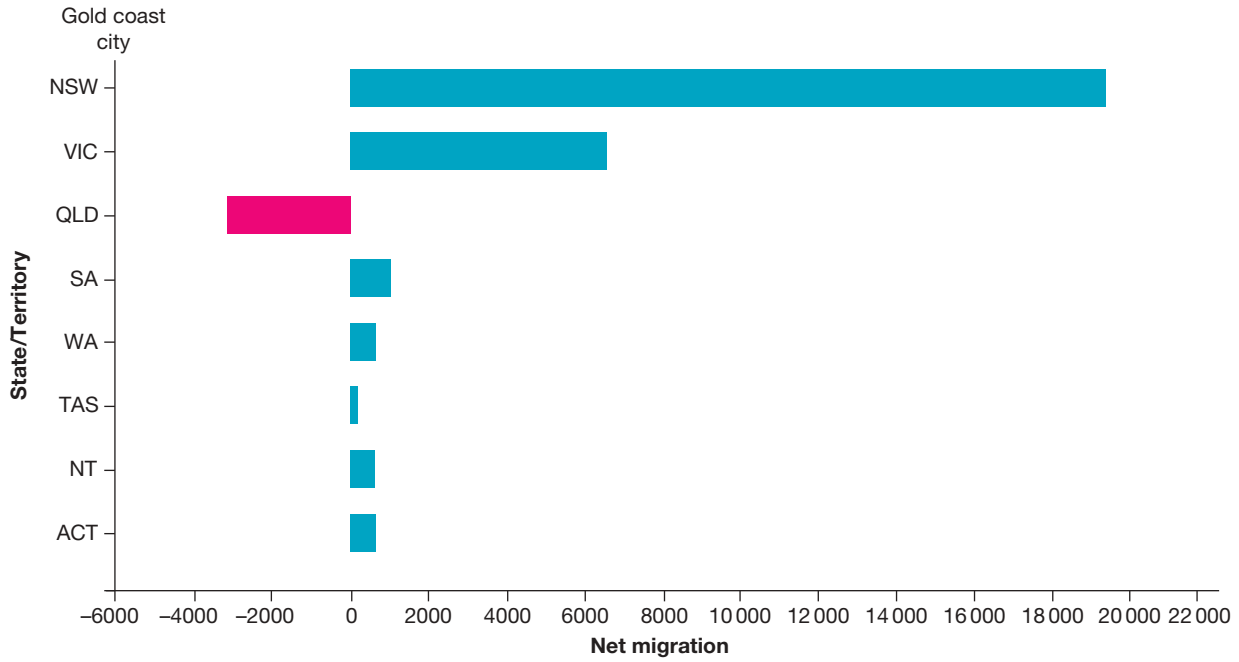
In 2024 the fastest growing suburbs in Western Australia were Brabham–Henley Brook (12 per cent), Alkimos–Eglinton (11 per cent) and Byford (9.9 per cent).

In Western Australia, the fastest-growing areas from 2018 to 2019 were Alkimos–Eglinton, North Coogee and Casuarina–Wandi.

What makes the Gold Coast such a great place to live?

The Gold Coast's warm weather, beach culture and holiday lifestyle have attracted many new residents. However, **FIGURE 7** shows that Queensland suffered a net migration loss. This is largely due to the impact of the COVID-19 pandemic, when state borders were closed for around 21 months. The Gold Coast has rebounded since borders were re-opened and is the sixth-largest urban area in Australia.

FIGURE 7 Net migration change 2016 to 2021



Source: Australian Bureau of Statistics, Census of Population and Housing, 2021 (Usual residence data).

SkillBuilder discussion

1. Which state or territory had the highest net migration as shown in **FIGURE 7**?
2. How does net migration from New South Wales compare to that from Victoria?
3. Were there any states or territories with negative net migration?

The main states for Australian Rules football are Victoria, South Australia, Western Australia and Tasmania. The Gold Coast Suns started in 2009, helping more kids join AFL.

FIGURE 8 Brisbane's Story Bridge

The Gold Coast hosted the 2018 Commonwealth Games. Metricon Stadium was upgraded for athletics and ceremonies. Australia has hosted five Commonwealth Games, but this was the first time they were not held in a state capital city.

The Gold Coast isn't the only city in Queensland for big sports events. Brisbane will host the 2032 Summer Olympics, which will provide many opportunities for using existing venues and perhaps building new ones.

CASE STUDY

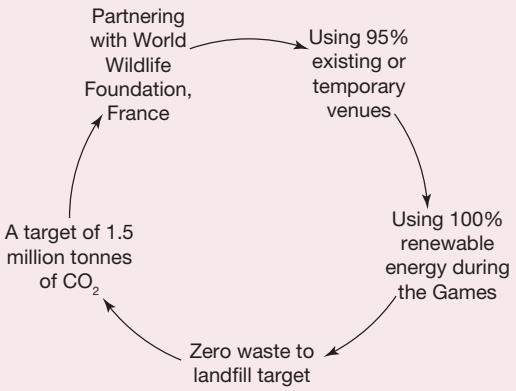
Paris 2024 Summer Olympic Games

The 2024 Summer Olympic Games were held in Paris — a truly global city steeped in history. Millions of athletes and spectators descended on the city, creating a big environmental impact. As part of their bid to host the Games, Paris committed to a raft of environmental measures to make their Olympic Games the most sustainable.

The Summer Olympic Games is one of the biggest sporting events held globally. The Games create a huge financial and environmental cost — think about all the travel (by athletes and spectators), all the food, all the cameras and all the lights. These factors create a lot of emissions.

The goal of the organisers of the Paris Olympic Games and Paralympic Games was to advance the sustainability agenda by being the first climate-positive Games.

FIGURE 9 The 2024 Paris Olympics focused on being sustainable.



10.6 SkillBuilder activity GEOGRAPHICAL INQUIRY

How do you feel about living in different places? The following nine statements refer to different opinions about living in rural areas or cities.

- Rural areas are peaceful, have lots of space and clean air.
- Cities provide more choice in activities and places to live.
- I feel isolated in cities.
- Pollution and noise in big cities impair living conditions.
- I don't feel safe in big cities because of crime.
- Rural areas have great communities with people supporting one another.
- The natural environment in many rural areas is very attractive.
- I feel isolated in rural areas.
- Jobs and transport are more accessible in cities.

Make a diamond ranking diagram. Put your top choice at the top and your least favourite at the bottom. Then choose two more for each side and three for the middle. **Explain** your ranking to someone else. How might these rankings change if they were completed by people who live in places different from where you live? Can you test this hypothesis?

10.6 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4	5, 6, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. **Determine** which of the following opinions is about living in rural areas.
   A. Rural areas are peaceful, have lots of space and clean air
   B. People feel isolated in cities
   C. Rural areas have great communities with people supporting one another
   D. All of the above

2. **Select** the best answer from the list provided to fill in the gaps.

capital	substantial	Australia's	large	Country

_____ towns come in all shapes and sizes. They can be small with only a post office and general store, or they can be _____ towns. Because most of _____ population and businesses are concentrated in the _____ cities, even people who live in quiet _____ towns outside the capital cities see themselves as living in the country.

3. Determine whether the following statements are true or false.
   a. People who live in country centres have a strong sense of identity, connectedness and belonging.
   b. It is predicted that by 2031, 13 per cent of Melbourne's urban population will be under the age of 20.
4. What features of the Gold Coast have made it grow so quickly? **Select** all possible answers from the options provided.
   A. Warm weather
   B. Cooler weather
   C. Beaches
   D. Holiday lifestyle
5. Push and pull factors result in the rise and fall of the population for a place. Use examples to **explain** the differences in environment, services and facilities between a place with push factors and a place with pull factors.

ANALYSE AND APPLY

6. The Paris 2024 Summer Olympic Games aimed to be the greenest Olympic Games ever staged. **Identify** three things they did to achieve this.
7. **State** three ways that country and regional centres can overcome access to essential services such as education and medical care.
8. **Select** the question that this answer relates to:
   Many of Australia's towns and cities are growing so quickly because global human populations are also rapidly increasing. People are living longer than ever before and people in more developed countries, such as Australia, have access to health services.
   a. What is behind the growth of Australia's regional centres?
   b. What are some of the reasons for Australia's growing cities?
   c. Australia's population is declining. Why?

EVALUATE AND COMMUNICATE

9. In Australia, people move between the city and the country.
   a. **Discuss** two reasons why people would move from the country to the city.
   b. **Discuss** two reasons why people might move from the city to the country.
10. Governments and town planners use demographic information.
   a. Explain what is meant by demographic information.
   b. **Describe** how the government might use demographic information from country towns.
   c. **Imagine** you are a town planner; **propose** three features you would add to a new suburban development that would make it a more appealing place to live.

Answers and sample responses for this topic are available online.

LESSON 10.7 What makes a liveable and non-liveable city?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** how the location and accessibility of services and facilities in cities influence people's perceptions of liveability
- **explain** why Perth is considered a liveable city
- **explain** why Dhakka is considered a less liveable city.

Tune in

Prior to the COVID-19 pandemic, Perth's global liveability survey rank was 14. Perth's ranking rose to sixth during the pandemic; but has fallen in the post-pandemic years. Dhaka in Bangladesh, on the other hand, has consistently been a 'least liveable city' and ranked in the bottom five.

The overall climate in each location differs; however they both experience high levels of humidity — Dhaka at 74 per cent and Perth a little lower at 66 per cent. A range between 30–50 per cent is considered comfortable.

FIGURE 1 Perth moved up the 10 most liveable city rankings.

FIGURE 2 Dhaka has consistently been ranked at the lower end of the liveability rankings.

1. **Mind map what you know about Perth and Dhaka.**
2. **For each place, highlight any facts that might affect its liveability rating.**
3. **Explain what is meant by humidity and how it plays a role in liveability.**
4. **Why do you think Perth rose into the top 10 most liveable cities during the pandemic but has been unable to stay there?**

10.7.1 Perth — pluses and minuses

For years, Perth was among the most liveable cities in the world according to the Economist Intelligence Unit (EIU). In 2021, Perth made it into the top 10, moving eight places from fourteenth to sixth with a score of 93.3. In 2024 Perth dropped back to twelfth place with a score of 95.9.

In 2024, Perth was awarded the maximum score of 100 for the categories of healthcare, education and infrastructure, a score of 95 for stability and 88.7 for culture and environment.

Perth faces challenges too, like homelessness and fewer local services in some areas.

FIGURE 3 The balance of positive and not so positive features for a city like Perth.

SkillBuilder discussion

Communicating

1. Explain why Perth is considered a liveable city according to the global liveability index.
2. Describe how Perth's liveability changed from 2019 to 2021.
3. Study the positives and not so positives of living in a city like Perth. Which of these are objective measures and which are subjective?

10.7.2 Is all of Perth the same?

Not all parts of a city are equally liveable. In Perth, some areas have high incomes, big houses and great views of the sea or the Swan River. People living there also have good shops and fun places to go. But even nice suburbs can have poor housing and homelessness, though less so.

Perth is split into different areas with a clear north–south divide. The far north offers a coastal lifestyle with large blocks of land and improved road and rail infrastructure providing easy access to the CBD. Places like Joondalup attract students, retirees and families because they have many **amenities**.

Southern suburbs, like Rockingham, have been improved via express train and bus services to the city and are more affordable for families. Mandurah, once separate, has now merged with Perth into one large area to form a **conurbation**.

Inner-city suburbs north of the Swan River, like Northbridge, Leederville and Mt Lawley, are favourites for professionals and young couples who enjoy a diverse lifestyle. They mix old buildings with new homes and apartments. Suburbs like Como and Applecross in the south are near the city, and have many cafés and restaurants, while feeling quiet and close to nature.

FIGURE 4 Perth has a variety of amenities to offer that make it liveable.

Street performers at the annual multi-arts Fringe World Festival.

Suburban area serviced by an excellent road network, including a multi-lane highway.

Perth Arena is home to the Perth Wildcats; it also hosts netball and tennis; including the ATP Cup.

Optus Stadium is a 60 000 seat multi-purpose venue, it is the home ground of AFL teams West Coast and Freemantle, and hosts international and domestic cricket, soccer and rugby.

Perth and its suburbs are serviced by an excellent public transport system, officially branded as Transperth.

Cottesloe Beach is a favourite among locals for swimming, snorkelling and surfing.

SkillBuilder discussion

Geographical inquiry

Imagine that you are making a similar graphic to figure 4, but instead of your own closest city in Victoria. What key attractions would you include?

10.7.3 Dhaka — a less liveable city

Dhaka, the capital of Bangladesh, has a population of over 24 million people and covers 306.4 square kilometres, resulting in a density exceeding 23 000 people per square kilometre. Parts of Dhaka resemble Australian suburbs with solid housing, shopping centres and high car ownership. However, widespread poverty and unplanned growth make it one of the least liveable cities globally.

Dhaka has been consistently ranked as one of the ten least liveable cities, reflecting its ongoing challenges across all five liveability indicators — stability, healthcare, culture and environment, education and infrastructure.

FIGURE 5 Location of Dhaka

Source: Spatial Vision

Environment

Dhaka is in Asia at 23.43 °N. **FIGURE 6** shows:

- a clear dry season
- 80 per cent of rain during the monsoon
- consistently hot and humid conditions
- about 2000 millimetres of rain annually
- warm to hot temperatures year-round.

Dhaka is only 2–13 metres above sea level. Snow-melt from the Himalayas feeds the rivers. This area is at high risk from climate change because increases in snow- and ice-melt or rainfall will add to river flow. Many rivers flow near Dhaka and the risk of flooding is high. Strong winds often occur during the monsoon, which also cause damage.

FIGURE 6 Climate graph for Dhaka

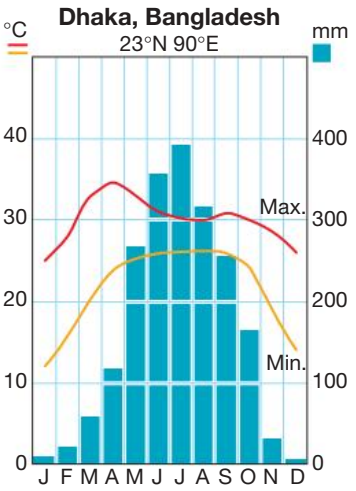
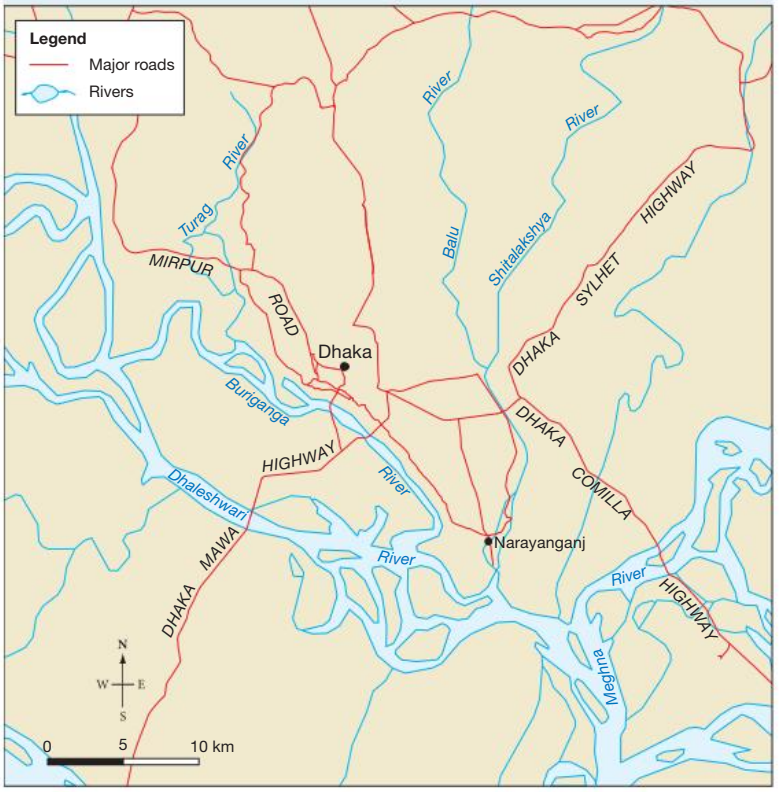


FIGURE 7 Map showing the many rivers that flow through and around Dhaka



Source: © OpenStreetMap contributors

Infrastructure

Dhaka, with almost 24 million residents, is one of the world's densest cities, growing annually at 3.13 per cent. Many migrate there seeking jobs in its expanding industrial sector.

The massive influx into Dhaka has caused unplanned urban expansion onto vacant lands, with about half the population living in slums lacking government-provided infrastructure.

FIGURE 8 A communal water pump in a slum region

Water is not pumped to houses.

Houses are built from found materials.

Some people have to walk 900 metres to a toilet.

Gangsters control the cost and supply of electricity.

Roads are poor and congested.

There are no gutters or sewerage systems.

Safety

High crime rates plague Dhaka's poor areas, including gang violence, land grabbing, crimes against women and children, and crimes related to gambling, drugs, alcohol and illegal weapons. The limited and unreliable police presence fails to provide adequate protection.

Education

Primary education is compulsory, but the government is unable to provide enough schools and resources for the increasing population. Many students do not attend school all the time because their families need them to earn money, often because their parents do not have jobs.

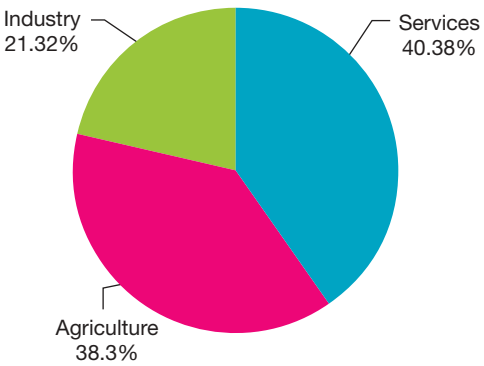
In spite of the tough conditions, the education rate in the city is slightly higher than in rural areas, and the national literacy rate is about 78 per cent.

SkillBuilder discussion

Geographical inquiry

1. Identify common jobs in the informal sector and describe the typical employment for women.
2. Investigate the minimum wage in Bangladesh and what might a young person earn. Make sure you use a reliable source for this information.
3. List the healthcare challenges in the city, focusing on slum areas.

FIGURE 9 Employment by sector in Bangladesh



Jobs and economy

Most jobs are in the **informal sector**, like rickshaw driving, street vending and garment work. Women often work as servants or in **agriculture**, where pay is low, and all family members might need to work. Food is grown on vacant land within and around the city.

Child labour

Child labour is common. It is estimated that 28 per cent of children between the ages of 5–11 and 35 per cent of children aged from 12—14 are working. Close to one-third have full-time jobs and are not attending school. Most are employed by the manufacturing sector, followed by agriculture. Around 34 per cent of children are working in hazardous industries which pose a significant risk to their health and safety.

FIGURE 10 Children undertake exhausting work and are often paid very little. They undertake informal work, meaning it is not regulated and they are not protected by formal labour laws.

Poverty

In 2024 about 18.7 per cent of the population lived below the poverty line, surviving on less than $2.15 per day. This is a decrease over 2022 when 22.4 per cent of the population was classed as living below the poverty line. This increase is largely attributed to increased cost of living, urbanisation and overpopulation. Despite these hardships, many people believe city life offers a better quality of life than rural areas.

Healthcare

Healthcare in Dhaka is mainly hospital-based in the formal city areas but lacks enough beds, equipment and staff. Slums lack medical facilities, and many can't afford treatment. While some private charities offer maternal health programs, mortality rates are considered high. Around 3 per cent of babies born will die within their first month of life, and a further 2.5 per cent before their first birthday. Another 3 per cent will die before the age of 5. Around 2 per cent of pregnant women will die from pregnancy-related complications.

10.7 SkillBuilder activity COMMUNICATING

1. Choose a city from the other least liveable cities and a liveable city (refer to lesson 10.3) and **investigate** how their natural environments create challenges and provide benefits. **Consider** the city's location, climate and landscape.
2. Find an image of each of your chosen cities that you think best reflects what you have discovered during your investigation.
3. **Annotate** your images to communicate your findings.

10.7 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 3, 4, 5	1, 6, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. **Describe** the difference between Perth's inner and outer suburbs.
2. **Identify** the categories in which Perth received a perfect score in the EIU 2024 global liveability index. **Select** all that apply.
   A. Healthcare
   B. Culture and environment
   C. Infrastructure
   D. Stability
   E. Education
3. What are the two ways of **describing** the weather in Perth?
   A. Hot and dry in summer
   B. Unreliable
   C. Mild for most of the year
   D. Mild in winter
   E. Reliable and constant
4. **Identify** the sector of the economy where most people find work in Dhaka.
   A. Formal sector
   B. Service sector
   C. Informal sector
   D. Manufacturing sector
   E. Business sector
5. Why do some children not attend school in Dhaka? **Select** all that apply.
   A. It is difficult to get to school.
   B. There are no schools to go to.
   C. Their parents do not have jobs.
   D. Child labour is the accepted norm.
   E. It is not compulsory for primary-aged children to attend school.

ANALYSE AND APPLY

6. Dhaka is heavily influenced by its natural environment. **Explain** how the natural environment influences life in Dhaka.
7. **Compare** the population of Dhaka with the population in Australia.

EVALUATE AND COMMUNICATE

8. In many parts of Perth, high-rise apartments rather than single dwellings on a large block are becoming more common. **Suggest** reasons for this trend.
9. **Explain** why Perth continues to have a high dependence on private cars and how this affects liveability.
10. Life in the Dhaka slums is affected by a variety of factors.
    a. **Explain** how the lack of resources that are normally provided by government (such as water, healthcare, education and safety) affects the people living in Dhaka.
    b. **Explain** why very young children go into the workforce.
    c. **Propose** reasons for the continued growth of Dhaka, even though it rates poorly in terms of liveability.

Answers and sample responses for this topic are available online.

LESSON 10.8 What makes communities liveable?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** local plans to improve liveability for diverse groups
- **analyse** how these plans enhance liveability in different communities.

Tune in

In a liveable community the needs of diverse groups are met.

What is on your wish list?

FIGURE 1 Improved beach access is on some people's wish list.

1. **Mind map a list of characteristics or features that are essential in your community.**
2. **Compare your list with other members of your class. Do any items appear on most people's wish lists? Is anything missing?**
3. **Work collaboratively to determine the top five or six characteristics that make your community liveable.**

10.8.1 Liveability studies

A study of a region's liveability considers both natural and human characteristics. All communities want a safe, healthy place to live, a sustainable environment, a liveable wage, good infrastructure and social opportunities.

Liveability survey results depend on several factors:

- Where a person lives affects access to services, jobs and nature, and influences how people view the region.
- Different age groups have different needs and opinions.
- Current economic conditions impact people; for example, a major employer may have opened or closed.
- Environmental conditions like drought also affect people.
- Government policies that shape infrastructure, housing and local grants.

To assess liveability, various themes must be explored using census data, surveys and fieldwork.

Most communities agree that essentials like safe water, sealed roads and reliable power are crucial. To achieve items on a liveability wish list, communities may need help from different levels of government for things like major roads or railways. However, some items, like sporting clubs or youth groups, are best set up by the community itself.

TABLE 1 Matching liveability indicators to key themes

Measure	Indicators	Examples
Social	• Population characteristics (gender, age) • Education (primary, secondary, tertiary) • Health (life expectancy, health-centre attendance, length of walking tracks, smoking rates, weight, chronic diseases) • Safety (perception, crime rates, road deaths and injuries, work safety)	• Volunteering • Voting • Aged care accommodation • Access to public transport • Membership of clubs and organisations • Diversity (ethnicity)
Environmental	• **Biodiversity** • Planning for the future • Water access • Waste management • **Ecological footprint**	• Public spaces • Household recycling • Weather • Land clearing
Economic	• Employment • Variety of businesses • Income • Financial stress • Housing types	• House ownership • Infrastructure • Internet access • Power • Car ownership

FIGURE 2 Community wish list: some aspects of liveability are common to all groups and some are desired by particular groups.

TABLE 2 Some of the more common items on a community wish list

Younger families	Older families and individuals
• Family housing • Financial security • Friendly community • Neighbourhood house • Parks and gardens • Paths for prams • Paths for bikes and scooters • Playgrounds • Schools	• Community groups • Public parks • Public seating • Public transport • Recognition of those from non-English speaking backgrounds • Shopping nearby • Single-person housing • **University of the Third Age**

Skillbuilder discussion

Communicating

1. Study **TABLE 2**. Think of your own community — which of the things on the list do you have?
2. Which do you think your community needs?
3. Are there any things missing from the list?

10.8.2 Transport strategies

People in towns and cities always seek ways to improve their living conditions. Communities consist of people from a range of age groups, different land uses, a range of needs and a variety of interests. Improvement ideas may be broad or focused.

Movement within and between neighbourhoods is a key issue. Bicycles are now seen as a way to boost mobility, reduce traffic, cut air pollution and improve health. Bicycle tracks promote recreational riding for all ages (see **FIGURE 3**), while dedicated paths along main routes (see **FIGURE 4**) encourage commuting by bike instead of cars.

FIGURE 3 Recreational riding along a trail mainly designed for bicycles.

FIGURE 4 Special bicycle lanes increase the safety of bike riding.

In 1965, Amsterdam introduced bike sharing — public bikes for hire, mainly for short trips. Although it initially failed, the idea continued. Modern schemes address theft and vandalism with identifiable bikes and location tracking via GPS or radio frequency. Bicycles are rented using credit card payments or smart cards based on membership required to hire a bike. Mobile apps enable bike users to connect with bicycle lanes and public transport. The number of bike-share programs declined following COVID-19; but is now rebounding. The program now includes e-scooters. In 2024, there were almost 2600 shared micromobility systems operating globally with 1.13 billion users. It is projected by 2029 there will be 1.29 billion users and the number of e-scooters will have increased ten-fold.

Copenhagen, the top bike-friendly city since 2014, sees around 62 per cent of its population cycling to work or school, covering 3.72 million kilometres daily. Beijing leads in bike-sharing programs with more than 11 million users making more than 1 billion journeys in 2023. Bike-sharing improves liveability for all ages and locations.

An example of a successful bike-sharing scheme is in Paris. The Vélib program started in 2007 and doubled in size quickly. By 2012, bike trips in Paris increased by 41 per cent. Today, the program has over 20 000 bikes and 1465 stations, spaced 300 metres apart. Forty per cent of the bikes now have electric motors with a 50-kilometre range when fully charged. These bikes also have a 50-kilogram basket capacity. The program is popular with locals and tourists, boasting 400 000 subscribers and 4.7 million trips monthly. In summer, a single bike may be used for more than ten trips in a day.

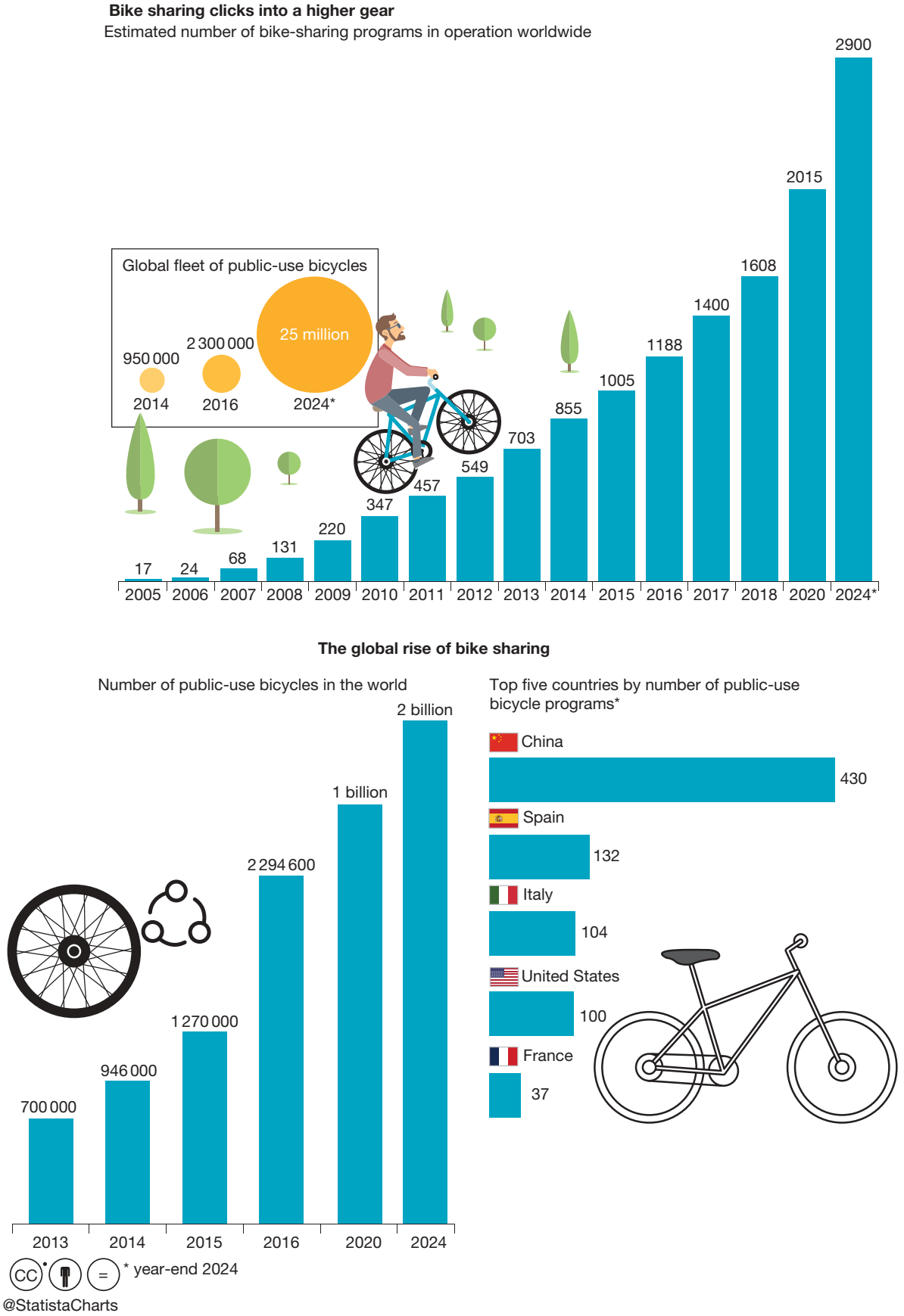
The electric bikes help solve issues in hilly areas, where people ride downhill but use other transport to return, causing bike availability imbalances. Bike sharing is also part of Paris' plan to reduce car traffic and pollution, which includes closing streets to cars on weekends, lowering speed limits, encouraging bus use and extending bike lanes.

SkillBuilder discussion

Concluding and decision-making

1. Why do you think bike-sharing programs are so popular? Compare how modern bike-sharing systems have improved since the first attempt.
2. The number of bicycle share programs increased by around 20 per cent between 2020 and 2024. Predict how many bicycle share programs there will be in 2029.
3. Do you think bicycles will replace cars for local trips? Give reasons for your answer.

FIGURE 5 Bike sharing is on the rise globally.



10.8 SkillBuilder activity COMMUNICATING

1. Some cities provide schemes to encourage people to ride bikes. **Conduct research** to find out about the success of bike incentive schemes in a European city. Include the following:
   - the name of the city
   - the date of the scheme
   - a summary of the scheme
   - evidence of success or failure of the scheme.
2. **Predict** whether a similar scheme would be viable in the area where you live.
   a. Would the scheme work as it is?
   b. What modifications might be needed? Why?

10.8 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 5, 10	4, 6, 7	3, 8, 9

REMEMBER AND UNDERSTAND

1. **Identify** the three measures used when investigating liveability.
   A. Population B. Social C. Environmental
   D. Economic E. Sustainability
2. All information to determine the liveability of an area can be obtained from census statistics. True or False?
3. Refer to **TABLE 1**.
   a. **Identify** two aspects that could be placed in a different theme. **Justify** your suggested change.
   b. **Propose** one more indicator that should be included. In which theme would it belong?
4. **Recall** three advantages of increasing bicycle riding.
5. **Identify** the problem that was faced by the first bike-sharing schemes.
   A. Increased accidents B. Reduced cars on the road C. Theft and vandalism
   D. Increased public transport use E. None of the above

ANALYSE AND APPLY

6. Refer to **FIGURE 2**. **Compare** and **contrast** the liveability wish list for young families and older people. You may wish to present your answer visually, as a Venn diagram.
7. Liveability means different things to people of different ages.
   With the use of an example, **demonstrate** how improving liveability for one age group might help the liveability of another age group.
8. Refer to **FIGURE 5**
   a. **Propose** a reason for the rapid increase in the number of shared bikes in cities around the world.
   b. **Propose** a reason why China is the fastest growing market for share bikes.
   c. **Explain** how the introduction of electric bikes might encourage more people to use share bikes.
   d. **Predict** potential problems that might be caused by using electric bikes.

EVALUATE AND COMMUNICATE

9. Refer to the community wish list in section 10.8.1. **Identify** three items from the community wish list that you think are most needed in the area you live in. **Justify** your answer.
10. **Discuss** whether a bike-sharing scheme would be a viable option in your area. **Justify** your answer.

Answers and sample responses for this topic are available online.

LESSON 10.9 What is connection to Country?

Aboriginal and Torres Strait Islander readers are advised that this lesson may contain images and references to people who have died.

LEARNING INTENTION

By the end of this lesson you should be able to **explain** the cultural connectedness and sense of belonging that Aboriginal and Torres Strait Islander Peoples have to Country and Place and how this influences liveability.

Tune in

Aboriginal and Torres Strait Islander Peoples have a deep connection and responsibility to Country. Read the excerpt provided in **FIGURE 1** from *The Lost Girls* to learn more about the importance of Country.

FIGURE 1 Excerpt from *The Lost Girl* by Ambelin Kwaymullina (illustrated by Leanne Tobin)

The girl had lost her way. She had wandered far from the Mothers, the Aunties, and the Grandmothers, from the Fathers and the Uncles and the Grandfathers. She had hidden in the shadow of a rock and fallen asleep while she waited for her brothers and sisters to find her. Now it was night, and no one answered when she called, and she could not find her way back to camp.

The girl wandered, alone. She grew thirsty, so she stopped by a waterhole to drink, and then hungry, so she picked some berries from a bush. Then the night grew colder, so she huddled beneath an overhanging rock, pressing herself into a hollow that had trapped the warm air of the day. Finally, she saw a crow flying in the moonlight, flapping from tree to tree and calling 'Kaw! Kaw! Kaw!'. The girl followed the crow. She followed him through the trees and over the rocks and up the hills, until at last she saw the glow of her people's campfires in the distance.

The people laughed and cried at once to see the girl was safe. They growled at her for her foolishness, and cuddled her, and gave her a place by the fire. Her little brother asked if she had been afraid; but the girl said, 'How could I be frightened? I was with my Mother. When I was thirsty, she gave me water; when I was hungry, she fed me; when I was cold, she warmed me. And when I was lost, she showed me the way home'.

1. **What does the story *The Lost Girl* highlight about the importance of the land and Country to the Aboriginal and Torres Strait Islander Peoples?**
2. **Highlight any phrases that indicate a spiritual connection, a cultural connection and a familial connection to Country.**

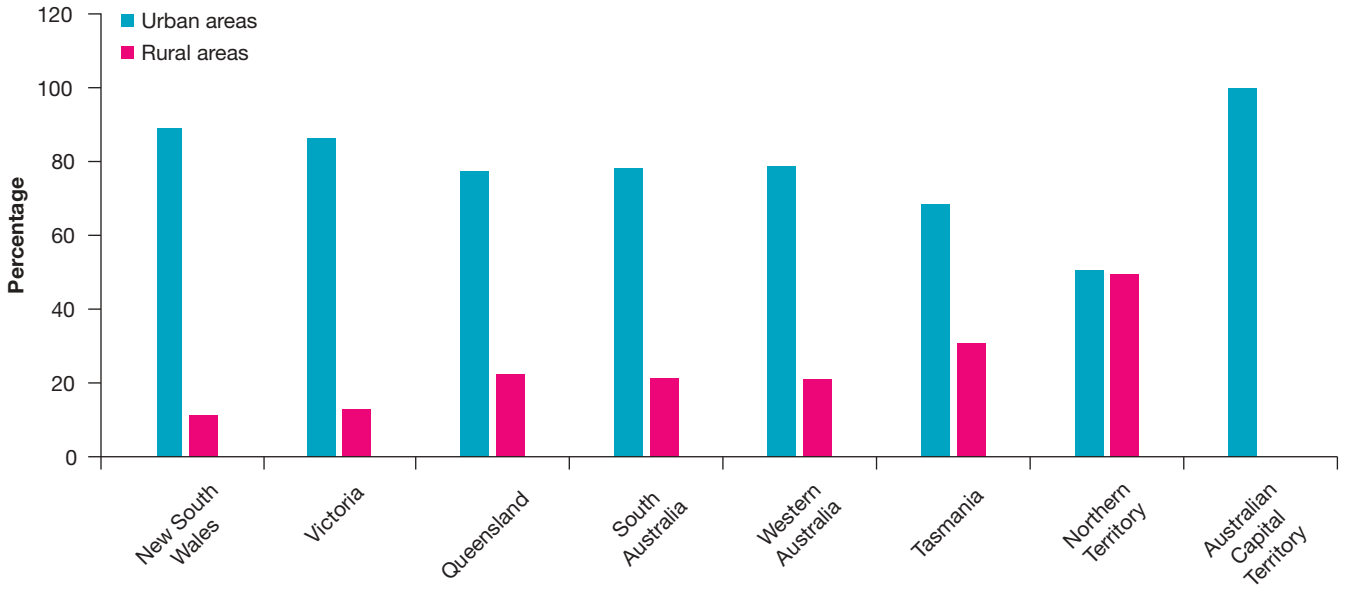
10.9.1 A connection to Country

Aboriginal and Torres Strait Islander Peoples refer to the land as Country. They have a deep spiritual and cultural connection developed over 65 000 years. They believe their identity and wellbeing are connected to their Country; therefore, they have a responsibility to care and protect the land, as it cares for and protects them. Despite this, Aboriginal and Torres Strait Islander Peoples are becoming increasingly urbanized; according to the 2021 census, 75 per cent of Aboriginal and Torres Strait Islander Peoples live in urban areas.

Connection to Country is achieved through very specific local knowledge of a region's natural history, coupled with complex layers of past personal and family experiences. So living remotely isn't the same as living on Country. A relationship with the land must exist.

The Dreaming stories, traditions and ancestral connections of Aboriginal and Torres Strait Islander Peoples are tied to a specific area or place. Aboriginal and Torres Strait Islander Peoples speak to Country, sing to Country, visit Country, worry about Country, feel sorry for Country, celebrate Country and long for Country. It is intrinsic to their very being.

FIGURE 2 Aboriginal and Torres Strait Islander Peoples living in urban and rural areas by state, 2021



Source: ABS Census of Population and Housing, 2021

SkillBuilder discussion

Geographical inquiry

1. Which state or territory shown in **FIGURE 2** has the highest urban percentage?
2. How do Queensland and New South Wales compare?
3. What's the trend for urban vs rural living?

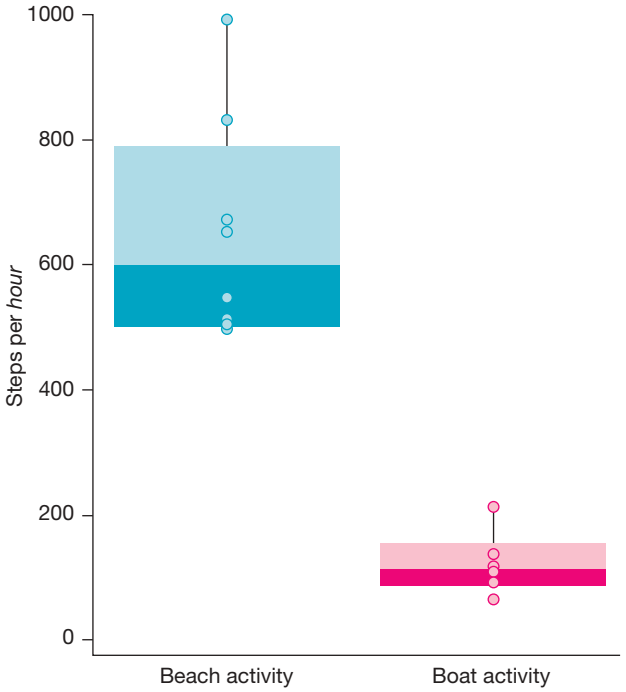
10.9.2 Healthy Country, healthy people

The land supports Aboriginal and Torres Strait Islander Peoples spiritually, physically, socially and culturally. Their mental and physical health often reflects the health of their Country. For example, those near the Murray River link their poor health to the poor condition of the river. Environmental damage and access limits have made it hard to share traditional knowledge and activities, which have negative consequences for people and land.

Being on Country helps Aboriginal and Torres Strait Islander Peoples' mental health. Many feel better by reconnecting with Country. This strengthens their identity and improves their mental wellbeing.

On Country, Aboriginal and Torres Strait Islander Peoples can do traditional activities, like gathering traditional foods which involves walking (see **FIGURE 3**), digging and chopping. These methods also have big health benefits.

FIGURE 3 Steps taken when on Country



Overall steps taken per hour of self-initiated activity when on Country

Boxplots illustrate the average number of steps taken per hour of activity across 3 days (where date available) for each participant (open circles: beach, n = 8; boat, n = 6).

FIGURE 4 Aboriginal and Torres Strait Islander Peoples have held smoking ceremonies for millennia.

Did you know?

Smoking ceremonies by Aboriginal and Torres Strait Islander Peoples have been practiced for at least 60 000 years. The smoke from native plants is believed to have cleansing properties, keeping bad spirits away. These ceremonies are performed when people arrive on Country (or specific places on Country) as a way of cleansing them and giving them safe passage to continue their journey.

10.9.3 Sustainability

For tens of thousands of years, Aboriginal and Torres Strait Islander Peoples have managed the land and its resources to ensure environmental harmony and sustainability. Caring for Country, by living on Country, helps keep the environment healthy.

Through practicing their traditional land management techniques on Country, Aboriginal and Torres Strait Islander Peoples provide a wide range of environmental services. Some of these are outlined in **FIGURE 5**.

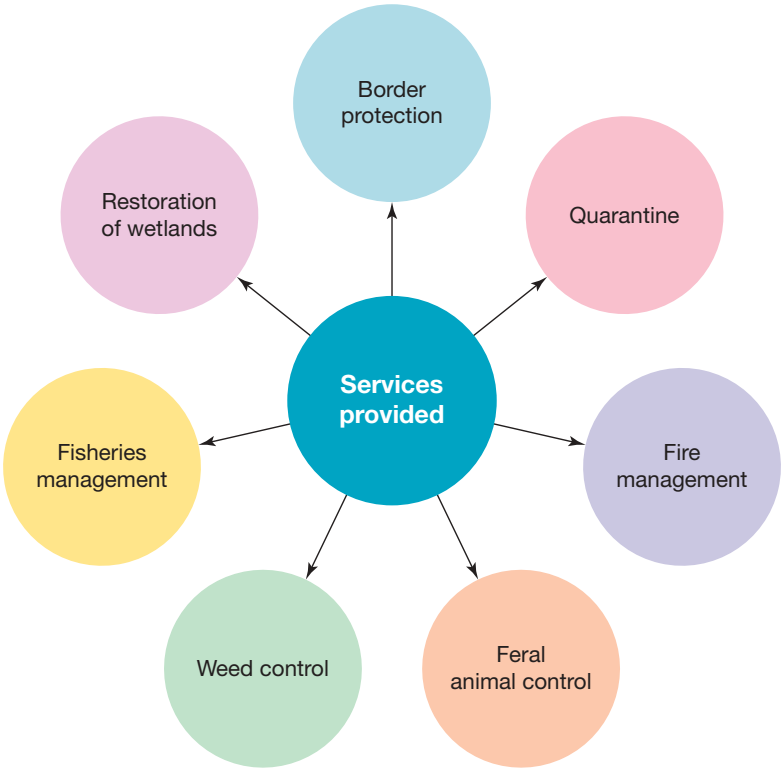
The introduction of Indigenous Protected Areas (IPAs) has meant that Aboriginal and Torres Strait Islander Peoples can manage their land to meet international conservation standards. They manage the land and receive funding to help with using traditional conservation strategies. Research shows IPAs help Australia meet biodiversity goals effectively.

SkillBuilder discussion

Geographical inquiry

1. What environmental services do Aboriginal and Torres Strait Islander Peoples provide?
2. How do they manage natural resources?
3. What role do they play in conservation?

FIGURE 5 Environmental services provided by Aboriginal and Torres Strait Islander Peoples



10.9.4 The Yolngu Peoples of Arnhem Land

The Yolngu Peoples are the traditional custodians of 55 000 hectares in the Northern Territory. Their land includes rocky outcrops, floodplains, sandy beaches and rugged coastline.

Despite pressure to adopt a Western lifestyle, the Yolngu Peoples have kept a strong connection to Country and their cultural ancestry, which goes back more than 50 000 years.

Over 40 languages are spoken across Eastern Arnhem Land, and English is often the second or third language for many Aboriginal and Torres Strait Islander Peoples.

FIGURE 6 Arnhem Land, Northern Territory

10.9.5 The Wurundjeri Peoples of the Kulin Nation

Wurundjeri lands cover about 12 500 square kilometres, including areas around what is now the Yarra River in Melbourne, and stretching to Whittlesea, Macedon, Lancefield and Woodend. They trace their ancestry back over 65 000 years, when the creator spirit formed their land, people and all living things.

The Wurundjeri connection to land and Country is based on their cultural and spiritual values. Central to these beliefs is the notion of belonging to the land rather than owning the land. They didn't build permanent homes but lived in a cycle. They set up temporary camps within set boundaries, moving when the land needed time to heal. They returned when the land could provide for them again.

The land met all their needs — food, water, medicine and shelter. In return, they treated the land with respect, taking only what they needed and caring for it.

FIGURE 7 Healesville is part of the Wurundjeri lands

10.9.6 Why do Aboriginal and Torres Strait Islander Peoples choose to live on Country?

For tens of thousands of years the land provided all their needs. The land is seen as the foundation of people — past, present and future.

Connection to Country is highly spiritual. It links to a sense of belonging and identity. Country is more than physical land; it includes plants, animals, sky, people, language, customs, seasons, creation spirits and cultural heritage.

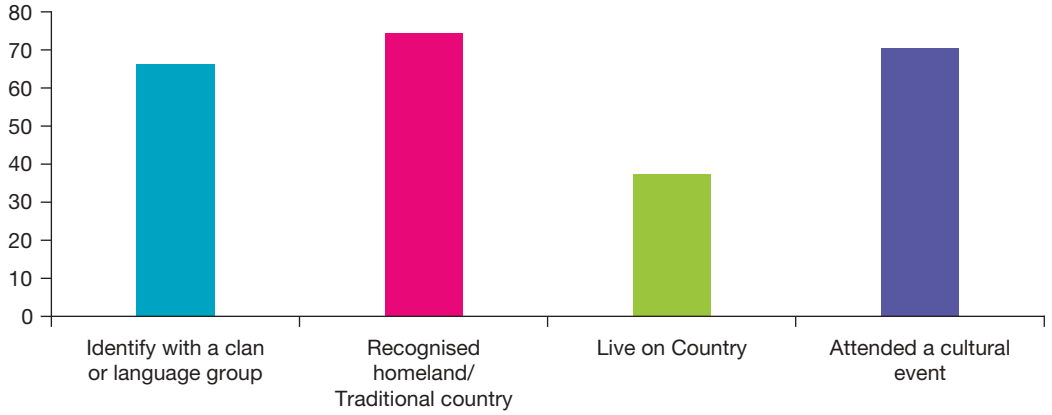
The land is like a 'living museum' for Aboriginal and Torres Strait Islander Peoples. It holds their collective memory from the time of the Dreaming. This is reflected in ancient burial grounds, cultural sites and watering holes that helped them survive across generations.

FIGURE 8 Country is a complex idea where all aspects of physical and spiritual life are connected.

Aboriginal and Torres Strait Islander Peoples are connected to the land and each other through kinship groups. Elders are trusted with the knowledge and responsibility of caring for the land and passing it to future generations. The language holds words and ideas that have no equivalent in English, showing their deep understanding of the land. This is their connection to Country.

This spiritual connection is maintained through ceremonial practices. The land provides for the people, and they manage and sustain it through culture, ceremonies, kinship and laws.

FIGURE 9 Aboriginal and Torres Strait Islander Peoples have a strong connection to their family, community and culture.



Source: Australian Bureau of Statistics.

Language and culture

According to the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), over 250 Aboriginal and Torres Strait Islander Peoples languages are spoken in Australia. In the 2021 census, one in ten Aboriginal and Torres Strait Islander Peoples said they spoke an Aboriginal and Torres Strait Islander language at home.

Acknowledgement of Country

To show respect, both Aboriginal and Torres Strait Islander Peoples and non-Indigenous Australians acknowledge Aboriginal and Torres Strait Islander Peoples as the traditional custodians of the land, along with their ancestors and traditions.

10.9.7 How are Aboriginal and Torres Strait Islander Peoples connecting others to Country?

About 200 km north of Broome is the Kimberley region. Local Aboriginal and Torres Strait Islander communities have set up camping sites where visitors can have a cultural experience. Visitors can enjoy yarns around the campfire, and learn about local history and the seasonal lifestyle, like bush foods and fishing.

Supported by Tourism Western Australia and run by the Traditional Custodians, the aim is to foster understanding between Aboriginal and Torres Strait Islander Peoples and non-Indigenous people. Money from tourism stays in the local community.

SkillBuilder discussion

Concluding and decision-making

1. Locate the camping sites of Aboriginal and Torres Strait Islander Peoples near Broome.
2. Identify activities visitors can do at the camping sites.
3. Decide how tourism helps local Aboriginal and Torres Strait Islander communities.

FIGURE 10 In 2022, Aboriginal and Torres Strait Islander communities on the Dampier Peninsula welcomed non-Indigenous visitors to connect with the oldest living culture in the world.

10.9 SkillBuilder activity GEOGRAPHICAL INQUIRY, COMMUNICATING

Aboriginal and Torres Strait Islander Peoples have a strong connection to the land. Children are taught from an early age to respect the environment. They stay in an area for a time and then move to another as the seasons change. This ensures that they do not overhunt, overfish or overharvest the resources in any one area. They are taught to take only what they need and not to waste anything.

The mangrove regions of the north of Australia are an important source of food, timber and medicines for the Aboriginal and Torres Strait Islander communities who live in this region.

Use online resources to investigate how Aboriginal and Torres Strait Islander communities live with and care for the mangroves.

1. As a class, mind map a list of how mangroves provide food, shelter, timber and medicine.
2. Select a feature of mangroves for further research.
3. **Create** a poster based on your findings:
   a. Outline what you investigated
   b. Explain how the land is cared for
   c. Describe what the land provides for the people
   d. Show how connection to Country is evident
4. Use the posters to create a class collage.

10.9 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4	5, 6, 7, 10	8, 9, 11, 12

REMEMBER AND UNDERSTAND

1. **Select** the most appropriate answer. What is Country to Aboriginal and Torress Strait Islander Peoples?
   A. Land, sea and sky
   B. Animals, rocks and water
   C. Family
   D. Land they own

2. **Select** the most appropriate words to fill in the gaps and complete the sentence.

physically	wellbeing	Aboriginal and Torres Strait Islander Peoples	mental	Country

The land sustains _____ in every aspect of their lives: spiritually, _____, socially and culturally. Connection to _____ runs so deep for many Aboriginal and Torres Strait Islander Peoples that often their _____ and physical health and _____ are reflected in the Country.

3. According to AIATSIS, there are more than _____language groups across Australia.
   A. 50
   B. 110
   C. 220
   D. 250
4. **Identify** the statement that best **describes** the purpose of a smoking ceremony.
   A. A smoking ceremony is a vital component of a controlled burn that will regenerate the land.
   B. A smoking ceremony is needed to call the creation spirits.
   C. A smoking ceremony has cleansing properties that will keep bad spirits away.
   D. A smoking ceremony is used to threaten strangers.
5. **Determine** whether each of the following statements is true or false.
   a. English is the first language of Aboriginal and Torres Strait Islander Peoples living in the Northern Territory.
   b. Connection to Country is just about land management.
   c. For Aboriginal and Torres Strait Islander Peoples, the land holds their collective memory from the time of the Dreaming.
6. **Explain** why it is important that Aboriginal and Torres Strait Islander Peoples live on the Country they have a connection to.

ANALYSE AND APPLY

7. Using **FIGURE 2 determine** which state or territory has the highest percentage of Aboriginal and Torress Strait Islander Peoples living in rural areas and which has the least.
8. **Explain** how connection to Country is established for Aboriginal and Torres Strait Islander Peoples .
9. **Refer** to **FIGURE 9**. **Explain** how the graph demonstrates a strong connection to Country.
10. Answer the following questions:
    a. **Explain** how Aboriginal and Torres Strait Islander communities in the Kimberley region of Western Australia are working to foster an understanding between Aboriginal and Torres Strait Islander Peoples and non-Indigenous Australians.
    b. **Describe** the benefits to local communities from running a tourism venture such as that offered in the Kimberley region of Broome.

EVALUATE AND COMMUNICATE

11. **Discuss** what is meant by the phrase ‘the land is a living museum’.
12. **Evaluate** the traditional Aboriginal and Torres Strait Islander Peoples’ way of land management shown in **FIGURE 5**. Which do you think is of greatest benefit to sustainability? **Justify** your response.

Answers and sample responses for this topic are available online.

LESSON 10.10 Investigating topographic maps — Liveability in Badu and Moa

LEARNING INTENTION

By the end of this lesson you should be able to **describe** what liveability is like in Badu and Moa.

10.10.1 Badu and Moa Islands

Both islands are located 40–60 kilometres off the far north Queensland coast in the Torres Strait. Moa Island has a small population of approximately 240 people. Badu Island has a slightly larger population of around 850 people.

These small, isolated communities rely on the ocean to provide food and as a pathway for trade. Their livelihood is threatened by climate change, particularly rising sea levels. Communities on the islands are heavily reliant on regular rainfall and have reservoirs to ensure a secure clean water supply. More recently, septic tanks and drainage facilities have been installed, improving the environmental health of the islands. Because of improved water security and the development of infrastructure, an increasing number of tourists are travelling to Badu and Moa Islands.

SkillBuilder discussion

Geographical inquiry

1. Determine how far Moa and Badu Islands are from the Queensland coast.
2. Identify the population of Moa and Badu Islands.
3. How do these island communities get their food and water?

FIGURE 1 Moa Island is the second largest island in the Torres Strait.

FIGURE 2 Topographic map extract of Badu Island and Moa Island in the Torres Strait.

Source: Data based on QSpatial, State of Queensland (Department of Natural Resources, Mines and Energy, Department of Environment and Science), http://qldspatial.information.qld.gov.au/catalogue/; Geoscience Australia.

10.10 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 3	2, 4	5, 6

REMEMBER AND UNDERSTAND

1. **Describe** where Badu and Moa islands are located. Use the terms *latitude* and *longitude* in your answer.
2. **Identify** the height and area reference of Mt Augustus.
3. Locate and give the area reference for three different human features located on the islands.

ANALYSE AND APPLY

4. Based on what you can see on the map, **explain** how liveable your think the islands are. **Support** your answer with evidence from the map.
5. What factors might affect how liveable your Badu and Moa islands are for different people? Choose one feature of the islands and **explain** the following:
   a. Why might someone born and raised on the islands think the feature increases liveability?
   b. Why might someone born and raised on the islands think that this feature decreases liveability?
   c. Why might someone born and raised in a big city in Australia think that this feature increases liveability?
   d. Why might someone born and raised in a big city in Australia think that this feature decreases liveability?

EVALUATE AND COMMUNICATE

6. **Determine** what challenges could exist if the island communities are reliant on rainfall for their water sources.

Answers and sample responses for this topic are available online.

LESSON 10.11 How do places change?

LEARNING INTENTION

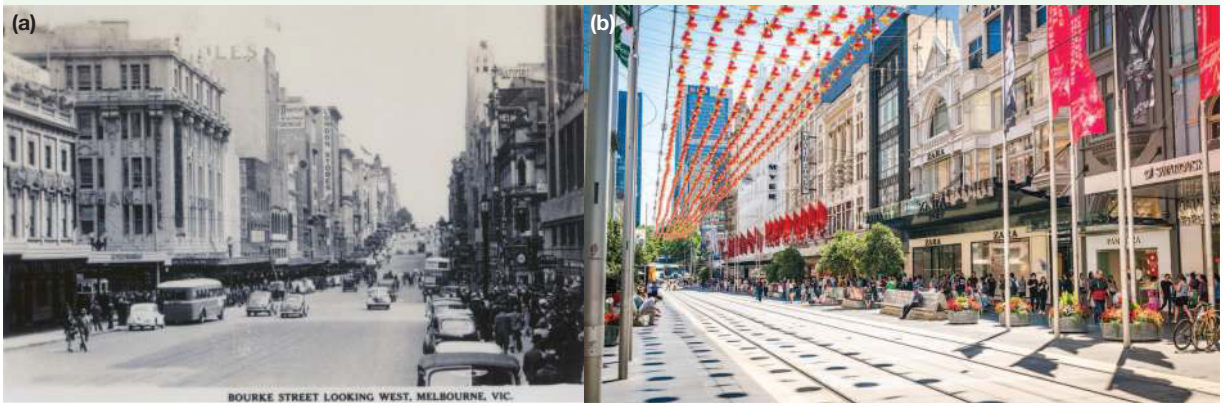
By the end of this lesson you should be able to:

- **explain** why places change over time
- **describe** the changes that might occur in a place over time
- **predict** how a place might look in the future.

Tune in

1. **Think of a familiar place, like your school or neighbourhood. Draw what it might look like in 5, 10 and 20 years. Think about trends in transport, sustainability, employment and education.**
2. **Explain the changes you've predicted for your place and why you drew them. Do these changes improve or deteriorate your place?**

FIGURE 1 Bourke Street Mall, Melbourne in (a) 1948 and (b) 2019.



10.11.1 On the move

A town will change over time if the factors influencing people's decision-making about living there also change. Decisions might be influenced by government plans, changes in the natural environment, employment opportunities and access to resources and other places.

FIGURE 2 A Tallangatta house being moved to the new town site.

The original buildings in Tallangatta, in north-east Victoria, about 40 kilometres from Albury and Wodonga, can be seen only when the water level in Lake Hume is very low. The current town was moved from its original location in 1956. Houses were lifted onto trucks (with parts of the buildings often falling off during the journey) and moved about eight kilometres (see **FIGURE 2**). The original site, in a valley beside the Mitta Mitta River, was flooded when the size of Lake Hume was increased.

10.11.2 Town closed

In 1917, the town of Cook was built on the dry Nullarbor Plain to service the Indian Pacific railway. It had a population of 300 people; large enough to support a school, hospital, shops and accommodation for train drivers. Privatisation of the railway in 1997 led to the town's closure. With no residents, Cook is now a ghost town.

FIGURE 3 The location of Cook

Source: Spatial Vision

SkillBuilder discussion

Geographic inquiry

1. Refer to **FIGURE 3**. Where is Cook located in relation to major cities?
2. In which state is Cook located?
3. Are there any nearby landmarks marked on the map?

10.11.3 Access to resources

Resource depletion

Silverton, near Broken Hill, had 3000 residents during its mining peak. After the mine closed, most left for larger mines in Broken Hill. As of the 2021 census, Silverton's population is 48. The town has become a popular filming location for movies like *Mad Max 2* and *Mission Impossible 2*. In 2017, the Silverton Wind Farm project began with 58 turbines, making it Australia's seventh-largest wind farm. Silverton attracts about 150 000 tourists annually, drawn by its scenery, historic buildings, mining history, wind farm and film sites.

SkillBuilder discussion

Geographical inquiry

1. What are some popular attractions in Silverton?
2. How far is Silverton from Broken Hill?
3. What type of activities can tourists enjoy in Silverton?

FIGURE 4 Silverton has reinvented itself as a tourist destination.

Resource discovery

Karratha is a hot, dry place 1600 kilometres north of Perth. It was founded in the 1960s to support workers in the growing iron ore mines of the Pilbara region. Further growth occurred with the development of the natural gas industry in the 1980s. The town supports a permanent population of 17 000 (2021 census) and provides accommodation for around 13 000 FIFO workers. The town currently has the capacity to comfortably accommodate 50 000 permanent and temporary residents.

FIGURE 5 The planned town of Karratha

10.11.4 Sea change

Margaret River, 270 kilometres south of Perth, is popular for its rural lifestyle, but remains accessible to the capital city. Moving to the coast is a **sea change**, while moving inland is a **tree change**.

Change over time

Margaret River is popular for its beaches, caves, wineries, national parks and mild weather — making it well suited to farming and tourism.

Over time, people's views on the region have changed (see **FIGURE 6**).

FIGURE 6 Change over time in the Margaret River region

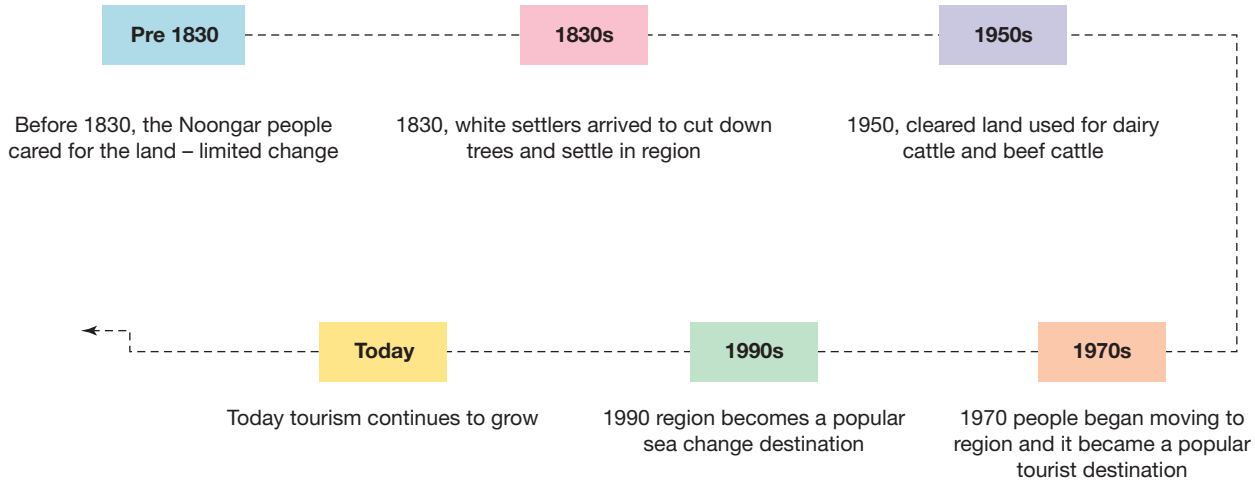


TABLE 1 Movement of people into and out of the shire of Augusta–Margaret River, 2016–2021

State / Territory	In migration	Out migration	Net migration
New South Wales	83	61	22
Victoria	72	32	40
Queensland	50	88	–38
South Australia	33	12	21
Western Australia	2458	1806	652
Tasmania	10	16	–6
Northern Territory	37	12	25
From Overseas	681	–	–

Source: Australian Bureau of Statistics, Census of Population and Housing, 2021.
(Usual Residence Data). Compiled and presented in profile.id by.id (informed decisions).
https://profile.id.com.au/augusta-margaret-river/migration

10.11.5 Tourism

Port Douglas, 60 kilometres north of Cairns, was a busy mining port in the 1870s with a population of more than 10 000 people. Environmental concerns saw mining stop and by the 1960s, only 100 lived there. Improvements in roads and flights in the 1980s brought tourists to the warm weather, beautiful beaches and the World Heritage areas of the Great Barrier Reef and Daintree rainforest. The permanent population is now around 3650, but it can double in size during peak holiday season (May–September).

FIGURE 7 Port Douglas in 1971, before the tourist boom

FIGURE 8 Port Douglas in 2007

Skillbuilder discussion

Concluding and decision-making

Places change over time. Look at the photos of Port Douglas from 1971 and 2007.

1. List the people affected by the changes you see.
2. How would different people feel about the changes?
3. What do you imagine the aerial view looks like today?

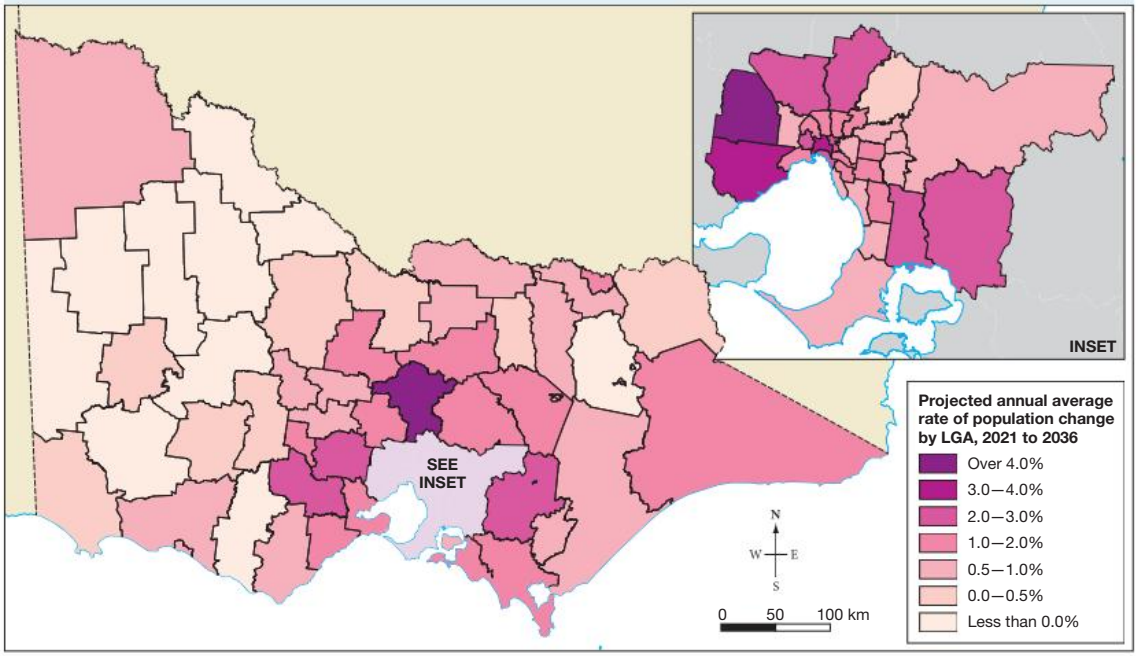
10.11.6 Change in the future

In Victoria, some rural towns might lose people as big farms use more machinery and factory closures result in less job opportunities.

Towns near Melbourne are expected to grow. People can access jobs and entertainment in the city while living in regional Victoria. More people mean more businesses and services are needed.

The population of Perth is expected to grow from 2.1 million in 2023 to 3.5 million in 2050; an increase of almost 67 per cent. A growing economy, quality of life and increased urban development are the key drivers of this change, making it the third largest city in Australia.

FIGURE 9 Projected population change for regional Victoria, 2011–2036



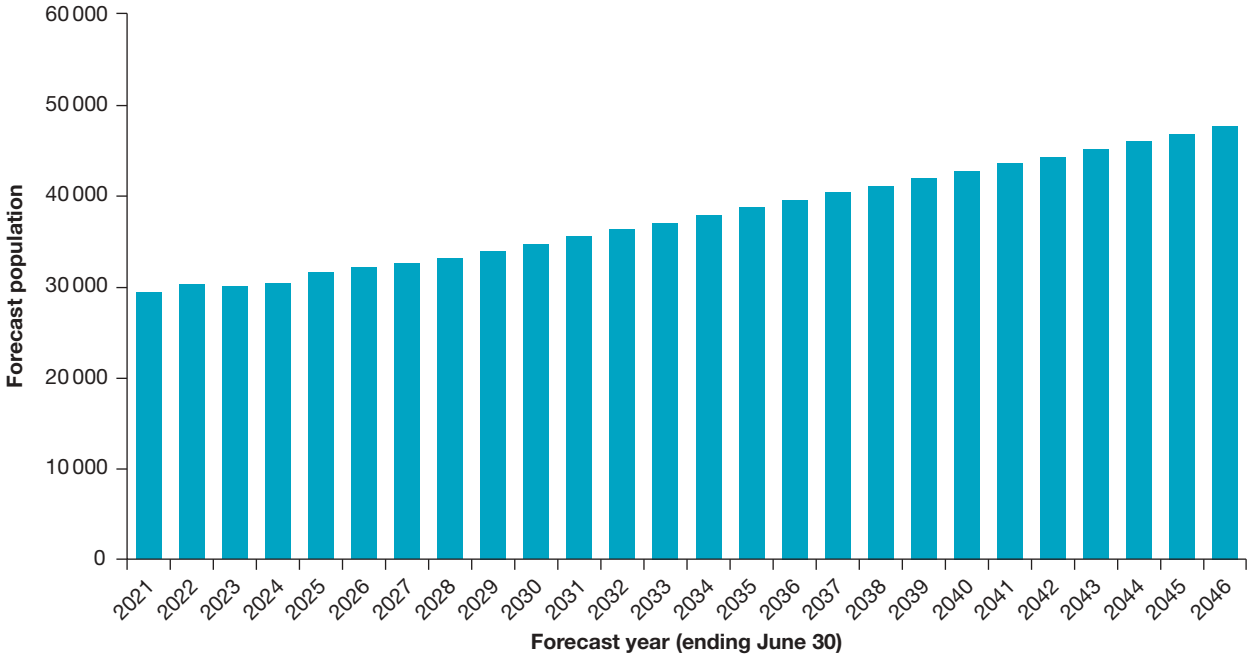
Source: © Copyright State of Victoria Department of Transport and Planning(2023). Victoria in Future 2023 Population and household projections to 2051. Retrieved from https://www.planning.vic.gov.au/__data/assets/pdf_-file/0022/703453/DTP0552-Victori-in-Future-2023-report.PDF?form=MG0AV3. Map drawn by Spatial Vision.

SkillBuilder discussion

Concluding and decision-making

1. Study **FIGURES 9** and **10**. Describe the projected change in Perth's population from 2021 to 2046.
2. Why do you think the population of Perth is increasing?
3. Is Perth or Melbourne growing at a faster rate? Justify your answer.

FIGURE 10 Forecast population growth for Perth, 2021–2046



Source: Population and household forecasts, 2021 to 2046, National Forecasting Program, id (informed decisions), January 2024.

10.11 SkillBuilder activity GEOGRAPHICAL INQUIRY

1. Find maps of Victoria that provide information about landform and climate. Refer to your maps and **FIGURE 10** to complete the following.
   a. Think about landform and population change. Are most areas of declining population in places that are not mountainous? Are most areas of increasing population on the coast side of the mountains?
   b. Think about climate and population change. Are most of the highest growth population areas in places where rainfall is over 600 millimetres per year? Are most areas of declining population in places where the rainfall is lower?
   c. What might be the reasons for your findings in questions **a.** and **b.**?

10.11 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 3, 4, 8	1, 5, 6, 7	9, 10

REMEMBER AND UNDERSTAND

1. **Identify** the water storage that drowned Tallangatta.
   A. The ocean
   B. Lake Hume
   C. One month of heavy rain
   D. The Murray River
2. People are now drawn to Silverton to see the town in its isolated, dry setting, which is a location for many film sets. True or false?

3. **Select** the correct answer to complete the sentence. During the peak season, the population of Port Douglas is the **same as** / **double** / **triple** / **half** its permanent population.
4. Refer to **TABLE 1**. **Identify** the three main places new residents came from to settle in Margaret River between 2016 and 2021.
5. **Describe** why May to November is the peak holiday season in Port Douglas.

ANALYSE AND APPLY

6. **Explain** why population changes are expected in regional Victoria in the coming years.
7. What would be the advantages and challenges of living in a town such as Port Douglas, which relies on tourism?
8. Study **FIGURES 7** and **8**. **Describe** how Port Douglas has changed between 1971 and 2007. **Suggest** a reason for this change.

EVALUATE AND COMMUNICATE

9. Refer to the map in **FIGURE 9**.
   a. **Describe** the location of the areas predicted to grow by more than 3 per cent. For example, are they inland or by the coast? Are they in the north, south, east or west of the state? Are they clustered together or spread out? Are they close to Melbourne?
   b. **Predict** what will happen to towns in regional Victoria.
   c. **Identify** the proportion of Victoria that is predicted to increase its population and the proportion that is predicted to decrease its population.
10. Factors that cause change can be categorised as social (related to people), economic (related to money) or environmental (related to setting or surroundings). **Consider** all the reasons for change provided in this lesson and allocate each to its correct category.

Answers and sample responses for this topic are available online.

LESSON 10.12 What is the connection between liveability and sustainable living?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** the connection between liveability and the environment
- **explain** the interconnection between liveability, sustainability and ecological footprint.

Tune in

Did you know that sustainable living is linked to our ecological footprint?

1. **Develop a definition of the terms 'sustainable living' and 'ecological footprint'.**
2. **Mind map a list of features that help determine our ecological footprint.**
3. **Categorise each feature as either having a positive or negative impact on our ecological footprint.**

FIGURE 1 Our ecological footprint comprises many different elements, including how we power our homes.

10.12.1 Sustainability

Australian cities often rank high in liveability, but liveability is not the same as sustainability (see **FIGURE 2**). Sustainability focuses on how well a community is meeting current needs and expectations, and how well it will contribute to meeting future needs.

Sustainability indicators include:

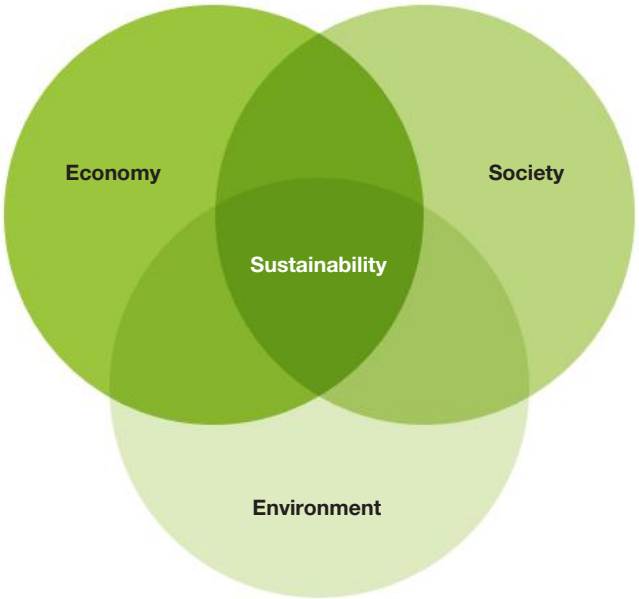
- low working hours to meet basic needs
- easy access to education
- satisfactory and affordable housing
- recycling and composting
- reliable transport
- low emissions and high air quality
- biodiversity
- high renewable energy use and low non-renewable energy use
- good water, forests and marine health
- ability to respond to disasters.

SkillBuilder discussion

Concluding and decision-making

1. What is the difference between liveability and sustainability in cities?
2. List three indicators that show a place is sustainable.
3. What categories does the Arcadis Sustainable Cities Index use to rank cities?

FIGURE 2 To achieve sustainability, a city must balance environmental, economic and social aspects.



Sustainable Cities Index

The Arcadis Sustainable Cities Index ranks 50 cities using a range indicators and organizes them into four categories: people (society), planet (environment), profit (economy) and progress (sustainable initiatives), as shown in **TABLE 1**.

The top ranked Australian city is Perth at 25. Only three other Australian cities feature in the top 100; Melbourne, Sydney and Brisbane all rank within the top 50 cities.

TABLE 1 Top 10 sustainable cities by indicator, 2024*

Ranking	Overall SCI	Planet	People	Profit	Progress
1	Amsterdam	Oslo	Paris	Amsterdam	Jakarta
2	Rotterdam	Copenhagen	Vienna	San Franscico	Kinshasa
3	Copenhagen	Berlin	Athens	Dallas	Chengdu
4	Frankfurt	London	Warsaw	Stockholm	Wuhan
5	Munich	Rotterdam	Seoul	Dublin	Guangzhou
6	Oslo	Amsterdam	Prague	Chicago	Shanghai
7	Hamburg	Frankfurt	Tokyo	Houston	Beijing
8	Berlin	Munich	Oslo	Zurich	Tianjin
9	Warsaw	Hamburg	Edinburgh	New York	Shenzhen
10	London	Edinburgh	Dublin	Seattle	Rotterdam

Source: © Arcadis Sustainable Cities Index 2024, compiled in partnership with Centre for Economics and Business Research. * Most recent data available at time of printing.

Ecological footprint

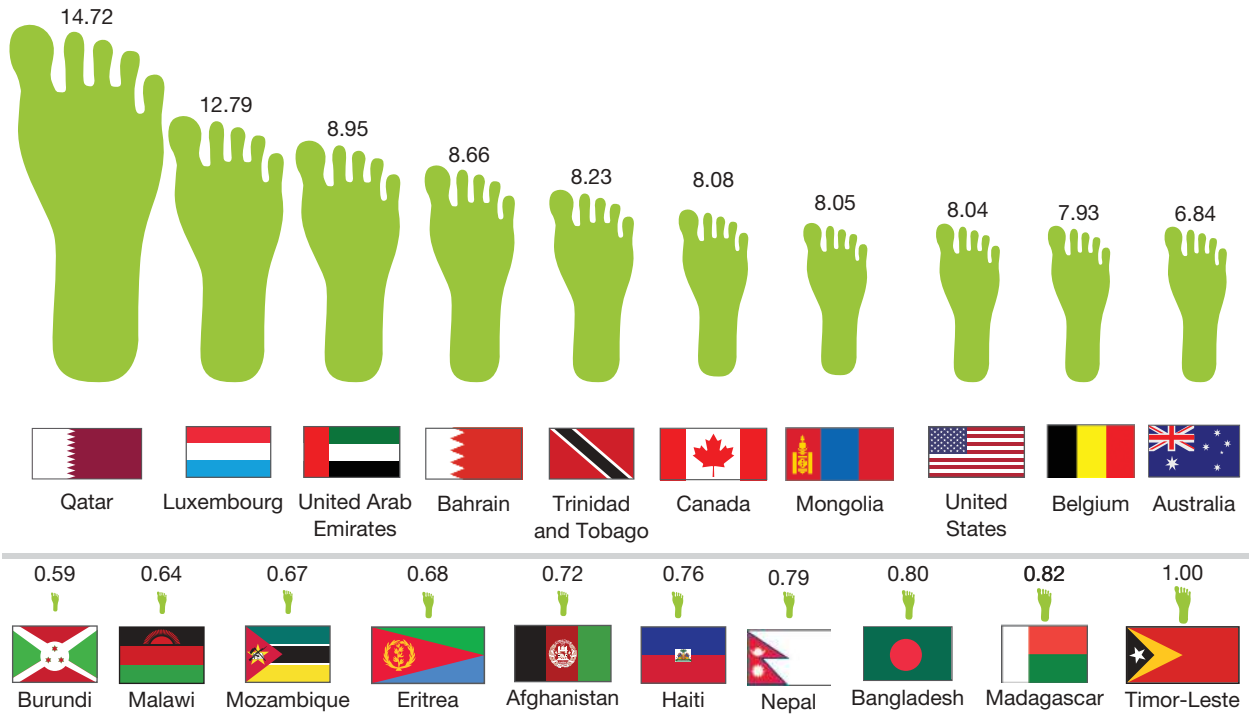
Everything we do impacts the environment. We clear land for food, raise animals, catch fish and use water for homes and farms. Most transport relies on non-renewable fuel like petrol.

An ecological footprint measures how much land is needed to support one person. It compares resource use between countries.

In wealthy countries like Australia, the ecological footprint is much larger than in poorer countries like Chad. The global average footprint is 2.77 hectares, meaning we need 1.63 Earths to support everyone. In Australia, the average is 6.84 hectares (4.02 Earths). To enjoy a sustainable way of life, the population needs to stay within the Earth's carrying capacity (meaning the maximum number of individuals the environment can support).

To live sustainably, the footprint should be no more than 1.7 hectares. **FIGURE 3** shows countries like Luxembourg, Qatar and the United States far exceed this. In Australia, we use resources and generate waste 4.0 times faster than the Earth can replace and absorb them. As more countries develop, we need smart solutions for a better quality of life.

FIGURE 3 Top 10 countries with the biggest and smallest ecological footprints (hectares per capita) per person, 2024



SkillBuilder discussion

Communiciating

1. Discuss what an ecological footprint measures and how it is expressed.
2. Compare the average ecological footprint of an Australian to the global average.
3. Describe how government policy and individual actions can influence the ecological footprint.

Government policies affect the ecological footprint, and the wider quality of the environment, through policies on regulating power generation, transport, water, industry, waste collection and building standards. Individuals influence it through their choices in food, water, power use, recycling, composting, building and travel.

10.12 SkillBuilder activity CONCLUDING AND DECISION MAKING

1. **Conduct research** and find two images:
   - One showing living conditions in a country with an ecological footprint over six hectares per capita.
   - One showing living conditions in a country with an ecological footprint under one hectare per capita.
   Refer to **FIGURE 3** for examples of countries with large and small ecological footprints.

2. **Annotate** each image to explain how living conditions affect the ecological footprint.
3. **Propose** a strategy to reduce the ecological footprint of the country with a large ecological footprint that might assist in reducing its ecological footprint. Fully **explain** your strategy and how it might lead to a reduction in the ecological footprint.

10.12 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 4, 6	3, 7, 8	5, 9, 10

REMEMBER AND UNDERSTAND

1. **Identify** the key term that refers to the variety of life in the world or in a particular habitat or ecosystem.
   A. Agriculture B. Ecological footprint C. Biodiversity D. Livestock
2. **Identify** three indicators that a place is sustainable.
   A. Unreliable public transport
   B. Satisfactory and affordable housing
   C. Low emissions and high quality air
   D. Difficult to access education
   E. Long working hours to meet basic needs
   F. Good water, forests and marine health
3. **Identify** three aspects that are considered in a definition of sustainability.
   A. Population B. Society C. Liveability D. Economy
   E. Environment F. Progress G. Waste
4. Refer to **TABLE 1** and an atlas and fill in the blanks in the following passage.

   The Arcadis Sustainable Citiesility Index, combining the rankings for all cities, is dominated by the continent of _____. People and Planet are also dominated by _____.

   Cities on the continent of _____ dominate the Profit category and those places that dominate the Progress category are located on the continent of _____.
5. Refer to **FIGURE 3**. **Describe** the distribution of countries with an ecological footprint of six or more hectares per capita.

ANALYSE AND APPLY

6. **Predict** what might happen to the global ecological footprint if liveability improves on every continent.
7. Refer to the list of indicators in section 10.12.1 that indicate that a place is sustainable.
   a. **Categorise** each indicator as applying to economy, society or environment. **Propose** one more indicator for each category.
   b. **Highlight** any of these indicators that you think might be used to assess a city's progress (sustainable initiatives) towards becoming a more sustainable city.

EVALUATE AND COMMUNICATE

8. **Consider** the ways in which resources have been used to improve liveability in your area. **Identify** an aspect you would be prepared to change a little so that others might improve their liveability where they live. **Justify** your answer.
9. **Explain** why high-income countries have a much larger ecological footprint than low-income countries.
10. a. **Explain** the term 'carrying capacity'.
    b. **Compare** the earth's carrying capacity with its current ecological footprint.

Answers and sample responses for this topic are available online.

LESSON 10.13 How can liveability be improved?

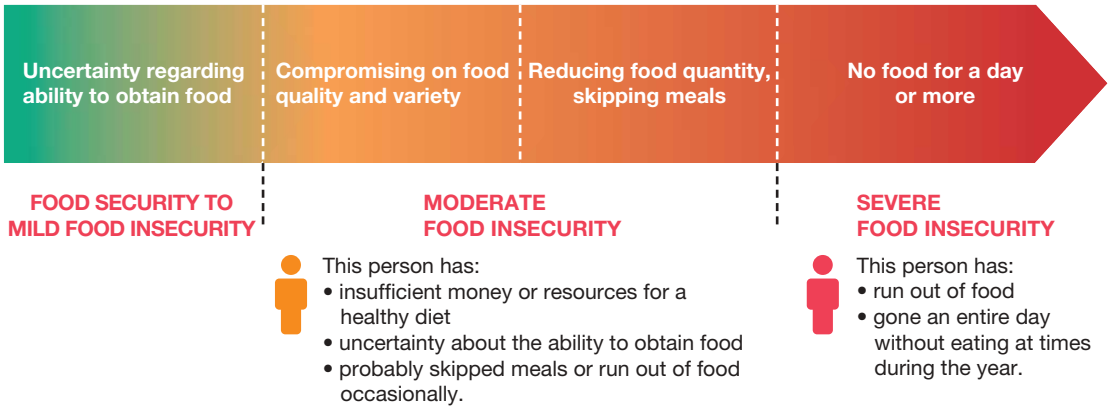
LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** reasons for the uneven distribution of food across the world and how this impacts liveability
- **explain** how livability can be enhanced at a local scale.

Tune in

FIGURE 1 Defining food insecurity



Source: Food and Agriculture Organization of the United Nations.

1. **Explain the connection between hunger and food insecurity.**
2. **Mind map reasons why people in some parts of the world have more than enough to eat while people in other regions are starving.**
3. **Discuss potential solutions to reduce global food inequality.**

10.13.1 Distribution of hunger

SkillBuilder discussion

Geographical inquiry

1. Look at **FIGURE 2**. Describe the patterns of rates of undernourishment over time.
2. Identify where most hungry people live and their primary sources of food.
3. What might affect crop growth and increasing hunger besides rainfall?

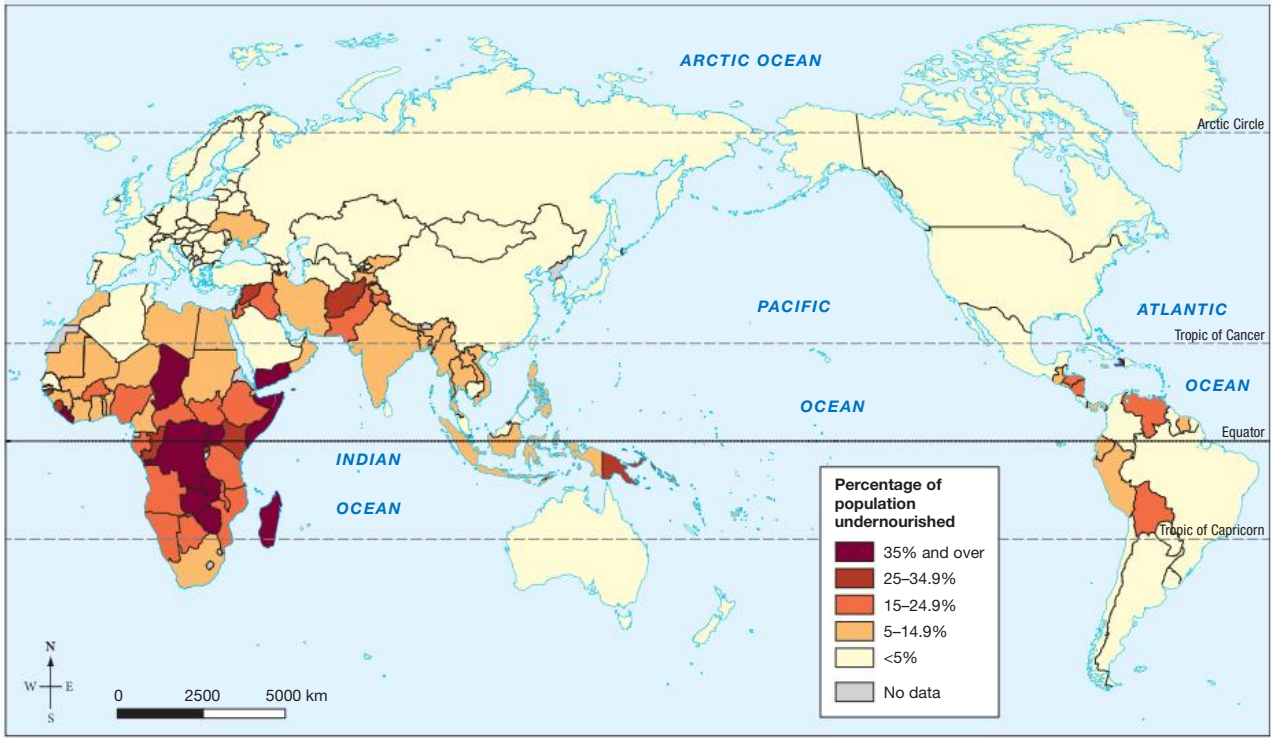
Access to enough food is a strong measure of liveability. Although globally we produce enough food to feed everyone, about 1 in 11 people do not have enough to eat.

Approximately 733 million people globally are **undernourished**. Many children in poorer countries are underweight and do not have enough food to maintain proper health. In 2000, 33 per cent of children worldwide faced chronic malnutrition. This figure has fallen to 20 per cent today.

Three-quarters of all hungry people live in rural villages in Asia and Africa (see **FIGURE 2**), mainly relying on agriculture with no other source of income or employment. They often consume one-quarter to one-half of the recommended daily calories and small amounts of water.

Lack of rain can hinder crop growth and affect livestock feed, but other factors also contribute to hunger, as outlined in **FIGURE 3**.

FIGURE 2 Distribution of hunger, 2023



Source: FAO (2021–2023). Prevalence of undernourishment (percent) (3-year average). Retrieved from https://www.fao.org/interactive/state-of-food-security-nutrition/2-1-1/en/. Map drawn by Spatial Vision.

FIGURE 3 Causes of hunger

Conflict becomes more important than food production. Farmers have difficulty getting to and from markets, crops are destroyed, many are forced off the land, and fields and water may be contaminated.

There is a lack of key agricultural infrastructure, such as roads, warehouses and irrigation. The results include high transport costs, lack of storage facilities and unreliable water supply.

Growing export crops such as coffee, cocoa and sugar produces export income while decreasing basic food production. Food becomes expensive.

The poverty cycle means the poor cannot afford to buy or produce enough food. This leaves them hungry and weak and less able to produce more food.

Poor farming techniques, deforestation, overcropping and overgrazing reduce soil fertility.

Extreme weather events such as floods, tropical storms and long periods of drought ruin crops and infrastructure.

10.13.2 Impact of hunger

Poor nutrition worsens the health and energy deficits caused by food scarcity.

TABLE 1 The impact of hunger is felt by individuals, families, communities, regions and whole countries.

Social impacts	Economic impacts	Environmental impacts
People fall ill	Food production drops	Soil overuse
Many, especially children, die	Urban populations swell	Excessive land clearing
Fathers seek work elsewhere	Poverty rises	Declines in soil fertility and biodiversity
Political unrest arises	Governments struggle to fund infrastructure	Water deficits and ecosystem stress

10.13.3 Ending hunger

Organisations work to reduce hunger by providing immediate food or improving future food production. Actions include:

- Individuals donating to hunger relief groups
- Governments of affected countries assisting the poor or upgrading infrastructure
- Other countries offering financial and food aid
- The United Nations, through programs like the World Food Program, providing support

10.13.4 Sustainable Development Goals

Poverty hinders infrastructure building and liveability, so reducing poverty is crucial for better living conditions globally.

United Nations Sustainable Development Goals

In 2000, the United Nations (UN), with 193 members, started the Millennium Development Goals to end extreme poverty by 2015. In 2015, 17 new goals were set for 2030 to achieve zero hunger, achieve food security and improved nutrition and promote sustainable agriculture. **TABLE 2** shows the eight Millennium Development Goals and 16 of the Sustainable Development Goals.

TABLE 2 UN Development Goals

Millennium Development Goals 2000–2015	Achievements of MDGs	Sustainable Development Goals 2015–2030	Related SDGs
Eradicate extreme poverty and hunger	Fewer people in extreme poverty	No poverty	Industry, innovation and infrastructure
Achieve universal primary education	Increased primary school enrolments	Zero hunger	Reduced inequalities
Promote gender equality and empower women	More girls attending school	Good health and wellbeing	Sustainable cities and communities
Reduce child mortality	Higher baby survival rates	Quality education	Responsible consumption and production

(continued)

TABLE 2 UN Development Goals *(continued)*

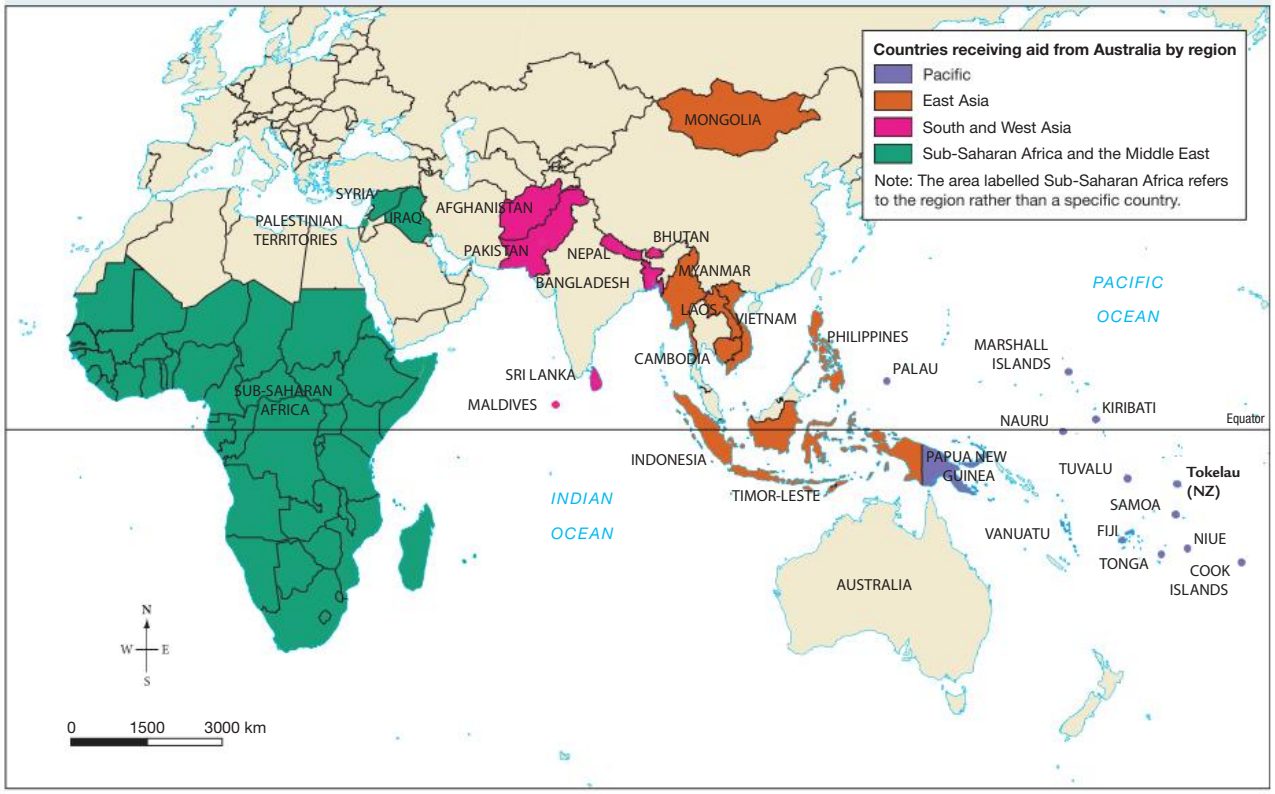
Millennium Development Goals 2000–2015	Achievements of MDGs	Sustainable Development Goals 2015–2030	Related SDGs
Improve maternal health	Better healthcare access for mothers	Gender equality	Climate action
Combat HIV/AIDS, malaria and other diseases	Reduced measles through vaccination	Clean water and sanitation	Life below water
Ensure environmental sustainability	More people accessing safe water	Affordable and clean energy	Life on land
Develop a global partnership for development	Increased access to phones and internet	Decent work and economic growth	Peace, justice and strong institutions

Australian government and NGOs

As **global citizens,** Australia supports global health, education and economic development through its overseas aid program run by the Department of Foreign Affairs and Trade (DFAT).

Additionally, the Australian government runs projects to improve liveability by working with **non-government organisations (NGOs)** like World Vision and the Australian Red Cross (**see FIGURE 4**).

FIGURE 4 Countries receiving assistance from Australia



Source: Department of Foreign Affairs and Trade

SkillBuilder discussion

Communicating

1. Identify the primary goal of the United Nations Sustainable Development Goals related to poverty.
2. How does the Australian government help in improving living conditions abroad?
3. What do you think is the main objective of the Millenium Development Goals established in 2000?

FIGURE 5 Examples of projects **(a)** child immunisations clinic of the Kokoda Track **(b)** building schools and improving education in Indonesia **(c)** planting grasses in Fiji to stabilise sea banks.

Small changes, big results

Simple, **appropriate technology** can greatly improve lives in developing countries (see **FIGURE 6**). Even a small amount of money can make a big difference to individuals or communities.

Microfinance

Through the provision of microcredit, small amounts like $150 can be used to invest in income-generating activities such as:

- animals for breeding or milking
- equipment or materials for basket-making or jewellery-making
- stock for a market stall.

Loans are repaid at low interest, allowing for future borrowing.

FIGURE 6 Appropriate technology: **(a)** solar lamps where electricity is scarce increases opportunities for reading **(b)** In South Africa, hippo rollers assist with collecting water from distant wells.

10.13 SkillBuilder activity CONCLUDING AND DECISION MAKING AND COMMUNICATING

This lesson has shown the extremes of hunger and the impact on liveability.

Let us now look locally at how liveability can be compromised and also enhanced.

1. Choose three of the Sustainable Development Goals shown in **FIGURE 7**.

FIGURE 7 The 17 Sustainable Development Goals

2. Choose one local place (e.g., park, street, school, shopping strip).
   Look at your three relevant Sustainable Development Goals (SDGs) and complete the following:
   a. **Assess:**
      Using brief dot points, describe how well the place meets each SDG.
   b. **Improve:**
      Suggest one realistic improvement for each SDG that would make the area more sustainable or livable.
   c. **Bonus:**
      Create a simple 'before and after' sketch or description of your improvements.

You may repeat this for other local areas of your choice.

10.13 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 3, 5, 6	1, 7, 8	4, 9, 10

REMEMBER AND UNDERSTAND

1. Refer to **FIGURE 2** and select the appropriate word from the word list to complete this sentence.

Australia	Arctic Circle	Asia-Pacific	Sub-Saharan Africa	Latin America Caribbean

_____ has the largest percentage of its population undernourished and _____ has one of the lowest.

2. Select the correct options to complete the sentence:
Most of the world's hungry people live in **cities** / **rural villages** / **inner suburbs** / **coastal towns in Asia and Europe** / **Asia and Africa** / **North America and Africa**.
3. Refer to **FIGURE 2**. The map indicates that the highest number of undernourished people are in Africa. True or false?
4. Poor roads contribute to hunger. **Explain** the connection between poor roads and hunger.
5. **Identify** the organisation that developed the Millennium Development Goals and the Sustainable Development Goals.

ANALYSE AND APPLY

6. Consider **TABLE 1** in section 10.13.2. **Propose** one more example for each category of impact — social, economic and environmental.
7. Study the images in **FIGURES 5** and **6**. **Identify** the Sustainable Development Goals that have been addressed in these projects.
8. Refer to **FIGURE 4**. **Describe** the distribution of places that receive aid from Australia. Think in terms of region, such as Asia, East Asia, the Middle East, South Asia, West Asia, Pacific, Africa and the Caribbean.

EVALUATE AND COMMUNICATE

9. **Explain** how simple technology and microfinance are transforming lives in developing countries
10. **Propose** why addressing issues related to hunger is an essential component of improving liveability.

Answers and sample responses for this topic are available online.

LESSON 10.14 Inquiry: What are the characteristics of liveable cities?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** what makes a city liveable
- **suggest** some ways to enhance the liveability of a local city.

Background

In this inquiry, you will investigate what makes a city liveable and how it is determined. Share your findings in an oral presentation.

Each year, the Economic Intelligence Unit (EIU) ranks 173 major cities using five key indicators:

- stability
- healthcare
- culture and environment
- education
- infrastructure.

FIGURE 1 Many factors affect how liveable a city is.

FIGURE 2 Education and infrastructure are two of the five key indicators used in the EIU liveability rankings.

In this activity you will:

1. **Identify** the five key indicators the EIU uses to rank cities and what they mean.
2. **Explain** what you know about liveable and less liveable cities.
3. List what you'd like to learn.
4. Use the EIU website to locate Melbourne's position. Locate a city that also ranks in the bottom 10 as a comparison.

Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task, you can use this rubric to self-assess.

Inquiry steps

Step 1: Write your inquiry question

In this inquiry, you will need to make comparisons between Melbourne and a city which is ranked in the bottom 10.

- **Select** your two cities and **write** your inquiry question — make sure you chose cities that have not been covered in detail in this topic.

Step 2: Questioning and researching

- **Conduct research** into your chosen cities.
- Collect relevant data in table or graph form.
- Use the key indicators to guide your research, and make notes under these indicators for each city.
- Locate appropriate images to **illustrate** each indicator; you might like to annotate these for future reference.

Step 3: Analysis, evaluation and interpretation

- **Create** a summary table for each city.
- **Identify** connections between your summary tables and your other elements such as graphs, tables and images.

Step 4: Civic participation and decision making

- **Reflect** on what makes one place liveable and another less liveable.
- **Decide** which information you will use in your presentation and how it can be used effectively.

Step 5: Communicating

- **Create** your PowerPoint presentation.
- Remember to take care with your font size and colour. Avoid making your slides text-dense.
- Use visuals and dot points. Prepare cue cards to help guide you through your presentation.

LESSON 10.15 Review

10.15.1 Key knowledge summary

Use this dot point summary to review content covered in this topic.

10.2 What is liveability?

- A sense of place is personal and varies from person to person.
- Natural and human features influence a sense of place.
- People have different views of liveability.
- Perceptions of liveability depend on a person's background, life stage and expectations.

10.3 What makes a place liveable?

- Push and pull factors influence where people choose to live.
- These factors include economic, spiritual, aesthetic and cultural aspects.
- Local neighbourhood, holiday and tourism locations often promote a positive sense of place.
- Aboriginal and Torres Strait Islander Peoples often identify with their Country.
- Identifying the most liveable places differs from person to person.

10.4 Where are the most liveable cities?

- 173 cities are ranked based on criteria to create the liveable city index.
- Melbourne, Vienna and Vancouver shared first place for several years. In 2021, both Vienna and Vancouver fell out the top 10 and Melbourne fell to sixth. In 2024, Vienna was again ranked first, Melbourne second and Vancouver seventh.
- Changes in rankings are due to city improvements; COVID-19 affected the 2021 results.
- The most used ranking index is produced by the Economic Intelligence Unit.

10.5 What is it like to live in remote places?

- Mining and farming are key activities in remote Australia.
- Australians are generally moving towards cities and major towns.
- Some Australians moved from cities to have more space; this is possible due to high-speed internet.

10.6 Country vs city living

- People choose where to live based on push and pull factors.
- Country communities are small but often have a closer sense of belonging.
- Small country communities are important for Australia's economy due to the agricultural industry.

10.7 What makes a liveable and non-liveable city?

- Perth has been in the top 20 most liveable cities for many years, placing sixth in 2021.
- Factors like weather can be both positive and negative for Perth as a liveable city.
- Less liveable cities are in developing countries.
- Extreme poverty affects many, with many living below the poverty line.
- Literacy levels are low, though showing some improvement.

10.8 What makes communities liveable?

- People view liveability differently based on their life stage and location.
- Bicycle-sharing schemes are growing and now include e-scooters. They reduce traffic congestion and pollution, and improve health.
- Beijing has the most shared bikes in the world.

10.9 What is connection to Country?

- Aboriginal and Torres Strait Islander Peoples have a significant connection to the land.
- They see land as a member of their family; a living entity.
- Aboriginal and Torres Strait Islander Peoples use their traditional land management skills to help achieve sustainable goals.
- Aboriginal and Torres Strait Islander Peoples have the world's oldest continuous culture.
- There are more than 150 language groups.
- Connection to Country is deeply spiritual; tied to identity and belonging.

10.10 Investigating topographic maps — Liveability in Badu and Moa

- These communities rely on the ocean for food and trade, but climate change threatens their livelihood.
- Septic tanks and drainage systems have improved the environment, health and liveability of the islands.

10.11 How do places change?

- Towns change a lot over time due to government decisions and land management.
- Changes in tourism patterns can significantly affect smaller communities.

10.12 What is the connection between liveability and sustainable living?

- Liveability and sustainable living are different.
- High-income cities rank high in liveability, but also have a high ecological footprint.
- A high ecological footprint means using resources faster than Earth can regenerate them.

10.13 How can liveability be improved?

- For those living in poverty, liveability improves with access to enough food.
- While some have too little to eat, others have too much.
- Hunger has social, environmental and economic impacts.
- The United Nations identifies poverty as the main cause of low liveability.
- Australia provides aid to many countries.

10.14 Inquiry: What are the characteristics of liveable cities?

- Liveability is determined by specific indicators used to rank and compare cities.

10.15.2 Key terms

agriculture cultivation of land, growing crops or raising animals
amenities features that make a place more pleasant or attractive
appropriate technology technology designed for a specific place, is affordable and locally repairable
arid lacking moisture; especially having insufficient rainfall to support trees or plants
aspect feature or quality, or the direction something is facing
biodiversity the variety of life in a habitat or ecosystem
built environment a place that has been constructed or created by people
census a survey to count population and gather statistics in Australia
community a group of people who live and work together, they share similar values; a group of people living in a particular region
conurbation an extended urban area, usually made up of a town merging with the suburbs of a city
Country the place where Aboriginal and Torres Strait Islander Peoples come from and where their ancestors lived; it includes the living environment and the landscape
demographic describes statistical characteristics of a population
ecological footprint total area of land used to produce the goods and services consumed by an individual or country
fly in, fly out (FIFO) workers who fly to work in remote places, work 7-to-21-day shifts and then fly home for extended leave

global citizens people who are aware of the world and working to make it better
horticulture the growing of garden crops such as fruit, vegetables, herbs and nuts
informal sector jobs not officially recognised by the government
infrastructure structures like roads, schools and utilities that help a community run
irrigation water provided to crops and orchards by hoses, channels or sprays or drip systems in order to supplement rainfall
literacy rate the percentage of people over 15 who can read and write
liveable city a city that people want to live in, which is safe, well planned and prosperous and has a healthy environment
livestock animals raised for food or products
location a point on the Earth where something can be found
natural environment elements like wind, soil, water, plants and animals
natural resources resources such as landforms, minerals and vegetation that are provided by nature rather than people
neighbourhood a region in which people live together in a community
non-government organisations (NGOs) non-profit groups working on humanitarian tasks
objective objective information is where data or events are presented without emotive words or opinion
place specific area of the Earth's surface that has been given meaning
population density number of people per square kilometre
pull factors reasons that attract people to come and live in a place
push factors reasons that encourage people to leave a place and go somewhere else
region any area of varying size that has one or more characteristics in common
remote a place that is distant from major population centres
sea change the act of leaving a fast-paced urban life for a more relaxing lifestyle in a small coastal town
subjective subjective information is where information is presented based on opinion or bias
tree change the act of leaving a fast-paced urban life for a more relaxing lifestyle in a small country town, in the bush, or on the land as a farmer
undernourished not getting enough food for good health and growth
University of the Third Age a movement promoting lifelong learning during retirement or later life
urban decay the process where a once functioning city or part of a city falls into disrepair and is abandoned. This is often the result of economic factors such as the decline of an industry leading to a lack of employment.
wilderness a natural place that has been almost untouched or unchanged by the actions of people

10.12.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the overview.

What is meant by the concept of liveability? How is liveability measured and how does this combine with other factors to influence where someone may choose to live?

1. Now that you have completed this topic, what is your view on the question? Discuss your views 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.

learnon

Post-test	Online post-test
eWorkbook	Customisable worksheets for this topic Reflection
Digital document	Key terms glossary

10.15 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 5, 9, 12	2, 4, 6, 8, 11	3, 7, 10, 13, 14, 15

REMEMBER AND UNDERSTAND

1. The early settlers of Australia chose to live on the coast and along rivers for a number of reasons. Which of the following would not have been a factor?
   A. Good access to sea transport
   B. Milder climate
   C. More scenic landscapes further inland
   D. Bays and rivers providing safe ports for ships, their main form of transport
2. Which of the following are correct in regard to the services and facilities available in country towns?
   A. There are sporting activities
   B. There are no cultural activities
   C. There are no environmental groups
   D. There are social groups
3. What factors contributed to the growth of tourism in Port Douglas?
   A. Mining and population growth
   B. Decreased population and stunning beaches
   C. Improved road and air access, warm weather and World Heritage areas nearby
   D. High-rise buildings and city infrastructure
4. What is 'Country' for many Aboriginal and Torres Strait Islander Peoples?
   A. Soil, rocks and minerals
   B. Cultural traditions and practices
   C. Home and family
   D. Urban areas
5. Which of the following is a way in which liveability can change? Select the best response.
   A. Over a number of years
   B. Over a season
   C. After an extreme event
   D. All of the above
6. Why is infrastructure so important for improving liveability? Select all possible options.
   A. It provides roads for transport
   B. It adds to the visual appeal of a city
   C. It provides hospitals for healthcare
   D. It provides clean water for drinking
7. The general connection between ecological footprint and liveability is that regions that rank highly in terms of liveability have a _____ ecological footprint.
   A. Small
   B. Large
   C. Non-existent
   D. Medium
8. **Identify** the types of jobs people from the poorer regions of Dhaka have access to.
   A. Jobs in the mining industry
   B. Jobs in the corporate industry
   C. Jobs in the informal sector
   D. Jobs in the formal sector
9. How many Sustainable Development Goals are there?
   A. 1
   B. 3
   C. 10
   D. 17

10. **Identify** a small change that can make a big difference to living conditions.
    A. Solar light to make it possible to do homework
    B. A long walk to school
    C. Moving to a slum area
    D. Girls staying home to tend the fire

ANALYSE AND APPLY

11. What services allow FIFO settlements such as Tom Price?
12. Using examples, **explain** the difference between push and pull factors.
13. **Explain** how the place in which you live influences your view of what makes a satisfactory standard of living.

EVALUATE AND COMMUNICATE

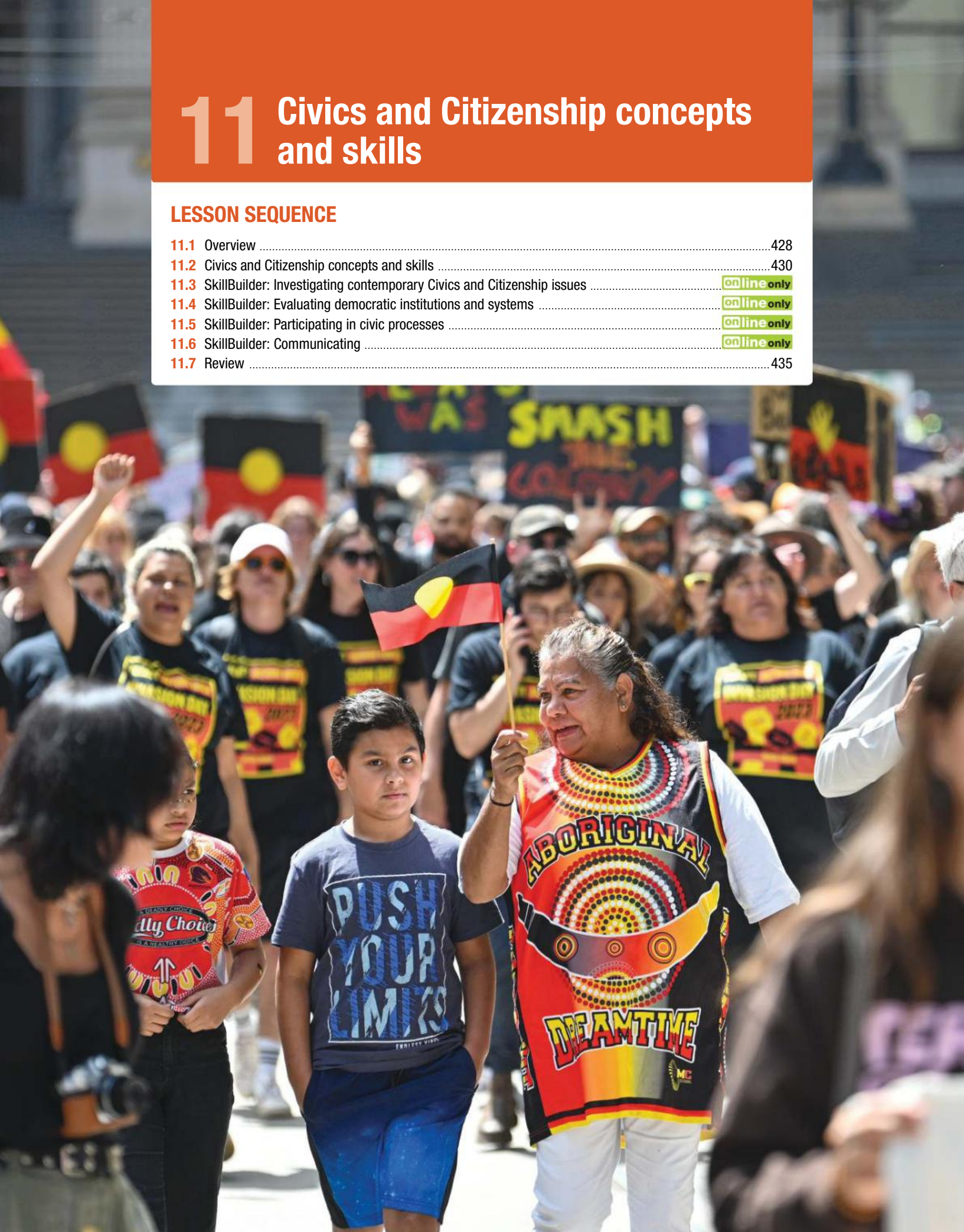
14. **Propose** at least three examples that show the influence of the environment on living conditions.
15. Answer the following questions.
    a. **Discuss** the advantages and disadvantages of informal housing?
    b. **Discuss** the advantages and disadvantages of the informal sector of the economy?

Answers and sample responses for this topic are available online.

11 Civics and Citizenship concepts and skills

LESSON SEQUENCE

11.1 Overview 428
11.2 Civics and Citizenship concepts and skills 430
11.3 SkillBuilder: Investigating contemporary Civics and Citizenship issues ..... online only
11.4 SkillBuilder: Evaluating democratic institutions and systems ..... online only
11.5 SkillBuilder: Participating in civic processes ..... online only
11.6 SkillBuilder: Communicating ..... online only
11.7 Review 435



LESSON 11.1 Overview

INQUIRY QUESTION

Why is it important to study Civics and Citizenship, and what skills do I need?

As a student of Civics and Citizenship, you are developing the knowledge and skills that you will need to be an active part of our society now and in the future. In your study of Civics and Citizenship, you will cover topics around Australia's systems of government and the justice system. This will help you to understand how society is run and how Australia's government and justice system works.

Engaging with civic life will help to ensure that you are an active and informed citizen with a sense of belonging in your community. It may also be very helpful in your chosen career.

learnon

eWorkbook
Customisable worksheets for this topic

Digital document
Key terms glossary

Video eLesson
Civics and Citizenship concepts and skills

SkillBuilder

Use the SkillBuilder activities to develop these Civics and Citizenship concepts and skills:

- INVESTIGATING CONTEMPORARY CIVICS AND CITIZENSHIP ISSUES
- EVALUATING DEMOCRATIC INSTITUTIONS AND SYSTEMS
- PARTICIPATING IN CIVIC PROCESSES
- COMMUNICATING

LESSON 11.2 Civics and Citizenship concepts and skills

LEARNING INTENTION

By the end of this SkillBuilder you should be able to:

- **identify** and **explain** the Civics and Citizenship concepts and skills
- **explain** why the study of Civics and Citizenship is important.

11.2.1 Introduction

Civics and Citizenship is grounded in the core concepts of active citizenship both local and global; community, identity and diversity; democratic institutions and systems; democratic **values**; and legal systems.

TABLE 1 The six core concepts that you will learn about in Civics and Citizenship.

Concept	Description
Active citizenship	You will learn how to be a responsive and informed participant in civic life for the betterment of your community.
Community	You will learn about values, characteristics, rights and responsibilities common to a community's members, and which bring the community together.
Democratic institutions and systems	You will learn about the political, legal and civic institutions and systems that underpin our democratic system in Australia.
Democratic values	Our key democratic values include **popular sovereignty**, consent of the governed, equality, freedom, **pluralism**, protection of minorities and government accountability.
Identity and diversity	This includes learning about a person's sense of who they are, and acknowledging Australia as a culturally diverse, multi-faith and cohesive society.
Legal systems	You will learn about the mechanisms for order, justice and obedience, acceptance of the right to establish courts and make laws, and the rule of law.

11.2.2 Civics and Citizenship concepts and skills

Studying Civics and Citizenship will allow you to develop key skills and values which shape responsible participation in Australia's democracy. Through investigating issues and evaluating our institutions and systems, you will develop the ability to question the world in which you live.

The four key skills in Civics and Citizenship are:

- Investigating contemporary civics and citizenship issues
- Evaluating democratic institutions and systems
- Participating in civic processes
- Communicating

11.2.3 Investigating contemporary Civics and Citizenship issues

You will investigate the operation of Australian democracy, political and legal systems by asking questions. These questions will form the basis of your research into contemporary Australian society

and its capacity to foster fairness, diversity and inclusiveness for different groups, such as Aboriginal and Torres Strait Islander Peoples and refugees.

Data will be gathered from multiple sources, such as tables and media reports (print and visual), and different perspectives will be considered and be evident in your research.

11.2.4 Evaluating democratic institutions and systems

An **evaluation** involves considering the strengths and weaknesses of a particular idea. This will be achieved through selecting, explaining and comparing information, data and ideas from a range of sources. By examining **contemporary issues**, you will identify the main features and ideas that underpin Australia's political institutions. You will look for bias and different perspectives when forming your own opinions.

You must keep in mind the cultural, religious and/or social influences on Australia's democratic institutions, and consider how democratic values and the principles of the legal system are expressed. Using evidence, you will explain how political opinions are influenced, formed and put into effect within Australia's democratic institutions and evaluate how effectively Australian citizens use their political and legal systems.

11.2.5 Participating in civic processes

Participating in the civic process involves identifying ways in which active and informed citizens can engage with democratic decision-making such as by voting.

You will examine methods of civic participation at local, state and national scales and explain how and why you might participate in civic processes.

11.2.6 Communicating

Using a variety of methods, you will present and communicate ideas, perspectives and arguments based on evidence and research on contemporary civics and citizenship issues. Explanations will be clearly expressed and consider not just the issue but also the outcome of civic action, participation and engagement.

SkillBuilder discussion

Communicating

1. Mind-map some topics or issues that are in the news at the moment.
2. Choose one issue. How would you explain this issue to someone from another generation who hadn't heard of it before?
3. How would this be different from how you would explain it to your friends?

FIGURE 1 Different generations have different perspectives, values and opinions.

11.2 SkillBuilder activity PARTICIPATING IN CIVIC PROCESSES

1. Think of an issue that you care about (e.g., improving public transport, reducing plastic waste, or funding for schools).
2. What is the issue that you care about? Which level of government is responsible for it? How could you participate to create change?
3. In small groups, **discuss** why it is important for young people to engage in civic processes. How do different methods of participation (e.g., voting, petitions, protests) influence decision-making?
4. Write a short paragraph explaining one way you might participate in civic processes now and when you are older and why it is important.

11.2 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 4, 10, 11	2, 5, 7, 9, 12	3, 6, 8, 13, 14, 15

REMEMBER AND UNDERSTAND

1. What is the main goal of active citizenship?
   A. To be a passive observer in civic life
   B. To be a responsive and informed participant in civic life
   C. To avoid community involvement
   D. To focus solely on personal gain
2. What does community relate to?
   A. Individualism and isolation
   B. Values, characteristics, rights and responsibilities common to a community's members
   C. How to live independently from others
   D. The importance of competition within a community
3. Which of the following is not a key democratic value?
   A. Popular sovereignty
   B. Consent of the governed
   C. Equality
   D. Authoritarianism
4. What does the identity and diversity refer to?
   A. Promoting a single cultural identity
   B. Learning about a person's sense of who they are and acknowledging Australia as a culturally diverse society
   C. Ignoring cultural differences
   D. Enforcing uniformity in beliefs
5. What are democratic institutions and systems meant to support?
   A. Anarchy and lawlessness
   B. Political, legal, and civic institutions and systems that underpin our democratic system in Australia
   C. Dictatorship
   D. Personal rule
6. Which of the following is a mechanism for order, justice and obedience in the legal system?
   A. Acceptance of the right to establish courts and make laws
   B. Ignoring laws
   C. Promoting disorder
   D. Rejecting the rule of law

7. What does popular sovereignty mean?
   A. The government has absolute power
   B. The people are the ultimate source of authority
   C. Only the elite have power
   D. Sovereignty is irrelevant in a democracy
8. What is the importance of pluralism in a democratic society?
   A. It promotes a single viewpoint.
   B. It encourages multiple perspectives and diversity.
   C. It discourages minority opinions.
   D. It enforces uniformity.
9. What does government accountability ensure?
   A. The government can act without oversight.
   B. The government is responsible to the people and must justify its actions.
   C. The government is above the law.
   D. The government can ignore public opinion.
10. What is the role of the rule of law in the legal system?
   A. To allow arbitrary decisions
   B. To ensure that laws are applied equally and fairly
   C. To promote inequality
   D. To disregard legal principles

ANALYSE AND APPLY

11. **Identify** the main features and ideas that underpin Australia's political institutions.
12. **Explain** how cultural, religious and social influences affect Australia's democratic institutions.
13. List the different methods of civic participation at local, state and national scales.
14. How can Australian citizens use their political and legal systems.
15. **Describe** how political opinions are influenced and formed within Australia's democratic institutions.

Answers and sample responses for this topic are available online.

LESSON 11.3 SkillBuilder: Investigating contemporary Civics and Citizenship issues

online only

How can we investigate big issues?

Learn how to break a topic into smaller parts that make it easier to investigate and locate relevant information and or data from a range of appropriate sources. As you break the topic into smaller parts, you will learn how to formulate inquiry questions and use these as the basis for notetaking.

LESSON 11.4 SkillBuilder: Evaluating democratic institutions and systems

online only

What can political cartoons tell us?

To judge the effectiveness of democratic institutions and systems that are meant to support us as a society, you will learn how to identify bias and how this relates to objective and subjective information.

LESSON 11.5 SkillBuilder: Participating in civic processes

online only

How can I participate in real issues?

Participating in civic processes means engaging in activities like voting, volunteering, and advocacy to help shape government and community decisions. In this lesson you will write a submission.

LESSON 11.6 SkillBuilder: Communicating

online only

How can I present my argument clearly?

Develop your ability to be able to present an explanation or argument, in a straightforward way, and to communicate this in a written form, such as an essay.

LESSON 11.7 Review

11.7.1 Key knowledge summary

Use this dot-point summary to review the content covered in this topic.

11.2 Civics and Citizenship concepts and skills

- Active citizenship means that people participate in the political and legal systems to influence a change in their society.
- Democracy is a political system in which citizens choose the way in which they are governed.
- Global citizenship involves an understanding of Australia's place and obligations on an international level, and our preparedness to take action to influence change.
- Legal systems in Australia are underpinned by the rule of law. Justice should be fair and equitable.
- Identity and diversity in our multicultural society allow for freedom of expression and help shape our shared beliefs and sense of belonging.
- The four Civics and Citizenship concepts and skills that you will develop throughout your course are:
  - *Investigating contemporary Civics and Citizenship issues:* This involves locating relevant information and data from different sources to develop an understanding of political and legal issues. Different perspectives are found through analysis of research.
  - *Evaluating democratic institutions and systems:* This involves explaining the cultural, religious and/or social influences on Australia's democratic institutions; analysing how democratic values and the principles of the legal system are expressed in Australia's democratic institutions and systems; and explaining how political actors exercise power in democratic institutions.
  - *Participating in civic processes:* This involves engaging in democratic decision-making, such as reaching consensus and voting; and examining methods of civic participation in a local/state/national issue and explaining why and how they would participate in civic processes in a particular way.
  - *Communicating:* This involves developing an analysis of civics and citizenship issues with knowledge and evidence using multiple methods of communication.

11.7.2 Key terms

contemporary issues the diverse range of current events and issues that are facing society
emotive words words that create a strong emotional reaction
evaluation the process of assessing something to determine its value, effectiveness or impact
objective information where data or events are presented without emotive words or opinion
political media news, articles and other content that provide information or opinions about politics, government and public issues
subjective information where information is presented based on opinion or bias
values individual beliefs that help to guide our actions
popular sovereignty the idea that the people have the power to choose their leaders and make decisions through voting
pluralism a system or idea where different groups, beliefs or opinions are accepted and have the right to exist and be heard in society or government

11.7.3 Reflection

Complete the following to reflect on your learning.

Revist the Inquiry question posed in the Overview.

Why is it important important to study Civics and Citizenship, and what skills do I need?

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

learnon

eWorkbooks	Customisable worksheets for this topic Reflection
Digital document	Key terms glossary

11.7 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 11, 12	4, 5, 7, 8, 10, 14	6, 9, 13, 15

REMEMBER AND UNDERSTAND

1. What is the primary purpose of studying Civics and Citizenship?
   - **A.** To understand Australia's systems of government and justice system
   - **B.** To learn about historical events
   - **C.** To improve mathematical skills
   - **D.** To explore natural sciences
2. Which method is recommended for notetaking?
   - **A.** Mind mapping
   - **B.** Cornell notetaking method
   - **C.** Bullet journaling
   - **D.** Free writing
3. What are the six core concepts in Civics and Citizenship?
   - **A.** Active citizenship, community, democratic institutions and systems, democratic values, identity and diversity, legal systems
   - **B.** History, geography, economics, politics, law, sociology
   - **C.** Voting, representation, legislation, judiciary, executive, media
   - **D.** Citizenship, governance, justice, equality, freedom, participation
4. What is the name of the cartoonist who created a cartoon about COVID Safe privacy issues?
   - **A.** David Pope
   - **B.** Michael Currie
   - **C.** Scott Morrison
   - **D.** Peter Dutton
5. Which example is given for practicing writing a formal submission?
   - **A.** Establishes an eSports competition
   - **B.** Modifies the school uniform
   - **C.** Implements a free breakfast program for students
   - **D.** All of the above

6. Which year did the Tasmania Law Reform Institute complete its inquiry into courts and the information age?
   A. 2020
   B. 2019
   C. 2023
   D. 2021
7. What does the TEEL structure stand for?
   A. Topic, Evidence, Explanation, Link
   B. Thesis, Example, Elaboration, Logic
   C. Theme, Evidence, Elucidation, Link
   D. Topic, Elaboration, Explanation, Link
8. What is the main role of a formal submission?
   A. To present information
   B. To request a specific action or express opinions on an issue
   C. To entertain
   D. To summarise a book
9. What should be included in a formal submission?
   A. Relevant evidence, such as research, photographs, survey results
   B. Personal anecdotes
   C. Graphs and charts
   D. None of the above
10. What tool helps transfer information from short-term to long-term memory?
   A. Mind mapping
   B. Taking notes by hand
   C. Digital notetaking apps
   D. Mnemonic devices

ANALYSE AND APPLY

11. **Explain** why it is important for jurors to avoid using the internet and social media during trials.
12. What are the key democratic values in Australia?
13. **Describe** the process of writing a formal submission.
14. How does the Cornell notetaking method aid in retaining information?
15. What is the importance of using the TEEL structure in writing argument paragraphs?

Answers and sample responses for this topic are available online.

LESSON 11.3 SkillBuilder: Investigating contemporary Civics and Citizenship issues

LEARNING INTENTION

By the end of this lesson you should be able to:

- write inquiry questions for investigations in Civics and Citizenship
- create organised notes.

In Year 7 you will learn how to break a topic into smaller parts that make it easier to locate relevant information and/or data from a range of appropriate sources. As you break the topic into smaller parts, you will learn how to formulate inquiry questions and use these as the basis investigating and note-taking.

11.3.1 Tell me

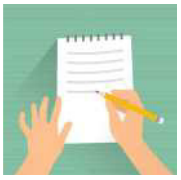
Research means investigating a topic or event and collecting information to help you understand it in detail.

To conduct a thorough investigation, it is important to have guiding questions (inquiry questions). Simply searching for key terms online can return a lot of information, but not all of it will be relevant. Inquiry questions help narrow down the information to what is directly relevant to your research.

Additionally, it is essential to use and review information in order for our brain to retain it. This process helps transfer information from short-term to long-term memory. Taking notes by hand can aid in retaining information, whether listening to a teacher, watching a documentary, reading a textbook or researching online.

The Cornell note-taking method, developed by Professor Walter Pauk at Cornell University provides a structured approach to note-taking and collecting information for your investigation. This method can be used for both revision and research purposes. Pauk's method includes the '5 Rs' of note-taking: record, reduce, recite, reflect and review (see **FIGURE 1**).

FIGURE 1 The 5 Rs of note-taking

Original content ↓ Note-taking ↓ Your words	**Record**	During the lesson, write down the key facts.	
	Reduce	Make a summary of the key facts and ideas using key words and short bullet points.	
	Recite	Without looking at your notes of the text, write the information in your own words.	
	Reflect	Develop your own opinions and ideas. Make links to other topics you have learned. Raise questions and record original ideas.	
	Review	Before studying new material, take 10 minutes to review your old notes. Skim over the main ideas and details.	

11.3.2 Show me

Imagine you have been asked to investigate how the Australian Constitution was written. You need to plan your investigation and break it down into a series of manageable steps. These steps are summarised in **FIGURE 2**.

Once you have formulated your research questions, set up one blank lined page for each question (see **FIGURE 3**). If you use more than one source, make sure you clearly identify which information has been taken from each source.

Divide up your page as shown in **FIGURE 3**.

- *Leave space at the top to record source details.*
- *Leave about eight lines at the bottom of the page for a brief summary.*
- *Split the rest of the page using a 30:70 split (as shown).*
- *Record the question and key terms in the smaller left-hand column.*
- *Record notes in point form in the larger right-hand column.*

FIGURE 2 The general process of researching a topic

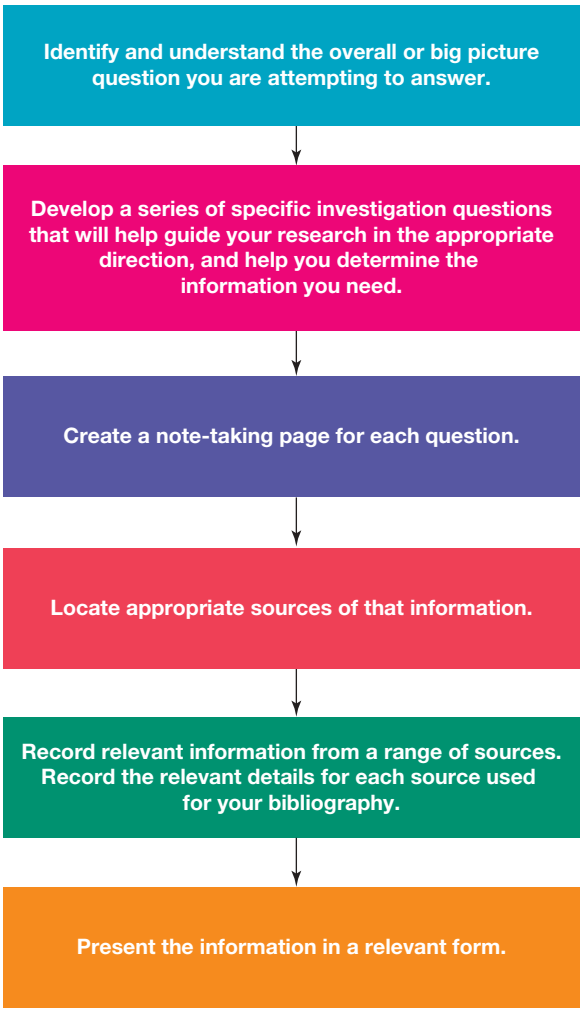
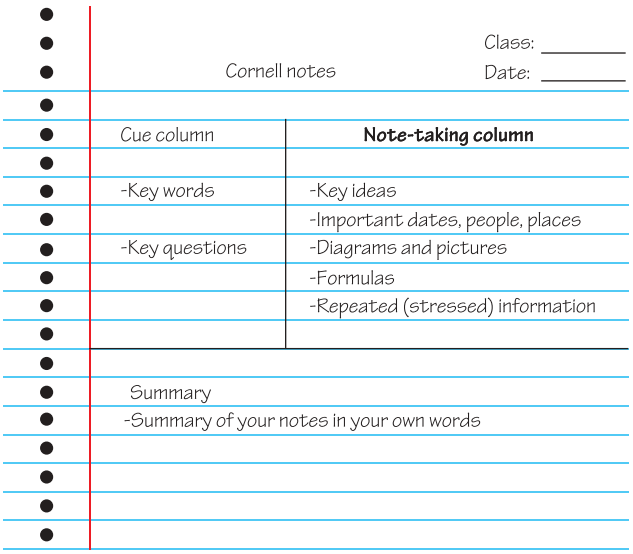


FIGURE 3 How to set up your page for the Cornell note-taking method



11.3.3 Let me do it

11.3 SkillBuilder activity

Practise the skill of using inquiry questions and note-taking for investigations and research by selecting one of the following topics.

Research topics

- Investigate the 2023 Australian Indigenous Voice referendum.
- Investigate how Australian citizens participate in the justice process.

LESSON 11.4 SkillBuilder: Evaluating democratic institutions and systems

LEARNING INTENTION

By the end of this SkillBuilder you should be able to create a cartoon, meme or advertisement to express a point of view about a political issue

At a Year 7 level, students should be able to understand and evaluate democratic institutions and systems. This involves an understanding of how an institution or system might work and drawing conclusions about its effectiveness.

11.4.1 Tell me

Political media can take many forms:

- Political cartoons use pictures, words and humour to represent ideas about a person or issue from a point of view.
- Political parties use advertisements to highlight the positive aspects of one party, or the negative aspects of another.
- Political memes are like cartoons — they use humour to highlight an aspect of a person or issue, using a reference that the intended audience understands.

Political media often present information about a person or issue from a particular point of view. This is done deliberately to highlight an issue, provide support for people or criticise a decision or action. This kind of information can help us to draw our own conclusions about things.

One of the steps in forming our own conclusions about institution and systems in politics, for example, is identifying and using bias. This relates to objective and subjective information.

- Objective information is data or events that are presented without emotive words or opinion. For example, describing a car accident as a 'traffic collision' is objective.
- Subjective information is information that is presented with opinion or bias. For example, describing the same car accident as 'a horror smash' is subjective. This is because 'horror smash' is a very emotive phrase that has been used to get a strong reaction from the reader.

11.4.2 Show me

Step 1

Creating political media can be tricky — it requires understanding of the person or issues and the intended audience, as well as creativity. Generally, only one viewpoint is presented, rather than a broad discussion of all points of view.

When creating political media cartoons, start by understanding the issues and people involved. If you want to create a meme, you need to make sure that the intended audience is familiar with the reference image, or that it speaks for itself.

Step 2

Work out the perspective or angle you want to present. Is the issue something that you want to celebrate or criticise? Do you want to make the reader angry or sad, or adopt a particular viewpoint?

You will need to choose the visual and written content carefully to convey your message.

Make sure you also understand the alternative perspective; you may find after research that you want to change your approach or point of view.

CASE STUDY

COVIDSafe

There are many examples of political cartoons, advertisements and memes. This case study shows how an issue can become the focus of a political cartoon.

In early 2020, Australia faced the COVID-19 pandemic. Identifying potential infections was called *contact tracing* and initially involved numerous phone calls to track an infected person's significant contact in the previous 14 days. Countries such as Singapore developed applications to streamline the process and allow faster identity of contacts.

In April 2020, the Australian government launched COVIDSafe, an application for contact tracing. Concerns about data safety were raised due to existing data retention laws requiring phone and internet companies to keep user data for two years. The government reassured the public that only contact tracers could access the data from the application, which would be deleted soon after.

Cartoonist David Pope created a cartoon highlighting public concerns about the Department of Home Affairs misusing information gathered from the COVIDSafe app (**FIGURE 2**). This cartoon emphasises people's caution in providing the government with more personal data.

The cartoon shows a likeness of the then Minister for Home Affairs Peter Dutton, who has been drawn as the coronavirus. The Chief Medical Officer of Australia, Brendan Murphy, is shown with the measuring tape, talking to then Prime Minister Scott Morrison. The measuring tape and the text in the speech bubble are a play on the concept of social distancing. You should note that the depictions of the three people are a recognisable likeness of each person.

FIGURE 1 A screenshot of the COVIDSafe application. You can see that there is information to explain to the user what the application is for and how it works. This aims to reassure users that the application is safe.

What COVIDSafe is for

The COVIDSafe app helps find close contacts of COVID-19 cases. The app helps state and territory health officials to quickly contact people who may have been exposed to COVID-19.

The COVIDSafe app speeds up the current manual process of finding people who have been in close contact with someone with COVID-19. This means you'll be contacted more quickly if you are at risk. This reduces the chances of you passing on the virus to your family, friends and other people in the community.

State and territory health officials can only access app information if someone tests positive and agrees to the information in their phone being uploaded. The health officials can only use the app information to help alert those who may need to quarantine or get tested.

The COVIDSafe app is the only contact trace app approved by the Australian Government.

How COVIDSafe works

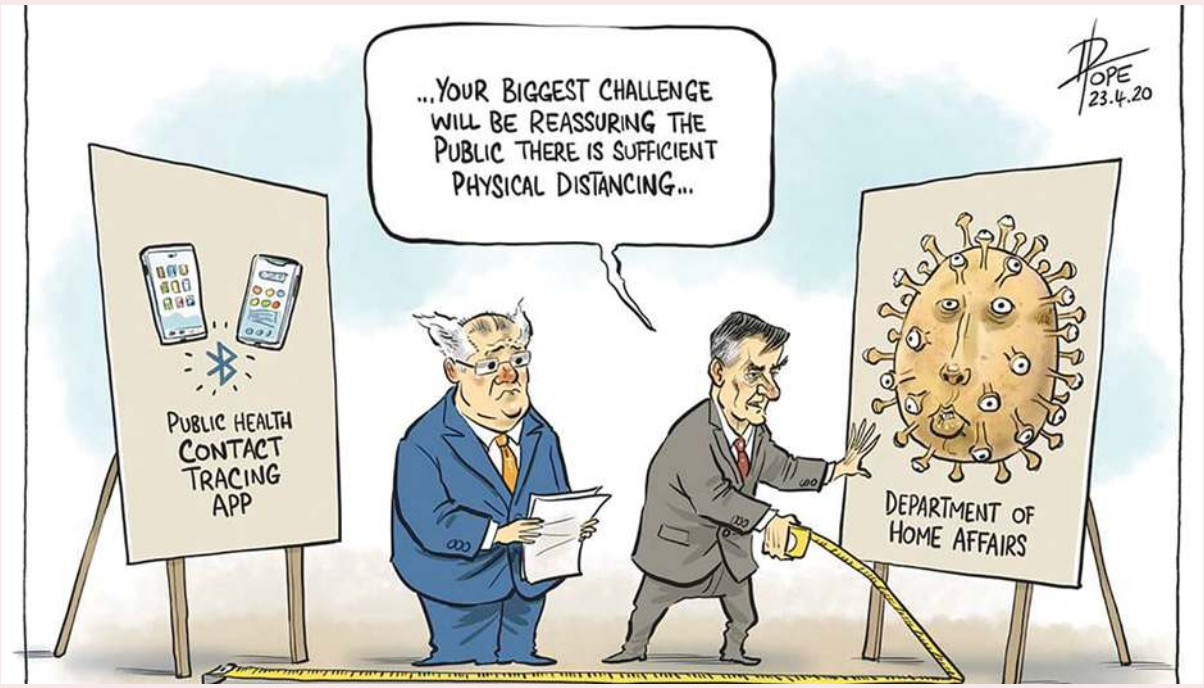
When you download the app you provide your name, mobile number, and postcode and select your age range (see Privacy). You will receive a confirmation text message to complete installation. The system then creates a unique encrypted reference code just for you.

COVIDSafe recognises other devices with the COVIDSafe app installed and Bluetooth® enabled. When the app recognises another user, it notes the date, time, distance and duration of the contact and the other user's reference code. The COVIDSafe app does not collect your location.

To be effective, you should have the COVIDSafe app running as you go about your daily business and come into contact with people. Users will receive daily notifications to ensure the COVIDSafe app is running.

The information is encrypted and that encrypted identifier is stored securely on your phone. Not even you can access it. The contact information stored in people's mobiles is deleted on a 21-day rolling cycle. This period takes into account the COVID-19 incubation period and the time it takes to get tested. For more, see Privacy.

FIGURE 2 Cartoonist David Pope's take on COVIDSafe privacy issues



Step 3

Draw drafts of your advertisement, cartoon or meme. (Political cartoonists and advertising companies create many amazing drafts that never get published!) When you have finished a draft, test it on friends or family members (or someone from the audience you want to appreciate your work) to see if they can identify:

- the issue
- the people or situation
- the main message or opinion being communicated and what your opinion might be.

The purpose of creating this media is to get your point across, so keep on drafting until your test audience understands. Then, create the final version.

11.4.3 Let me do it

11.4 SkillBuilder activity

Create a political advertisement, cartoon or meme about an issue that is current in state or federal politics. This means that you need to start by watching or reading the news to be aware of current issues. You should note the language and bias that are used to make the audience feel a certain way about the issue. Can you show a standpoint or opinion based on an evaluation of the issue or system?

LESSON 11.5 SkillBuilder: Participating in civic processes

LEARNING INTENTION

By the end of this SkillBuilder you should be able to write a simple submission to show participation in civic processes.

Year 7 students are expected to be able to communicate ideas through a variety of methods, including structured writing, such as essays. An example of getting involved in civic processes is in the form of a formal submission to an organisation or government body.

11.5.1 Tell me

A formal submission is a letter or email to an organisation or government body requesting a specific action or expressing an opinion on an issue. Parliamentary committees often call for public submissions to investigate community issues or bills. Any Australian citizen or resident can write a formal submission, often used to request permission from government agencies (such as permission to host a community event).

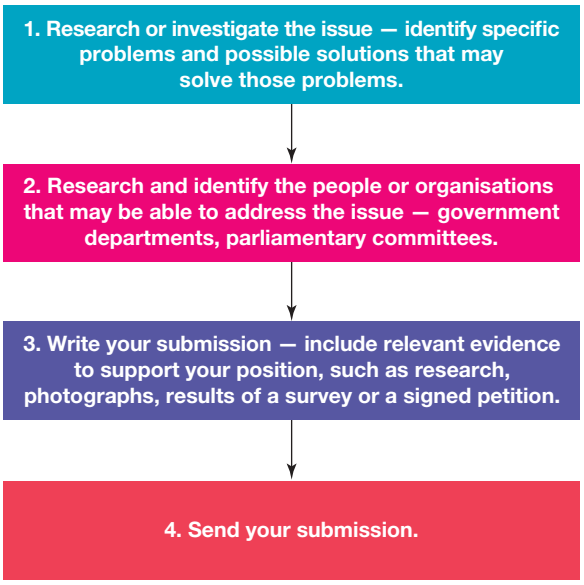
Submissions are similar to essays, with clear structure and developed ideas. However, they differ by asking for specific actions and being more personal (often written in the first person, I. . .).

Learning to write submissions helps apply written communication skills in real-world scenarios and enables active participation in a democratic society.

11.5.2 Show me

Your submission may be one of hundreds of letters sent to a government department or parliamentary committee; therefore, it is important that it is clear and concise (short). Follow the process set out in **FIGURE 1**.

FIGURE 1 How to write a submission



Case study: Troublesome intersection

Max lives near an intersection with a new roundabout. He has seen several cars and trucks hit the roundabout in recent weeks.

The specific issue is traffic safety on the new roundabout and Max wants to participate in solving this issue.

Step 1 — Problems and solutions

Max wondered why there were so many accidents — was the problem driver behaviour or the roundabout itself?

He drove through the intersection and walked on the footpath around the roundabout. He noticed it was not easy to see the roundabout from one direction (driving from the north) and it was not lit at night.

Specific problem — roundabout can't be seen easily from the north and is not lit at night.

Possible solutions — provide lighting at the roundabout, improve signage and add line markings — especially from the north.

Step 2 — Who is responsible?

Max wasn't sure which level of government was responsible for the road, so he first rang the government department responsible for roads at the state level. The person Max spoke to was able to tell him that the road was maintained by his local government (council).

Responsible organisation — local council

Step 3 — Write your submission

Max followed the following steps to write a submission to his local council. He included photographs that he had taken of the roundabout and statistics related to the accidents.

- Clearly address the issue (or terms of reference for a parliamentary committee).
- Make sure your points are relevant and highlight your own perspective.
- Begin with a short introduction about yourself or the organisation you represent.
- Emphasise the key points so that they are clear.
- Outline how problems can be addressed.
- Include only documents that directly relate to your key points.
- Include only information you would be happy to see published on the internet (if writing to a parliamentary committee).

What if I can't find a specific person to write to?

In this example, if Max couldn't find out who in his local government was the most appropriate person to write to, he could address the submission to 'whom it may concern'. If you are emailing, you can locate a general enquiry email address. You should state the issue in the subject line of the email.

Here is the submission Max wrote:

Dear Mr Jones,

I write to express concern about the safety of the new roundabout at the intersection of Tom Road and Jones Street in the suburb of Highwater. I live on Tom Road in Highwater, close to the intersection of concern. I do acknowledge that roundabouts are generally safer than other forms of controlled intersection and I congratulate the council for selecting this method of traffic control. However, the design of the roundabout, and lack of visual markers for traffic approaching the intersection from the north on Jones Street, are concerning. Although the roundabout is new, there are already

considerable tyre and scrape marks from vehicles going over the island kerbing, suggesting that many drivers have not seen the roundabout until it was too late to stop.

Specific problems with the roundabout are as follows:

1. The roundabout is around a bend, so drivers don't see it until they are at the roundabout.
2. There is no street lighting.
3. There is only one sign from the north on Jones Street.

I believe that the roundabout could be made much safer with the following suggestions:

1. Implement additional street signs warning of the roundabout on all roads, but especially on Jones Street to the north of the intersection.
2. Ensure the street lighting on Tom Road is extended so that the roundabout at Jones Street is lit at night.
3. Add reflective markers on the road kerbing.

I have included photographs of the roundabout and the approach from the north on Jones Street as evidence of these issues. I look forward to hearing from you regarding this matter.

Kind regards,

Max Safety

Step 4 — Send your submission

Members of parliament and local councils generally have websites and social media accounts that provide contact details. These details usually include email and postal addresses.

11.5.3 Let me do it

11.5 SkillBuilder activity

Practise the skill of writing a formal submission by selecting one of the following examples and working through the steps. If it is an issue that genuinely concerns you, then you may choose to send the submission to the relevant organisation.

Examples follow for different levels of issue.

That your school:

- establishes an eSports competition
- modifies the school uniform
- implements a free breakfast program for students
- has the library open after hours for students.

That your local government:

- builds a skate park in public open space
- has regular street sweeping, especially in bike lanes
- provides bins for 'green waste' as well as general rubbish.

LESSON 11.6 SkillBuilder: Communicating

LEARNING INTENTION

By the end of this SkillBuilder you should be able to write an argument in paragraphs to communicate an issue clearly.

Year 7 students are expected to be able to communicate to others through an explanation or argument. Formal communication should always be straightforward and clear, especially when it is written.

11.6.1 Tell me

Throughout your life, you will need to present and communicate arguments. At school, these can be in written form, such as an essay. An essay has several key characteristics:

- It clearly explains the background of an issue.
- It contains evidence and examples of the issue.
- It discusses the positives and negatives of an issue.

Paragraphs are a useful tool in presenting arguments. Each paragraph will discuss either a positive or a negative aspect of an issue in a 'scholarly' or academic way.

11.6.2 Show me

Step 1 — Understanding structure

An argument paragraph is a section of an essay that communicates a point of view. It begins 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 (see **FIGURE 1**).

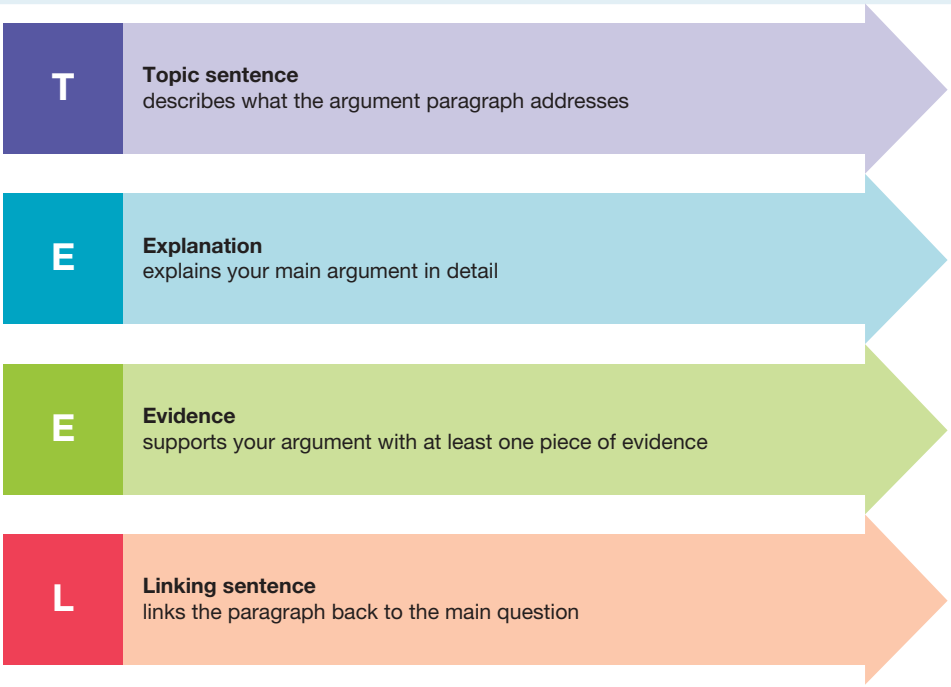
Step 2 — Using the TEEL structure

Read the following news article: 'Juries need to be told how they're allowed to use the internet to ensure fair trials' (see **FIGURE 2**).

Your teacher then asks you to write an essay focusing on the following statement:

'*It is important that court cases in Australia are open and transparent to the public; therefore, social media should be allowed in courts.*'

FIGURE 1 Using the TEEL structure will help you organise your argument paragraphs.



JURIES NEED TO BE TOLD HOW THEY'RE ALLOWED TO USE THE INTERNET TO ENSURE FAIR TRIALS

Juries are supposed to consider evidence without influence or bias from the outside world. However, the widespread access to and use of the internet and social media threatens to undermine this, with significant consequences for our criminal justice system and those within it.

FIGURE 2 What jurors see online could affect their decisions in the courtroom

Because courts cannot effectively police smartphone use, they must adapt to it. This week the Tasmania Law Reform Institute completed its yearlong inquiry into courts and the information age, and has recommendations as to how they can adapt.

The right to a fair and unbiased trial by your peers

An accused person's right to a fair trial is the most fundamental principle of our criminal justice system. It is a phrase that describes a system that affords an accused person many protections. That system relies on jurors being impartial and returning a verdict that is based solely on the evidence that is presented within the courtroom.

In the past, this was easy to achieve. Juror communications during trial hours and even after them could be controlled.

. . .

The shift in the way people access news, information and communications in the modern age has changed this reality.

Almost every Australian has access to the internet via their smartphone or other devices, social media use is habitual among much of our population and the internet is a ubiquitous source of information for most people.

Jurors are no different — in fact, they represent the wider Australian community these statistics describe. While jurors' smartphones are removed from them during trial, they cannot be removed before or after the trial

period, nor at the beginning or end of the day. As a result jurors may intentionally, or simply by habit, seek out or communicate information about the trial.

Use and misuse of social media

Between 2018 and 2020, the Tasmania Law Reform Institute conducted an inquiry into juror misuse of the internet and social media during trials. The institute concluded there is likely to be a high, but unquantifiable and undetectable, level of misuse.

However, there is evidence across Australian jurisdictions that jurors have used their internet-connected devices to:

- research legal terms or concepts or other information relevant to the trial. A West Australian juror in a drug-related trial obtained information online about methamphetamine production
- research the accused, witnesses, victims, lawyers or the judge. Two South Australian jurors sitting in a blackmail trial against multiple defendants conducted online searches about the accused, which disclosed past outlaw motorcycle gang affiliations
- communicate with people involved in the trial. Multiple New South Wales jurors on a long-running fraud trial became Facebook friends, sharing posts such as a digitally altered photo of one of the jurors wearing a judge's wig.

. . .

Misuse is under-reported. In those few instances where reports are made, fellow jurors, rather than court officers, tend to be the ones who raise the issue. Indeed, it is an important part of their role.

. . .

Educate, inform and encourage self-regulation

The law reform institute ultimately concluded it is impossible for, and beyond the capacity of, courts to completely police juror internet use. It has thus recommended not reforming the law, but rather strengthening and standardising juror education and directions. These recommendations are divided across two stages of jury selection, as part of an overall strategy:

- pre-selection: prospective jurors should receive improved training and information about the role of the juror and the risks of internet use
- post-selection: once a jury has been selected, judges need to explain to jurors what dangers arise from using the internet to access and publish on social media, seeking information about the case, parties, court officers, lawyers and self-conducted research into legal concepts or sentences. The report has recommended the court adopt minimum standard directions, but also have the flexibility to make specific directions relevant to any particular trial.

The report recommended certain current practices and laws should remain unchanged, including:

- removing phones from jurors while they are in court (even though the effect is limited, it avoids juror distraction)
- leaving contempt (punishment) laws in place for those jurors who intentionally ignore court training and directions. That might include monetary fines and, in severe cases, imprisonment.

This process is aimed at encouraging self-regulation among jurors, by educating them how to curtail their internet use and why it's so important.

Source: The Conversation Media Group Ltd. Jemma Holt and Brendan Gogarty. 'Juries need to be told how they're allowed to use the internet to ensure fair trials'. 22 January 2020. Retrieved from https://theconversation.com/juries-need-to-be-toldhow-theyre-allowed-to-use-the-internet-to-ensure-fair-trials-130127 [Online Resources].

Step 3 — Planning with TEEL

The following paragraph (**FIGURE 3**) has been written using the TEEL structure. It has been colour coded to make it easier to see TEEL in action (**T**opic, **E**xplanation, **E**vidence, **L**ink).

FIGURE 3 An example of a TEEL paragraph.

T	What is the argument I am making in this paragraph?	Rules of court cases have to be followed.
E	What is the reason I believe this argument is true or important?	The rules are important for a trial to be fair: the current rules are to give everyone a fair chance to present their evidence. Jurors seeing information on social media might change their view of what they see and hear in court.
E	What evidence can I use to back up my argument?	Rules: each side presents their case and evidence to jurors, but when there is extra information, they may not be able to weigh up the cases fairly (e.g. researching previous convictions that are not related).
L	How does this link to the main topic?	Social media use in courts should be controlled.

T

Topic sentence:
Neither the judge nor jury should know anything about the case in addition to the evidence and arguments presented in court.

E

Explanation:
A fair trial must follow strict procedures. These procedures are designed to make sure that each side has an equal opportunity to present its own case and to challenge the evidence introduced by the other side. Information posted on social media about the case may be seen by jurors, and therefore influence their decision.

E

Evidence:
Jurors must hear only the evidence presented in court by each side. Witnesses can be asked to give evidence at a criminal trial if they are the victim of the crime, if they have direct information about the crime or if they are an expert providing specialist opinion. If a juror is influenced by information about the case on social media or looks for additional information online, it may not be accurate or related to the specific case, and that makes the trial unfair. For example, a Western Australian juror in a drug-related trial searched information online about methylamphetamine production. This meant the juror's decision may have been changed by the extra information.

L

Linking sentence:
For this reason, it is important to have some limitations on the use of social media in courts.

11.6.3 Let me do it

11.6 SkillBuilder activity

Use the information and tips in this SkillBuilder to practise writing your own argument paragraphs. Be sure to use the TEEL structure as it will help you logically organise your thoughts and arguments. This will make sure that you are communicating clearly.

Here are some essay topics you can use to form the basis of your argument topics.

You will need to do some **research** before writing your practice paragraphs.

1. Witnesses should be allowed to provide written, instead of oral, testimony.
2. Juries are unqualified to make judgements of law.
3. ‘Presumption of innocence’ protects guilty people more than those wrongly accused.
4. Criminal trials should be held as soon as there is enough evidence to prosecute someone.

12 Government and democracy

LESSON SEQUENCE

12.1 Overview 440
12.2 How do political parties shape Australia's democracy? 442
12.3 How does Australia's parliamentary system work? 446
12.4 How do state and territory parliaments work? 450
12.5 Why do we share power between different levels of government? 454
12.6 How can citizens participate in Australia's democracy? 460
12.7 How do Australia's institutions protect our democratic freedoms? 464
12.8 Inquiry: How do we share the power? 469
12.9 Review 471

LESSON 12.1 Overview

INQUIRY QUESTION

How does Australia's democracy function for all citizens, and how can citizens get involved?

Australia is a vibrant **democracy** where citizens elect representatives to make decisions on their behalf. The political landscape is dominated by major parties like the Australian Labor Party and the Liberal Party of Australia, but independent representatives also play a crucial role. Elections are held to choose members of parliament, who then form the government. The **balance of power** can shift, especially in a hung parliament, where independents and smaller parties can influence key decisions and policies. This dynamic ensures a diverse and representative governance system.

learnon

- **Pre-test**
  Online pre-test
- **eWorkbook**
  Customisable worksheets for this topic
- **Digital documents**
  Key terms glossary
- **Video eLesson**
  Introduction to government and democracy

SkillBuilder

Use the SkillBuilder activities to develop these Civics and Citizenship concepts and skills:

- INVESTIGATING CONTEMPORARY CIVICS AND CITIZENSHIP ISSUES
- EVALUATING DEMOCRATIC INSTITUTIONS AND SYSTEMS
- PARTICIPATING IN CIVIC PROCESSES
- COMMUNICATING

LESSON 12.2 How do political parties shape Australia's democracy?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** how political parties and independent representatives shape Australian democracy
- **describe** how governments are formed and the role of the balance of power.

Tune in

FIGURE 1 On the floor of the House of Representatives

1. An **OPPOSITION MEMBER** asks the Prime Minister a question
2. The **PRIME MINISTER** answers the opposition member's question
3. A **GOVERNMENT MEMBER** asks a minister a question
4. The **MINISTER** answers the government member's question

Questions to the Prime Minister and ministers continue alternating between government and non-government members

1. **What differences can you see between the two sides of parliament?**
2. **Why do you think the parliament is arranged this way?**
3. **How might different political parties impact decision-making?**

12.2.1 Political parties in Australian democracy

In Australia we describe our system of government as a democracy because the people vote to decide who sits in the parliament to make our laws for us. State parliaments were mostly established in the six former colonies from the 1850s onwards, while the federal parliament came into being with **federation**

in 1901. Political parties are groups of people who share similar ideas about how society should be organised and how the country should be run. Political parties:

- choose candidates for elections
- develop policies and promises that align with their ideas (or ideology).

The two major parties in Australian politics are:

- The Australian Labor Party (ALP)
- The Liberal Party (which works with the National Party to form the Coalition).

Smaller parties like the Greens, One Nation and independents can also win seats and sometimes hold the balance of power. See **TABLE 1**.

TABLE 1 Australian political parties

ALP Logo	
LNP Logo	
Greens Logo	
One Nation Logo	

SkillBuilder discussion

Investigating contemporary Civics and Citizenship issues

Discuss what each of the party logos reveals about that party's values and their ideas.

12.2.2 How governments are formed

In Australia, the government is the party or coalition of parties with the support of the majority of members in the House of Representatives. The government is responsible for coming up with a plan for how to run the country. They make policies, propose new laws and put new laws into action for Australia. Governments are voted in at an election. After an election:

- The party or coalition that wins the most seats in the House of Representatives forms government.
- Their leader becomes the Prime Minister.
- The Prime Minister chooses ministers to run government departments.
- Other parties form the Opposition.
- If no party wins a majority, they must negotiate to form government. This leads to what is known as a 'hung parliament'.

12.2.3 Balance of power

Sometimes smaller parties and independents hold the 'balance of power'. This means that:

- No major party has enough votes to pass laws alone.
- They must negotiate with crossbench members of parliament (MPs).
- This can lead to changes in proposed laws.
- It gives smaller parties significant influence.

FIGURE 2 Julia Gillard led a minority Labor government after failing to win a majority of seats in the 2010 federal election. Despite being in minority government, the Gillard Government was one of Australia's most productive, passing 570 Bills during its term.

SkillBuilder discussion

Evaluating democratic institutions and systems

1. What do you know about Julia Gillard's government?
2. Why might they have been so productive in passing Bills?

12.2 SkillBuilder activity **COMMUNICATING**

1. Research a current independent MP.
   a. Which electorate do they represent?
   b. What issues do they focus on?
   c. How do they work with the major parties?
2. Watch part of Question Time and record:
   a. How many different parties speak.
   b. What issues they discuss.
   c. How the balance of power impacts the debate.
3. Create a presentation explaining how small parties or independents have influenced a recent decision in parliament.

12.2 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 5, 10	2, 3, 6, 7	4, 8, 9

REMEMBER AND UNDERSTAND

1. What are the two major political parties in Australian federal politics?
   a. Labor and Liberal
   b. Liberal and National
   c. Greens and Labor
   d. Independent and Liberal
2. Which of these statements about forming government is correct?
   a. The party with the most votes in the Senate forms government.
   b. The party with the most seats in the House of Representatives forms government.
   c. The Governor-General chooses who forms government.
   d. The party with the oldest leader forms government.
3. Explain what the term 'balance of power' means in parliament.
4. Describe two ways that independent representatives can influence decisions in parliament.

APPLY AND ANALYSE

5. Using an example, **explain** how minor parties can impact the passage of legislation through parliament.
6. **Compare** the roles of government and opposition parties in parliament. Give two examples of how they interact.
7. **Analyse** why it might be challenging for a government to pass laws when they don't have a majority in both houses of parliament.

EVALUATE AND COMMUNICATE

8. **Evaluate** whether having independent representatives in parliament strengthens or weakens our democracy. Provide examples to support your answer.
9. 'Minor parties are essential for Australian democracy.' To what extent do you agree with this statement?
10. You are an independent candidate running for parliament. Create a short speech explaining:
    a. Why voters should choose an independent over a major party candidate.
    b. How you would use your position if you held the balance of power.
    c. What issues you would focus on in parliament.

Answers and sample responses for this topic are available online.

LESSON 12.3 How does Australia's parliamentary system work?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** how the different parts of Australia's parliament interact
- **describe** the roles of important political figures like the Prime Minister and the Governor-General
- **analyse** how our parliamentary system reflects democratic principles.

Tune in

Australia is a constitutional monarchy, with the British monarch as head of state.

1. **What is your opinion on the British monarch also serving as Australia's head of state?**
2. **In 1975, the Queen's representative fired Australia's elected government. Was this fair? Why or why not?**
3. **In America, the president isn't in parliament, but the Australian prime minister is. Is this good or bad?**

FIGURE 1 King Charles III became the monarch of the United Kingdom and 14 other Commonwealth realms on 8 September 2022.

12.3.1 The three parts of parliament

The Australian Parliament has three main parts that work together, like cogs in a machine, all turning to pass laws and keep Australia functioning. They are:

- the House of Representatives (lower house)
- the Senate (upper house)
- the King's representative (Governor-General).

All three parts must work cooperatively to make laws and government effectively.

Our Commonwealth Parliament is **bicameral**. Its main job is to make laws in areas set by the Constitution.

12.3.2 Working together: The House of Representatives

As the lower house in the federal parliament, the House of Representatives has the following features:

- Parliament has 151 members elected for three years. Each member represents an area called an electorate, with about 110 000 voters. Bigger states like New South Wales have more members, while smaller states like Western Australia have fewer.
- The Speaker leads the House of Representatives. They are elected by members and keep order during debates, making sure everyone follows the rules called 'standing orders'.
- Most laws start in the House of Representatives, where the government sits. Laws need a majority vote to pass.

SkillBuilder discussion

Investigating contemporary Civics and Citizenship issues

1. What functions take place in the House of Representatives?
2. How is the seating arranged in the House of Representatives?
3. What is the significance of the House of Representatives in Australia's parliamentary proceedings?

FIGURE 2 The House of Representatives chamber in Parliament House

12.3.3 Working together: The Senate

The Senate is the upper house of the federal parliament.

It acts as a review house, meaning it checks laws passed by the House of Representatives.

- Senators must vote on new ideas before they become law. They can reject or change any law they think isn't right.
- Since 1981, governments have rarely had a majority in the Senate. This means the Senate often tries to improve laws.
- The Senate has 76 members. Each state elects 12 senators, and the Northern Territory and ACT each elect two. This gives each state equal power. Senators serve for six years, with half elected every three years.
- The Senate President leads meetings, like the Speaker does in the House.

SkillBuilder discussion

Investigating contemporary Civics and Citizenship issues

1. How does the Senate differ from the House of Representatives?
2. What role does the Senate play in Australia's legislative process?
3. How are senators seated and organised within the Senate?

FIGURE 3 The Senate chamber in Parliament House

12.3.4 Working together: The Governor-General

The third part of Parliament is the British monarch, represented in Australia by the Governor-General. The Governor-General gives **royal assent** to new laws passed by Parliament. They can also ask for changes before the law is made official.

The Governor-General has special powers called 'reserve powers'. They can call a new parliament, open or end it before an election. They usually follow the government's advice but can ignore it.

In 1975, the Governor-General used these powers to call an election and dismiss the government. It remains a hotly debated topic in the history of Australia's democracy.

12.3.5 Working together: Executive government

The Governor-General holds the executive power for Australia on behalf of the King. They lead a group called the Executive Council that gives advice. However, the Prime Minister and **Cabinet** run the government.

An Executive Council meeting includes the Governor-General and at least two Cabinet ministers. They meet every two weeks to approve decisions made by the Cabinet. The Council doesn't make new decisions but follows **conventions** that existed in the **Westminster system** before Australia's federation.

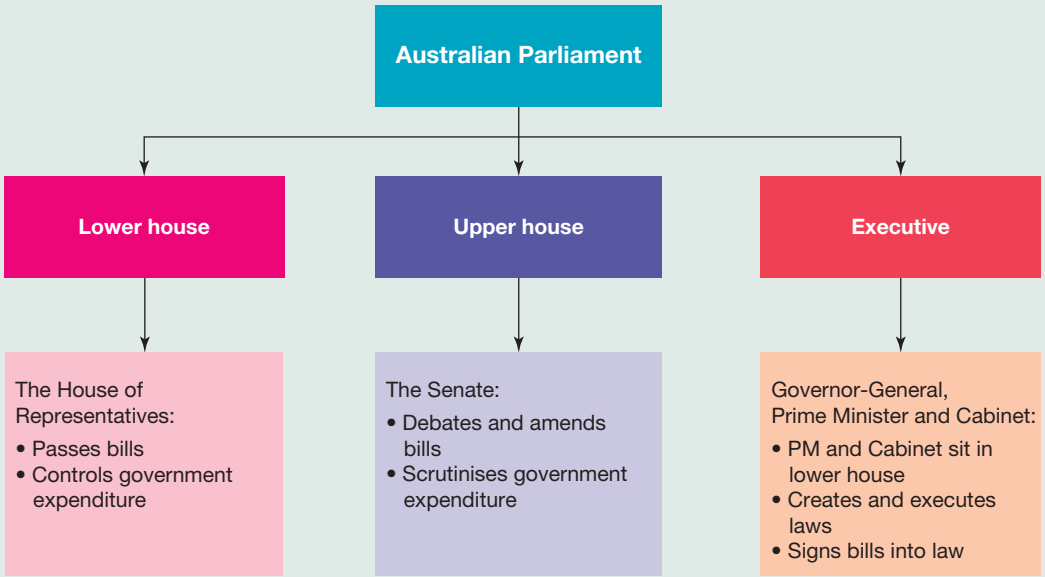
Examples include the following:

- The Governor-General usually follows the advice of ministers, like old British conventions.
- The Constitution doesn't mention the Prime Minister or Cabinet. It relies on old British conventions to create these roles.
- The Prime Minister and Cabinet not only carry out laws but also decide which Bills to present to Parliament. They choose which laws to create and decide how to spend government money, usually through an annual budget. This follows old British conventions.

12.3 SkillBuilder activity QUESTIONING AND RESEARCHING, COMMUNICATING

1. Research the parliamentary system of the United States of America or the United Kingdom.
2. Present your findings in a diagram-like **FIGURE 4**. Include names of current leaders and the houses.

FIGURE 4 Australian parliamentary system



12.3 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 3, 4	2, 5, 6	7, 8

REMEMBER AND UNDERSTAND

1. **Determine** if the following statements are true or false.
   a. A bicameral parliament has three houses to make laws in those areas defined by the Constitution.
   b. The Governor-General gives the royal assent to legislation that has been passed by both houses of parliament.
2. **Describe** what happens if the Governor-General asks for changes to a law: both houses of Parliament must review and agree on the changes before sending it back.
3. In federal parliament, what is the name of the lower house?
   a. The Senate
   b. The House of Representatives
   c. The Legislative Assembly
   d. The Legislative Council
4. **Outline** the two main functions of the Senate.

APPLY AND ANALYSE

5. **Describe** how House members and Senators are elected differently, following old conventions.
6. **Identify** two things that might happen if Parliament doesn't accept the Governor-General's changes, following old conventions.
7. **Identify** and explain two rules for the Commonwealth government not in the Constitution.

EVALUATE AND COMMUNICATE

8. The Senate was made to give smaller states equal power. Since most senators are from political parties, does it still do this? **Discuss** why or why not, using old conventions.

Answers and sample responses for this topic are available online.

LESSON 12.4 How do state and territory parliaments work?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **describe** the structure of the federal and state/territory parliaments
- **analyse** how state governments work with the federal government
- **evaluate** the effectiveness of state parliament services.

Tune in

Australian states and territories usually have two houses in parliament. Some only have one house.

TABLE 1 lists the names of each lower house and (if relevant) upper house in each state and territory.

TABLE 1 The lower and upper house in each state and territory

State or territory	Lower house	Upper house
New South Wales	Legislative Assembly	Legislative Council
South Australia	House of Assembly	Legislative Council
Victoria	Legislative Assembly	Legislative Council
Northern Territory	Legislative Assembly	No upper house
Queensland	Legislative Assembly	No upper house
Tasmania	House of Assembly	Legislative Council
Western Australia	Legislative Assembly	Legislative Council
Australian Capital Territory	Legislative Assembly	No upper house

1. **Discuss how the lower and upper houses are similar or different in states and territories. Why do you think they have these names?**
2. **Suggest reasons why some states have two houses but one state and the two territories only have one house.**

12.4.1 Eight separate parliaments

When Australia became a federation, the states kept their old parliaments, which are still important. Australia now has eight parliaments: six for states and two for territories. The federal parliament can change laws for the territories but not for the states.

SkillBuilder discussion

Investigating contemporary Civics and Citizenship issues

1. Look at **FIGURE 1**. Where is Tasmania's Parliament House located?
2. What distinctive feature is seen in the design of the Northern Territory's Parliament House?
3. Which state or territory in Australia has a bicameral parliament?

FIGURE 1 Each state and territory's parliament house

12.4.2 Features of the state and territory parliaments

State and territory parliaments have many similar features and some have unique characteristics:

- All state parliaments originally had two houses. In 1922, Queensland removed its upper house and became **unicameral**.
- In bicameral parliaments, the upper house is called the Legislative Council. The lower house is the Legislative Assembly in Western Australia, New South Wales, Victoria and Queensland. In South Australia and Tasmania, it is called the House of Assembly.
- The territory parliaments are also unicameral, with the one house in each territory known as the Legislative Assembly.
- The leader of a state is called the premier, and the leader of a territory is called the chief minister.
- Each state and territory has three parts: legislative, executive and **judiciary**.
  - The legislative parliament makes laws.
  - The executive runs the government
  - The judiciary enforces laws and solves problems.
- Each state and territory has a supreme court, but the High Court is the highest in Australia.
- Each state has a governor who represents the King, like the Governor-General does at the federal level.

12.4.3 Role of the state and territory governments

State and territory governments provide many of the essential services we rely on in everyday life (**TABLE 2**).

SkillBuilder discussion

Investigating contemporary Civics and Citizenship issues

There is a national curriculum, but not all states use it (Victoria, for example, has its own curriculum). What are the positives and negatives of this?

TABLE 2 A summary of the main state and territory services

Category of service	Responsibilities/purpose of service
Criminal law	• Make laws about crimes and punishments • Control road rules/traffic offences
Transport	• Build and maintain roads • Handle public transport with provision being either government or private led, or a combination of both • Make rules for transport
Police and emergency services	• Own police force, fire brigade and ambulance services • Have special permission for interstate arrests • Can combine mutual aid during emergencies
Health and hospitals	• Build and run public hospitals • Receive money from the federal government to help pay for them
Education	• Own school system • Determine starting ages and types of certificates for finishing Year 12 • Follow national curriculum, so students learn the same subjects, no matter where they live

12.4 SkillBuilder activity INVESTIGATING CONTEMPORARY CIVICS AND CITIZENSHIP ISSUES

Use internet resources to answer the following.

1. **Identify** which states and territories commence secondary school at Year 7 and which ones do so at Year 8.
2. **Name** the minimum age at which you can get your provisional (P-plate) driver's licence in each of the states and territories.
3. **Recall** the name of the Year 12 certificate in each state and territory.
4. **Identify** the current premier or chief minister of the state or territory you live in. How long has his or her government been in power?

12.4 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 3, 4	1, 5, 6	7, 8, 9, 10

REMEMBER AND UNDERSTAND

1. **Define** the term 'unicameral parliament'.
2. **Determine** if the following statements are true or false.
   a. Queensland and the Northern Territory have unicameral parliaments.
   b. The federal parliament retains the power to change or overrule any laws passed in the six state parliaments.
3. **Name** the title given to the British monarch's representative in each of the states.
   a. Governor
   b. Governor-General
   c. President
   d. Speaker of the House
4. **Name** the title given to the leader of the government in each of the states.
   a. Prime Minister
   b. Chief Minister
   c. Premier
   d. Chief
5. **Explain** how the separation of powers applies in all of the states and territories.

APPLY AND ANALYSE

6. Using an example, **explain** how emergency services from the different states can cooperate with each other.
7. Should all states have the same driving rules and ages, or is it better for each state to decide? **Justify** your response.
8. **Explain** why Australia has a National Curriculum, but then states implement their own curriculum.
9. In 1995, the Northern Territory made a law for terminally ill people to end their lives, but the federal government stopped it. In 2017, Victoria made a similar law, and the federal government has not stopped it. **Explain** the difference in these two cases.

EVALUATE AND COMMUNICATE

10. In Australia, many people have argued that we no longer need state governments and that all powers could be handed over to the federal parliament. **Propose** one argument in favour of retaining state governments.

Answers and sample responses for this topic are available online.

LESSON 12.5 Why do we share power between different levels of government?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** why Australia has different levels of government
- **analyse** how powers are divided between these levels
- **evaluate** how different levels of government work together.

Tune in

The 2022 floods in New South Wales and Queensland required all levels of government to work together.

1. **What services might each level of government provide during a flood?**
2. **Why is it important for governments to work together during emergencies?**
3. **How might different levels of governments sometimes disagree about what to do?**

FIGURE 1 The Australian Army assists the New South Wales SES during the 2022 floods.

12.5.1 Why share power?

The Australian Constitution defines parliament, the executive and the judiciary in Australia and the roles they play in making and managing laws in Australia. Each group has their own area of responsibility, and they keep a check on the actions of the others. It makes sure no one person or group has all the power. Before 1901, each Australian colony had its own parliament that made laws and managed things. After 1901, when Australia became a federation, these parliaments became state parliaments and continued their work.

Australia shares power between different levels of government to ensure our democracy works effectively and fairly. By dividing responsibilities between federal, state and local governments, we can make sure decisions are made at the most appropriate level.

Key reasons for sharing power include:

- Different areas have different needs and challenges.
- Local governments understand local community issues better.
- Some matters impact the entire country and need national leadership.
- Sharing power prevents any one group from becoming too powerful.

12.5.2 Federal government powers

Section 51 of the Constitution tells us what the federal government oversees and lists the areas it manages. These national responsibilities help keep our country united and working together. The legal term for these responsibilities is '**specific powers**', and they include:

- trade and commerce with other countries
- postal and telephone services
- the defence forces
- quarantine regulations
- immigration and emigration issues
- weights and measures used in Australia
- the banking and currency systems
- relationships with other countries (through our embassies and diplomats).

SkillBuilder discussion

Investigating contemporary Civics and Citizenship issues

1. What would it be like to have different currencies for each state and territory?
2. How would this impact our daily lives?

FIGURE 2 The federal government controls the issuing of currency to ensure the same money is used throughout Australia.

12.5.3 State and territory powers

Any area of government not included in Section 51 remains the responsibility of state parliaments. State and territory governments deliver many of the services we use every day. They also make important decisions about how these services work in their areas. State and territory governments are responsible for:

- health and hospitals
- police and emergency services
- primary and secondary education
- transport, including public transport, road rules and road construction.

The powers that remain with state parliaments are known as the 'residual powers'.

FIGURE 3 The provision of essential services such as firefighting is the responsibility of state governments.

12.5.4 Local government services

Local government is not in the Constitution, but local government is a feature of Australian governance. Local councils work closely with their communities. They provide the everyday services that keep our neighbourhoods functional and fun places to live. City and town councils handle things like:

- parks and recreational facilities, such as swimming pools and sports grounds
- town planning
- rubbish removal
- maintenance of local streets
- libraries and kindergartens.

FIGURE 4 Public swimming pools are valuable facilities provided by local councils.

12.5.5 Working together

While each level of government has its own responsibilities, they often need to work together on major projects or challenges. This cooperation helps deliver better results for communities. Examples of this cooperation include:

- building major roads, which involves planning and funding from all levels of government
- managing emergencies, which requires coordinated responses
- environmental protection, which often crosses government boundaries
- major events, like the upcoming 2032 Brisbane Olympics, which need support from everyone.

Sometimes governments disagree about who should pay for services, which level is responsible, how to solve problems and what communities need most.

These disagreements are normal in a democracy and can lead to better solutions through discussion and compromise.

12.5.6 The separation of powers

The British colonised Australia, so the new Australian government copied the British system, called 'Westminster'. The Westminster system is old and has rules to keep things fair. One rule is the 'separation of powers'. This means the government has three parts: making laws, carrying out laws and enforcing laws. Each part has its own tasks and doesn't interfere with the others.

SkillBuilder discussion

Investigating contemporary Civics and Citizenship issues

1. How is the Prime Minister chosen in Australia's Westminster system?
2. What role does the Governor-General have in Australia's Westminster system?
3. How does responsible government work within Australia's Westminster system?

FIGURE 5 Our parliamentary system comes from Westminster, a part of London where the British Parliament meets.

The separation of powers is written into the Australian Constitution. The Australian Constitution outlines three arms of government:

- legislative
- executive
- judicial.

Legislative power — Making laws

The parliament is the part of government that makes and changes or **repeals** existing laws. It has two parts: the House of Representatives and the Senate. It also includes the Governor-General, who represents the King.

A new law starts as a Bill. It must be discussed and voted on by both houses, then approved by the Governor-General. Once this happens, it becomes a law called an 'Act'.

FIGURE 6 When all the ministers meet, it's called the Cabinet. They usually meet in the Cabinet Room at Parliament House.

Executive power — Carrying out laws

The executive part of government makes sure laws are carried out. The Governor-General has this power but ministers usually do the work. Each minister looks after different areas:

- The defence minister manages the army.
- The immigration minister is responsible for people coming to Australia.
- The environment minister takes care of nature protection.

Public servants help with these tasks, too.

Judicial power — Interpreting laws

The judicial arm includes the **judiciary** and courts, which enforce laws and solve disputes. The courts make sure the law is fair and protect our **rights**. The High Court of Australia checks that both the legislative and executive arms follow the Constitution. Once a judge is appointed, they can't be easily removed, this makes it less likely they can be influenced to make unfair decisions.

FIGURE 7 The High Court of Australia has the power to interpret and enforce the Constitution.

Why do we have the separation of powers?

Separation of powers keeps the government balanced. Here's how it works:

- Members of parliament make laws but must face elections regularly. If people don't like the laws, they can vote for new members.
- An independent court checks if parliament and the executive follow the Constitution. The High Court can cancel laws that break the Constitution.

- Government ministers need most of both houses to agree before new laws can be made. If not, the law won't pass.
- Government ministers are members of parliament. They must answer questions about their actions.

FIGURE 8 The division of powers and the separation of powers

Local government

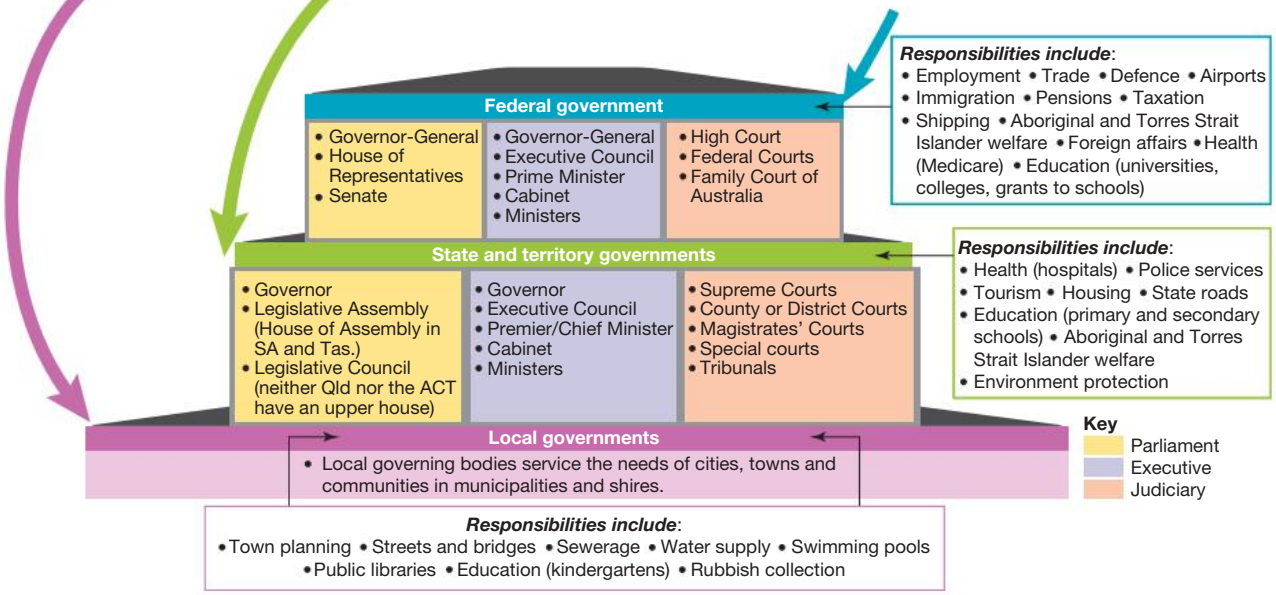
- There are around 900 local government bodies in Australia (usually called councils).
- Council members are called aldermen or councillors. The head of the council is called a mayor or a shire president.
- Councils operate under state laws. They make rules, called by-laws, on local issues.

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.

Federal government

- There are two houses of federal parliament — an upper house (the Senate) and a lower house (the House of Representatives).
- 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.



SkillBuilder discussion

Evaluating democratic institutions and systems

'The separation of powers exists to protect us from the abuse of power.'

1. List arguments to support the statement.
2. List arguments to oppose the statement.
3. Which do you support?

12.5 SkillBuilder activity EVALUATING DEMOCRATIC INSTITUTIONS AND SYSTEMS

Use the internet to find who does these roles in our government. Then, **construct** a table showing if each role is legislative, executive or judicial.

a. The minister for defence
b. Your local member of the House of Representatives
c. The Chief Justice of the High Court
d. The minister for education in your state

12.5 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
3, 4, 5	1, 2, 6	7, 8, 9, 10

REMEMBER AND UNDERSTAND

1. **Describe** the role of each of the following arms of government and provide an example of each.
   a. Legislative arm
   b. Executive arm
   c. Judicial arm
2. **Identify** three examples of the responsibilities of each of the following levels of government.
   a. Federal government
   b. State government
   c. Local government
3. **State** which of the following is not an example of a specific power.
   a. Postal services
   b. Internet services
   c. Weights and measures
   d. Quarantine regulations
4. **Determine** whether the following statements are true or false.
   a. The Constitution supports the idea of a division of powers between the state parliaments and the federal parliament.
   b. The Governor-General has the power to change or repeal existing laws.
5. Select the correct options to complete the sentence. The separation of powers is a safeguard designed to **allow** / **encourage** / **prevent** one particular group **to hold** / **from holding** all of the **members** / **power** / **seats**.

APPLY AND ANALYSE

6. For each of the following, **state** whether the role is legislative, executive or judicial.
   a. Members of parliament
   b. Government minister
   c. High Court judge
   d. The Cabinet
7. Which level of government—federal, state or local—affects people the most? Give reasons or examples to explain.
8. **Describe** the ways in which the executive arm is not separate from the legislative arm of government.

EVALUATE AND COMMUNICATE

9. **Explain** why it is significant that the High Court has the power to interpret the Australian Constitution.
10. Do you think separating powers helps protect our rights and freedoms? **Justify** your answer.

Answers and sample responses for this topic are available online.

LESSON 12.6 How can citizens participate in Australia's democracy?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** how to participate in Australia's democracy including the electoral system
- **name** ways to contact elected representatives
- **outline** how lobby and interest groups work.

Tune in

Young people can help make big changes in the world. They have the right to speak up about issues that affect them.

1. **What is a change that you'd like to see in your school or local community?**
2. **Do you feel like you can do anything about it? Why or why not?**
3. **If the problem is bigger than you first thought, who else can you involve in solving the problem?**

FIGURE 1 Student activists voice their opinions.

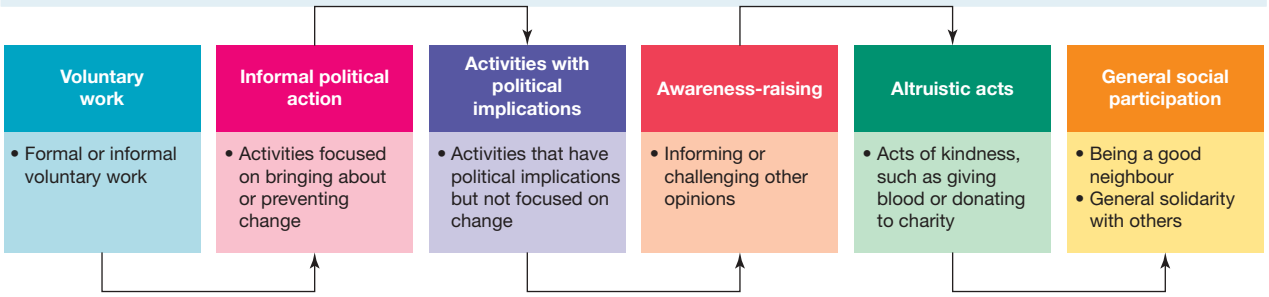
12.6.1 Using the electoral system

Citizenship is not just a legal status. It is also a means to get involved and be part of the decision-making in our country. As a citizen, you are on the **electoral roll**, and this means that you can participate in the following ways:

- enrolling to vote when they turn 18
- voting in elections (federal, state and local)
- working at polling places
- joining political parties
- running as political party candidates.

At a different level, active citizenship means getting involved with your local community. Active citizenship can be as small as organising a clean-up of your local street, park or even your school. Or it can be as big as educating people about Australia's democratic values, skills and participation. Active citizenship involves six broad categories of political participation, shown in **FIGURE 2**.

FIGURE 2 The six categories of political participation



SkillBuilder discussion

Evaluating democratic institutions and systems

1. How does voluntary work contribute to the political process in Australia?
2. What role do protests and demonstrations play in influencing public opinion in Australia?
3. How can contacting politicians help address community issues in Australia?

12.6.2 Contacting representatives

Every Australian is represented by elected officials at three levels of government. These representatives work for their communities and want to hear from citizens about important issues. There are ways for you to get involved and contact your representative, such as:

- writing letters and emails
- making phone calls
- requesting meetings
- attending community forums and meetings
- following and engaging on social media.

Don't just show up, make sure you do your prep work. Make sure you research your issues, have clear points to make and suggest possible solutions. It's also important to be professional — 'you attract more bees with honey than vinegar', as the old saying goes! Write or speak clearly, be polite and respectful and make sure you follow up if needed.

12.6.3 Working with groups

Sometimes joining with others can be more effective than acting alone. Australia has many **interest groups** and **lobby groups** that work to influence government decisions.

TABLE 1 Groups that can influence government decisions

Group	Explanation
Interest groups	These groups focus on specific issues or represent communities. They might: • share information • support their members • work toward common goals • organise community activities. Examples include sporting clubs, environmental groups and parents' associations.
Lobby groups	These organisations try to influence government decisions. They often: • research issues deeply • meet with politicians • run media campaigns • propose policy changes. Examples include business organisations, unions and professional associations.

12.6.4 Taking direct action

Sometimes citizens can take peaceful **direct action** to create change. This can be more public than other forms of participation.

FIGURE 3 Types of direct action

Peaceful protests	Public campaigns	Effective direct action
• Public rallies • Marches • Sit-ins • Silent demonstrations	• Petitions • Letter-writing campaigns • Media engagements • Public meetings	• Has clear goals • Stays within the law • Respects others' rights • Is well organised

SkillBuilder discussion

Evaluating democratic institutions and systems

'Direct action is more effective than writing to politicians.' Discuss.

Look at **FIGURE 3**.

1. When might direct action work better?
2. When might contacting representatives be more effective?
3. What examples can you think of where different methods have worked?
4. How might different methods work together?

12.6 SkillBuilder activity **PLANNING FOR CHANGE**

Choose an issue in your local area that needs changing.

1. **Investigate** the issue:
   a. What exactly needs to change?
   b. Who has the power to make this change?
   c. What evidence supports your position?
2. **Propose** your approach:
   a. What participation methods would work best?
   b. Who could you work with?
   c. What steps would you take?
3. Present your plan to the class explaining why you chose certain methods over others.

12.6 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4	5, 6, 7	8, 9

REMEMBER AND UNDERSTAND

1. Which of the following is NOT a way citizens can participate in the electoral system?
   a. Running as a candidate
   b. Working at a polling station
   c. Making laws
   d. Voting in an election

2. **Name** all the correct examples of direct action:
   a. Peaceful protests
   b. Writing to politicians
   c. Public rallies
   d. Voting in elections
3. **Explain**, in your own words, what a lobby group does.
4. **Describe** two different ways you could contact your local member of parliament.
5. **Explain** how the separation of powers prevents any one group from becoming too powerful in Australia's democracy.

APPLY AND ANALYSE

6. The Prime Minister wants to pass a new law that many people think breaks the Constitution. Using your knowledge of the separation of powers:
   a. **Explain** which branch of government would make the new law.
   b. **Identify** which branch of government would challenge the new law.
   c. **Analyse** how this shows the separation of powers working in practice.
7. **Examine** three different methods of participating in Australia's democracy. What are the strengths and weaknesses of each?

EVALUATE AND COMMUNICATE

8. **Propose** which participation method would be most effective for:
   a. saving a local park.
   b. changing a national law
   c. improving school facilities
9. A local council plans to demolish a historic building to build a shopping centre. Complete the table below comparing the positives and negatives of different participation methods for concerned citizens.

Method of participation	How it could be used	Positives	Negatives
Electoral system			
Contacting representatives			
Working with groups			
Direct action			

Answers and sample responses for this topic are available online.

LESSON 12.7 How do Australia's institutions protect our democratic freedoms?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** key democratic freedoms in Australia
- **analyse** how institutions protect these freedoms
- **evaluate** how well our systems protect democratic values
- **account for** limits on freedoms.

Tune in

Democratic freedoms are important and apply to all Australians.

1. **What rights do you have in the classroom?**
2. **What rights do you think your teacher has in the classroom?**
3. **If you had to make rules for your class, what would be your top three rules for the teacher and students?**
4. **Who has the responsibility to ensure these rules are maintained and followed?**

FIGURE 1 What rules and rights exist in a typical Year 7 classroom?

12.7.1 The creation of our Constitution

In the 1890s, many people wanted the six Australian colonies to join and become one united country. This 'new country' would need a national government, but the states would still have their own parliaments.

After the 1850s gold rush, the colonies' populations grew quickly. By 1890, there were about 3 million people, and most were born in Australia. People started to feel more loyal to their colony than their parents' home countries.

In the 1890s, colony representatives met to write a **constitution**. These men, called the 'founding fathers', decided how power would be shared between the states and a central government. Women were not allowed to take part in this process.

FIGURE 2 Leaders from the colonies met several times to write a constitution for Australia's planned federation.

When states join and share some powers with a central government, it's called a 'federation'. The Australian Constitution was made to show which powers the states would keep, and which powers the central government would have. For example, before Federation, each colony had its own money and army. After Federation, it made sense to have one national currency and one defence force for the whole country.

SkillBuilder discussion

Evaluating democratic institutions and systems

1. Study **FIGURE 3**. Who opened the first federal parliament in 1901?
2. What role did Charles Nuttall play in the opening ceremony?
3. Why was the opening of the first federal parliament significant in Australian history?

FIGURE 3 *Opening of First Federal Parliament by HRH the Duke of Cornwall & York*, by Charles Nuttall, 1901

By 1898, the main ideas of the new Constitution were agreed upon. Each of the colonies held a **referendum** to allow their citizens to vote on whether they wished to join this new federated Australia. By 1900, most people in all six colonies had voted 'yes', and the British Parliament approved the new Constitution.

The Commonwealth of Australia was created on 1 January 1901. In March, the first national elections were held. The new parliament opened in Melbourne's Exhibition Building on 9 May 1901. Federal parliament met in Victoria's Parliament House until 1927, when it moved to the new capital, Canberra.

12.7.2 Why have a constitution?

Not all countries have a written constitution like Australia's. The United States of America does, but countries like Canada and New Zealand do not. They follow rules from different pieces of **legislation**. Australia, Canada and New Zealand all have the British monarch as their head of state and similar government systems.

Advantages of having a constitution

1. A constitution is a set of rules for the government. In Australia, laws must be made by parliament, not just one person.
2. A written constitution can list rights for everyone. For example, the Australian Constitution guarantees freedom of religion.
3. In Australia, the Constitution separates the powers of federal and state parliaments.

Disadvantages of having a constitution

1. A written constitution can be hard to change. Australia has changed a lot since the Constitution was written over 100 years ago. For example, long ago, it was illegal to swim on public beaches between 6 am and 8 pm. Imagine if that was still a rule today!
2. A written document can be hard to understand. Some words have different meanings, which can cause confusion and arguments.
3. Enforcing a constitution depends on the willingness of everyone to obey it. Sometimes, dictators ignore it and take control by force, like Hitler did in 1933.

In 1933, Adolf Hitler became a dictator in Germany by changing the rules of Germany's constitution. He passed a law called the Enabling Act, which let him make any law he wanted. This took away important rights, like free speech and freedom of the press. Hitler used his power to target his enemies and minority groups, including Jewish people. He was responsible for the death of over six million Jewish people.

How the Constitution protects our freedoms

The Constitution helps protect freedoms by setting up democratic institutions, dividing government powers, creating independent courts and protecting some rights directly.

12.7.3 Our democratic freedoms

Australia's democracy is built on important freedoms that let people participate in society and express their ideas and their views. These include the freedoms listed in **TABLE 1**.

TABLE 1 Examples of democratic freedoms

Freedom of speech	Freedom of association	Freedom of assembly	Freedom of religion	Freedom of movement
Share information	Join groups or organisations	Meet peacefully	Practise any religion	Travel within Australia
Express opinions freely	Form political parties	Organise protests	Choose no religion	Choose where to live
Debate ideas openly	Create community groups	Hold public meetings	Choose religious beliefs	Cross state borders
Criticise government decisions	Work with others	Gather for events	Express religious views	Leave and return to Australia

12.7.4 How institutions protect our freedoms

Different institutions work together to protect these freedoms. Each has an important role in making sure our democratic values are maintained.

TABLE 2 How institutions protect our freedoms

Institution	How it protects our freedoms
Parliament	• Making laws that protect rights • Debating freedoms issues • Reviewing existing laws • Responding to community needs
Courts	• Interpreting laws fairly • Protecting individual rights • Checking government power • Resolving disputes

When parliaments and courts work together, they help ensure our freedoms are protected while maintaining public safety and order.

12.7.5 Other important institutions

Several other organisations work alongside the parliament and the courts to protect our freedoms.

The Australian Human Rights Commission

The Australian Human Rights Commission is an independent organisation that:

- investigates complaints about discrimination and human rights breaches
- provides advice to the government about human rights

- educates the community about rights and freedoms
- reviews laws to ensure they protect human rights

For example, if someone faces discrimination at work because of their religion, they can complain to the commission. The commission will investigate and help resolve the issue.

Ombudsman offices

Each state, territory, and the Commonwealth has an ombudsman who:

- investigates complaints about government departments
- checks that government agencies act fairly
- makes recommendations for improvement
- helps resolve disputes.

The ombudsman is free and independent. They help ensure government organisations treat people fairly and respect their rights.

TABLE 3 Types of ombudsman offices

Type of ombudsman	What they investigate	Example
Commonwealth	Federal government agencies	Centrelink complaints
State	State government departments	Public housing issues
Industry	Specific sectors	Telecommunications disputes

Anti-discrimination boards

These state-based organisations:

- handle discrimination complaints
- provide anti-discrimination training
- promote equal opportunity
- help organisations prevent discrimination.

For example, if a person is refused service because of their race, they can complain to their state's anti-discrimination board.

Free press

A free press is essential for democracy. Australia has a free press. This means its newspapers, magazines, television and radio stations are able to express any opinions they want, even if these criticise the government and other organisations.

SkillBuilder discussion

Communicating

'A free press is the most important protection for democratic freedoms.' To what extent do you agree with this statement?

FIGURE 1 The purpose of a free press

12.7 SkillBuilder activity COMMUNICATING

The Australian Government has decided to add a Bill of Rights to the Constitution. Your job is to design this Bill of Rights and the Referendum question.

1. **Investigate** other Bills that are present in other countries (such as the European Union, the United States, the United Kingdom).
   a. What rights are listed in these Bills?
   b. Are they all the same? What's different?
2. **Investigate** what rights are in Australian law and the Constitution.
   a. What can be improved on?
   b. What can be added?
3. The government wants to add seven rights to the Bill of Rights. **Deduce** which are the most important ones.
4. **Propose** a question that can be asked in a Referendum.
5. Communicate your Bill of Rights and your referendum question on a poster or presentation.

12.7 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 5	4, 6, 7	8, 9

REMEMBER AND UNDERSTAND

1. Which of the following is NOT one of Australia's key democratic freedoms?
   a. Freedom of speech
   b. Freedom of movement
   c. Freedom to avoid taxes
   d. Freedom of religion
2. The organisation that investigates complaints about government departments is the:
   a. Human Rights Commission
   b. Ombudsman
   c. Parliament
   d. Supreme Court
3. List three ways a free press helps to protect democracy.
4. Explain what freedom of assembly means and give two examples.

APPLY AND ANALYSE

5. Using an example, explain how the Australian Human Rights Commission helps protect democratic freedoms.
6. Describe how different institutions might work together to protect someone's freedom of religion.
7. Compare the roles of parliament and the courts in protecting democratic freedoms.
8. Examine how freedom of speech might conflict with other rights. Use specific examples.

EVALUATE AND COMMUNICATE

9. Assess how well Australia's institutions protect freedoms. Use specific examples in your answer.

Answers and sample responses for this topic are available online.

LESSON 12.8 Inquiry: How do we share the power?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** division of powers
- **discuss** how to balance different needs.

Background

The Australian Constitution sets out how Australia is governed. It shows how the federal and state governments share power to make laws. This is called 'division of powers'.

At federation the states gave some powers to the federal government. For example, the federal government manages things like immigration and defence. These are called specific powers and are listed in Section 51 of the Constitution.

The states kept control over things like health, education and public housing. These are residual powers and are not listed in the Constitution.

Some powers, like marriage and taxes, are shared by both the federal and state governments. These are called concurrent powers.

FIGURE 1 The river system that feeds the Murray–Darling Basin stretches across four states and the ACT.

Each level of government manages its own resources and services. Sometimes, they need to work together, especially when sharing resources.

One shared resource is water. The Murray–Darling Basin is Australia's biggest river system. About 530 000 gigalitres flow through the system each year. This river system flows through four states: Queensland, New South Wales, Victoria and South Australia, and the Australian Capital Territory.

All governments must work together to share water fairly and keep the river system healthy. The Murray–Darling Basin is on land of many Aboriginal and Torres Strait Islander Peoples.

Discuss the following:

1. What does the term 'division of powers' mean?
2. How do you balance the different needs of different states and groups?

Before you begin

Find the **Inquiry rubric** in the Resources panel. Use it to help with your task and check your work when you're finished.

Inquiry steps

In groups of five, you'll plan how to share the Murray–Darling Basin's water. Each person will be the water minister for a state or territory.

Step 1: Questioning and researching

- Each of you will **investigate** your state's water needs and work with other ministers to make a water plan. Present your plan and any problems you faced to the class. Find out the volume of water your state needs and **determine** what would be best for extra needs. This helps you know where you can make changes.

Step 2: Analysis, evaluation and interpretation

- **Analyse** your research to consider the following:
  - how much water originates in your state
  - drinking water needed for towns in the Basin
  - water needed for the health of the Basin's ecosystem
  - water needed for irrigation for food production
  - water needed for tourism, fishing and social activities
  - how the management of the Basin will impact the Traditional Owners and their rights and freedoms.

Step 3: Civic participation and decision-making

- Conduct a negotiation with the other ministers about how to share the Murray–Darling Basin water. Get enough for your state and also care for the other states and the river's health.

Step 4: Communicating

- Once you have come to an agreement, write up your plan for the Murray–Darling Basin.
- Present a PowerPoint to show your plan. Include what worked well and what was tricky in sharing power.
  - Make one idea per slide in your PowerPoint. Use the slides as a summary, and be ready to explain more details when presenting.
  - After finishing your presentation, give it to your teacher for feedback or present it to your class.

Note: If your group has fewer than five members, you can skip the roles of the ACT and/or Queensland water ministers. They have a smaller role in the Basin than New South Wales, Victoria and South Australia.

LESSON 12.9 Review

12.9.1 Key knowledge summary

Use this dot-point summary to review the content covered in this topic.

12.1 Overview

- Democracy means people choose their representatives through voting.
- Australia's system is based on the Westminster model.
- Different levels of government serve different purposes.

12.2 How do political parties shape Australia's democracy?

- Political parties are groups with similar ideas about how the country should be run.
- The party with the most seats in the House of Representatives forms government.
- Minor parties and independents can hold the balance of power.
- Government formation requires negotiation when no party has a majority.

12.3 How does Australia's parliamentary system work?

- Parliament has three parts: House of Representatives, Senate and Governor-General.
- The House of Representatives is where government is formed.
- The Senate reviews laws and represents state interests.
- The Governor-General gives final approval to laws.

12.4 How do state and territory parliaments work?

- Each state and territory has its own parliament.
- State parliaments provide essential services like health and education.
- States have either one or two houses of parliament.
- State governments work with federal government on many issues.

12.5 Why do we share power between different levels of government?

- Different levels of government handle different responsibilities.
- Federal government manages national issues.
- States provide many day-to-day services.
- Local councils handle community needs.

12.6 How can citizens participate in Australia's democracy?

- Citizens can participate through voting and elections.
- People can contact their representatives about issues.
- Interest groups and lobby groups influence decisions.
- Direct action includes protests and campaigns.

12.7 How do Australia's institutions protect our democratic freedoms?

- Key freedoms include speech, assembly, religion and movement.
- Different institutions work together to protect freedoms.
- Parliament makes laws protecting rights.
- Courts and other bodies help enforce these protections.

12.8 Inquiry: How do we share the power?

- Different levels of government must work together.
- Sharing resources requires negotiation.
- Balancing different needs is important.
- Cooperation helps solve complex problems.

12.9.2 Key terms

balance of power when minority parties/independents influence government decisions
bicameral a parliament with two houses
Cabinet the top-level decision-making group within the Australian Government made up of most or all ministers
constitution a set of rules that determines the structure of government and its law-making powers
convention an unwritten rule, not a law; an accepted way of doing something
democracy a political system where citizens elect representatives to govern and make laws on their behalf, with key freedoms protected including speech, association, assembly, religion and movement
direct action peaceful public activities to create change
electoral system the process for conducting elections and choosing representatives
Federation when separate states or colonies join to form one united country, sharing law-making power between the national and state governments
interest group an organisation focused on specific issues or community needs
judiciary a collective name given to the judges who preside over law courts
legislation a term used to describe laws passed by parliament
lobby group an organisation that tries to influence government decisions
referendum a process of allowing the people to vote on an important issue
repeal removing a law so that it no longer applies
rights the freedoms and protections guaranteed to all citizens in a democracy, including the right to vote, participate in government decisions, express opinions and be treated equally under the law
royal assent the formal approval by the monarch's representative, and the final step necessary before a law comes into force
specific powers areas that the federal government controls under the Constitution
unicameral a parliament with only one house
Westminster system based on the British Parliament and used by many countries, including Australia; named after the Palace of Westminster, where the British Parliament meets

12.9.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

How does Australia's democracy function for all citizens, and how can citizens get involved?

1. Now that you've finished this topic, what do you think? Talk with a partner. Has what you learned changed your opinion? If yes, how?
2. Write a paragraph in response to the inquiry question outlining your views.

learnon

Post-test	Online post-test
eWorkbook	Customisable worksheets for this topic Reflection
Digital documents	Key terms glossary

12.9 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
3, 5, 6	1, 4, 7	2, 8, 9

REMEMBER AND UNDERSTAND

1. When states join and give some power to a central government, what is this called?
   A. Federation
   B. Constitution
   C. Referendum
   D. Legislation
2. Which section of the Constitution outlines the specific role and power of the federal government?
   A. 42
   B. 67
   C. 19
   D. 51
3. Australia's parliamentary system is based on the Westminster system from which country?
   A. Japan
   B. Spain
   C. Britain
   D. America
4. Which of the following is *not* a disadvantage of having a constitution?
   A. A constitution protects the rights and freedoms of citizens.
   B. A constitution can be difficult to alter.
   C. A constitution can be open to interpretation.
   D. A constitution relies on citizens to follow its principles.
5. What is the separation of responsibilities across local, state and federal governments known as?
   A. The separation of responsibilities
   B. The division of responsibilities
   C. The separation of powers
   D. The division of powers
6. What is the separation of the government's responsibilities into legislative, executive and judicial arms known as?
   A. The separation of responsibilities
   B. The division of responsibilities
   C. The separation of powers
   D. The division of powers
7. Which court of Australia has the power to interpret and enforce the Constitution?
   A. Magistrates Court
   B. Supreme Court
   C. Court of Appeals
   D. High Court

APPLY AND ANALYSE

8. Australia's Constitution was made to keep state governments important. Some people think we don't need state governments any more and that local councils could handle more jobs. They say this would make government simpler. Others believe state governments are needed because they are closer to people and can provide important services. Changing this would need big changes to the Constitution.
   a. **Consider** the following and give reasons for your responses.
      i. Modern communications did not exist when the Constitution was drafted, so the federal government would have seemed very distant. State governments, however, were based in every capital city and so were closer to the people. Have changes in our forms of communication made state governments unnecessary?

b. **Identify** three changes that would have to happen for a referendum to abolish the states to be successful.
c. Can you think of some jobs one government level does that could be given to another level? For example, states could give health care to the federal government.

9. When people want to be elected, they make promises to win votes. **Decide** if you would vote for or against them based on their promises.
   a. Lowering the voting age to 16
   b. Raising the licensed driving age to 21
   c. Introducing compulsory military service for all 18-year-olds
   d. Introducing tolls on all roads to help pay for improved public transport

Answers and sample responses for this topic are available online.

13 Laws and citizens

LESSON SEQUENCE

13.1 Overview 476
13.2 What are the principles of justice? 478
13.3 Where did our justice system come from? 483
13.4 How do Australian courts work? 487
13.5 What is a fair trial? 493
13.6 Can everyone access justice? 501
13.7 Inquiry: Can community action make a difference? 506
13.8 Review 507

LESSON 13.1 Overview

INQUIRY QUESTION

How do features of the Australian legal system protect the rights of individuals and uphold the principles of justice?

Imagine being in court, accused of a crime you didn't commit, and then being found guilty. Australia's **rule of law** and our **legal system** should protect everyone. Do you know how to find a lawyer? Everyone should have access to justice.

learnon

Pre-test
Online pre-test

eWorkbook
Customisable worksheets for this topic

Digital document
Key terms glossary

Video eLesson
The courtroom

SkillBuilder

Use the SkillBuilder activities to develop these Civics and Citizenship concepts and skills:

- INVESTIGATING CONTEMPORARY CIVICS AND CITIZENSHIP ISSUES
- EVALUATING DEMOCRATIC INSTITUTIONS AND SYSTEMS
- PARTICIPATING IN CIVIC PROCESSES
- COMMUNICATING

LESSON 13.2 What are the principles of justice?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** what is meant by the rule of law
- **explain** the principles of justice.

Tune in

Justice comes from ancient Greek, Roman and Egyptian societies. Lady Justice began in the time of Emperor Augustus, although the blindfold first appeared in the sixteenth century. Look at **FIGURE 1** with a partner, and discuss what message you think is being conveyed by Lady Justice. What does the word 'justice' mean to you?

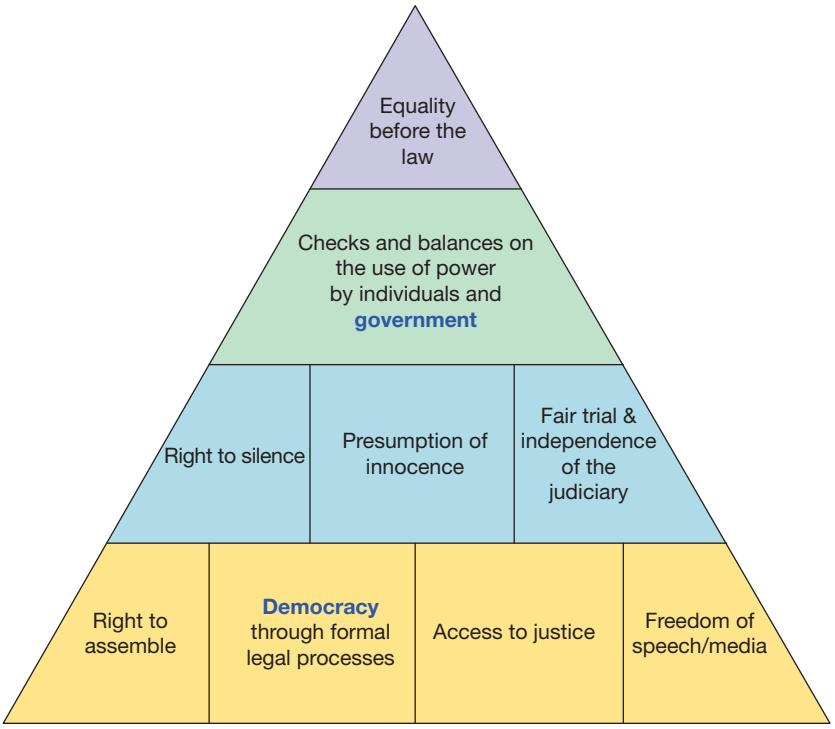
1. **What does Lady Justice represent?**
2. **Why is Lady Justice often blindfolded?**
3. **What items does Lady Justice hold?**

FIGURE 1 Lady Justice is commonly used to represent the idea of justice.

13.2.1 Introducing justice

Justice is not an easy term to define. It can mean different things to different people. For some people, justice is about following the law, while for others, it's about finding the truth based on the facts. Our legal system has key principles that uphold justice and protect everyone's rights. One of these principles is the rule of law, which means that everyone must follow the law. It doesn't matter if you are rich or poor, the prime minister or just an everyday person — everyone is equal before the law.

FIGURE 2 The rule of law brings together key aspects of our legal system to protect the rights of citizens.



13.2.2 Fairness, equality and access

The rule of law promotes three other principles of justice: fairness, equality and access.

Fairness

In the legal system, fairness means everyone will be treated impartially and using consistent processes. Impartial, unbiased judges and juries help make this happen.

There are several ways in which the legal system upholds fairness, including:

- *The **presumption of innocence***: A person accused of a crime is presumed to be innocent until proven that they are guilty in a court. They can only be found guilty if the court is sure they committed the crime. This means that the magistrate, judge or jury must believe that the accused is guilty **beyond reasonable doubt**.
- *The right to silence*: Any person charged with a crime has the right to silence.
- *Both sides (the **prosecution** and the **accused**) can show evidence and question each other*.
- *Strict rules ensure fairness in court* (***procedural fairness***): For example, juries can't hear about past crimes, so decisions are based only on the facts.

But is this fair? Does treating everyone the same lead to a fair result?

Fairness also means helping people with their specific needs.

Equality

Equality means everyone is treated the same, no matter their race, gender or family status. The legal system must treat people equally and without discrimination.

Ways in which our legal system aims to treat people equally and without discrimination include:

- the presence of an independent decision-maker
- the rules related to evidence and procedure
- using interpreters so that a person who needs assistance in understanding English, or has a hearing and/or speech impairment, can be involved in their case
- providing legal aid so that people who cannot afford a lawyer can get one.

Fairness and equality are similar. What makes a system fair often helps it be equal, too. For example, think about equality and fairness in school rules in relation to school uniform:

- *Equality* — students who are not in the correct uniform are given a detention (the same rule for all).
- *Fairness* — students who have a valid note will be given a uniform pass and will not receive a detention (making an adjustment using a consistent process). This approach to fairness is also known as 'equity'.

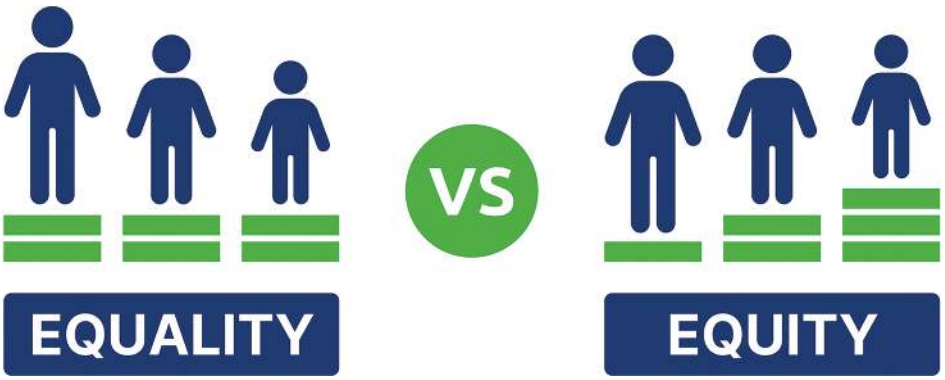
Sometimes the legal system treats people differently so that justice is served, like offering legal aid (see **FIGURE 3**).

SkillBuilder discussion

Investigating contemporary Civics and Citizenship issues

1. Look at **FIGURE 3**. What is the difference between equity and equality?
2. How does equity ensure fairness?
3. Why is equality important in society?

FIGURE 3 Fairness means we must make sure that we 'level the playing field' (equity) because simply treating everyone equally might lead to injustice.



Access

Access means that all people should be able to make use of the legal system when they need to. Everyone should understand what their rights are and how to get legal advice. Legal aid services can help with this. It also means you can pursue your case, whether in court or in other ways.

Ways in which our legal system provides for access include:

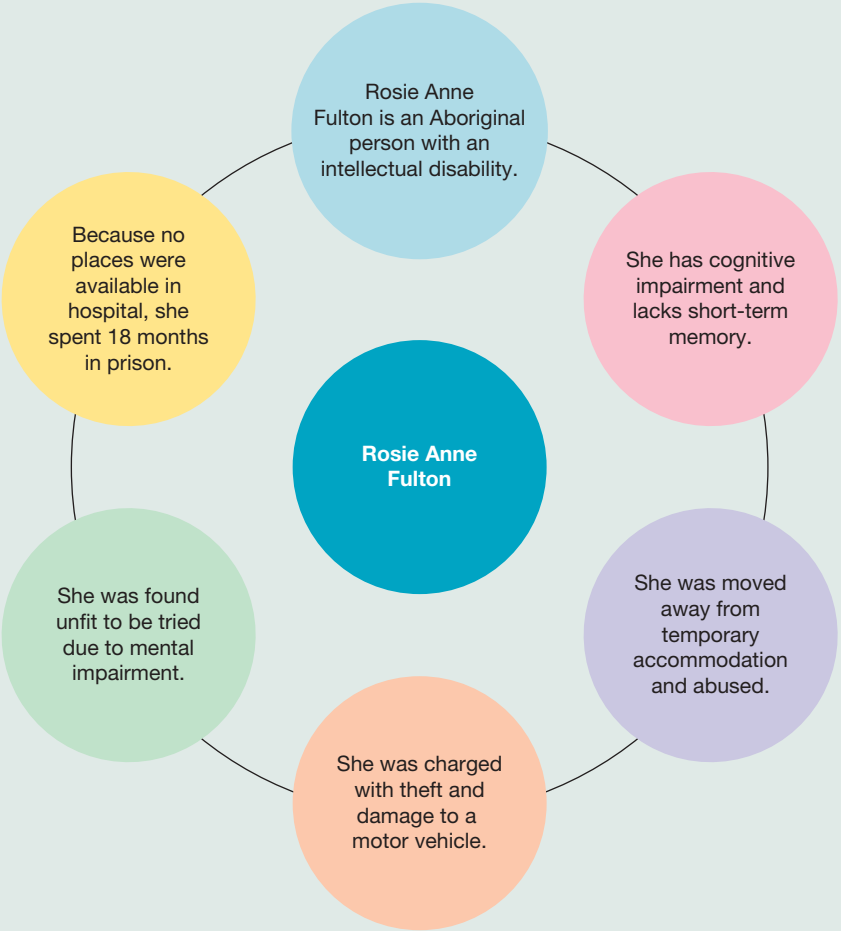
- a court hierarchy, where people can access experts who have specialised knowledge in dealing with cases
- the right to appeal a decision made by a court if a person is not satisfied with the outcome of their case
- different ways to settle disputes other than going to court, such as mediation, conciliation and arbitration. These methods are often quicker and cheaper than taking a case to court.

13.2 SkillBuilder activity **EVALUATING, CONCLUDING AND DECISION-MAKING**

Case study: When the system is not just

Read the information on Rosie Anne Fulton provided in **FIGURE 4**. You can also complete your own research on Rosie Anne Fulton, as this case allows us to explore issues related to justice, disability rights, and systemic inequality in Australia.

FIGURE 4 Which of the principles of justice are relevant to this case?



1. Create two tables similar to those provided and work with a partner to fill them in.
   a. In the first table, **propose** evidence of the rule of law protecting and not protecting rights in the Rosie Anne Fulton case.

Applying the rule of law	
Rights protected	**Rights not protected**

   b. In the second table, apply the principles of justice and **propose** evidence of how the principles were met and not met in the Rosie Anne Fulton case.

Meeting the principles of justice	
Principles met	**Principles not met**

2. Using the information in your tables, write two paragraphs that **summarise** your findings.
3. With your partner, **suggest** a solution to help ensure the legal system achieves the principles of justice.

13.2 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 3, 4, 9	2, 5, 8	6, 7, 10

REMEMBER AND UNDERSTAND

1. **Identify** the three principles of justice.
   A. Fairness, equity, access
   B. Fairness, equality, access
   C. Rule of law, fairness, access
   D. Rule of law, equality, access
2. **Identify** the three symbols of justice.
   A. Legal Aid, scales, courtroom
   B. Fairness, equality, access
   C. Sword, blindfold, scales
   D. Police, lawyers, judges
3. What do rules about not sharing an accused person's past crimes show?
   A. The rule of law
   B. Procedural fairness
   C. The principles of justice
   D. A symbol of justice
4. In 2021, Victoria's then premier was fined $400 for not wearing a mask. This is an example of the application of what?
   A. The rule of law
   B. Procedural fairness
   C. The principles of justice
   D. A symbol of justice
5. Sarah was charged with driving without a licence and knows what to expect in court. This is an example of what principle of justice?
   A. Fairness
   B. Equality
   C. Access
   D. All the above

ANALYSE AND APPLY

6. **Explain** why treating everyone the same is not always fair? Provide a real-life example where fairness requires equity instead of equality.
7. a. Which principles of justice overlap?
   A. Fairness and access
   B. Equality and access
   C. Fairness and equality
   D. They all overlap
   b. **Justify** your answer to part **a**.

EVALUATE AND COMMUNICATE

8. **Contrast** the prosecution and the accused in a criminal case.
9. **Define** the term 'procedural fairness'.
10. Using an example, **distinguish** between fairness and equality.

Answers and sample responses for this topic are available online.

LESSON 13.3 Where did our justice system come from?

LEARNING INTENTION

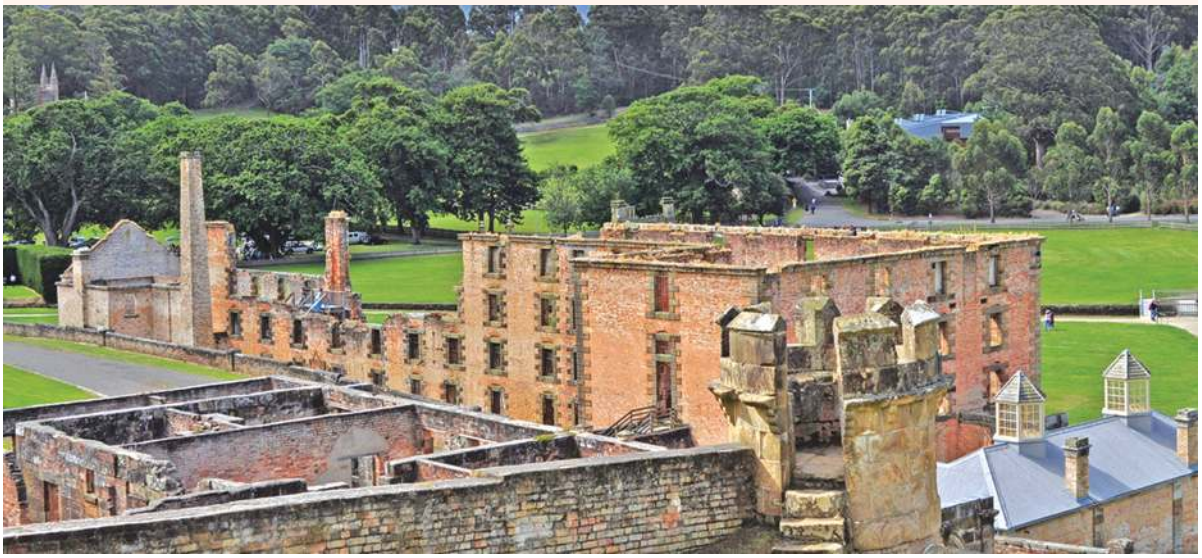
By the end of this lesson you should be able to:

- **explain** the origins of the Australian legal system
- make connections between the Australian legal system today and past events.

Tune in

A penal colony is a place to exile prisoners, often far away. Port Arthur is a reminder of our early **colonial** history. Look at **FIGURE 1** and brainstorm reasons why the British founded a colony in Australia. How is the start of this colony connected to our legal system?

FIGURE 1 Penal colony of Port Arthur in Tasmania



1. **When was the Penal Colony of Port Arthur established?**
2. **What was the purpose of Port Arthur as a penal colony?**
3. **Why is Port Arthur significant in Australian history?**

13.3.1 A legal system before European settlement

Before the British arrived in Australia, Aboriginal and Torres Strait Islander Peoples had their own laws. Different groups followed unique customary laws based on their beliefs and where they lived. These laws were connected to stories, customs and traditions. They helped guide behaviour and relationships. If someone broke a rule, they faced consequences within their community.

When the British established a settlement in Australia, they introduced their own laws. They did not recognise the laws that Aboriginal and Torres Strait Islander Peoples had been following for thousands of years.

13.3.2 Our British roots

Topic 14 explains that Australia's government is based on the Westminster system from England. Early settlers brought British laws to Australia and said that all the laws would apply everywhere in the new colony (see **FIGURE 2**).

Early settlers brought British laws to Australia. This is why the Australian legal system uses the same principles as the Westminster system, including separation of powers and a bicameral (two chambers or houses) parliament, as well as independent courts.

FIGURE 2 The Australian legal system comes from the British legal system.

13.3.3 The independence of the courts

A court is a place where legal disputes between people can be settled. In lesson 13.2, you learned about the rule of law. The rule of law is protected by courts. For example, courts can help people challenge unfair government decisions. Courts can do this because they are independent from government.

Like parliament, courts can also make laws. Courts can make laws when making decisions about cases brought to them. If parliament hasn't made a law about something, or if a law isn't clear, the courts may step in and make laws to fill in the gaps.

The Magna Carta

The judiciary wasn't always independent. Before the Magna Carta was signed eight hundred years ago, the king of England made and enforced all laws.

From 1199 to 1216, King John ruled England with total power. He made laws and decided court cases, sometimes unfairly. He heavily taxed people and took lands from barons. In 1215, the barons rebelled and asked him to respect their rights. They presented the Magna Carta (Latin for 'Great Charter') for him to sign as a promise that he would respect these rights.

SkillBuilder discussion

Evaluating democratic institutions and systems

1. What does the artwork show King John doing?
2. In what year did King John sign the Magna Carta?
3. What historical event does this artist's impression represent?

FIGURE 3 An artist's impression of King John signing the Magna Carta in 1215

Many legal experts have praised the Magna Carta as establishing the rule of law. The rights that King John agreed to included freedom from high taxes and the right to own property. The Magna Carta also created a council of 25 barons to advise the king. Another significant clause related to legal entitlements before the courts. Clause 39 read:

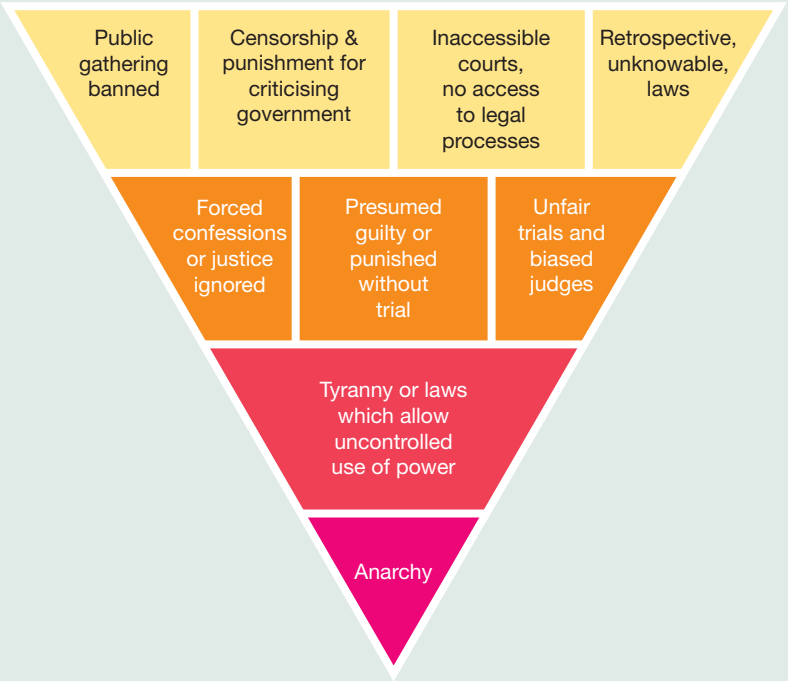
No free man shall be arrested or imprisoned . . . or outlawed or exiled or in any way victimised, neither will we attack him or send anyone to attack him, except by the lawful judgement of his peers or by the law of the land.

This limited the king's power to imprison people unfairly. It started the idea of independent courts and trial by jury. This can be seen in the words 'lawful judgement of (one's) peers'. A person's peers are those considered to be their 'equals' in society.

13.3 SkillBuilder activity EVALUATING, CONCLUDING AND DECISION-MAKING

Refer to **FIGURE 2** in lesson 13.2 and **FIGURE 4** in this lesson.

FIGURE 4 When the rule of law is absent, our rights and freedoms are no longer protected.



1. **Explain** the difference between the two pyramids.
2. a. Match two elements in the two pyramids to **investigate** in more detail.
   b. **Explain** what the element means under the rule of law and what would change if the rule of law did not exist.
3. Create a cartoon to illustrate the importance of the rule of law.

13.3 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 4, 6	3, 7	5, 8, 9

REMEMBER AND UNDERSTAND

1. **Identify** which of the following features is not an aspect of the rule of law.
   A. Unfair trials and biased judges
   B. Freedom of speech
   C. Right to assemble
   D. Independence of the judiciary
2. **Identify** the correct statements in relation to King John. Select all that apply.
   A. King John was a fair and democratic leader.
   B. King John was a British king.
   C. King John signed the Magna Carta.
   D. King John was a popular king.
3. What is the Australian legal system based on?
   A. The British legal system
   B. The American legal system
   C. Customary law
   D. None of the above
4. Determine if the following statements are true or false.
   a. The first settlers used Aboriginal and Torres Strait Islander Peoples' laws.
   b. People made King John sign the Magna Carta.
   c. Our laws can only be made by the elected parliament.
   d. The rule of law is protected by the courts.

ANALYSE AND APPLY

5. **Explain** the connection between the rule of law and the independence of the courts.
6. **Identify** the year in which King John signed the Magna Carta.

EVALUATE AND COMMUNICATE

7. **Explain** why courts can make laws.
8. **Explain** the system of laws that existed prior to the arrival of European settlers.
9. **Justify** celebrating the Magna Carta's signing.

Answers and sample responses for this topic are available online.

LESSON 13.4 How do Australian courts work?

LEARNING INTENTION

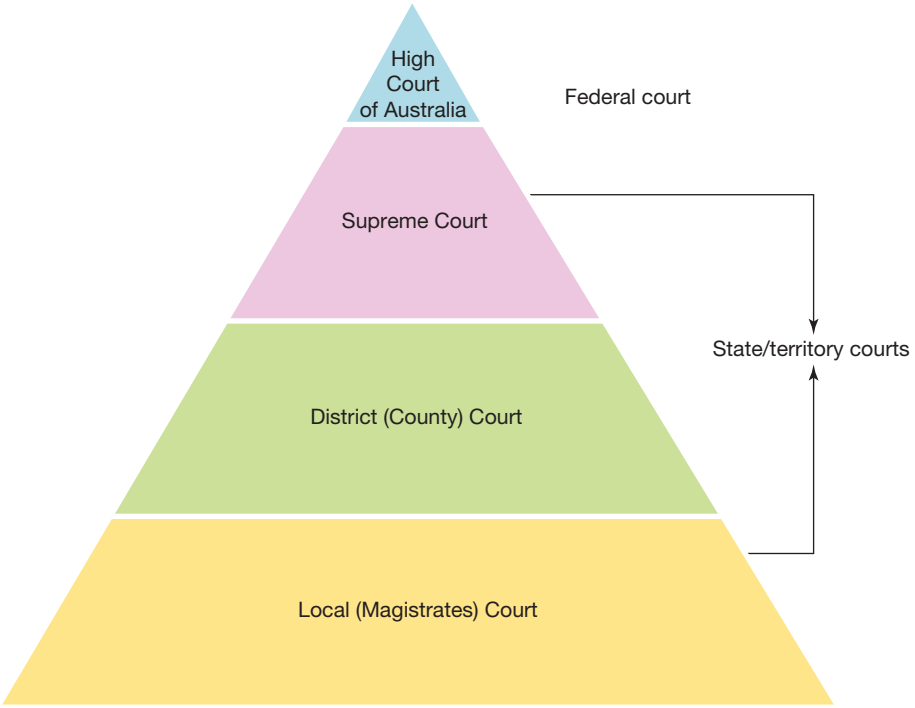
By the end of this lesson you should be able to:

- arrange the courts into a hierarchy
- **distinguish** between state and federal courts and **explain** the role of the courts.

Tune in

Did you know Australian courts are organised in a hierarchy? Some are federal courts, while others are in the states and territories.

FIGURE 1 The hierarchy of courts in Australia



1. **Why do you think we have a court hierarchy?**
2. **Why do you think the High Court is at the top of the hierarchy?**
3. **In what ways do you think the cases heard in the Magistrates Court might be different from the cases heard in the Supreme Court?**

13.4.1 Going to court

If someone is charged with a crime, their case may be heard in court. The court will decide if they are guilty or not guilty. If a person believes that another person has harmed them, the case may be heard in a court. The court will decide if the other person is liable or not liable.

13.4.2 The court hierarchy

The lowest courts in the hierarchy are local courts, known as the Magistrates Court in Victoria. The Magistrates Court hears most cases in Victoria. It is more informal than the higher courts, with no jury. **Magistrates** don't wear wigs or robes, but you need to call them 'Your Honour'.

The Magistrates Court hears minor cases like drink driving, shoplifting or disputes involving small amounts of money. The magistrate will decide how to settle a dispute or if someone is guilty or not. If a person is found guilty, the magistrate gives a sentence. For serious cases, they may decide to send the case to a higher court.

SkillBuilder discussion

Evaluating democratic institutions and systems

1. What is the name of the court shown in **FIGURE 2**?
2. Where is this court located?
3. What type of cases are heard here?

FIGURE 2 Melbourne Magistrates Court. In this court, a magistrate will decide how to settle a dispute or if someone is guilty or not.

Next in the hierarchy are the district courts. In Victoria, this is called the County Court. The County Court hears disputes involving larger amounts of money and more serious crimes such as armed robbery, drug trafficking and serious assaults.

SkillBuilder discussion

Evaluating democratic institutions and systems

1. What is the name the court shown in **FIGURE 3**?
2. Where is this court located?
3. What type of cases are heard here?

FIGURE 3 The County Court of Victoria in Melbourne. In this court, a judge or jury will decide how to settle a dispute or if someone is guilty or not.

Each Australian state has a Supreme Court for serious cases like murder. This is the highest court in each state. The Supreme Court also hears disputes involving large amounts of money.

SkillBuilder discussion

Evaluating democratic institutions and systems

1. What is the name the court shown in **FIGURE 4**?
2. Where is this court located?
3. What type of cases are heard here?

FIGURE 4 The Supreme Court of Victoria in Melbourne. In this court, a judge or jury will decide how to settle a dispute or if someone is guilty or not.

The High Court is at the top of the hierarchy. This is the highest court in Australia. It is a federal court. It hears important appeals and complex legal issues. Topic 14 explains that the High Court can interpret and enforce the Constitution.

SkillBuilder discussion

Evaluating democratic institutions and systems

1. What is the name of the court shown in **FIGURE 5**?
2. Where is it located?
3. What type of cases are heard here?

FIGURE 5 The High Court of Australia in Canberra

13.4.3 The courtroom

Courtrooms can be tense. Decisions there affect people's lives. The people who work in courts handle real dramas. The main courtroom officials include a magistrate or **judge**, **jurors**, a **prosecutor** and **counsel for the accused**. Let's next look at what might happen during a trial before a court.

13.4.4 A criminal trial

At the beginning of a criminal **trial** in a higher court, the accused is asked, 'How do you plead?' A **jury** of 12 may decide if someone is guilty or not guilty. They must listen carefully to evidence. If not guilty, the accused person goes free; if guilty, the judge decides the sentence.

FIGURE 6 Inside a serious criminal trial

1. The judge's associate is a trained lawyer who manages much of the paperwork.
2. People on the electoral roll can be called to be jurors. In a criminal case, a jury has 12 members. They decide if someone is guilty beyond reasonable doubt, and all must agree in murder or manslaughter cases.
3. The prosecutor must show the jury that the accused is guilty by asking questions of witnesses.
4. The judge is called 'Your Honour'. They listen to both sides and help the jury understand the case. If the jury finds someone guilty, the judge decides the sentence.
5. The defence counsel represents the accused. If they plead guilty, the lawyer make arguments to try to reduce the punishment. If they plead not guilty, the lawyer must show they are innocent.
6. The tipstaff helps the judge keep order in the court.
7. Witness box, from which people give evidence
8. Public watching court cases
9. A prison officer from the prison where the accused has been held
10. The accused
11. Media reporting on court cases

CASE STUDY

Actor pleads guilty in court

An Australian actor was charged with drug driving, driving while unlicensed and providing false details to police in April 2021. He was intercepted by police while driving his silver Peugeot on St Kilda Rd in Melbourne. The police stopped him after checking his car's registration and discovering he was unlicensed.

At the scene, the actor initially told police that he didn't have his licence on him, and gave police a false name. When the police officers expressed doubt about the name, the actor claimed to have a twin brother. However, he correctly identified himself when police threatened to arrest him. He pleaded with police not to test him for drugs, admitting to using marijuana a few days before. After the actor admitted that he had lost his licence two months earlier, his car was impounded on the spot.

The police later found that he had methamphetamine (ice) in his system.

FIGURE 7 An Australian actor was charged with drug driving, providing false details to police and driving while unlicensed in Melbourne. After pleading guilty, he was fined $2500 and disqualified from driving for 16 months.

The actor appeared in the Melbourne Magistrates' Court in October 2022. He pleaded guilty to the charges. His defence lawyer told the court that he was driving to his mother's house for Easter and to drop off groceries. Melbourne was in a COVID lockdown at the time. The lawyer explained that he panicked when giving police the false name because he knew that he should not have been driving with a suspended licence. The court also heard that the actor's ongoing legal troubles were causing significant strain on him and his family. Additionally, he had 169 outstanding penalties with Fines Victoria, amounting to $65 215.

In delivering her decision, Magistrate Olivia Trumble noted that while the actor's actions were serious, imprisonment was not appropriate. She acknowledged his remorse and his ongoing efforts to recover, but said that he needed to deal with the outstanding penalties. The magistrate also noted that the actor had shown a total disregard for his unlicenced status.

The actor was fined $2500 and disqualified from driving in Victoria for 16 months.

13.4 SkillBuilder activity INVESTIGATING

Find a news article about a recent Australian criminal case and fill in the table.

Note:

- First complete rows 1 to 6.
- Complete rows 7 and 8 if the information is available in your article.
- If you cannot complete rows 7 and 8, complete row 9.

1	Title of article
2	Date and source (including the URL)
3	Name of the court
4	Name of the accused
5	**Identify** the charge or charges
6	The names of other court officials named and their role (including lawyers)
7	The decision — what was the outcome of the case? Guilty or not guilty?
8	The sentence imposed
9	If you were the judge or magistrate, what do you think would be an appropriate penalty? **Justify** your decision.

13.4 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 3, 5	1, 4, 6	7, 8, 9, 10, 11

REMEMBER AND UNDERSTAND

1. **Identify** the four main courtroom officials in a serious criminal case.
2. Match the key terms with the correct definitions in the following table.

1. A court official who hears cases in the Magistrates Court	a. Prosecutor
2. A court official who hears cases in higher courts	b. Counsel
3. A lawyer who represents the accused person	c. Juror
4. A person chosen to hear and assess evidence in a court case	d. Magistrate
5. The party bringing a criminal action against the accused	e. Judge

3. Select the correct option to complete the following sentence: Magistrates and judges are addressed in court as *Your Highness* / *Your Honour* / *Sir or Madam* / *Professor.*
4. **State** how many jurors are assigned for criminal cases.
5. **Identify** the one phrase that best explains the responsibility of a jury in a criminal trial.
   A. To determine a defendant's guilt beyond any reasonable doubt
   B. To determine a defendant's guilt on the balance of probabilities
   C. To determine a defendant's guilt to any standard they deem appropriate
   D. To determine a defendant's guilt and decide on an appropriate punishment

ANALYSE AND APPLY

6. The system of courts for each state or territory is referred to as a hierarchy. Arrange the courts in their correct position in the Victorian court hierarchy.
   - High Court
   - Magistrates Court
   - Supreme Court
   - County Court

EVALUATE AND COMMUNICATE

7. In most courts, a jury can find someone guilty if 11 or all 12 jurors agree.
   Explain why this might be hard to achieve.
8. **Justify** the procedural rule that prevents judges from asking a witness a question except where this is required to clarify a point.
9. **Justify** the need for courts in our legal system.
10. **Explain** why you think our legal system has a hierarchy that classifies courts as higher and lower.
11. a. **Describe** what happened when police stopped the actor on St Kilda Rd in Melbourne.
    b. **Explain** what the actor's case shows about the role of the Magistrates Court in handling driving offences.

Answers and sample responses for this topic are available online.

LESSON 13.5 What is a fair trial?

LEARNING INTENTION

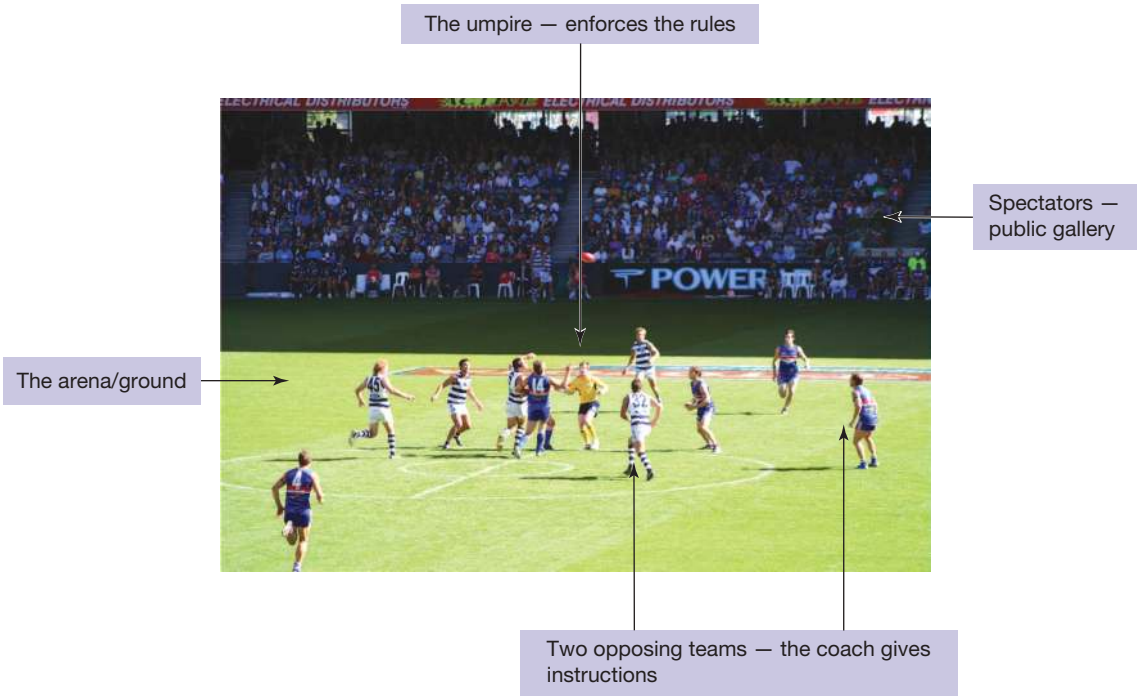
By the end of this lesson you should be able to:

- **identify** and **discuss** the elements of a fair trial
- make connections between witnesses, legal representation and due process, and a fair legal system.

Tune in

The Australian trial system has sometimes been compared to a football match. Look at **FIGURE 1** with a partner, and brainstorm a list of similarities and differences between a football match and a trial.

FIGURE 1 The courtroom is like a football game where everyone must follow the rules.



1. **How is a courtroom case similar to a football game?**
2. **What roles do the judge and referee play?**
3. **Why is teamwork important in both settings?**

13.5.1 Main elements of a fair trial

SkillBuilder discussion

Evaluating democratic institutions and systems

1. What are the key parts of a fair trial?
2. How does a judge ensure fairness?
3. Why is evidence important in a trial?

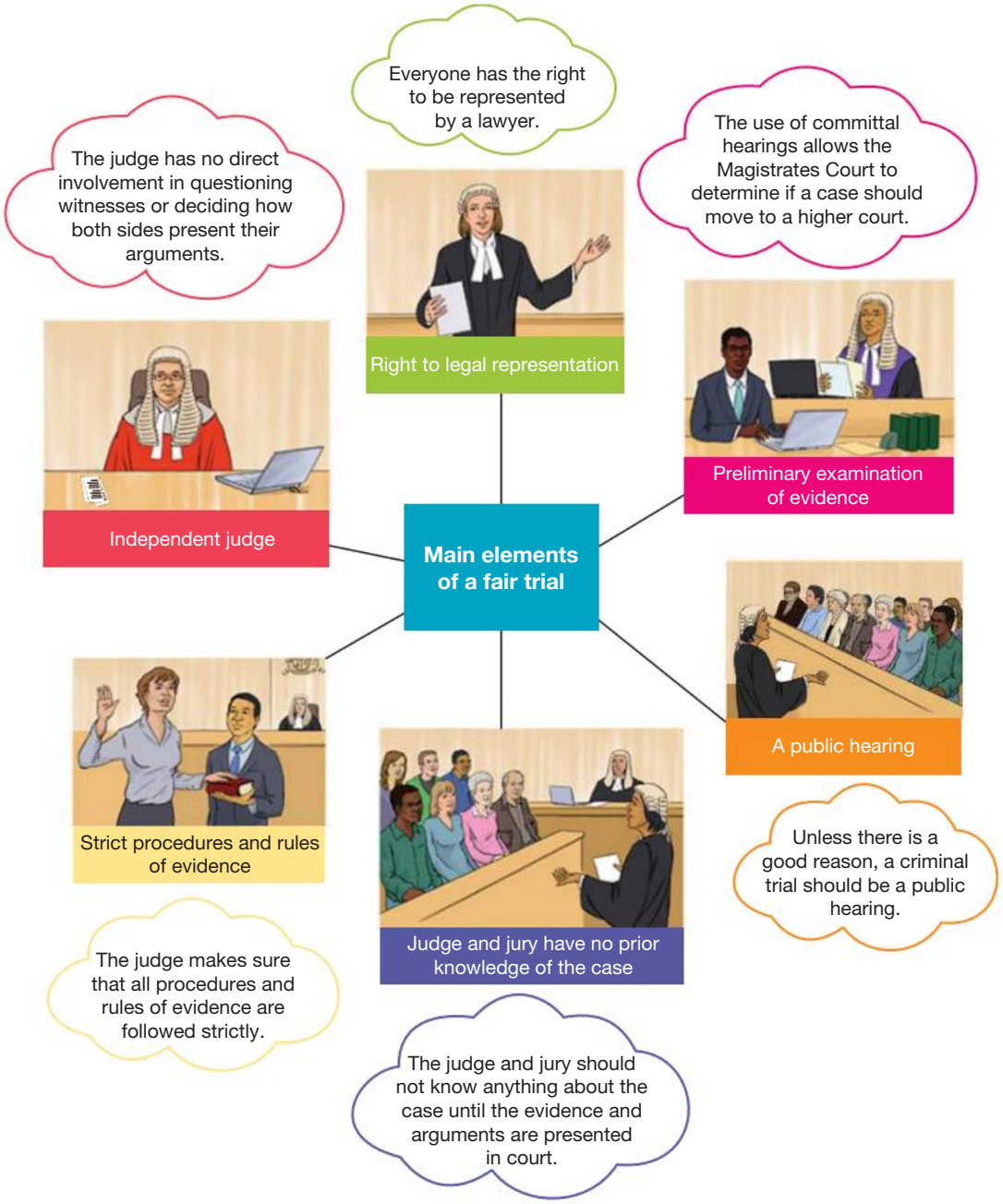
Fair and equal treatment for all

In Australia, we believe everyone deserves a fair trial. If accused of a crime, you would expect that you would have the chance to share your side. You would want a judge who listens to both sides fairly.

Main elements of a fair trial

The main elements of a fair trial are summarised in **FIGURE 2**. Let us now look at each element in more detail.

FIGURE 2 Main elements of a fair trial



Preliminary examination of evidence

When someone is charged with a crime, they go to the Magistrates Court. This court hears minor offences and some serious cases. It can also examine serious cases in a **committal hearing** (before going to trial). If there's enough evidence, the case goes to a higher court like the County Court or Supreme Court.

Committal hearings help ensure a fair trial. The prosecution must share all evidence, so the accused can prepare their defence and challenge the evidence.

Right to legal representation

For a fair trial, each side should have **legal representation**. This means that a lawyer will assist with a case. The lawyer might present the accused's case in court. If someone can't afford a lawyer, they may get help from legal aid (see lesson 13.6).

A public hearing

Most trials are held in public, so anyone can watch. This allows the community to see that the rules are followed and promotes fairness.

A trial can be closed to the public if it helps justice; for example, if a witness is very young. Cases involving people under 18 are heard in the Children's Court, which is private.

Independent judge

The right to a fair trial means everyone is treated equally. The judge is like the umpire in football. They ensure both sides follow the rules. They also ensure that both sides have the opportunity to present their case. The judge is independent. This means that the judge doesn't question witnesses or decide how arguments are presented. However, the judge may ask witnesses questions to make things clearer.

FIGURE 3 Anyone on the electoral roll can be randomly called for jury duty.

Judge and jury have no prior knowledge of the case

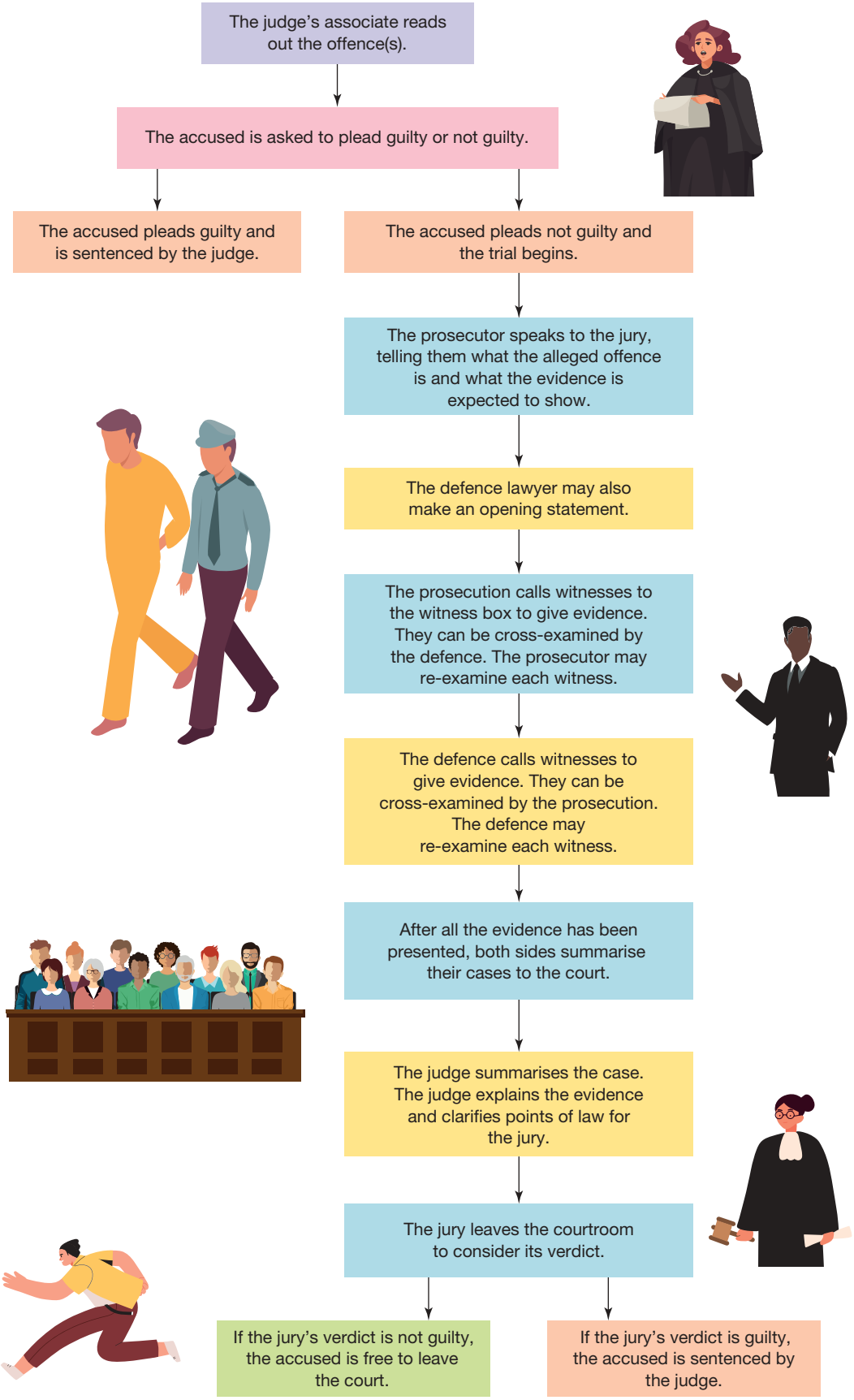
The judge and jury shouldn't know about the case until it is in court. They can't use the internet or other sources to learn about it.

During the trial, the judge helps the jury understand legal issues and explains the law at the end. Jurors must listen closely to the evidence and decide based only on that and the law explained by the judge. Jurors can't discuss the case with anyone, even after the trial. They also can't share information on social media or give interviews.

Strict procedures and rules of evidence

A fair trial follows strict rules to ensure both sides can present their case and challenge each other's evidence. Only certain types of evidence are allowed, like a doctor giving medical evidence. These strict rules of evidence and procedure ensure **due process**. Due process refers to the procedures that occur during a trial that ensure that people are treated fairly by the legal system.

FIGURE 4 Procedure for a trial in a higher court with a jury



13.5.2 Witnesses

A **witness** is someone who saw or knows something important about a crime. Witnesses can give evidence if they are victims, have direct information or are experts. Experts might talk about handwriting evidence or how the accused was influenced by mental health or drugs. All witnesses must promise to tell the truth. Both sides can ask witnesses to answer questions.

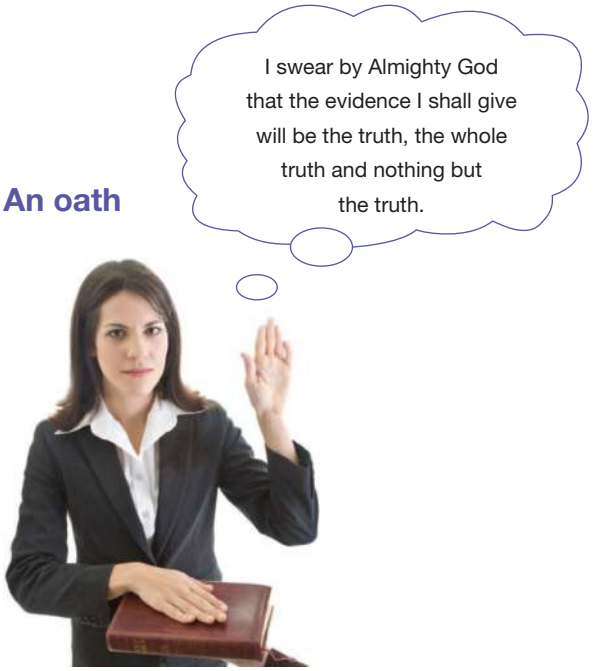
SkillBuilder discussion

Evaluating democratic institutions and systems

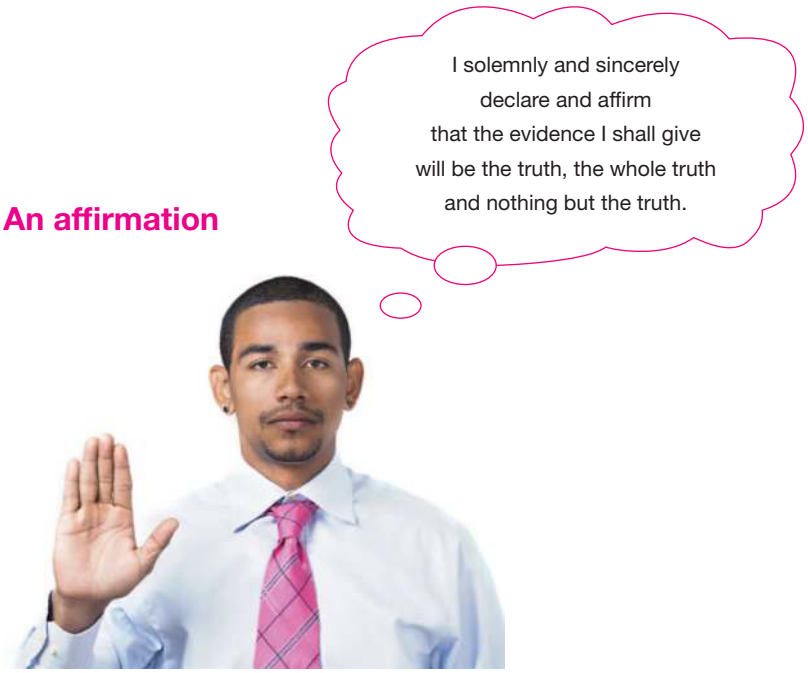
1. Consider **FIGURE 5**. Why do witnesses need to promise to tell the truth?
2. What is the difference between an oath and an affirmation?
3. Why do you think that witnesses can choose between an oath or an affirmation?

FIGURE 5 Before testifying, witnesses must promise to tell the truth with an oath or affirmation.

An oath



An affirmation



CASE STUDY

Fair trial or bias?

In December 2020, three influencers dined at the Silver Pearl Restaurant in Sydney. They ordered a lobster meal and a bottle of wine costing $364. Partway through the meal, the influencers complained to staff about feeling sick. They accused the restaurant of serving frozen lobster, instead of fresh lobster. The restaurant later posted on Instagram, claiming that the influencers continued eating despite their complaints, finished the meal and refused to pay. The post described the influencers' behaviour as 'dishonest . . . fraudulent . . . entitled . . . classless'.

FIGURE 6 Three influencers refused to pay for a meal at the Silver Pearl Restaurant in Sydney. This led to the restaurant posting about the incident on Instagram. The influencers then sued the restaurant for defamation.

The influencers felt the Instagram post harmed their reputations. They claimed that the post suggested they were frauds, bullied waitstaff and used fake food poisoning claims to avoid payment. As a result, the three influencers sued the restaurant. The case reached the Federal Court, where Judge Robert Bromwich raised questions about its appropriateness for a higher court. The judge noted that the Federal Court usually handles significant defamation cases.

The influencers' lawyer, Roger Rasmussen, felt that Justice Bromwich was biased against them. He argued that the judge had shown bias during proceedings and had called the case a minor one. Mr Rasmussen requested that the judge step down from the case. However, the judge rejected this request. Justice Bromwich clarified that he had not shown bias, but had only commented that the case might not result in a large payout due to its lower-level nature. The influencers were ordered to cover the restaurant's legal costs for the failed request. The main defamation case, however, was still set to go to trial in late 2024.

In March 2024 the case was dismissed. Following the dismissal of the case brought against Silver Pearl in Federal Court proceedings, Silver Pearl extended an apology to the influencers a Silver Pearl spokesperson said in a statement.

'This apology, disseminated through official social media channels, reflects Silver Pearl's commitment to empathy and understanding, without any admission of wrongdoing or liability.'

The restaurant also said no damages were awarded to the influencers involved.

'Silver Pearl reaffirms its dedication to providing exceptional service to all patrons and fostering positive community relationships,' the statement read.

13.5 SkillBuilder activity EVALUATING, CONCLUDING AND DECISION-MAKING, INVESTIGATING

Evidence is very important in a criminal trial. The jury can only find the accused guilty if the evidence supports this decision. Procedural fairness means there are strict rules about what evidence can be used in a trial.

1. **Investigate** the different types of evidence used in court. Make a table to classify each type as admissible or inadmissible. The first row is done for you.

Admissible evidence (allowed)	Inadmissible evidence (not allowed)
Video recordings	Hearsay evidence

FIGURE 7 Due process relates to procedural fairness during the trial.

2. **Select** three examples from each column to explore more.
3. Create a visual presentation of your findings. This might be a PowerPoint presentation or a short documentary or commercial.
   a. Begin by introducing your topic.
   b. **Explain** what is meant by due process and the difference between admissible and inadmissible evidence.
   c. Include your chosen evidence types — remember to make your presentation engaging.
   d. Include a bibliography.

13.5 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 6	4, 5, 7, 8	3, 9, 10, 11

REMEMBER AND UNDERSTAND

1. When someone is charged with a serious crime, they go to the Magistrates Court to be told whether they will have a trial in a higher court. **Identify** the name of this process.
   A. Committal hearing
   B. Pre-trials
   C. Sentence hearing
   D. Civil hearing
2. What is legal representation best defined as?
   A. A lawyer will act for the person in court.
   B. A family member will act for the person in court.
   C. A judge will act for the person in court.
   D. A jury will act for the person in court.

3. **Define** the elements of a fair trial by matching each element to its corresponding description.

1. The prosecution must show its evidence in court. They must share this with the accused's lawyers before the trial starts.	a. Preliminary examination of evidence
2. The case for the accused will be presented by their lawyer.	b. Right to legal representation
3. Unless a good reason exists not to, the trial will be open to the public.	c. A public hearing
4. The judge cannot question witnesses or decide how each side argues.	d. Independent judge
5. The judge and jury learn about the case during the trial.	e. Judge and jury have no prior knowledge of the case
6. Due process means the judge follows the rules.	f. Strict rules of evidence and procedure

4. **Explain** the role of a juror and a witness in a fair trial.
5. **Identify** a situation in which a judge might be permitted to ask a witness questions during a trial.

ANALYSE AND APPLY

6. Any citizen who is on the electoral role can be randomly selected to sit on a jury. True or False?
7. Create your own diagram showing the steps involved in a trial with a jury. Use an appropriate illustration for each step to show that you understand it.

EVALUATE AND COMMUNICATE

8. Select two elements that contribute to a fair trial. **Explain** how each element might contribute to a fair trial.
9. Examine **FIGURE 4**. **Explain** the possible impact on procedural fairness and the concept of a 'fair trial' if one of the procedures were removed.
10. **Identify** what you consider to be the most important element contributing to a fair trial. **Justify** your response.
11. a. **Explain** how accusations of judicial bias, such as those raised by Mr Rasmussen, challenge the principle of due process.
    b. **Analyse** Justice Bromwich's decision in the case study to remain on the case despite claims of bias. **Explain** what this decision indicates about the judicial process and fair trials.

Answers and sample responses for this topic are available online.

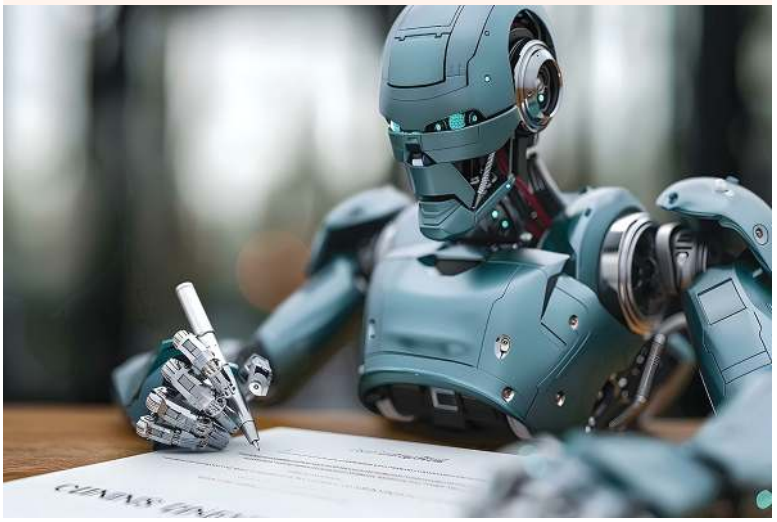
LESSON 13.6 Can everyone access justice?

LEARNING INTENTION

By the end of this lesson you should be able to **explain** how Australians can access justice and legal representation.

Tune in

FIGURE 1 A robot lawyer is a legal AI application that can perform tasks that are typically done by young associates at law firms. Typically, people seeking legal assistance will complete a series of questions relevant to the help or advice they need. The robot lawyer then uses AI software to provide automated legal advice.



1. **Brainstorm the reasons people might have difficulty accessing the criminal justice system.**
2. **How do you think robot lawyers work?**
3. **What problems might occur with this type of assistance?**

13.6.1 Difficulties in gaining access to the legal system

All Australians should have access to justice. We all have the right to legal representation, but some people cannot access the law for various reasons.

Some people may not understand the law. Those with limited English might struggle to explain their problems. They may not know their rights or where to get help. Some might feel scared of lawyers or can't afford one.

Our legal system has devised ways of providing access to justice and legal representation for everyone.

13.6.2 Legal aid

Not everyone can afford to pay for a lawyer. In Australia, **legal aid** is important for access to justice. Without it, some people wouldn't have a lawyer and could lose their right to a fair trial.

Legal aid is provided for people who can't afford a lawyer. It is offered by legal aid commissions, community legal centres and Aboriginal and Torres Strait Islander Peoples' legal services.

SkillBuilder discussion

Investigating contemporary Civics and Citizenship issues

1. Discuss what the cost of meeting with a legal professional might be.
2. What may cause the costs to be higher than you may have anticipated?

FIGURE 2 Everyone has the right to legal representation. However, consultations with legal professionals can be expensive, which excludes some people from accessing it.

SkillBuilder discussion

Investigating contemporary Civics and Citizenship issues

1. What support does legal aid offer?
2. Who can receive help from legal aid?
3. Why is legal aid important for people?

Legal aid commissions

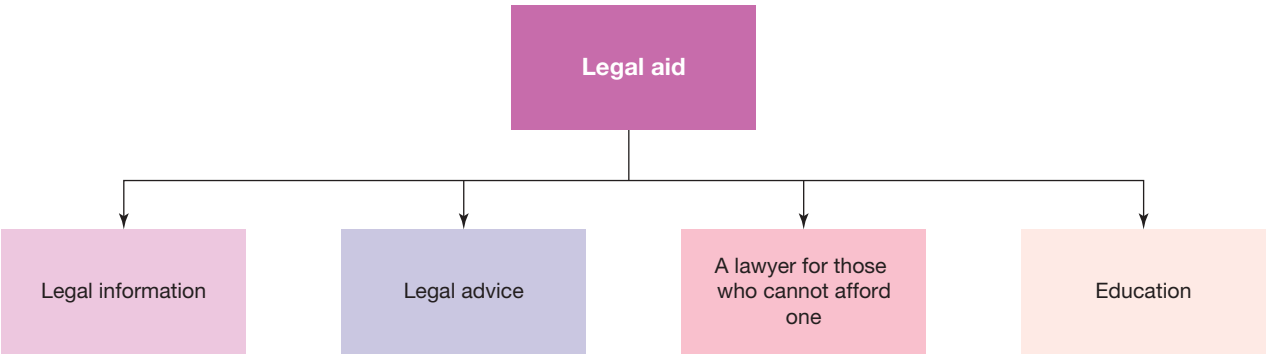
Each state and territory has a legal aid commission. They are funded by the government and provide legal assistance, legal information and advice, and lawyers for people going to court.

Legal aid services are free unless ongoing help is needed, in which case a small feemay apply. Names vary by state, like the Legal Service Commission South Australia, Victoria Legal Aid and Tasmania Legal Aid.

Legal information is free on legal aid websites in 36 languages. There are strict eligibility rules for those needing a legal aid lawyer to represent them in court.

Legal aid services work with private law firms to help more people. Lawyers volunteer as duty lawyers to support those without a lawyer in court.

FIGURE 3 What legal aid provides



Community legal centres

Community legal centres offer free legal advice and help, especially for disadvantaged people and those with special needs.

Some centres get money from the government and donations, but others rely mostly on volunteers, who can be lawyers or non-lawyers.

Community legal centres help locals but rarely go to court.

FIGURE 4 Community legal centres are funded by the government and donations. They offer legal help and advice, focusing on disadvantaged people and those with special needs.

13.6.3 Aboriginal and Torres Strait Islander Peoples and access to the law

Aboriginal and Torres Strait Islander Peoples can face many challenges in the legal system, like language and cultural differences. They are over-represented in the criminal justice system. They make up about 3.3% of Australia's population but 30% of the prison population.

Aboriginal and Torres Strait Islander Peoples' legal services

Each state has a legal service for Aboriginal and Torres Strait Islander Peoples, funded by the government and donations. They provide free legal help, community education and advice on law changes.

Aboriginal and Torres Strait Islander Peoples' sentencing courts

All states except Tasmania have a sentencing court for Aboriginal and Torres Strait Islander Peoples to provide culturally appropriate justice. The names differ: Circle Sentencing in New South Wales, Murri Court in Queensland, Nunga Court in South Australia and Koori Court in Victoria.

Aboriginal and Torres Strait Islander courts, like the Koori Court, require the accused to plead guilty to a criminal offence. This demonstrates that they are taking responsibility for their offending.

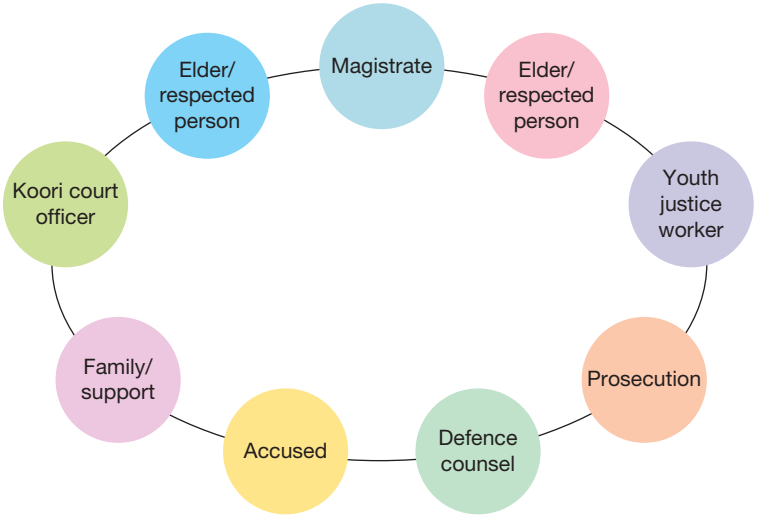
FIGURE 5 shows a Koori Court layout. The round table makes it less formal and encourages participation.

SkillBuilder discussion

Investigating contemporary Civics and Citizenship issues

1. Why does everyone sit at the same level in the Koori Court?
2. What shape is the table in the Koori Court?
3. How does this set-up affect the court's atmosphere?

FIGURE 5 In the Koori Court, everyone sits at the same level, around an oval table.



Aboriginal and Torres Strait Islander elders help the magistrate understand cultural issues, the accused's background and how crimes affect the community.

Elders are respected in their community for their knowledge and **lore**. They show the accused that their actions are not accepted.

The Victorian Koori Court and, especially, the Children's Koori Court, help address issues that lead to offending. They recognise culture and have reduced reoffending rates. More courts are now using the Koori Court. You can learn more by checking the **County Koori Court** weblink in the Resources panel.

FIGURE 6 A welcome and smoking ceremony were held as a sign of respect at the Dandenong Koori Court.

13.6.4 Legal awareness

The law affects everyone, so it is important to know your rights and responsibilities. You need to be aware of how to access justice and how to apply for legal representation.

Schools teach civics and citizenship to help students understand the law. Reliable information is on websites like the Law Institute of Victoria and Victoria Legal Aid. Advertising is used to promote new laws to keep everyone informed.

13.6 SkillBuilder activity EVALUATING, CONCLUDING AND DECISION-MAKING, COMMUNICATING

Work in groups of three or four.

1. **Identify** one factor that can improve access to justice and legal representation (e.g. robot lawyers).
2. Create a storyboard that:
   - **explains** this factor
   - **outlines** how it can improve access to justice and legal representation.
3. Produce a video presentation that will engage your audience (other Year 7 students).
4. Share your video with the rest of your class.

13.6 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 6	5, 7, 8	4, 9, 10

REMEMBER AND UNDERSTAND

1. **Identify** the statement that best describes what is meant by the term 'justice'.
   A. The treatment of people that is fair, honest and genuine
   B. A person who represents a defendant in court
   C. The branch of criminal law
   D. The word that is used when a 'not guilty' verdict is handed over

2. **Identify** the statement that best describes the role of legal aid.
   A. Legal assistance to people who could not otherwise afford the cost of hiring a lawyer
   B. Legal representation for all defendants on trial
   C. Tutoring for people who are studying to be a lawyer
   D. The assistant of the court when a trial is in progress
3. Match the legal assistance body with the statement that best describes the services it provides in the following table.

1. Give legal assistance, information and advice. They can also find lawyers for people.	a. Legal aid commissions
2. Give free legal advice and assistance to people in need. They often have few funds and staff can be volunteers.	b. Aboriginal and Torres Strait Islander Peoples' legal services
3. Give legal advice to Aboriginal and Torres Strait Islander Peoples. They are funded by the government.	c. Community legal centres

4. **Explain** how legal awareness can improve access to justice and legal representation.
5. **Explain** what is meant by the term 'legal representation'.

ANALYSE AND APPLY

6. **Analyse** the following scenarios. Advise each person of the most appropriate body that could provide them with legal advice.
   a. Janet is an elderly pensioner who has been charged with growing cannabis for commercial use.
   b. Tahni is an Aboriginal and Torres Strait Islander person who has been charged with assault.
   c. Yousif has recently arrived in Australia from Africa and has been charged with driving without a licence.

EVALUATE AND COMMUNICATE

7. **Explain** the consequences of not providing options for everyone to access the law.
8. **Explain** why you think our legal system enables everyone to receive access to justice and legal representation.
9. Megan is a concerned citizen and is interested in finding out more about how Australians can receive access to justice and legal representation. **Suggest** appropriate advice to Megan.
10. **Identify** what you believe is the most appropriate means for providing access to justice and legal representation for everyone. **Explain** your response.

Answers and sample responses for this topic are available online.

LESSON 13.7 Inquiry: Can community action make a difference?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **discuss** issues related to the campaign to stop imprisoning Aboriginal and Torres Strait Islander men and women for the non-payment of fines
- **explain** your findings on whether community action can make a difference.

Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task, you can use this rubric to self-assess.

Inquiry steps

Step 1: Questioning and researching

Define your inquiry question. Use the below as inspiration.

- Why are people sent to prison for not paying fines? What are the reasons that fines are not paid?
- Are there any alternatives to sending people to prison?
- What are the rates of imprisonment for Aboriginal and Torres Strait Islander men and women and non-Indigenous men and women in Australia? Why does this matter? Does it seem fair? Why has this become an issue?
- How can 'people power' lead to a change in the legal system?
- What other questions do you have in relation to this topic?

Conduct research to find out more about this topic so that you can answer your inquiry question.

Step 2: Civic participation and decision-making

Identify strategies that individuals can use to bring issues related to the law to the attention of lawmakers.

What would you do if you thought an aspect of the law needed to change?

Step 3: Analysis, evaluation and interpretation

Identify individuals and groups who have campaigned to change the law.

- What strategies did they use?
- How effective were these strategies?

Step 4: Communicating

Select a format to present your point of view. For example, this could be a short video, a mock TV interview or a PowerPoint presentation.

LESSON 13.8 Review

13.8.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

13.2 What are the principles of justice?

- The Australian legal system follows key principles, like the rule of law, which means everyone must follow the law.
- The Australian legal system has three other important principles: fairness, equality and access.
- Fairness and equality work together, so sometimes we treat people differently.

13.3 Where did our justice system come from?

- Before European settlers came, Aboriginal and Torres Strait Islander Peoples had their own laws, but the British settlers ignored them.
- The legal system we have today is based on the British legal system.
- Our legal system started with the Magna Carta, which said lawmakers should not enforce the law.

13.4 How do Australian courts work?

- Everyone in Australia has the right to a fair trial.
- Both sides can share evidence and ask questions in front of a fair judge.
- Everyone can have a lawyer in court, even if they cannot pay.

13.5 What is a fair trial?

- A fair trial happens when both sides show their evidence, the judge is independent, and rules are followed.
- Regular people help in a fair trial as witnesses giving evidence, and as jurors deciding if the accused is guilty.

13.6 Can everyone access justice?

- Legal aid helps people who cannot afford a lawyer in a dispute or criminal case.
- People can be made aware of the law through education, information and the media.
- Indigenous sentencing courts help Aboriginal and Torres Strait Islander Peoples get fair justice.

13.7 Inquiry: Can community action make a difference?

- Many Aboriginal and Torres Strait Islander Peoples are in jail for not paying fines.
- We can explore how to fix this issue.

13.8.2 Key terms

accused a person who has been charged with a criminal offence
beyond reasonable doubt the standard of proof required in a criminal trial where the prosecution must prove that the accused is guilty to such a high degree that a reasonable person would have little doubt that the accused committed the crime
colonial relating to the time when Australia was a British colony, under the control of the British government
committal hearing in very serious cases, the procedure held in a lower court to determine if enough evidence exists for the case to move to a higher court
counsel for the accused a lawyer who represents the accused person
democracy a political system according to which citizens choose the way in which they are governed, and elect representatives to make laws on their behalf
due process the procedures occurring during a trial that ensure people are treated fairly by the legal system

government a group of people with the power to rule over a country or state and make decisions and laws on behalf of the people
judge a court official who hears cases in the higher courts, such as the District or County Court, or the Supreme Court
juror a person selected to hear and assess the evidence in a court case
jury a group of ordinary people randomly selected to hear and assess the evidence in a court case
justice the use of laws to treat people fairly and in a way that is morally right
legal aid the provision of legal assistance to those involved in a dispute or criminal matter who are unable to pay for legal representation
legal representation services performed by a qualified legal practitioner, such as a lawyer, who deals with legal matters on behalf of the person who has hired them
legal system a system for interpreting and enforcing the laws of a country
lore the accumulated traditional knowledge, beliefs and customs passed down from generation to generation in a society; it is passed on orally, not in written form
magistrate a court official who hears cases in a Magistrates Court
presumption of innocence the principle that all accused people who appear before a court are presumed to be innocent until the prosecution proves that they are guilty
procedural fairness having fair procedures in place to protect the rights of all parties
prosecution the party bringing a criminal action against the accused
prosecutor the person who presents a criminal case on behalf of the state
rule of law the legal principle that all citizens are subject to the law, and equal before the law, as it is upheld by independent courts
trial the court process to determine whether someone committed a criminal act
witness someone who saw or knows something important about a crime

13.8.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

How do features of the Australian legal system protect the rights of individuals and uphold the principles of justice?

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.

learnon

Post-test	Online post-test
eWorkbooks	Customisable worksheets for this topic Reflection
Digital document	Key terms glossary

13.8 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
3, 4, 8	1, 2, 6, 7, 9, 10	5, 11, 12, 13, 14, 15

REMEMBER AND UNDERSTAND

1. Identify the statement that best describes the meaning of the term 'legal system'.
   A. A way of breaking the law of a country
   B. A system for interpreting and enforcing the laws of a country
   C. A system for making the jails of a country
   D. A way of going through law school
2. Identify the main role of courts.
   A. To deal with people who have done bad things
   B. To only hear serious crimes, such as murder
   C. To apply the law and settle disputes
   D. To decide if accused people will go to jail or not
3. Where will most criminal cases be heard?
   A. The District Court/County Court
   B. The Supreme Court
   C. The High Court
   D. The Magistrates Court/Local Court
4. Define the term 'presumption of innocence'.
   A. Accused people are presumed innocent until proven guilty.
   B. Accused people are innocent until proven guilty.
   C. All accused people who appear before a court must prove their innocence.
   D. Accused people are innocent until proven guilty in court.
5. Identify a purpose of committal hearings.
   A. To commit to both sides being available to present their cases
   B. To guarantee that evidence will be presented using court procedures
   C. To ensure that the judge is independent
   D. To determine if enough evidence exists for a case to move to a higher court
6. Explain what we mean when we refer to a judge as being 'independent'.
   A. They sit by themselves in court.
   B. They have no direct involvement in how either side will present its case.
   C. They can enter and leave the court when they please.
   D. They always decide if an accused is guilty or not guilty.
7. Identify one reason for calling an expert witness.
   A. To say if the accused is mentally ill
   B. To tell the court what someone told them they saw the accused do
   C. To give instructions to the jury
   D. To present their version of events to the court
8. Which of the following statements best describes a jury?
   A. A group of people who present evidence in court
   B. The party bringing a criminal action against the accused
   C. A group of people chosen to listen to a court case
   D. The person who represents the accused
9. Which statement best describes the reason for strict procedures and rules of evidence in a court?
   A. To make sure that a case can move on to a higher court
   B. To interpret and enforce the laws of the country
   C. To guarantee that a verdict is reached by the jury
   D. To make sure both sides can share their case

10. Identify which group of people can access legal aid.
    A. People who would otherwise be unable to afford a lawyer
    B. People who wish to change the law
    C. People who have been selected to be on a jury
    D. People who need to learn about the law

ANALYSE AND APPLY

11. a. **Identify** and explain one factor that can improve access to justice and legal representation.
    b. **Outline** how this factor improves access to justice and to legal representation.
12. **Analyse** the similarity between British law and the customary law of Aboriginal and Torres Strait Islander Peoples.

EVALUATE AND COMMUNICATE

13. **Distinguish** between the principles of justice, fairness and equality.
14. Using an example, **suggest** why the legal system may need to treat people differently.
15. **Explain** how a sentencing court, such as the Koori Court, can lead to improved outcomes for Aboriginal and Torres Strait Islander offenders.

Answers and sample responses for this topic are available online.

14 Citizenship, diversity and identity

LESSON SEQUENCE

14.1 Overview 512
14.2 Australia's diverse society 514
14.3 What role does religion play in Australian society? 518
14.4 How do we promote cohesion in Australian society? 522
14.5 Inquiry: Will the Religious Discrimination Bill protect us? 525
14.6 Review 527

LESSON 14.1 Overview

INQUIRY QUESTION

How is Australia a diverse society, and what factors contribute to a cohesive society?

This topic explores what it means to be a pluralist, **multi-faith** society that draws upon a **diverse** range of cultural origins. You will learn how amongst this there is an inherent values system that leads to **social cohesion**.

learnon

- **Pre-test**
  Online pre-test
- **eWorkbook**
  Customisable worksheets for this topic
- **Digital document**
  Key terms glossary
- **Video eLesson**
  Our national identity

SkillBuilder

Use the SkillBuilder activities to develop these Civics and Citizenship concepts and skills:

- INVESTIGATING CONTEMPORARY CIVICS AND CITIZENSHIP ISSUES
- EVALUATING DEMOCRATIC INSTITUTIONS AND SYSTEMS
- PARTICIPATING IN CIVIC PROCESSES
- COMMUNICATING

LESSON 14.2 Australia's diverse society

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the diverse cultural origins of our Australian communities.

Tune in

Australian artist Peter Drew created and posted the **FIGURE 1** posters around cities and suburbs.

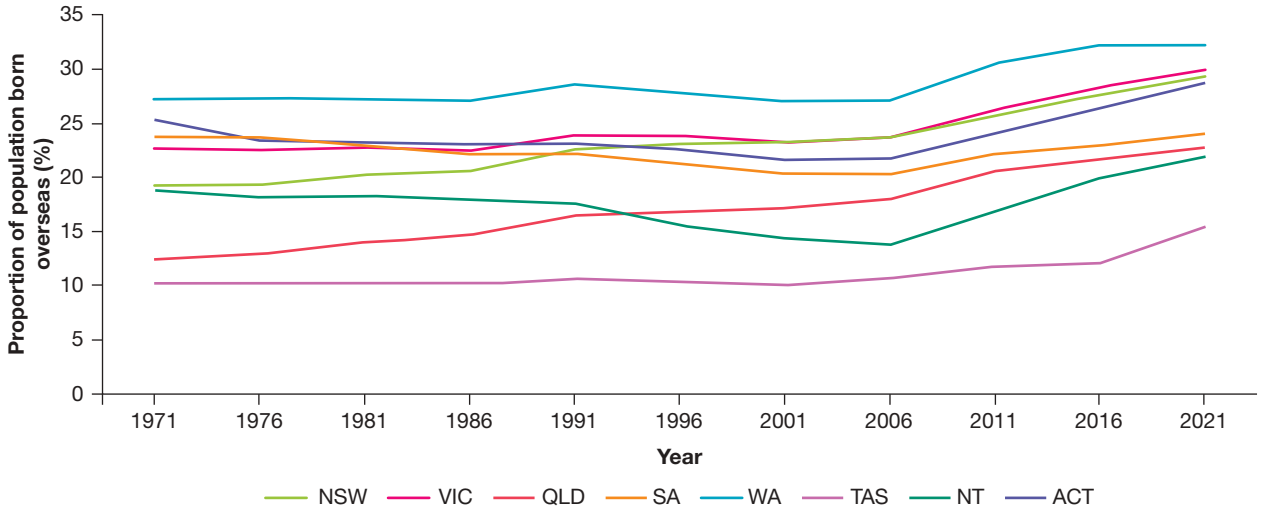
FIGURE 1 AUSSIE posters by Peter Drew

1. **Explain what being an 'Aussie' means.**
2. **Count how many cultures are represented in your class.**
3. **Discuss whether everyone in your class feels 'Aussie'.**

14.2.1 Multiculturalism

Imagine your classroom as a mini version of Australian society. Six of the students in your class may have been born overseas, and ten may have parents born outside Australia. This is **multiculturalism** in action. Australia's cultural history is complex and diverse. While it is home to the world's oldest living cultures in Aboriginal and Torres Strait Islander Peoples, it also has a rich history of immigration, with people from nearly 200 nations making Australia their home.

FIGURE 2 Proportion of population born overseas by state and territory, 2021



SkillBuilder discussion

Communication

1. Look at **FIGURE 2**. Discuss with a partner what this graph is showing.
2. Can you think of reasons for the patterns?

FIGURE 3 Australian schoolchildren

14.2.2 Cultural diversity

Embracing *cultural diversity* helps us understand diverse ways of living. Without it, we might assume everyone lives like us. Learning about other cultures broadens our view of others and ourselves. For example, you might feel uncomfortable in your classroom desk right now, but millions of students around the world don't have access to desks, chairs or even textbooks. Understanding these differences helps us appreciate our own opportunities while recognising the challenges others face.

Knowledge fosters tolerance, as seen in Australia's immigration history. As different communities settled in Australia, it took time for their cultures to be understood and accepted. For example, Italian and Greek children were once teased for playing soccer — which is now one of Australia's most popular sports. This shows how knowledge leads to tolerance and acceptance.

SkillBuilder discussion

Investigating contemporary Civics and Citizenship issues

1. What do you notice in this image?
2. Discuss why Australia Day might be significant for new migrants.
3. Identify the purpose of a citizenship ceremony in Australia.

FIGURE 4 A citizenship ceremony on Australia Day is a popular event for migrants to formally gain Australian citizenship.

14.2.3 Conflict and division

Australia has become increasingly multicultural and inclusive over time. Our history reminds us that cultural understanding does not always come easily. Important moments that have shaped our journey include the:

- treatment of Aboriginal and Torres Strait Islander Peoples by European settlers (1778 onwards)
- **White Australia Policy** (1901–1973)
- Cronulla race riots (2005)
- rise of anti-immigrant sentiment towards African communities (2018).

These are examples of **cultural intolerance**.

It is important to learn from these events and ensure cultural differences are understood and celebrated, rather than used to divide communities.

14.2 SkillBuilder activity **QUESTIONING AND RESEARCHING**

Being Australian can unite us, but do we all need to be the same?

Supporting a sports team brings pride and identity. You wear team colours, cheer and on the other hand, boo the other side. It feels great to belong. But what if you keep your 'colours on' at home and see the other team as a threat? This is **tribalism**. An extreme example occurred in Cronulla, Sydney, in 2005.

The Cronulla riot events of December 2005 tested Australia's multicultural harmony and social cohesion. Local tensions escalated when texts and media reports spread through Sydney's beachside suburbs. On 11 December, a large crowd gathered at Cronulla Beach, leading to confrontations between different community groups. The day ended with multiple injuries and arrests, and showed how quickly misunderstanding and fear can damage community relationships.

Here are the reactions from the Prime Minister at the time, John Howard, and Eman Dandan, the Lebanese Muslim Association's welfare coordinator:

- John Howard: '*I do not believe Australia has underlying racism. I have always been optimistic about Australians' character and do not think they are racist*.'
- Eman Dandan: '*Invisible racism has always existed in Australia — unspoken feelings toward certain communities, rarely expressed publicly*.'

FIGURE 5 Police and protestors clash in Cronulla.

1. Find out more about the Cronulla riots. Use a reliable source of information to investigate the following:
   a. short- and long-term causes of the riot
   b. the role of media, including social media, before, during and after the riot
   c. community bridging efforts, following the event
2. We are born into groups that shape our **values** and **perspectives**. Our upbringing influences our thinking.
   - Why did John Howard hold his view?
   - Why did Eman Dandan hold her view?
   - Which view matches yours? **Explain** and **justify**.
3. **Discuss:** How can we prevent another event like the Cronulla race riots in the future?

14.2 Exercise

learnon

Learning pathways

Level 1	Level 2	Level 3
1, 2, 4, 5	3, 6, 7, 8	9, 10

REMEMBER AND UNDERSTAND

1. What is meant by the term multi-faith society?
   A. An atheist society where there is no religion
   B. A society with many religions, where none is more superior than another.
   C. Christianity is the dominant religion.
   D. One person having multiple religions
2. How many nationalities are represented in Australia?
   A. 50
   B. 100
   C. 150
   D. 200
3. **Discuss** who you believe can truly call themselves 'Australians'.
4. **Identify** one reason from the lesson that explains why some people may be intolerant of other cultures.
5. **Identify** an event in Australian history where cultural intolerance led to conflict.

ANALYSE AND APPLY

6. What does **FIGURE 3** suggest about being Australian?
7. **Reflect on** what the **soccer example** teaches us.
8. **Describe** the benefits of multiculturalism in Australia.

EVALUATE AND COMMUNICATE

9. Is the phrase 'knowledge is the key to tolerance' accurate? **Discuss.**
10. **Suggest** why cultural differences might be used to divide communities. Who benefits from this division?

Answers and sample responses for this topic are available online.

LESSON 14.3 What role does religion play in Australian society?

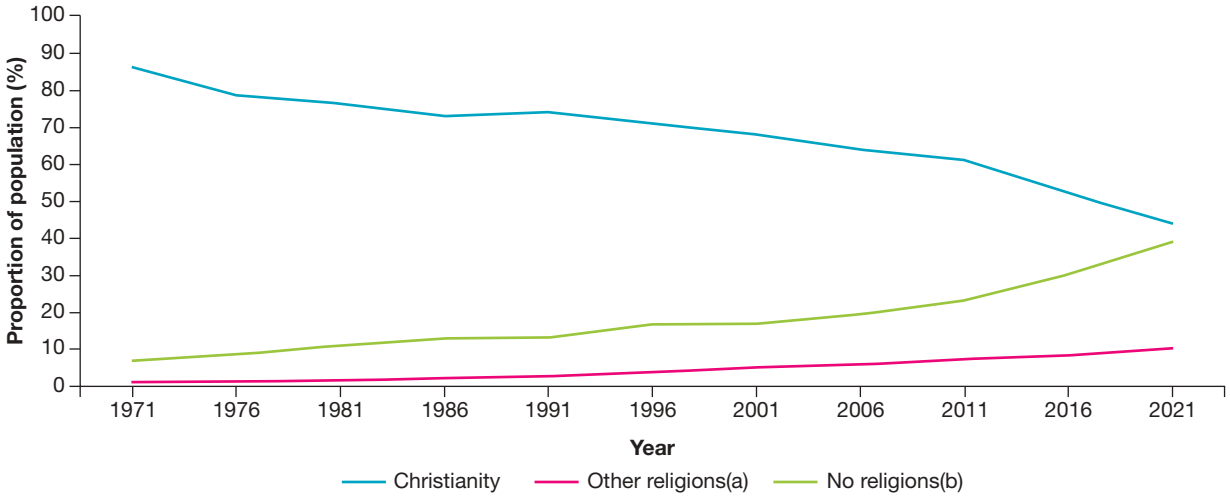
LEARNING INTENTION

By the end of this lesson you should be able to **understand** how religious observance plays a role in Australian society and politics.

Tune in

Over the past 50 years, there has been a steady change in religious affiliation among the population.

FIGURE 1 Change in religious affiliation over time



1. **Describe the changes in religious affiliation among the Australian population.**
2. **What other religions can you name?**
3. **Discuss the reasons for the changes.**

14.3.1 Secularism

Historically, religion and government were closely linked. Pharaohs in Egypt were seen as 'God-Kings', and European kings ruled by 'divine right'. Over time, people questioned religion's role in government, especially when it led to **persecution** or **discrimination** of other faiths.

Many governments have adopted a **secular** approach, separating religion from the state. In a secular society, religion does not influence laws, and all citizens are treated equally, regardless of faith. Australia's Constitution (Section 116) promotes religious freedom by ensuring that no law establishes or prohibits religion.

Despite this, religion and politics sometimes clash, sparking debates in society and parliament. Understanding this history is key to exploring recent debates.

14.3.2 Historical foundations of religion in Australian society

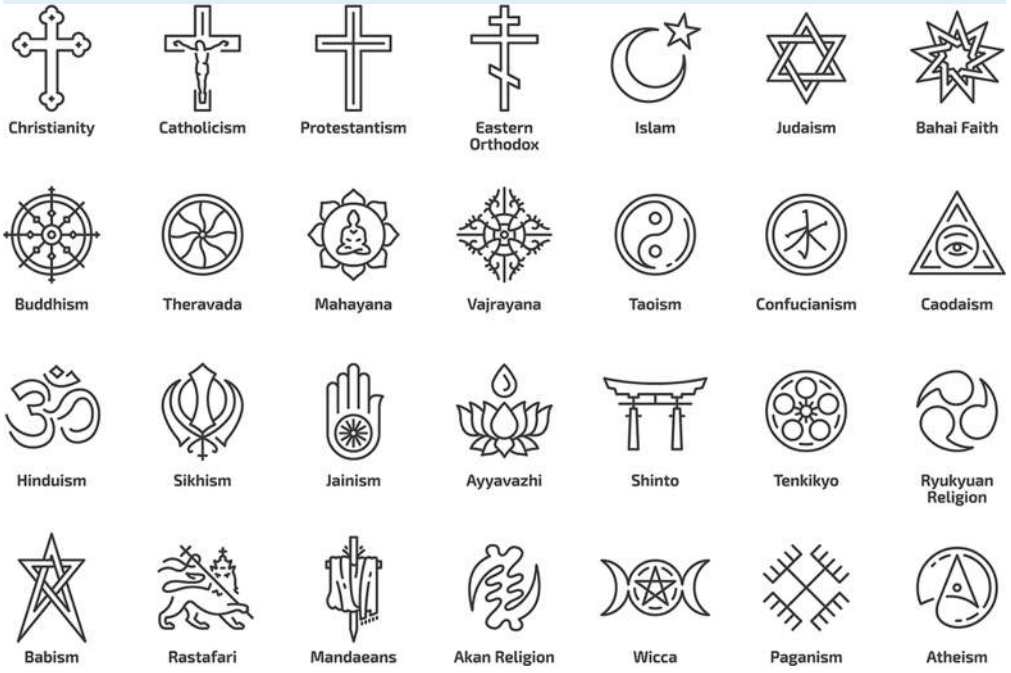
Since Europeans came to Australia, Christianity has been the dominant religion of our country. As the European influence over Australia spread, so too did the influence of Christianity. The vast majority of convicts and official members of the First Fleet identified as Christian. Specifically, they were Anglican and, therefore, aligned with the Church of England. The popularity of Catholicism increased as transportation to the colonies continued. It has since been estimated that there are now over 100 different religious affiliations in Australia.

SkillBuilder discussion

Investigating contemporary Civics and Citizenship issues

1. How many of these symbols do you recognise? Which do you know about?
2. Identify which religion's symbol is represented by a crescent moon and star.
3. Name the religion associated with the Om symbol.

FIGURE 2 Symbols of some of the different faiths that are practised in Australia



More recent data on religious affiliation reveals some of the more dominant religions practiced in Australia today. These are again a reflection of where settlers in Australia have come from. Interesting is the near 40 per cent of people who are atheists and do not believe in a god or organised religion.

TABLE 1 A summary of some of the major religions

Religion	Historical context	2021 Census percentage
Christianity	Dominant since European settlement; most First Fleet convicts and officials were Anglican; Catholicism grew as more Europeans settled in Australia	43.9%
Judaism	One of the first religions in colonial Australia; Jewish convicts arrived with the First Fleet; increased immigration during the gold rush and after WWII	0.4%
Buddhism	First Buddhists were Chinese immigrants during the gold rush; Sri Lankans arrived in the 1870s; popularity grew from the 1970s with Asian immigration	2.4%
Islam	Known to Islamic scholars by 820 CE; Aboriginal and Torres Strait Islander Peoples traded with Macassans; modern immigration began with Afghan cameleers in the 1860s; grew after the White Australia Policy ended in 1973	3.2%
Hinduism	Arrived in the mid-nineteenth century; early immigrants were labourers, camel drivers, domestic staff and merchants; growth slowed by the White Australia Policy; popular among Indian, Sri Lankan, Fijian and South African immigrants	2.7%
Atheism	Religion not important to all Australians; atheists do not believe in a god or religion	38.9%

Source: Data from the Census of Population and Housing — ***Religious Affiliations*** in Australia, 2021, Table 1: Religious Affiliation (religious groups) — 2016 and 2021.

14.3.3 Influence of religion on Australian politics and legal systems

Religion has long influenced Australian law. Former High Court Judge, Michael Kirby, stated that Australian law was shaped by values shared with Christian churches (ABC Radio, 16 May 2012). Although Christianity is not directly referenced in the law, Christian values like those in the Ten Commandments, such as forbidding murder and theft, have impacted it.

More recently, religion has sparked debates on LGBTQIA+ rights. The Australian Liberal Party opposed marriage equality until 2018, based on a perceived belief that the Christian Bible forbids same-sex marriage. In 2022, Scott Morrison's Liberal Government's Religious Discrimination Bill added to the controversy. This issue will be explored further in the Inquiry activity later in the topic.

SkillBuilder discussion

Investigating contemporary Civics and Citizenship issues

1. Why might a Minister bring a Bible to Parliament House?
2. Discuss what this might mean or symbolise.

FIGURE 3 In 2022, Minister Bob Katter signed his Bible at Parliament House.

14.3.4 Aboriginal and Torres Strait Islander Peoples' spirituality

Aboriginal and Torres Strait Islander Peoples' spirituality is still misunderstood in Australia, to some extent. Spirituality is central, with the world seen as animistic, meaning that all things are connected. Humans are part of nature, not above it. Totemism is key, with natural objects representing clans, passed down through generations. Each clan protects their totem.

SkillBuilder discussion

Investigating contemporary Civics and Citizenship issues

1. Describe the purpose of smoke in an Aboriginal and Torres Strait Islander Peoples' smoking ceremony.
2. Explain how the body paint relates to the smoking ceremony's meaning.
3. Identify the cultural role the smoking ceremony serves in Aboriginal and Torres Strait Islander communities.

FIGURE 4 A traditional Aboriginal and Torres Strait Islander Peoples' smoking ceremony

Today, Acknowledgement of Country or Welcome to Country is commonly practised at community events. Government events often include Aboriginal and Torres Strait Islander leaders and customs like smoking ceremonies, honouring their culture and identity.

14.3 SkillBuilder activity **INVESTIGATING CONTEMPORARY CIVICS AND CITIZENSHIP ISSUES**

Complete research in pairs or table groups to answer the following questions:

1. Which religions have grown over the past 15 years?
2. Why has the number of Australians without religion increased? **Suggest** why you think this has happened.
3. **Predict** future trends: Will religious observance in Australia rise or fall? Explain your reasoning.

14.3 Exercise

learnon

Learning pathways

Level 1	Level 2	Level 3
1, 2, 3, 4	6, 7, 8	5, 9, 10

REMEMBER AND UNDERSTAND

1. **Identify** the correct definition of 'multiculturalism'.
   - A. A society where multiple cultures coexist and are encouraged
   - B. A society where individual differences are not accepted
   - C. Movement of people for political, cultural or economic reasons
   - D. When a smaller community merges with a larger one

2. What concept did European kings use to claim the throne?
   A. Royal right
   B. Birth right
   C. Divine right
   D. Legal right
3. Immigration refers to the movement of _____ from one _____ to another, usually for political, cultural, environmental or _____ reasons.
4. **Identify** the two benefits of a secular nation.
5. **Explain** how animism and totemism are part of Aboriginal and Torres Strait Islander Peoples' spirituality.

ANALYSE AND APPLY

6. **Identify** and explain one positive influence of religion on society.
7. **Identify** and explain one negative influence of religion on society.

EVALUATE AND COMMUNICATE

8. Should the government influence religious observance in Australia? **Justify** your response.
9. How can Aboriginal and Torres Strait Islander Peoples' spirituality be better represented in society? **Suggest** some ways.

Answers and sample responses for this topic are available online.

LESSON 14.4 How do we promote cohesion in Australian society?

LEARNING INTENTION

By the end of this lesson you should be able to **explain** how our values promote cohesion in Australian society.

Tune in

Sikh Volunteers Australia exemplifies how a community's values can benefit society.

Sikh Volunteers Australia is a registered charity and a non-profit volunteer organisation focusing on reducing distress in the community by providing free food to disadvantaged and needy individuals/families.

1. **Visit the Sikh Volunteers Australia website. Find out what this organisation does.**
2. **Discuss why this example has been used to introduce Australian values.**

FIGURE 1 Sikh volunteers march during an Australia Day parade in Melbourne.

14.4.1 What are values?

Values guide how we live. Compassion strengthens bonds, and honesty builds trust, shaping personal and community identity. Differences in values can divide people, as seen in political debates, but shared values unite us.

We often choose friends or connect with others through shared values, like favourite bands or teams, just as communities or even entire countries bond over common values.

14.4.2 Do unique Australian values exist?

Defining a single set of values for a diverse country like Australia is difficult. However, terms like 'a fair go', 'mateship', 'freedom' and 'equality' are often used. All visa applicants must sign the Australian Values Statement (see **FIGURE 2**).

SkillBuilder discussion

Evaluating democratic institutions and systems

1. State what visa applicants must do according to the Australian Values Statement.
2. Identify the national language mentioned.
3. Discuss the rights and responsibilities of Australian citizenship. Are they fair?

FIGURE 2 All new visa applicants are required to sign the Australian Values Statement. The below shows the values statement for permanent visa applicants.

Australian Values Statement

You must sign this statement if you are aged 18 years or over.

I confirm that I have read, or had explained to me, information provided by the Australian Government on Australian society and values.

I understand that Australian society values:

- *respect for the freedom and dignity of the individual;*
- *freedom of religion ...;*
- *commitment to the rule of law ...;*
- *parliamentary democracy ...;*
- *equality of opportunity for all people, regardless of their gender, sexual orientation, age, disability, race, or national or ethnic origin;*
- *a 'fair go' for all that embraces:*
  - *mutual respect;*
  - *tolerance;*
  - *compassion for those in need;*
  - *equality of opportunity for all;*
- *the English language as the national language and as an important unifying element of Australian society.*

I undertake to make reasonable efforts to learn the English language, if it is not my native language.

I understand that, if in the future I meet the legal qualifications for becoming an Australian citizen and my application is approved, I will need to pledge my loyalty to Australia and its people.

Signature of Applicant

14.4.3 How well are values and traditions reflected in Australian society?

Many Australians believe we are tolerant, compassionate and inclusive. Is this true?

Australia's Social Progress Index score (one of the world's largest curated collections of social and environmental data) has generally reflected a high level of social progress, ranking it among the top nations globally. The country is seen to excel in areas such as access to basic knowledge, personal rights and **inclusiveness**.

Inclusive Australia's reports have more recently indicated that the country ranks highly on the Social Progress Index, with many Australians considering their society to be tolerant, compassionate and inclusive, aligning with the values and traditions upheld in the nation. However, reports in 2022 suggested that Aboriginal and Torres Strait Islander Peoples surveyed experienced major discrimination and religious and racial groups were still targeted by some of the highest levels of prejudice in Australia.

14.4 SkillBuilder activity PARTICIPATING IN CIVIC PROCESSES

Can you foster cohesion and inclusion in your classroom with shared values while respecting diversity?

1. Work in groups to create a class values statement.
2. Present and **explain** the statement, ensuring everyone participates.
3. Be prepared to defend your statement or be ready to answer questions and adjust values based on feedback.
4. After all presentations, reach a consensus on one shared class values statement.
5. **Discuss**: Are these values uniquely Australian? **Justify** your answer.

FIGURE 3 Does your classroom community have a common set of shared values?

14.4 Exercise

learnon

Learning pathways

Level 1	Level 2	Level 3
1, 2, 3, 4, 5	6, 7, 8	9, 10

REMEMBER AND UNDERSTAND

1. What are values?
   - A. Law change proposals
   - B. Principles of behaviour
   - C. Fair treatment of citizens
   - D. Community unity

2. Who must sign the Australian Values Statement?
   A. All Australians
   B. Australian politicians
   C. Australian visa applicants
   D. Australian job applicants
3. **Identify** two values the Sikh community shows by volunteering to help.
4. **Name** two Australian values. Do other countries share these values? **Explain**.
5. How can values both unite and divide us? **Explain**.

ANALYSE AND APPLY

6. **Explain** why visa applicants must sign the Australian Values Statement.
7. Do you disagree with any values in the statement? **Justify** your opinion.
8. Are any important values missing from the statement? **Justify** your opinion.

EVALUATE AND COMMUNICATE

9. **Compare** the findings of the Social Progress Index and the Face Up to Racism report.
10. **Create** a meme for social media that celebrates diversity at a local school or community centre.

Answers and sample responses for this topic are available online.

LESSON 14.5 Inquiry: Will the Religious Discrimination Bill protect us?

LEARNING INTENTION

By the end of this lesson, you should be able to:

- understand whether Religious Discrimination Bill will protect us all
- communicate either your support for or opposition to it.

Background

Australians have faced some challenging debates in recent years about how we live together as a community. From the Voice referendum in 2023 to ongoing discussions about religious freedom, we've seen how complex it can be to respect everyone's rights and beliefs. One important example of these challenges happened during Scott Morrison's time as Prime Minister, when he introduced the Religious Discrimination Bill in 2018.

FIGURE 1 Some members of Australia's LGBTIQA+ community opposed then-Prime Minister Scott Morrison's proposed Religious Discrimination Bill.

This bill sparked significant debate because it highlighted a challenging question: how do we protect both religious freedoms and the rights of LGBTIQA+ people? The case of a student named Skye helps us understand what was at stake. When Skye was denied the right to wear a dress at her religious school, it showed how laws like this affect the lives of real people. It wasn't just about school uniforms; it was about

finding a balance between religious beliefs and personal identity in our diverse Australian society. The debate sparked controversy, with many parliamentarians, like Stephen Jones MP, expressing concerns provided in **FIGURE 2**.

These discussions continue to shape how we think about fairness, respect and community in Australia today. As we explore this topic, we'll look at different views on the Religious Discrimination Bill and think about what it means to protect everyone's rights equally.

FIGURE 2 Stephen Jones' speech to Parliament on the Religious Discrimination Bill

But the fact is Australia is a much more diverse place than we project from our pulpit in this place. Being an Aussie is much more complex than punting on the Melbourne Cup or shouting 'go Sharkies'. It is the high responsibility of us called to this place to reflect and shape the sort of Australia we want to have. It's a bloody diverse place. It is black and white and brown. It prays in a church, in a mosque, at a shrine, in a hall, or on a surfboard just behind the breaking waves. It's men and women, it's straight and gay and trans and intersex . . . the whole bloody lot.

(This is an edited transcript of a speech given to parliament during the debate on the government's Religious Discrimination Bill on Thursday 9 February 2022.)

Before you begin

Access the **Inquiry rubric** in the Resources panel for guidance. Use it to complete the task and self-assess at the end.

Inquiry steps

Step 1: Create a campaign

Support or oppose the Religious Discrimination Bill with a poster or a 40- to 60-second clip to persuade the public.

Step 2: Question and research

- Refine the question: 'Will the Religious Discrimination Bill protect us all?'
- Explore perspectives using the Ian Thorpe campaign and Scott Morrison's speech.

Step 3: Analyse and evaluate

- Assess arguments for and against the Bill, considering its strengths, valus, rights and justice.

Step 4: Participate

- Collaborate to decide your message, plan and ensure all participate.

Step 5: Communicate

- Present your campaign, receive feedback and self-assess using the Inquiry rubric.

LESSON 14.6 Review

14.6.1 Key knowledge summary

14.2 Australia's diverse society

- Australia's cultural diversity shapes its identity.
- Embracing diversity strengthens social cohesion, with knowledge fostering tolerance.

14.3 What role does religion play in Australian society?

- Australia is secular, promoting religious freedom.
- Migrants bring religious beliefs and traditions.
- Aboriginal and Torres Strait Islander Peoples' spirituality remains underrepresented in Australian culture.

14.4 How do we promote cohesion in Australian society?

- Values guide living a good life.
- Shared values promote unity, while differing values can divide.
- Australian values reflect the nation's diverse backgrounds.

14.5 Inquiry: Will the Religious Discrimination Bill protect us?

- Legislation must protect everyone's rights.
- Religious views can impact political decisions.

14.6.2 Key terms

cultural intolerance when individual differences are not accepted by others
discrimination unfair or prejudicial treatment of people and groups based on race, gender, age or sexual orientation
diverse showing a great deal of variety
inclusiveness providing equal access to opportunities and resources for everyone
multiculturalism a society in which the cultures and traditions of many different groups coexist and are encouraged
persecution hostility, violence or ill-will directed at a person or group of people on the basis of their personal characteristics
perspective a particular attitude towards or way of regarding something
secular not having a connection to religion
social cohesion the degree to which communities are united by shared values, traditions and experiences
tribalism behaviour and attitudes that stem from strong loyalty to one's own social group, sometimes in opposition to other groups
values principles that help you to decide what is right and wrong, and how to act in various situations
White Australia Policy informal name for the *Immigration Restriction Act 1901*, which effectively prevented non-European immigration to Australia

14.6.3 Reflection

Complete the following to reflect on your learning.

Reflect on your learning by revisiting the inquiry question from the Overview:

How is Australia a diverse society, and what factors contribute to a cohesive society?

1. Has this topic changed your perspective on the question? How?
2. Write a paragraph responding to the inquiry question.

learnon

Post-test	Online post-test
eWorkbooks	Customisable worksheets for this topic Reflection
Digital document	Key terms glossary

14.6 Review exercise

Learning pathways

Level 1	Level 2	Level 3
1, 5, 6, 7, 9	2, 4, 8, 12	3, 10, 13, 14

REMEMBER AND UNDERSTAND

1. What characterises Australian society?
   A. Age
   B. Gender
   C. Diversity
   D. Size
2. In a tolerant society, cultural differences
   A. are hard to identify.
   B. are easy to identify.
   C. pull people together.
   D. push people apart.
3. What is a benefit of cultural diversity?
   A. Learning about other cultures
   B. Learning about yourself
   C. Appreciation for living conditions
   D. All of the above
4. A secular country is one where
   A. religion is part of life.
   B. religion is part of government.
   C. religion is separate from government.
   D. religion is not allowed.
5. Religious freedom in Australia is protected by
   A. the Constitution.
   B. the Bill of Rights.
   C. the Royal Assent.
   D. the Parliament.

6. According to the latest census, the most practised religion in Australia is
   A. Christianity.
   B. Islam.
   C. Hinduism.
   D. Judaism.
7. _____ are like instructions for how to act and live your life.
   A. Traditions
   B. Values
   C. Customs
   D. Beliefs
8. Which is not a value from the official Australian Values Statement?
   A. Freedom of religion
   B. Tolerance
   C. Gender equality
   D. Mateship
9. What happens if migrants only associate with their own communities?
   A. They will be bored.
   B. They won't gain exposure to other cultures and values.
   C. They won't make new friends.
   D. They will forget their own culture.
10. What was the outcome of the Religious Discrimination Bill debate in February 2022?
   A. Passed by parliament.
   B. Voted down by parliament.
   C. Withdrawn from parliament.
   D. Still being debated.

ANALYSE AND APPLY

11. Based on your experiences, do you think cultural tolerance exists in Australian society?
12. How is secularism protected in Australia, a secular nation?

EVALUATE AND COMMUNICATE

13. To what extent do you agree that shared values increase social cohesion?
14. **Evaluate** the presence of Aboriginal and Torres Strait Islander cultures in Australian identity. Give two examples.

Answers and sample responses for this topic are available online.

15 Economics and Business concepts and skills

LESSON SEQUENCE

15.1 Overview 532
15.2 Economics and Business concepts and skills 534
15.3 SkillBuilder: Investigating ..... online only
15.4 SkillBuilder: Interpreting and analysing data and information ..... online only
15.5 SkillBuilder: Evaluating, concluding and decision-making ..... online only
15.6 SkillBuilder: Communicating ..... online only
15.7 Review 541

LESSON 15.1 Overview

INQUIRY QUESTION

How do free markets operate, and what are the different ways Australians can earn an income in the changing landscape of contemporary and future work?

Have you purchased food today? Have you used electricity, caught public transport or been driven in a car? Do you have a bank account, or have you sent a text to a friend? If you answered yes to just one of these questions, you have been involved in the world of **Economics** and **Business**.

When we buy goods and services, deposit money in a bank account or obtain a casual (or, in the future, a more permanent) job, we are contributing to the economy.

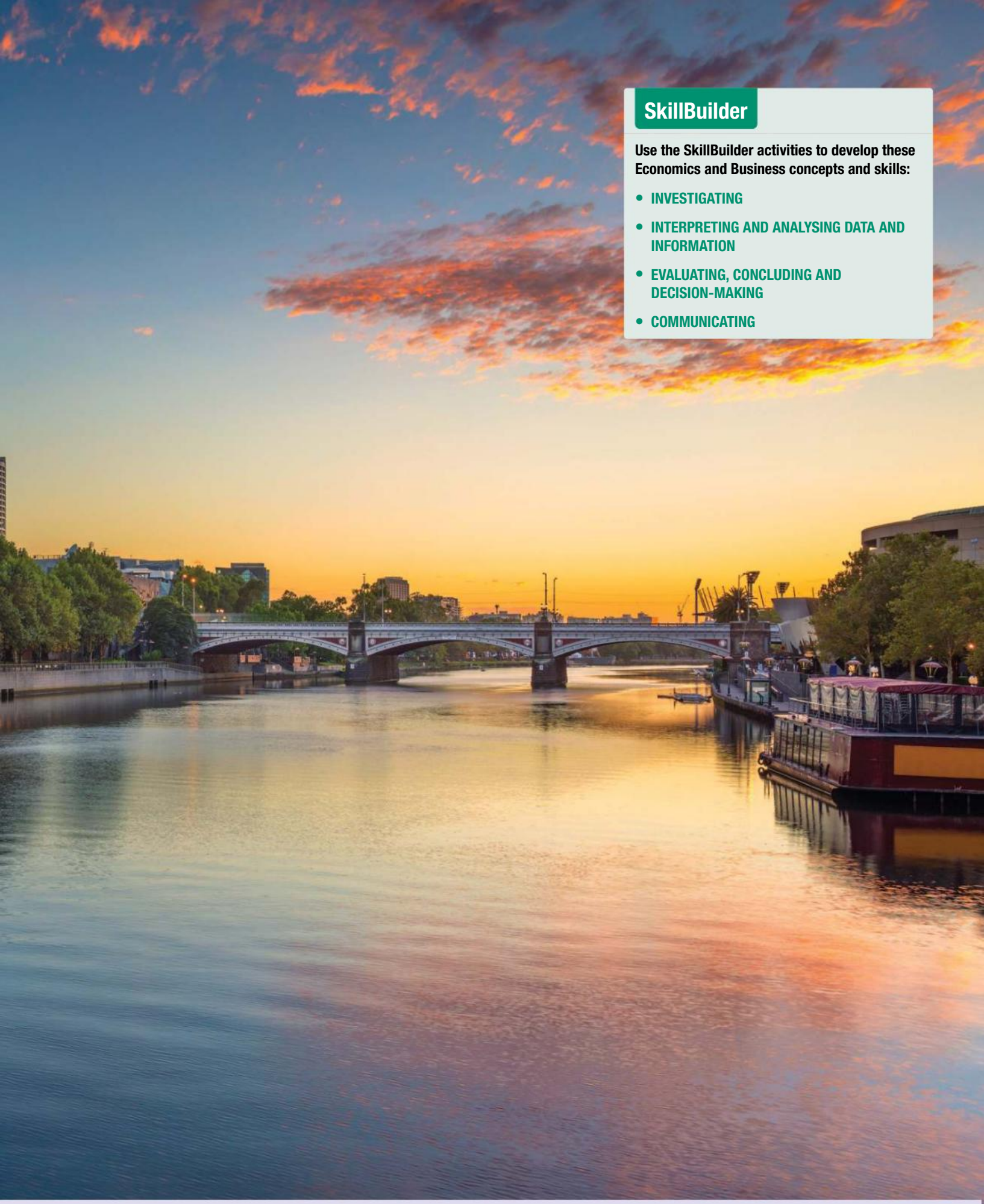
The focus of topics and lessons in Year 7 is on how free markets work, the different categories of business, and the rights and responsibilities of the **market**. Studying Economics and Business in Year 7 also allows us to understand the different ways Australians may earn an income, the nature of work in contemporary Australia and the future of work.

learnon

eWorkbook
Customisable worksheets for this topic

Digital document
Key terms glossary

Video eLesson
Economics and business concepts and skills



SkillBuilder

Use the SkillBuilder activities to develop these Economics and Business concepts and skills:

- INVESTIGATING
- INTERPRETING AND ANALYSING DATA AND INFORMATION
- EVALUATING, CONCLUDING AND DECISION-MAKING
- COMMUNICATING

LESSON 15.2 Economics and Business concepts and skills

LEARNING INTENTION

By the end of this lesson you should be able to **explain** Economics and Business concepts and skills.

15.2.1 Introduction

Economics and Business is about understanding how people use **resources** and make decisions. Economics looks at how goods and services are produced, distributed and consumed. It explores concepts like supply and demand, prices and how markets work. Business focuses on how companies operate, make profits, and provide goods and services. It includes topics like marketing, management and finance. Together, Economics and Business helps us understand how the economy functions and how businesses contribute to society. This knowledge is useful for making informed decisions in everyday life and for future careers.

15.2.2 Economics and Business concepts

There are five concepts that underpin Economics and Business.

TABLE 1 The concepts you will use in Economics and Business.

Concept	Description
Understanding work and business	Learn about how businesses work in Australia, what affects their decisions and why entrepreneurship is important.
Resource allocation and decision-making	Understand how resources are used, what opportunity cost is and how economic decisions are made. Apply these ideas to the economy, business, work and being a smart consumer.
Being an active participant	Know why it's important to be involved in the economy by working, running a business, being financially smart and making informed decisions.
Key issues in Australia	Appreciate the main economic and business issues in Australia and understand how Australia interacts with the global economy, especially Asia.
Reasoning and problem-solving	Develop skills to apply economic and business concepts to real-world issues, solve problems and make economic decisions.

Understanding work and business

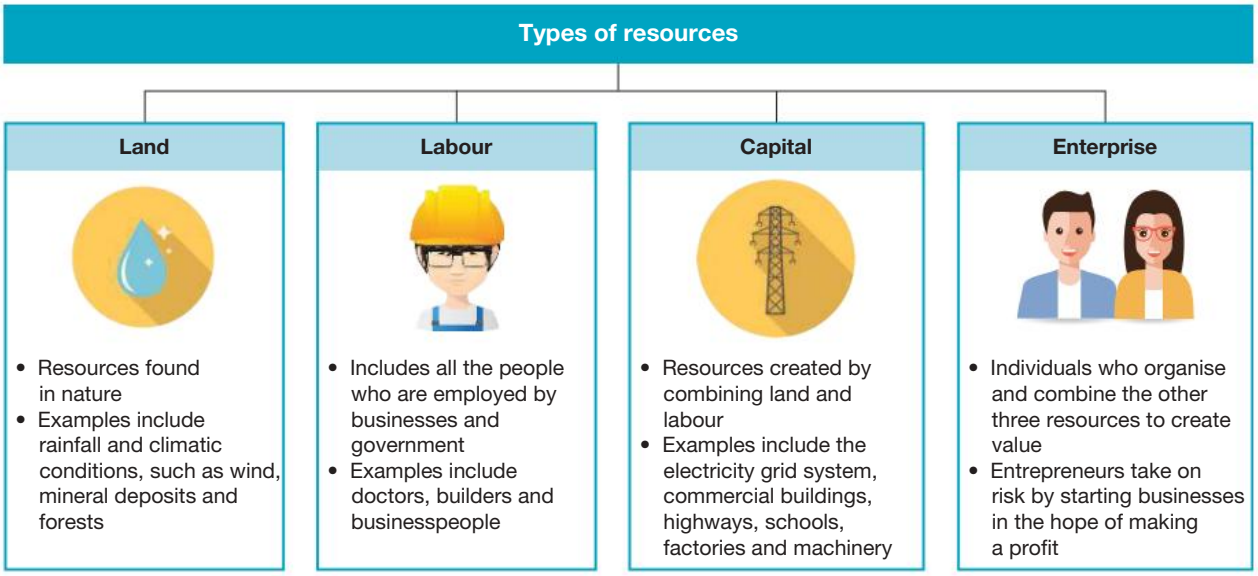
In Australia, there are many different types of work and businesses. People work for various reasons, such as earning money, gaining skills and contributing to society. Businesses play a crucial role in the economy by providing goods and services, creating jobs and driving innovation.

Entrepreneurs are important because they start new businesses and bring fresh ideas to the market. Aboriginal and Torres Strait Islander Peoples have made significant contributions to the workforce and the entrepreneurial landscape in Australia.

Understanding the different types of work, the reasons people work and the role of businesses helps us appreciate how the economy functions and the opportunities available in Australia.

To satisfy our **needs** and **wants**, businesses use resources to produce goods and services. The four main types of economic resources are land, labour, capital and enterprise.

FIGURE 1 The four main types of economic resources are land, labour, capital and enterprise.



Economic **scarcity** means that we need to make choices. We cannot produce an unlimited or infinite number of goods and services because we do not have an infinite amount of resources. We cannot buy an unlimited number of goods and services because we do not have unlimited amounts of money either. We need to make choices about how scarce resources are used. Making choices about alternatives is an important part of economics, as is explaining how economic resources might be used more sustainably.

Opportunity cost

Every choice we make has an **opportunity cost**, which is the next best thing we give up. For example, if a student spends money on sushi, they can't spend it on a sandwich. The opportunity cost is the sandwich they didn't buy.

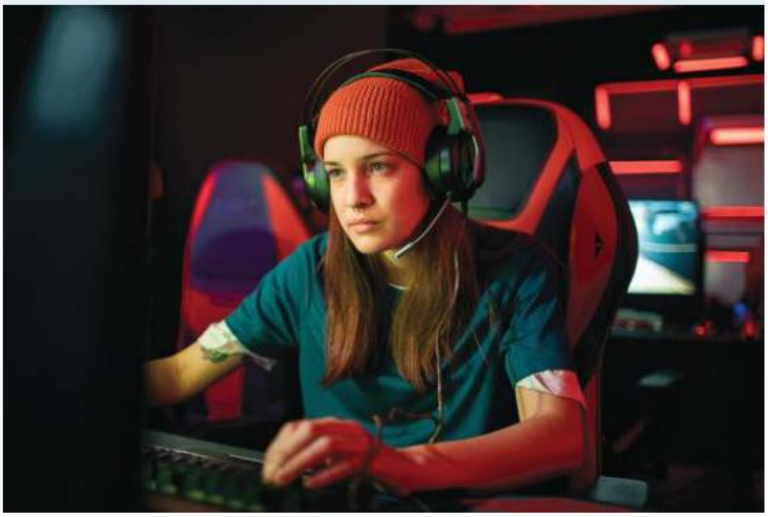
Consumers, businesses and governments all face opportunity costs. Consumers decide how to spend their money and time. Businesses choose what products to make and who to sell them to. Governments decide how to manage the economy. Understanding opportunity cost helps us make better decisions.

SkillBuilder discussion

Communicating

1. Mind-map with a partner some of the opportunity costs that you, or someone you know, may have faced within the week?
2. Discuss how these decisions can be complicated

FIGURE 2 The cost of purchasing a video game includes the opportunity cost of the alternative decision given up. For example, the money could have been spent on a new T-shirt.



SkillBuilder discussion

Investigating

1. Think of and list some of the weird and wonderful things that you can buy.
2. How do you think businesses decide on what to produce?

All individuals, business and economies must decide how they will use their scarce resources to satisfy their unlimited needs and wants. Making decisions about how we will use resources is known as **resource allocation**. Our society has developed an **economic system** to make choices that will solve the basic economic problem. Remember, that basic economic problem is scarcity.

An economic system is simply the way we organise the production and distribution of our goods and services. All economic systems must answer three basic economic questions: what to produce? how to produce? for whom to produce? These questions are summarised in **FIGURE 3**.

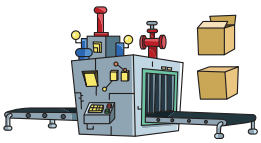
FIGURE 3 All economic systems must answer three basic economic questions.

Three basic economic questions

1. What to produce?

- Decisions must be made about what goods and services are to be produced and in what quantities.
- Should we produce cars or trucks, televisions or radios, beef or lamb and how many of each?

2. How to produce?



- Decisions must be made about how we produce goods and services.
- Do we use mostly labour or do we make use of technology and machinery?

3. For whom to produce?

- Decisions must be made about who will get the goods and services produced.
- Does the first person in line get the good or service? Do goods and services go to those who need them the most?

Being an active participant

Being an active participant in the economy isn't just about having a job or running a business, it's about being engaged and making informed choices that impact both your personal financial health and the broader economic landscape. Whether you're working, operating a business or simply making day-to-day financial decisions, your actions contribute to the vitality and stability of the economy.

To be an active participant, consider the roles you play: as an employee, you contribute through your labour and skills; as a business owner, you drive innovation and create jobs; as a consumer, your spending habits influence market trends. Financial literacy is crucial in all these roles, enabling you to make informed decisions, understand the consequences of those decisions, and ultimately, help build a more robust and resilient economy. Embracing this proactive approach not only benefits you personally but also helps address key issues in Australia and enhances reasoning and problem-solving skills.

Key issues in Australia

Australia faces several important economic and business issues that impact our daily lives. One key issue is the balance between economic growth and environmental sustainability. As we develop industries and create jobs, we also need to protect our natural resources and reduce pollution. This balance is crucial for ensuring a healthy future for both the economy and the environment.

Another significant issue is the role of technology in the workforce. Automation and artificial intelligence are changing the types of jobs available and the skills needed to succeed. This means that education and training are more important than ever to prepare for the future job market.

FIGURE 4 A busy fresh fruit and vegetable market with people participating as buyers and sellers.

Australia is also closely connected to the global economy, especially with countries in the Asia region. Trade with countries like China, Japan and South Korea is vital for our economy. These relationships help us access new markets for our goods and services, but they also mean that global events can impact our economy.

Understanding these issues helps us see how Australia fits into the bigger picture and why it's important to make informed decisions about our future.

Reasoning and problem-solving

The development of reasoning and problem-solving skills are essential components of education. These skills are crucial for you to be able to navigate complex economic situations, make informed business and consumer decisions, and tackle any challenges effectively.

Reasoning skills involve the ability to think logically, evaluate evidence and draw sound conclusions.

Problem-solving skills focus on identifying issues, generating potential solutions and implementing effective strategies to resolve problems.

15.2.3 Economics and Business skills

In addition to the concepts in Economics and Business, you will also develop four key skills.

TABLE 2 The four Economics and Business skills that you will develop in Year 7.

Skill	Description
Investigating	Develop and apply questions to investigate contemporary economic, business, work or financial issues and systems; locate, select and organise relevant data and information from a range of sources
Interpreting and analysing data and information	Construct, interpret and draw conclusions from graphs, models and text to identify and describe economic and business issues, trends and cause-and-effect relationships; analyse and verify sources of data and information
Evaluating, concluding and decision-making	Analyse a response to an economic, business, work or financial issue, identifying potential costs and benefits
Communicating	Create and present descriptions and explanations, using subject-specific knowledge and terminology, with reference to sources

15.2 SkillBuilder activity EVALUATING, COMMUNICATING AND DECISION-MAKING

Investigating opportunity cost in sport

1. Read each scenario and **identify** the opportunity costs (the next best alternatives that the tennis player is potentially giving up).
   a. Entering major Grand Slam, where winning could earn significant ranking points and prize money. This is scheduled for the same month as a smaller local tournament
   b. Participation in an exhibition match with a famous player, which would surely gain publicity.
2. A tennis player has the opportunity to sign a lucrative sponsorship deal with a sports brand. However, the contract requires them to wear the brand's gear exclusively for the next two years, limiting their freedom to choose other endorsements. The deal offers significant financial gain but restricts the player's flexibility.
   a. What are the benefits of signing the sponsorship deal?
   b. What is the opportunity cost of signing the deal (i.e., what is the player giving up)?
   c. What are the benefits of not signing the sponsorship deal?
   d. What is the opportunity cost of not signing the deal?
3. **Discuss** the impact of opportunity costs on decision-making in tennis, or any other sport of your choice.

FIGURE 5 The Australian Open tennis tournament can give us lots to discuss and even sporting scenarios can be linked back to economics.

15.2 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 3, 8	2, 4, 5, 9	6, 7, 10

REMEMBER AND UNDERSTAND

1. Why do people work?
   A. To avoid doing chores at home.
   B. To earn money and contribute to society.
   C. So they can go on holidays all the time.
   D. Because school tells them to.

2. What does ‘opportunity cost’ mean?
   A. The money spent on something cheap.
   B. The time it takes to buy something.
   C. The benefit you give up when choosing one option over another.
   D. The best option available at all times.
3. How can a young person be an active participant in the economy?
   A. Watching TV shows about money.
   B. Saving part of their pocket money or helping a family business.
   C. Ignoring how money is used at home.
   D. Only buying expensive things.
4. Which of these is a current economic issue in Australia?
   A. Too many zoos
   B. Lack of movie theatres
   C. Youth unemployment
   D. Not enough phone brands
5. Mia wants to buy a new bike but also needs to pay for her school camp. How should she decide what to do?
   A. Flip a coin.
   B. Ask a friend what they would do.
   C. Think about what is more important and what she can afford.
   D. Buy both without thinking about the cost.

ANALYSE AND APPLY

6. **Explain** the importance of investigation as a skill in Economics and Business.
7. **Describe** the steps involved in collecting and organising data for an investigation.
8. How can interpreting information in a graph help in making business decisions?
9. What are the advantages of evaluating a business plan before starting a business?
10. **Discuss**, with examples, why is it important to communicate findings in an appropriate format for a particular audience.

Answers and sample responses for this topic are available online.

LESSON 15.3 SkillBuilder: Investigating

online only

How can I investigate an issue?

Use this lesson to develop your own questions and to investigate contemporary economic issues.

LESSON 15.4 SkillBuilder: Interpreting and analysing data and information

online only

How is data and information interpreted?

Learn how to infer information from different sources.

LESSON 15.5 SkillBuilder: Evaluating, concluding and decision-making

online only

What does it mean to evaluate an idea or policy?

Once you have investigated and analysed, you are on your way to identifying the costs and benefits of a decision. In this next step, you will develop a response to an issue.

LESSON 15.6 SkillBuilder: Communicating

online only

How can I communicate Economic and Business information?

Create informative, subject-specific presentations using Economics and Business terminology.

LESSON 15.7 Review

15.7.1 Key knowledge summary

Use this dot-point summary to review the content covered in this topic.

15.2 Economics and Business concepts and skills

- Resource allocation and decision-making involves the idea of 'scarcity'. Scarcity is the 'basic economic problem', and this involves society having limited resources available to satisfy unlimited needs and wants.
- The four main types of economic resources are land, labour, capital and enterprise.
- Every choice made involves an opportunity cost, which 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. This means economies must answer the three economic questions: what to produce? How to produce? And for whom to produce?
- Australia is a market capitalist economy, which means that most answers to the three economic questions are made by the market (where buyers and sellers negotiate prices for goods and services).
- The four Economics and Business skills that you will develop throughout your course are:
  - *Questioning and researching:* This involves posing statements that require answers, particularly in regard to what is known and what is not known, in order to improve your knowledge. Research is important because it allows you to find out what is unknown and contributes to filling in gaps in your knowledge.
  - *Interpreting and analysing:* This involves interpreting information to identify the main features or ideas, and then examining the information closely to determine how the parts relate to the whole.
  - *Evaluating, concluding and decision-making:* This involves proposing explanations for events or issues and making overall judgements based on the evidence.
  - *Communicating:* This 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 in this.

15.7.2 Key terms

business any activity conducted by an individual or individuals to produce and sell goods and services to make a profit
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
entrepreneur a person who takes on a risk by starting a business with an idea, hoping to make a profit through initiative and enterprise
franchise a business that gives the right to another person or business to sell goods or services using its name
market where goods, services or resources are exchanged between buyers and sellers
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 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
sole trader a person who owns and operates a business alone, taking full responsibility for its profits and losses
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

15.7.3 Reflection

Complete the following to reflect on your learning.

Revist the Inquiry question posed in the Overview.

How do free markets operate, and what are the different ways Australians can earn an income in the changing landscape of contemporary and future work?

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

learnon

eWorkbooks	Customisable worksheets for this topic
	Reflection
Digital document	Key terms glossary

15.7 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 4, 7, 10, 12	1, 6, 8, 11, 14	3, 5, 9, 13, 15

REMEMBER AND UNDERSTAND

1. What is one key issue in Australian economics?
   A. Financial literacy
   B. Business planning
   C. Balance between economic growth and environmental sustainability
   D. Reasoning and problem-solving skills
2. What best suits the role that technology plays in the workforce?
   A. It drives innovation and creates jobs
   B. It does not change the types of jobs available and the skills needed
   C. It influences market trends
   D. It helps develop reasoning skills
3. What is the primary learning intention of SkillBuilder: Investigating?
   A. To interpret and explain a graph
   B. To locate, select and organise relevant data and information
   C. To accurately evaluate a business plan
   D. To communicate findings using an appropriate format

4. Why is financial literacy crucial?
   A. It enables informed decisions and helps build a resilient economy
   B. It helps maintain quality service
   C. It drives innovation and creates jobs
   D. It influences market trends
5. What is the first good practice when investigating and collecting data?
   A. Evaluating the benefits and costs of something
   B. Creating specific research questions
   C. Communicating findings in a suitable format
   D. Making overall judgements based on evidence
6. What kind of trends can line graphs show?
   A. Market analysis
   B. Historical price records
   C. Patterns of change over time
   D. Business plans
7. Why is understanding the purpose of your investigation important?
   A. It helps maintain quality service
   B. It drives innovation
   C. It keeps focused and on track
   D. It influences market trends
8. How can interpreting a business plan best benefit a new business owner?
   A. It ensures steady stream of customers
   B. It helps make informed decisions
   C. It identifies the main features or ideas
   D. It evaluates the advantages and disadvantages
9. What is the significance of Australia's connection to the global economy?
   A. It drives innovation
   B. It influences market trends
   C. It prepares for the future job market
   D. It helps access new markets for goods and services
10. What is one approach suggested for presenting data in an investigation?
   A. Creating specific research questions
   B. Using tables, charts or graphs
   C. Evaluating evidence
   D. Making overall judgements

ANALYSE AND APPLY

11. **Explain** how the balance between economic growth and environmental sustainability affects Australia.
12. **Describe** the process of investigating price changes for a selected group of products.
13. **Explain** how automation and artificial intelligence impacts the workforce in Australia.
14. What are the advantages of communicating findings using case studies in economics and business?

EVALUATE AND COMMUNICATE

15. **Evaluate** how Australia's trade relationship with countries like China, Japan and South Korea influences its economy.

Answers and sample responses for this topic are available online.

LESSON 15.3 SkillBuilder: Investigating

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **locate**, **select** and **organise** relevant data and information from a range of sources as part of an investigation.

15.3.1 Tell me

While studying economics and business, you will develop the skill of investigating. Investigating includes collecting data from different sources about an economics or business issue. An example is looking at price rises for a group of products or property prices between different areas or periods of time, and then presenting the different data sources in a table. You will then be able to identify patterns and draw relevant conclusions.

To effectively investigate and collect data, it is good practice to do the following:

1. Understand the purpose of your investigation and what you want to achieve.
2. Next, create specific questions to guide your research. These questions keep you focused and on track.
3. Locate reliable information sources such as books, online data, government reports and credible websites.
4. As you gather data, take detailed notes and organise the information for easy analysis.
5. Finally, present the data in tables, charts, graphs or reports to highlight key patterns or differences.

15.3.2 Show me

Imagine that you have been asked to collect and organise data from various sources to investigate price rises for a selected group of products. By following the steps below, you'll develop the skills necessary to understand economic trends and make informed conclusions.

Step 1 — Identify the purpose of your investigation

Outline what you want to achieve. For example, you might want to understand how the prices of dairy products have changed over the last five years.

Step 2 — Create specific research questions

Create questions that will guide your investigation, such as:

- How have the prices of milk, cheese and butter changed over the past five years?
- Are there any noticeable patterns or trends in price changes?
  What factors could have contributed to these price changes?

Step 3 — Locate reliable information sources

Gather data from trusted sources such as:

- government reports on consumer prices
- market research publications
- online databases and reputable websites
- historical price records from retailers.

Step 4 — Collect and organise data

As you collect data, take detailed notes and organise the information in a way that makes it easy to understand.

TABLE 1 Price changes for 1 litre of full cream milk in a well-known Australian supermarket 2018–2025

Year	Milk
2018	$1.20
2019	$1.30
2020	$1.40
2021	$1.60
2022	$1.80
2023	$1.90
2024	$2.00
2025	$2.20

Step 5 — Analyse and present your findings

Present the collected data in tables, charts or graphs to show key patterns or differences. Draw relevant conclusions based on your analysis and prepare a report summarising your findings.

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.

15.3.3 Let me do it

Complete the following activity to practise the skill of investigating.

15.3 SkillBuilder activity

Choose three everyday items such as a loaf of bread, a packet of rice or flour, or a kilogram of fruit of your choice. Visit three different stores either in person or online (for example, a supermarket, a convenience store and a local market) and record the price of the chosen items at each location.

Discuss any price differences you observed and hypothesise reasons for these variations (for example, store location, brand, packaging). Present your information to your teacher and class.

LESSON 15.4 SkillBuilder: Interpreting and analysing data

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **interpret** and **explain** a graph.

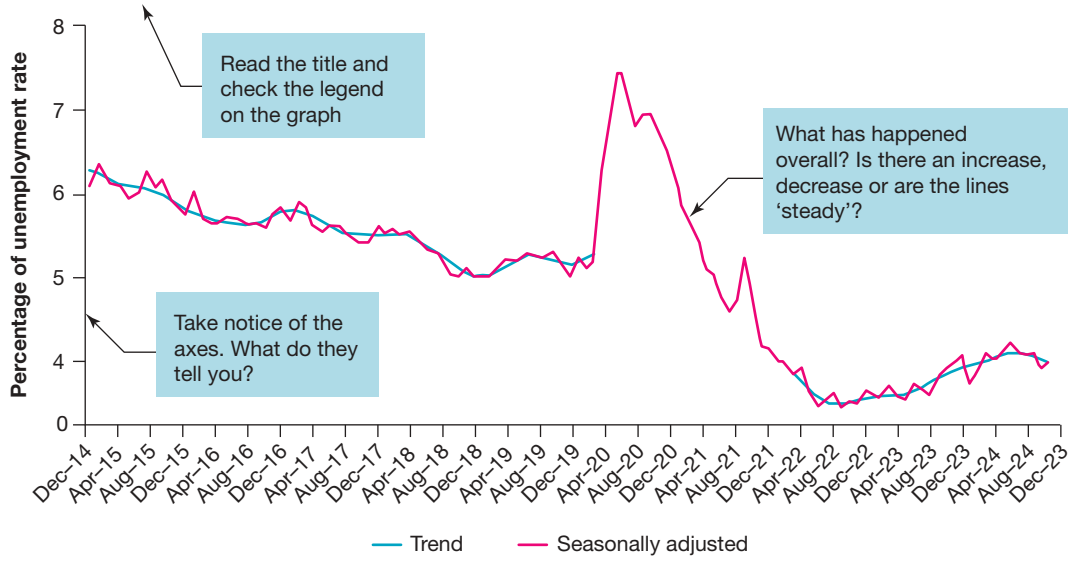
15.4.1 Tell me

Interpreting and analysing data and information is another skill that you will develop while studying economics and business. This skill involves studying information to identify the main features or ideas. You may also be able to determine how the parts relate to the whole. One way in which you might analyse data and information is by interpreting information in a graph.

15.4.2 Show me

Line graphs are very useful for showing trends (patterns of change over time) and comparing data. When analysing a line graph, first examine the heading — what does it tell you about the data contained in the graph? Next, examine the key, which identifies what each of the lines on the graph represents. Then look closely at the vertical and horizontal axes, which show you the variables as numbers, percentages, years and so on.

FIGURE 1 Unemployment for a 10-year period in Australia



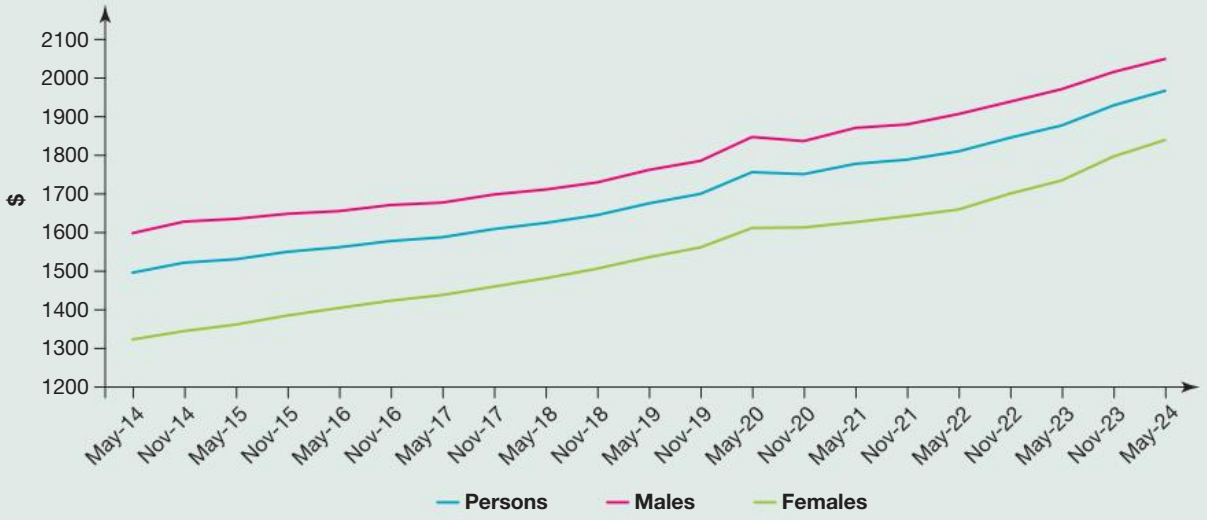
When reading the lines on a graph, you should be able to see an overall picture of what is happening; that is, whether a particular variable has increased, decreased or remained steady over time. Examine these lines closely — what changes do you see? If change has occurred over time, has it been steady and gradual, or sudden and erratic? When examining a line graph, note any patterns that you identify. You will then be ready to complete your interpretation, which involves writing a paragraph to summarise the information you have found in your analysis.

15.4.3 Let me do it

Complete the following activity to practise the skill.

15.4 SkillBuilder activity

Analyse and interpret the following graph. Use what you have learned about the line graph (vertical axis and horizontal axis and variables) to analyse what the graph tells you. Write a paragraph describing the trends shown.



LESSON 15.5 SkillBuilder: Evaluating, concluding and decision-making

LEARNING INTENTION

By the end of this SkillBuilder you should be able to **evaluate** a business plan.

15.5.1 Tell me

Evaluating is making overall judgements based on evidence. This is a skill that you might develop in economics and business by looking at the benefits or advantages of something and then also considering the costs or disadvantages of something. In this lesson we will evaluate a business plan.

15.5.2 Show me

TABLE 1 Business plan for a Sunny Café

Section	Details
Business name	Sunny Café
Location	Main Street, Ballarat
Owner	Alex Johnson
Mission statement	Provide a warm and inviting place for the community to enjoy delicious coffee, fresh pastries, and friendly service

Products and services	Coffee: espresso, cappuccino, latte, iced coffee Pastries: croissants, muffins, cookies Snacks: sandwiches, salads
Market analysis	Serve local community including students, workers and families Location on Main Street ensures steady stream of customers
Marketing strategy	Social media: Instagram, Facebook Flyers and posters Special offers: 'Buy One Get One Free on coffee'
Financial plan	Startup costs: $10 000 Monthly expenses: $2000 Monthly revenue goal: $5000 Profit: $3000 per month
Conclusion	Sunny Café aims to be the go-to spot in Ballarat for a great cup of coffee and a relaxing atmosphere

Alex's business plan is a good one. However, it is not perfect. And it still needs to be evaluated. An evaluation will include looking at the advantages and disadvantages of the plan. The process has been started for you.

Advantages	Disadvantages
Well-defined financial plan with clear start up costs and profit goals	The start up costs could be broken down further. What do the start up costs actually include?

15.5.3 Let me do it

Complete the following activities to practise this skill.

15.5 SkillBuilder activity

1. List the benefits or strengths you can see for the business plan. For example, Alex is planning to operate as a **sole trader** — this type of business is very suitable if Alex wants to maintain full control of the business and wants to keep all the profit.
2. Next, **identify** the limitations that you can see in the business plan. For example, operating as a sole trader means that the business is very reliant on Alex being able to operate the business every day.
3. Finally, what do you think? Should Alex go ahead with the business? Write down an evidence-based conclusion.

LESSON 15.6 SkillBuilder: Communicating

LEARNING INTENTION

By the end of this SkillBuilder you should be able to communicate findings or show information using an appropriate format for a particular audience.

15.6.1 Tell me

When we communicate something, we are often using information and presenting it in a different format. We also aim to make it interesting for whoever we are going to show it to.

15.6.2 Show me

The case study below has information from a variety of sources including the boost juice website. The information has been organised into sections and contains dot points to highlight key achievements.

CASE STUDY

Boost Juice

Who is Boost Juice?

Boost Juice Bars is a global chain of retail stores selling fruit juice and smoothies. Boost Juice also sells snacks, including banana bread, wraps and yoghurt. Janine Allis and her husband, Jeff, started the business in 2000 in South Australia.

Why is Boost Juice successful?

Janine was inspired by a trip to the United States, where juices and smoothies were common. Back in Australia, Janine found, 'In shopping centres, there was nowhere to get something healthy.' Using her trip to the United States as research, Janine explains, 'I studied the concept of smoothies and juice and took what I liked to develop a new concept in Australia called Boost.' The business started small with just one shop in Adelaide.

Janine was very hands-on in setting up the business — developing the structures, business plan and ethics that were needed to grow the business. This meant getting involved in every aspect: 'I flew to Adelaide to open the first store; I ran it, scrubbed the floors and really learned the business.'

FIGURE 1 An image of a typical Boost bar — bright, colourful and fun

This modest start gave Janine the chance to test the market. To reach their goal of expanding their brand, Janine focused on **franchises**, developing strong branding as a way to lure the best franchisees and to win customers. 'I never had the intention of opening just one store, but you have to open the first one to work out the cost of goods, your wages, expenses and income, and work out if you have a viable business.'

Running her own business was a risk, but it gave Janine a way to try to balance her work and home life and the opportunity to work from home when her children were young. 'When the time came to expand with a building program on 15 to 18 sites, we sold the house and put the money into the business.'

Other Information about Boost Juice

- 2000: Opened first Boost Juice (Adelaide)
- 2002: $1 million annual turnover
- 2008: 213 stores and on track for $100 million annual turnover
- 2014: 300 stores in 10 countries and annual turnover of more than $135 million
- 2022: Over 580 stores in 15 countries
- Highest grossing company stores: Sydney and Melbourne airports
- Highest grossing company franchisees: Chadstone and Pacific Fair Shopping Centres
- Ethical and social responsibility: Boost uses paper cups that are renewable, sustainable and biodegradable, and which are printed using non-toxic, food-safe inks and are not harmful to the environment. Boost Juice has a tree planting and school fundraising program.
- 2025: Over 650 stores worldwide

A good business case study:

- includes a profile of the business (the trading name and the products it sells)
- explains some of the history of the business
- gives reasons the business has been successful
- covers any other issues or questions as required
- includes extra information about the business
- is of reasonable length (approximately 300 words)
- is easy to read
- is well presented.

15.6.3 Let me do it

Complete the following activity to practise this skill.

15.6 SkillBuilder activity

Write your own business case study to communicate to your class about a business of your choice. Use the following questions to guide you:

- What is the name of the business and what products does it sell?
- When and why did the owner start the business?
- Does the owner consider themselves to be an entrepreneur?
- What are the reasons for the success of the business?
- Do any other issues or information need to be covered? These might include:
  - where the business is located and why it is located there
  - where the business is located and why it is located there
  - how it develops or developed a high-quality product
  - how it maintains quality service
  - the promotion or advertising it uses
  - the number of staff it employs
  - who gave the business support and advice when the business was getting started
  - whether the business has a business plan (or ever had one)
  - who manages the finances of the business and how they are managed
  - in what ways the business is ethically and/or socially responsible.

16 How markets work

LESSON SEQUENCE

16.1 Overview 546
16.2 What are our needs and wants? 548
16.3 What types of businesses exist? 553
16.4 What is economic sustainability? 559
16.5 What is meant by demand and supply in the market? 562
16.6 What are your rights as a consumer? 566
16.7 What responsibilities do businesses, producers and government have to you? 572
16.8 Inquiry: How is Aboriginal and Torres Strait Islander Peoples economics sustainable? 580
16.9 Review 582

LESSON 16.1 Overview

INQUIRY QUESTION

How do societies share resources to meet people's needs and wants? Why do consumers and businesses have rights and responsibilities?

When you buy something, you help a business and show that you want their products, creating a cycle where businesses hire people, use resources, and make and sell products. All of this interaction takes place within a **market**, where buyers and sellers exchange money for goods and services.

learnon

Pre-test
Online pre-test

eWorkbook
Customisable worksheets for this topic

Digital document
Key terms glossary

Video eLesson
What is economics?

SkillBuilder

Use the SkillBuilder activities to develop these Economics and Business concepts and skills:

- INVESTIGATING
- INTERPRETING AND ANALYSING DATA AND INFORMATION
- EVALUATING, CONCLUDING AND DECISION-MAKING
- COMMUNICATING

LESSON 16.2 What are our needs and wants?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** how consumers and producers work together
- **describe** the difference between needs and wants
- **outline** how goods and services meet those needs.

Tune in

You probably know the story of Aladdin, a boy who finds a magic lamp with a genie that grants three wishes.

We can relate to Aladdin when thinking about our needs and wants, as we all have wishes but limited resources.

1. **Write a list of the three things you desire most and compare your list with the rest of the class.**
2. **Discuss with your class which of your three wishes satisfied needs. Which of your three wishes satisfied wants?**
3. **Explain the difference between needs and wants.**

FIGURE 1 Like Aladdin, we all have things we wish for. But often we have little chance of these wishes being granted.

16.2.1 Needs and wants

Imagine you are alone on an island. To survive, you need essentials like food, clothing and shelter. These are called basic **needs**. Besides these, you might want things to make life better, like a bed, a torch, a fishing rod, a comb, or a table and chair and a mobile phone. These are called **wants**. While they would be nice to have, you could survive without them.

Even on a desert island, there are things you need for survival. Can you identify some basic needs?

TABLE 1 Needs versus wants

	Definition	Examples	Properties
Needs	Goods or services that are essential for life	Water, food, shelter, air, clothing, medication	*Finite list:* • They must be satisfied if life is to continue. • They remain throughout life. • They are weaker when satisfied.
Wants	Non-essential goods and services	Torch, bed, fishing rod, armchair, toothbrush, mobile phone, laptop	*Unlimited list:* • Life can continue without them. • Wants change throughout life. • New wants arise once others are satisfied.

16.2.2 Goods and services

To meet our needs and wants, we buy goods and services. **Goods** are things we can see and touch, like food, mobile phones, cars and clothes.

Services are actions done for us, like those from doctors, dentists, banks, mechanics and teachers.

If you were alone on a desert island, you would have to make or find everything you need and want. You'd be a one-person economy, producing and consuming all the goods and services. In today's world, we usually rely on **businesses** to provide these goods and services.

SkillBuilder discussion

Investigating

1. Make a list of the goods and services that you have bought or have been bought for you in the last week.
2. Are there any examples that are hard to categorise as a good or a service?

FIGURE 2 As consumers, we can buy goods or services.

16.2.3 Relative scarcity

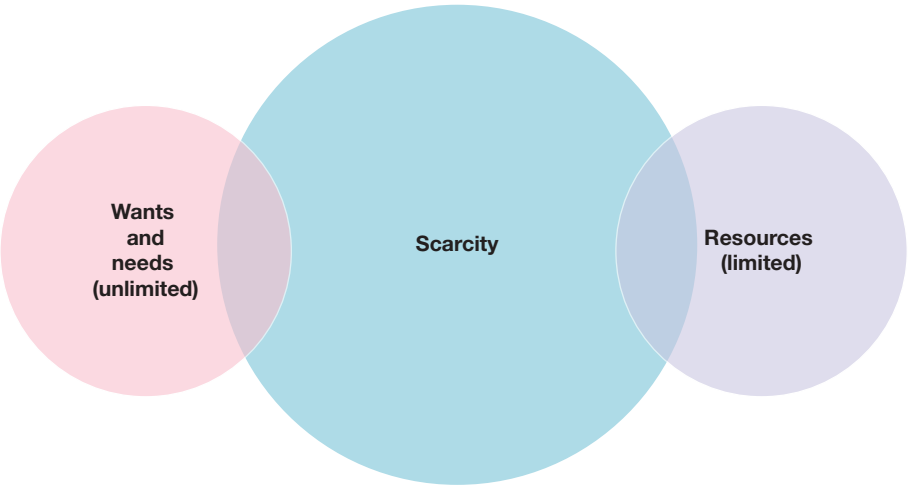
Producers need resources like machines, raw materials and people to meet consumer needs and wants. These resources can be limited, creating relative scarcity. This means there aren't enough resources to satisfy everyone's unlimited needs and wants.

SkillBuilder discussion

Investigating

1. What happens when the resources we need are limited?
2. Why does scarcity occur in our economy?
3. How does scarcity affect our choices?

FIGURE 3 Scarcity happens when limited resources can't meet our unlimited needs and wants.



16.2.4 Opportunity cost

Since resources are limited but needs and wants are unlimited, the economy must make important choices, like in Australia.

- *What to produce?* What goods and services will the economy produce? Will we produce cars or clothes, railway systems, or roads and bridges? Businesses choose based on what consumers want and will buy.
- *How to produce?* What methods of production will businesses use to produce the goods and services we want? Businesses can use machines, workers or both. They can get materials from local suppliers or overseas.
- *Which consumers to produce for?* Businesses need to decide which consumers will be able to buy the goods and services. The price of a good or service depends on consumer **income**, demand and the business's profit goals.

Just as the economy as a whole and businesses need to make choices, so too do consumers. This is because most consumers have some limit to their income. So, they will need to decide what to buy. Making this choice is known as **opportunity cost**.

For example, on the weekend, you might choose to play basketball with your team or go to the movies with friends. If you pick basketball, you miss out on the movies. Every choice has a cost, and consumers try to keep these costs low.

16.2.5 Producers and consumers

The economy is like a cycle. **Producers** make and sell goods and services, while **consumers** buy them.

Producers pay their **employees** and hope to make money from sales. This money is then used to buy from other producers. Producers need consumers to buy from them, and consumers need producers to provide what they want.

16.2.6 The relationship between businesses and consumers

SkillBuilder discussion

Communicating

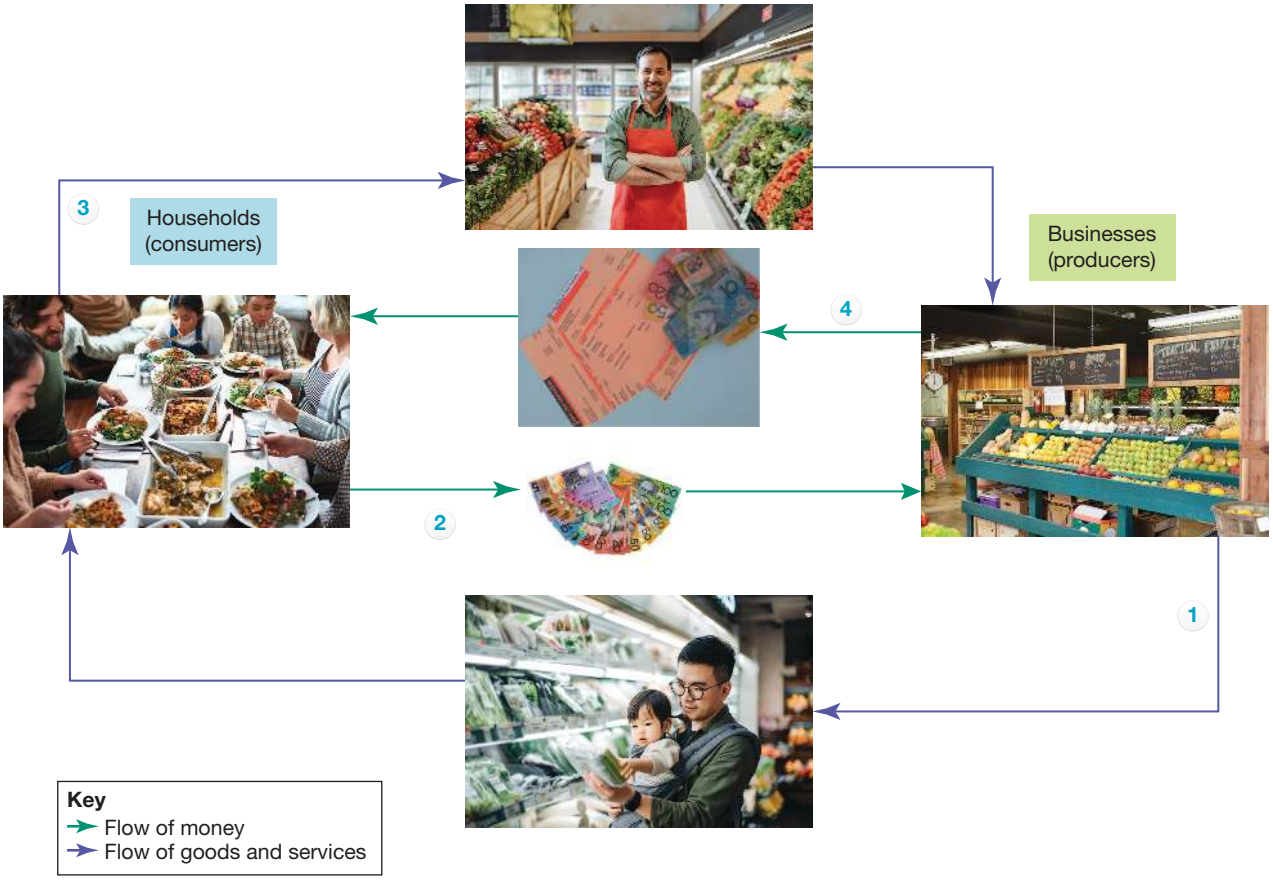
1. Look at **FIGURE 4**. Do you think money makes the world go round?
2. Is there too much or too little focus on money in our society?

In Australia, we meet our needs and wants by earning money. This can come from working, government help or investments. We use this money to buy goods and services. When we work, we provide **labour** to make goods or services for others. When we spend money, we are consumers buying things we need or want.

Every day, we make choices like where to buy milk or how to get to school. These choices affect what businesses make and influence the economy. **FIGURE 4** shows how people trade work for money and use that money to buy goods and services.

The phrase 'money makes the world go round' is a popular expression. It implies, in this context, that without money it would be almost impossible to maintain the many aspects of our lives.

FIGURE 4 The interrelationship between consumers and business



1. Businesses are producers that make or supply goods and services that are distributed to households.
2. Consumers use cards and cash mostly to purchase goods and services.
3. Consumers are often also employed. This means that they have a job and provide businesses with their labour to produce goods and services.
4. Employees receive money in the form of wages for their labour.

16.2 SkillBuilder activity INTERPRETING AND ANALYSING DATA AND INFORMATION

Discuss with your parents or carers what they buy in a week. Collect data on needs and wants, then share with your class.

1. **List** five goods and five services that you or someone you know may have purchased in the last week.
2. **Distinguish** the items listed as a need or a want, and organise them into categories — for example, food or entertainment.
3. **Investigate** with your family approximately what proportion of their weekly budget they spend on each category. (Some banking apps can also provide this information.)
4. **Construct** a pie chart showing this breakdown.
5. Share and **discuss** your findings as a class.

16.2 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 6	4, 7, 8	5, 9, 10

REMEMBER AND UNDERSTAND

1. What is the difference between needs and wants? **Identify** all possible answers from the options provided.
   A. Needs are non-essential goods and services, whereas wants are goods or services that are essential for life.
   B. Needs are goods or services that are essential for life, whereas wants are non-essential goods and services.
   C. Needs include food, water and shelter, and wants include designer clothes, a mobile phone and a computer.
   D. Needs include designer clothes, a mobile phone and a computer, while wants include food, water and shelter.
2. **Identify** three types of business that provide services.
   A. Doctors
   B. Teachers
   C. Car manufacturers
   D. Clothing retailers
   E. Mechanics
   F. Food manufacturers
3. **Identify** three types of business that provide goods.
4. _____ is the performance of mental or physical tasks in exchange for _____. It contributes to the production of goods and services.
5. **Explain** why wants are considered to be unlimited.

ANALYSE AND APPLY

6. **Explain** the role of a producer in the economy.
7. **Explain** the role of a consumer in the economy.
8. **Explain** how an individual can be both a producer and a consumer in an economy.
9. **Describe** one way that producers and consumers are dependent on each other.

EVALUATE AND COMMUNICATE

10. **Assess** whether the relationship between producers and consumers could succeed without money. **Propose** what you think might happen if money didn't exist.

Answers and sample responses for this topic are available online.

LESSON 16.3 What types of businesses exist?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** why people start a business
- **compare** different categories of business ownership structure.

Tune in

Starting a business involves decisions about its size, number of stores and how it will be run.

FIGURE 1 Pacific Fair Shopping Centre, located on the Gold Coast, houses over 400 businesses.

1. **What are some amenities commonly found in large shopping centres?**
2. **How do large shopping centres impact local businesses?**
3. **What are the advantages of shopping at a very large shopping centre?**

16.3.1 Why businesses exist

Starting a business is hard and risky. If it fails, the owner could lose money, so the decision must be made carefully.

Businesses are often started by people who want to achieve one or more of the following:

- *To make a profit:* A successful business can earn the owner more money than a regular job.
- *To fill a gap in the market:* A gap in the market means a good or service that is not being provided at all or not being provided in the local area.
- *To meet a social need:* Some people start businesses to help with social issues. For example, the owners of Thankyou Water saw that many people didn't have clean drinking water. They used their profits to help fix this. While Thankyou no longer makes single-use water bottles, it still works to end poverty by funding projects through other products.

- *To extend a hobby:* Some business owners start a business based on a hobby they enjoy, especially as they near retirement. This could include being a handyman or setting up a gardening business or a bookstore
- *To provide employment:* Businesses often have employees. Some are started to provide jobs for local people, young people, or people who are disabled or elderly.

Every business needs a type of ownership structure, no matter why it starts.

16.3.2 Three main forms of business ownership

A business owner can choose different types of ownership. The three main types are:

1. sole proprietorship (one person)
2. partnership (a group)
3. corporation (owned by shareholders).

Businesses can also be cooperatives or franchises.

FIGURE 2 Many types of businesses are possible.

Sole proprietorship

A sole proprietorship is a business owned by one person, though they can hire others. These are usually small businesses like cafés, hairdressers, plumbers or electricians.

SkillBuilder discussion

Investigating

1. Who owns a sole proprietorship business?
2. What is the simplest form of business structure?
3. What is the owner's responsibility in a sole proprietorship business?

FIGURE 3 A sole proprietorship means the business is owned by one person.

The sole proprietor keeps all the profit made by the business but is responsible for any losses. This is called **unlimited liability**, meaning they might have to sell personal items like their house to cover debts. Sole proprietors are often called entrepreneurs, and the business usually has one person's name, like Mario's Café.

TABLE 1 Advantages and disadvantages of a sole proprietorship business

Advantages	Disadvantages
Simple and low cost to start	Unlimited liability
Owner has full control and keeps all profit	Owner must perform multiple roles
Minimum regulations	Long hours because success depends on effort

Partnership

A partnership is a business owned by two or more people, called partners. They share profits and losses equally and make decisions together.

FIGURE 4 Partnerships are businesses run by two or more people.

Some partnerships can have only two partners, while some have over 400. Partners don't have to work for the business (they are known as silent partners). Profits are shared between partners based on how much money they contributed to start the business.

Partnerships are common among doctors, accountants and lawyers. The business name often includes the partners' names, like Kennedy & Lee Lawyers. Like sole proprietors, partnerships have unlimited liability, meaning partners are responsible for debts. A partnership can start with a verbal agreement, but it's better to have a written one. This agreement says how profits will be shared, how decisions will be made and what happens if the partnership ends.

TABLE 2 Advantages and disadvantages of a partnership

Advantages	Disadvantages
Inexpensive and simple form of ownership	Unlimited liability
Partners can share the responsibility for decision-making, the risks and the workload	Finding suitable partners can also be difficult
Partners can pool their finances and their expertise	Disputes between the partners can arise
Minimal government regulation	Future of business can become complicated if partners decide to leave

Corporation

A corporation, or company, is owned by shareholders. In Australia, corporations are incorporated, making the business a separate legal entity. This means the corporation, not the shareholders, is responsible for its debts.

Corporations have **limited liability**, so shareholders only lose the money they invested if the business can't pay its debts.

Corporations can be public or private. Public corporations allow anyone to buy or sell shares. They may be listed on the Australian Securities Exchange (ASX). Private corporations, often family-owned, restrict who can buy shares. Public companies must have 'Limited' (Ltd) after their name, while private companies use 'Proprietary Limited' (Pty Ltd).

TABLE 3 Advantages and disadvantages of a corporation

Advantages	Disadvantages
Attract finance by selling shares	Complex to establish and set up
Can continue after an owner of the business sells their shares	Strict laws outline the operation of corporations
	Large corporations can become very inefficient

16.3.3 Alternative forms of business ownership

Sole proprietorships, partnerships and corporations are not the only ways to run a business. A business can also be a cooperative, owned by the people it serves, or a trust, where someone manages property for the members. After choosing a type, a business owner can also run their business as a franchise.

Cooperative

In a cooperative, people come together to share resources for a common goal. Common examples include farmers, community education centres, and credit unions. Cooperatives help members use their expert knowledge to manage their work and reduce costs by working together.

One example is the Dairy Farmers Milk Co-operative, which describes itself as 'farmers helping farmers'. It has over 200 members from more than 100 farms across Australia, supplying over 150 million litres of milk each year to Bega Dairy & Drinks.

FIGURE 5 The Dairy Farmers Milk Co-operative is an example of a farming cooperative.

There are many types of cooperatives for different purposes, like housing, consumers and workers. Retailers' cooperatives buy in bulk to get discounts, helping local grocery stores, hardware stores and pharmacies.

Franchise

A franchise isn't a form of ownership, but it's a popular way to run a business. A franchisor is the person or group that gives others the right to use their business name and products. The franchisee is the person who buys the franchise by paying a fee. Franchisees can run their business as a sole proprietorship, partnership or corporation.

SkillBuilder discussion

Evaluating, concluding and decision-making

1. McDonald's has almost 40 000 franchises worldwide. Where do you think most of these are?
2. Why do you think McDonald's franchises are so successful?
3. Study the images in **FIGURE 6** – why do these McDonald's look different from each other?

FIGURE 6 McDonald's has the highest number of franchises worldwide, almost 40 000.

TABLE 4 Advantages and disadvantages of a corporation

Advantages	Disadvantages
Established brand recognition	Limited control over business decisions
Training and support from franchisor	Ongoing royalty fees
Lower risk of business failure	Restrictions on creativity and innovation
Marketing and advertising support	Dependence on franchisor's success

16.3.4 Choosing the best form of ownership

A business owner can choose different types of ownership when starting a business. They need to think about what they prefer and the pros and cons of each type. For example, someone who likes to work alone and wants an easy set-up might pick a sole proprietorship. A person wanting to sell products across Australia or overseas might choose a company structure. As a business grows and its goals change, the owner may need to rethink the best type of ownership for their business.

16.3 SkillBuilder activity EVALUATING, CONCLUDING AND DECISION-MAKING, COMMUNICATING

Work with a partner to complete the following:

1. Complete some of your own research about the different types of businesses.
2. Using this information, **summarise** three advantages and three disadvantages of each form of business ownership using a table such as the one provided.

Business ownership type	Advantage	Disadvantage

3. **Discuss** an idea for a business with your partner. Write a paragraph on what you might sell, who you might sell to, and where you might be located.
4. Choose an appropriate type of ownership for the business. Write a paragraph to **justify** why this type of ownership will suit you best.
5. Present your idea and your chosen business ownership to your class.

16.3 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 5	4, 6, 8	7, 9, 10

REMEMBER AND UNDERSTAND

1. **Identify** the difference between a sole proprietorship and a partnership.
   A. A sole proprietorship has unlimited liability but a partnership does not.
   B. A partnership has unlimited liability but a sole proprietorship does not.
   C. A sole proprietorship has only one owner and a partnership has two or more owners.
   D. There is no difference.
2. A partnership has unlimited liability. True or false?
3. **Explain** what is meant by a cooperative.
4. **List** five examples of franchise businesses.
5. Circle the correct options to **complete** the sentences. **Unlimited** / **Short-term** / **Limited** / **Fixed** / **Financial** liability means that the owner(s) of a business can be held personally responsible for the business's debts. **Unlimited** / **Short-term** / **Limited** / **Fixed** / **Financial** liability means that if the business cannot pay its debts, shareholders in the corporation will only lose the money they have invested.

ANALYSE AND APPLY

6. **Distinguish** between a sole proprietorship and a partnership.
7. 'The public corporation ownership structure allows access to greater finance but can lead to a loss of control of a business.' **Discuss** this statement.
8. **Define** what is meant by a partnership.
9. **List** the possible consequences of the partners of a business having a dispute.

EVALUATE AND COMMUNICATE

10. **Evaluate** the benefits of operating a business as a franchisee.

Answers and sample responses for this topic are available online.

LESSON 16.4 What is economic sustainability?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** what is meant by economic sustainability and the concept of scarce resources
- **describe** how we can use resources more sustainably to meet future needs and wants.

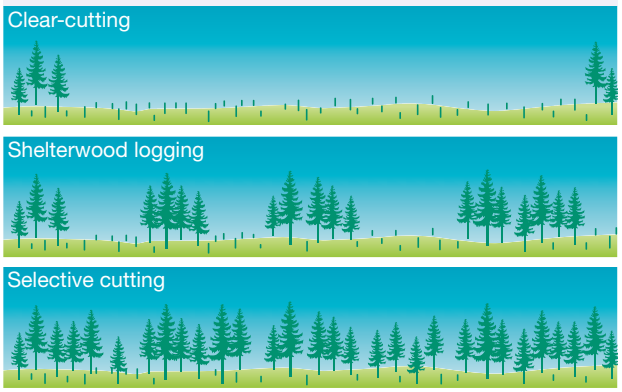
Tune in

Consumers have many needs and wants that use scarce resources. One resource is timber. Timber can be renewed, but it needs to be managed sustainably.

Look at **FIGURE 1**

1. **Explain which is the most sustainable method of logging.**
2. **What happens if we don't use this resource sustainably?**
3. **Brainstorm four more resources that might run out if we don't use them sustainably.**

FIGURE 1 Which method of logging is the most sustainable?



16.4.1 Sustainability

Meeting consumers' needs is important because if people's basic needs aren't met, they might not have enough food to eat or a safe place to live. Producers use resources, often referred to as land, labour and capital, to make goods and services. Since many resources are non-renewable, we must think about **sustainability**.

16.4.2 Environmentally sustainable resources

Producers should use resources that don't harm the environment or community health. They can choose renewable energy, like solar power, to help fight climate change. They can also get sustainable ingredients from farmers who use eco-friendly methods.

SkillBuilder discussion

Communicating

1. How can fishing methods be modified to reduce harm to other marine life while catching tuna?
2. What are some ways to ensure tuna fishing practices are sustainable for future generations?
3. How do environmentally friendly methods of catching tuna impact ocean ecosystems?

FIGURE 2 Consumers have shown a preference for environmentally friendly methods of catching tuna.

Examples of eco-friendly products include cosmetics from The Body Shop, which uses sustainable methods and doesn't test on animals. Many detergents say they are biodegradable, meaning they won't harm the environment. Electrical goods often show their energy efficiency. Supermarkets like Coles and Woolworths have stopped giving out single-use plastic bags, which don't break down and can harm nature.

16.4.3 Organic food

Demand for organic food is growing because people care about the environment and want healthy options. Organic food is usually grown without pesticides or chemicals, making it a healthier choice. This means the soil stays clean and can be used again for growing fruits and vegetables or for grazing animals. Not using chemicals also reduces the risk of harming other plants, animals or the environment.

SkillBuilder discussion

Investigating

1. Are organic fruits and vegetables in Australia typically grown without synthetic pesticides and fertilisers?
2. What certification can ensure that fruits and vegetables in Australia are organically grown?
3. How do organic farming practices differ from conventional methods in Australia's fruit and vegetable production?

FIGURE 3 Organic fruit and vegetables are seen to be both healthier and more environmentally friendly.

CASE STUDY

An Aboriginal and Torres Strait Islander food business: Kaiyu Superfoods

Aboriginal and Torres Strait Islander Peoples have a strong connection to the land. Before colonisation, they managed the land wisely to gather food, clothing and shelter. They used resources sustainably, and this has led to businesses that celebrate Aboriginal and Torres Strait Islander cultures and foods across Australia.

Kaiyu Superfoods is an Aboriginal and Torres Strait Islander food business in Humpty Doo, Northern Territory. Owners Pete and Cate love the bush and the animals in it. Pete is an Awabakal man from the Hunter Valley, while Cate grew up on farms in New South Wales and Queensland.

Their shared love for the land inspired them to use native plants to create tasty products. They want to help people learn about the health benefits of native fruits and grow the industry. This will allow more Aboriginal and Torres Strait Islander families to get involved and benefit.

The business buys fruits from Aboriginal and Torres Strait Islander communities that harvest them sustainably, leaving some for animals and nature to regrow. They also grow Kakadu plums, red bush apples and other local plants on their land. If needed, they buy from non-Aboriginal and Torres Strait Islander farms in New South Wales.

Kaiyu Superfoods is committed to helping Aboriginal and Torres Strait Islander Peoples join the Native Food Industry. They aim for at least 75 per cent of their employees to come from Aboriginal and Torres Strait Islander communities.

16.4 SkillBuilder activity INVESTIGATING

Sustainability is important for people, businesses and the government. In 2022, billionaire Mike Cannon Brookes, a recognised climate advocate, became the largest shareholder of the publicly listed Australian energy company AGL. This was a strategic move to force the business to reduce their use of coal fire plants and move to cleaner energy methods.

Work alone or in pairs to suggest ways in which businesses can be more sustainable.

Choose one of your ideas and research it further.

As an example, you may decide a business can be more sustainable by using solar power. Research what solar power is and how it might be used by a business to make it more sustainable.

FIGURE 4 The sustainability priorities of businesses can vary.

16.4 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 4, 7	3, 6, 8, 9	5, 10

REMEMBER AND UNDERSTAND

1. _____ means meeting our needs without making it harder for future generations to meet their needs.
2. **State** one means by which producers can produce sustainably.
3. **Identify** which of the following is not one of the three resources used by producers to satisfy our needs and wants.
   A. Natural
   B. Labour
   C. Time
   D. Capital
4. **Explain** how recycling could assist sustainability.
5. **Explain** why sustainability is important.

ANALYSE AND APPLY

6. 'Sustainability is good for producers, good for consumers and good for the community as a whole.' **Explain** why this statement could be seen to be true.
7. **Explain** one reason why some producers may not be able to use resources in a sustainable manner.
8. **Explain** one reason why some consumers may not buy goods produced from sustainable sources.

EVALUATE AND COMMUNICATE

9. **Recall** three products you use every day. **Propose** how they could be produced in a more sustainable manner.
10. 'As we learn more about the Earth and our impact on it, we will become more sustainable in our use of the Earth.' **Discuss** whether you agree or disagree with this statement.

Answers and sample responses for this topic are available online.

LESSON 16.5 What is meant by demand and supply in the market?

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the laws of demand and supply, and what is meant by a free market.

Tune in

The year 2024 saw Taylor Swift tour Australia. She played a number of concerts around Australia with tickets selling for as much as $1249.90 for VIP tickets, $379.90 for A Reserve tickets and as little as $75.90 for seats with an obstructed view.

FIGURE 1 How much would you pay?

1. **How was Taylor Swift able to charge these prices and sell out three concerts at the MCG, with each concert holding over 96 000 fans?**
2. **As a class, discuss why you think prices vary, how do ticket sellers determine what price to charge and how much would you pay for tickets?**
3. **Is there another artist you would pay more for a ticket to their show?**

16.5.1 Demand

The law of **demand** simply states that the quantity of a particular good or service that consumers are prepared to buy is dependent on the price being charged, assuming other factors do not change. Hence:

- As the price increases, there is a reduction in the quantity demanded.
- As the price decreases, there is an increase in the quantity demanded.

This relationship can be shown on a diagram known as a demand curve. This curve will show that as the price falls, the demand for a product will increase as more people can afford the product. The opposite will also be true.

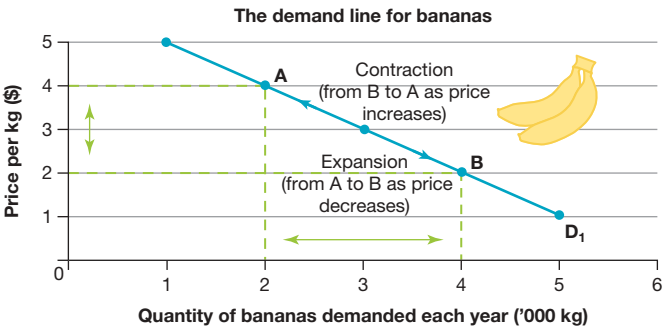
SkillBuilder discussion

Interpreting and analysing data

1. Study **FIGURE 2**. As a consumer, which price would you prefer to pay for bananas?
2. Explain what happens to demand as the price rises.
3. Can you provide another example that shows the same relationship between price and demand?

FIGURE 2 The demand line shows the law of demand for bananas, where the quantity demanded varies inversely with price.

Price per kg of bananas	D_1 = Original quantity of bananas demanded each year ('000 kg)
$1	5
$2	4
$3	3
$4	2
$5	1



16.5.2 Supply

The law of **supply** simply states that the quantity of a particular good or service that sellers are prepared to sell (or supply) is dependent upon the price they will receive for their good or service, assuming other factors do not change. Hence:

- As the price increases, there is an increase in the quantity supplied.
- As the price decreases, there is a reduction in the quantity supplied.

This relationship can be shown on a diagram known as a supply curve. This curve will show that as the price falls, the supply of a product will decrease as suppliers hope to gain a higher price for the product by making it scarce. The opposite will also be true as suppliers will want to supply as much of the product as possible at the highest price possible to maximise their profits.

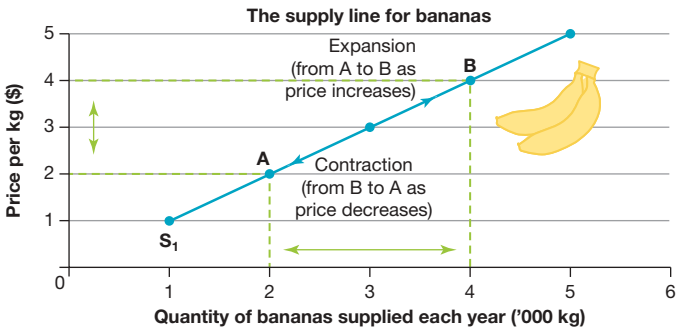
SkillBuilder discussion

Interpreting and analysing data

1. Study **FIGURE 3**. As a producer, which price would you prefer to sell your bananas for?
2. Explain what happens to the supply of bananas as price rises.
3. Can you provide another example that shows the same relationship between price and supply?

FIGURE 3 The supply line shows the law of supply for bananas, where the quantity supplied varies directly with price.

Price per kg of bananas	S_1 = Original quantity of bananas supplied each year ('000 kg)
$1	1
$2	2
$3	3
$4	4
$5	5



16.5.3 Equilibrium

The laws of demand and supply are straightforward but it is important to remember that consumers and businesses don't operate in isolation — consumers need businesses to supply goods and services for them to buy, and businesses need consumers to buy the products they supply.

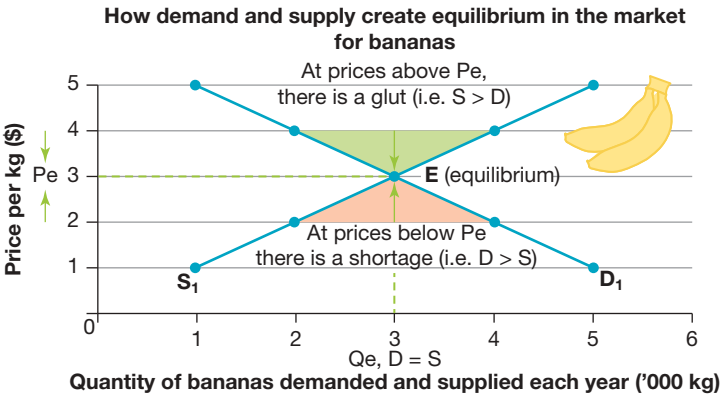
As both buyers and sellers want different things from the market, they often need to negotiate to come up with a price for a product that both consumers and suppliers are happy with. This is called the **equilibrium** price. In a diagram, it is the point where the demand curve and the supply curve intersect.

The equilibrium point is where consumers and suppliers agree on a price and a quantity that will be traded. As a result there is no shortage of products and no surplus of products and both parties are satisfied.

Using our banana example, the equilibrium price and quantity traded can be seen in **FIGURE 4**.

FIGURE 4 A demand–supply (D–S) graph shows how the free operation of market forces determines the equilibrium price of bananas.

Price per kg of bananas	D_1 = Original quantity of bananas demanded each year ('000 kg)	S_1 = Original quantity of bananas supplied each year ('000 kg)
$1	5	1
$2	4	2
$3	3	3
$4	2	4
$5	1	5



16.5.4 Changing conditions for demand and supply

The concept of demand and supply is relatively simple — consumers and suppliers make their decisions based on the price of the good or service. However, on occasions, the conditions within the market change. This can affect the demand and/or supply of a product.

Some of the factors that can impact demand are as follows:

- *Change in income*: If a person receives a pay rise, their income will change. They may now be able to afford some goods and services they previously couldn't afford.
- *Change in the price of a substitute product*: Some products have substitutes, products we can buy as alternatives to a product, such as tea or coffee, butter or margarine. If the price of peaches falls, consumers may buy peaches instead of bananas if they consider these products substitutes.
- *The price of complementary goods*: Some products are complementary — they go together. An example is petrol and cars — many cars can't be used if there is no petrol. If the price of petrol rises, consumers may drive less or use public transport as they can't afford to spend as much on petrol.

Some of the factors that can impact supply are as follows.

- *Clime conditions*: Some products, such as bananas, are dependent upon the weather. Poor growing conditions or extreme weather events such as floods, drought or storms can damage crops and reduce supply. This can reduce the supply of a product.
- *Improved technology*: Some producers use technology in their production process. If technology improves (such as AI), businesses may be able to produce greater quantities and/or at a cheaper price. This can increase the supply of a product.
- *The cost of resources becomes cheaper*: Nearly all products require the use of other resources to ensure they are ready for sale. If the cost of those resources (ingredients, components, labour or capital) become cheaper, a business can increase its supply of their product.

In these circumstances, the supply curve will 'shift', reflecting the changed conditions of supply.

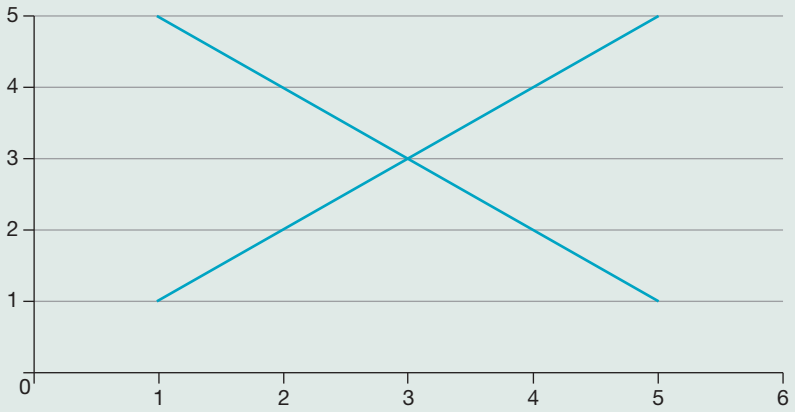
16.5 SkillBuilder activity INTERPRETING AND ANALYSING DATA AND INFORMATION

Each product has a different set of conditions that impact that market. While the general rules for demand and supply do operate, sometimes individual markets have their own special set of circumstances that impact the demand and/or supply of the products in that market.

For each of the following scenarios, use the demand and supply curve diagram below to draw new curves to reflect the changes in demand and/or supply. For each graph, explain what has happened and the effect on demand and/or supply.

a. The effect on the market for plastic swimming pools of a heatwave
b. The effect on the market for iPhone 15s of the announcement of the release of an iPhone 16
c. The effect on the market for petrol-driven cars of improved technology for electric vehicles
d. The effect on the market for energy drinks of a government ban on their sale to people under 18 years of age.

FIGURE 5 The demand and supply curve



16.5 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4, 5	7, 8, 9	6, 10

REMEMBER AND UNDERSTAND

1. A market is where buyers and sellers _____ and _____ money for goods and services.
2. **State** the law of demand.
3. **State** the name of the point where demand and supply intersect on a graph.
4. **State** the law of supply.
5. **State** the factor that both the law of demand and the law of supply have in common.

ANALYSE AND APPLY

6. **Explain** why there is no surplus or shortage when a market is at equilibrium.
7. **Explain** the impact of a prolonged drought on the market for lettuce.
8. **Explain** the likely impact of a cut in income tax by the government on the market jewellery.

EVALUATE AND COMMUNICATE

9. **Define** the term 'equilibrium' and **discuss** how it works.
10. **Discuss** the concept that non-price factors have more impact than price on the demand for clothes.

Answers and sample responses for this topic are available online.

LESSON 16.6 What are your rights as a consumer?

LEARNING INTENTION

By the end of this lesson you should be able to **describe** how laws protect consumers when buying things. This includes warranties, cooling-off periods and returns.

Tune in

We all buy things and sometimes want to return them for a refund or exchange.

FIGURE 1 Should signs like this one be allowed?

As a class, talk about whether signs like the one in FIGURE 1 should be allowed and when they should be used.

16.6.1 Law and justice

Governments help the economy in many ways. They work to encourage growth and keep unemployment low. Governments also set rules for buying and selling to make sure it's fair for everyone.

Australian Consumer Law protects people from dishonest businesses. Other laws ensure that buyers and sellers can enforce their rights in court. Criminal laws protect people from threats in business. Our court system allows everyone to take legal action to protect their rights.

FIGURE 2 Australian Consumer Law protects consumers from unscrupulous businesses that could try to cheat them.

16.6.2 Fair transactions

As a consumer, you might feel unsure when buying goods and services. You often depend on salespeople for help. You want to be sure they respect your needs and don't try to take advantage of you. Australian Consumer Law aims to keep buying and selling fair for everyone.

16.6.3 Honesty is the best policy

The Australian Consumer Law says sellers must be honest in advertising their products. It is illegal to mislead or trick customers into buying something. Here are some examples of illegal behaviour under this law.

- *Misleading or deceptive conduct:* Advertisements can't make false claims about products, like saying prices are low or items are 'on special'.
- *Unconscionable conduct:* This is any business conduct that is unfair or unreasonable.
- *Offering gifts and prizes in connection with the supply of goods and services and then not providing them*.
- *Conduct that may mislead the public:* An example is using a name like a famous brand or showing an Australian-made logo when the product is made overseas.
- *Bait advertising:* This is when a store shows low prices to attract customers but has very few of those items. When they run out, customers are pushed to buy more expensive products.
- *Referral selling:* This is when a business gives a special deal to a customer for bringing in new buyers who make a purchase.

SkillBuilder discussion

Interpreting and analysing data and information

1. What is the special offer in the image? How would this affect your purchasing decisions?
2. What are some common types of special offers used by sellers in Australia?
3. How do Australians typically respond to seasonal promotions and discounts offered by retailers?

FIGURE 3 Any discounts, special offers or specials offered by sellers must be genuine.

16.6.4 Treating consumers fairly

Consumers want to buy goods and services to meet their needs. This eagerness can be taken advantage of by dishonest sellers. Consumer law requires sellers to share all important information and ensures fair rights for both buyers and sellers. Here are some of these rights:

- Any contract a consumer signs must be fair and easy to understand. It can't let the seller change the rules without telling the buyer. For example, a mobile phone contract can't let the company change prices without warning. Consumers should read contracts carefully to make sure they understand them.

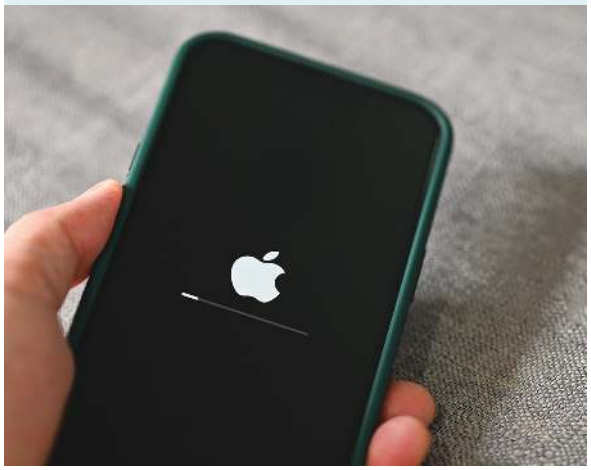
- A consumer has the right to ask for a receipt for any transaction, no matter how small the amount involved. For all transactions over $75, a receipt is compulsory.
- Salespeople can only sell door-to-door or over the phone between 9 am and 6 pm on weekdays, and 9 am to 5 pm on Saturdays. They can't sell on Sundays or public holidays unless you set an appointment. If you ask a salesperson to leave, they must go right away and not contact you for 30 days about that product. If you buy something from them, you have a 10-day 'cooling off period' to cancel the deal without paying.
- Lay-by agreements must be written in simple, clear language and include all terms and conditions.
- Businesses with 'No refunds' signs are breaking the law. If a product is faulty or doesn't work as it should, a refund must be given. But if you change your mind and the product is fine, they don't have to refund you.

16.6.5 Guarantees for consumers

Manufacturers or sellers often give guarantees or warranties. These are promises to fix or replace a product for free if it breaks. Even without a written warranty, the Australian Consumer Law requires that all products have basic guarantees. Businesses can't take away these rights but can add more if they want. Here are some guaranteed rights under the law:

- The buyer gets legal ownership of goods, meaning the seller owns the goods and can transfer them to the buyer.
- Goods must match any sample, demonstration model or description provided to the buyer.
- Goods must be of acceptable quality. This means they should be safe, last a long time and look good. For example, if jeans fall apart after a week, they are not of acceptable quality.
- Products must do what they are meant to do. For example, shampoo should wash hair well.
- Repairs and spare parts must be available for a reasonable time after manufacture and sale.
- Any needed servicing must be done carefully and finished in a reasonable time.

FIGURE 4 Goods must be of good quality. For example, if a phone stops working after a few weeks, it's not good quality.



16.6.6 When the law is broken

The Australian Consumer Law is enforced by state and territory offices, like Fair Trading or Consumer Affairs. If a consumer has a problem with a seller, these offices usually suggest contacting the seller first. If that doesn't work, they can help talk to the business. If the issue isn't resolved, they can take legal action for the consumer. This may lead to the seller having to pay money or fix the faulty products. The business might also be fined for breaking the law.

SkillBuilder discussion

Communicating

1. According to the information in **FIGURE 5**, what should a consumer do first if they believe a business has violated consumer laws in Australia?
2. How can consumers formally lodge a complaint against a business suspected of breaching consumer rights?
3. What resources help consumers resolve disputes over breaches of consumer laws in Australia?

FIGURE 5 These steps may help a consumer resolve an issue when they feel a business has breached consumer laws.

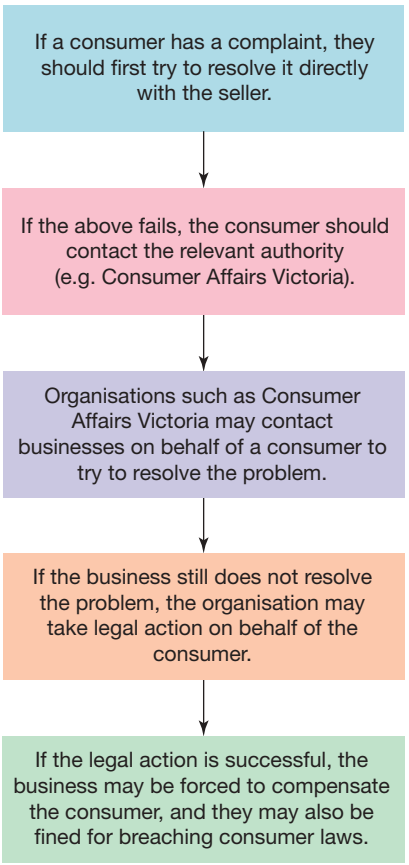


FIGURE 6 Fair Trading suggests you try to solve the problem with the seller first.

16.6.7 Responsibilities as well as rights

What is an ethical consumer or producer?

The Australian Consumer Law protects buyers, but consumers also have responsibilities. Here are some of them.

- When you buy goods or services, you make a legal contract. This doesn't always mean signing a paper. Any agreement between a buyer and seller is a contract, even without a signature. As a buyer, you must pay the right amount for what you buy. This is important if you buy on credit, like a phone with a payment plan.
- If you borrow money or use a credit card, you must pay it back. If you don't, your credit rating can get bad. This can last for five years and might stop you from getting loans during that time.
- You can't return items for a refund if you use them incorrectly. If you break something by using it the wrong way, you usually can't get money back. It's important to use things as the maker intended.

16.6 SkillBuilder activity INTERPRETING AND ANALYSING DATA AND INFORMATION

Online shopping, or ecommerce, became popular in the mid-1990s with big companies like Alibaba and Amazon. Sites like eBay and apps like PayPal made it easier. If you ask your parents about shopping when they were young, they might say they mostly bought things in stores with cash. How has online shopping changed shopping, and what will it be like in the future?

In this activity, you will learn how to interpret trends, consider possible causes of those trends, and use data to make predictions about the future.

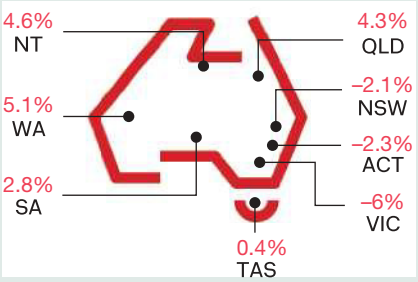
FIGURE 7 Ecommerce report 2024, Australia Post

- In 2023, Australians spent $63.6 billion online
- Online shoppers made more frequent but smaller purchases, with an average basket size of $98.10, down by 4.6% from the previous year
- 16.8% of retail spending was made online
- 9.5 million Australian households shop online, up from 8.1 million in 2019

Top categories with above average YOY growth:

- Home and garden
- Variety stores
- Food and liquor
- Fashion
- Hobbies
- Health and beauty
- Books, print and stationery

FIGURE 8 Ecommerce purchases, year on year growth, December 2023, Australia Post



TASK

Look at the data provided in **FIGURES 7** and **8** and **discuss** the following.

1. **Identify** the overall trend in ecommerce (online shopping).
2. Look up the most recent data on ecommerce figures for Australia Post. Has the trend shown in **FIGURES 7** and **8** continued or changed in any way?
3. **Predict** the future of ecommerce in the next five years. **Justify** your prediction with data.
4. **Describe** any changes to your local or city shopping strips. **Predict** how these shopping strips might change in the future based on the data and trends you have researched.
5. Have you ever bought something online that wasn't what you expected? What protections do you have if you buy from a website overseas and it's not as described?

16.6 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 8	4, 5, 7, 9	6, 10

REMEMBER AND UNDERSTAND

1. One responsibility that _____ have is to use the goods as manufacturers intended.
2. Australian Consumer Law aims to ensure all interactions between buyers and sellers are fair. True or False?
3. **Identify** two guaranteed rights that consumers have in relation to goods they purchase.
4. Select the correct option to complete the sentence. Consumers are entitled to a refund **if they change their mind** / **if the item is faulty** / **for any reason at all**.
5. Suggest a brief description of each of the following.
   a. Misleading conduct
   b. Bait advertising
   c. Referral selling

ANALYSE AND APPLY

6. In each of the following examples, **explain** why a breach of Australian Consumer Law has occurred.
   a. An electrical goods business advertises a particular brand of television and falsely states that it is at a cheaper price than that offered by a competitor.
   b. A clothing store advertises T-shirts and claims that they are made in Australia when they are made in Hong Kong.
   c. A take-away food outlet advertises that a special deal is only for one week when it plans to extend it for two months.
   d. A garden business gives a 10% discount if you share names and addresses of five potential customers.
7. **Explain** the rules that apply to phone sales and door-to-door selling.
8. What powers does a Consumer Protection or Fair Trading authority have to enforce Australian Consumer Law?
9. **Explain** what is meant by a 'lay-by' and why consumers may use this method of purchasing goods.

EVALUATE AND COMMUNICATE

10. 'Most businesses are concerned about maximising their profits and so we need consumer protection laws to regulate their behaviour.' **Discuss** this statement.

Answers and sample responses for this topic are available online.

LESSON 16.7 What responsibilities do businesses, producers and government have to you?

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the legal responsibilities of businesses to consumers. This includes rules about product safety and recalls.

Tune in

As consumers, we want goods and services that are good value for money. When many producers compete, it helps keep prices fair and quality high.

FIGURE 1 McDonald's is permitted to have an exclusive deal with Coca-Cola, and KFC can have an exclusive deal with Pepsi, because the market for soft drinks is still competitive.

Look at **FIGURE 1** and discuss the following questions:

1. **How do Coca-Cola and Pepsi compete?**
2. **What are the benefits of their competition for consumers?**
3. **What are some negatives related to their competition for consumers?**

16.7.1 The benefits of competition

A market with many sellers is good for consumers. The laws of demand and supply will often work better if there is competition for consumers. Competition helps keep prices lower. However, not all businesses will operate fairly or treat consumers honestly and so consumers need protection. The *Competition and Consumer Act 2010* (Cth) makes sure businesses compete fairly. It is illegal for businesses to cheat or gain an unfair advantage. The Australian Competition and Consumer Commission (ACCC) enforces these rules to support fair competition.

16.7.2 Banned anti-competitive practices

The Competition and Consumer Act has rules against unfair business practices. These include price fixing, misuse of power and unfair pricing.

Each of these practices is outlined in the following subsections.

Price fixing

It is illegal for two competing businesses to agree on the same prices for their products. They can have similar prices, but they can't work together to raise or lower them. For example, petrol stations often change their prices during the week. Some people think nearby stations might be working together to set prices. If this is proven, it is against the law because it stops fair competition for consumers.

SkillBuilder discussion

Investigating

1. Why is price fixing illegal in Australia?
2. Can you think of any examples of price fixing? Do you think it is easy to prove?
3. Instead of price fixing, big supermarkets are in a price war, selling things like milk and chicken for less by paying farmers less. Should supermarkets pay farmers more?

FIGURE 2 If service stations agree to change prices together, that's called price fixing.

Misuse of market power

Not all businesses are the same size. Bigger businesses can sometimes use their power unfairly to hurt smaller ones. The law stops this. For example, Woolworths was fined $7 million for trying to stop some restaurants from selling alcohol. They complained to the government about the restaurants getting liquor licenses. Woolworths said they would stop complaining if the restaurants didn't sell take-away alcohol. A court found Woolworths broke the law.

FIGURE 3 Woolworths was fined for attempting to misuse its market power to restrict the operations of competing liquor outlets.

Predatory pricing

Predatory pricing happens when a business sets very low prices to drive competitors out of the market. This business can lose money at first but hopes to gain more customers later.

In 2011, Coles and Woolworths sold milk for $1 per litre to attract shoppers away from competitors like Aldi and IGA. They could afford to lose money on milk because they made good profits on other items. Smaller shops couldn't lower their prices as much, so they lost customers. If these smaller stores closed, the big supermarkets could raise their prices later since there would be less competition.

SkillBuilder discussion

Investigating

1. What is predatory pricing, and why is it regulated in Australia?
2. How does predatory pricing impact competition in the Australian market?
3. What measures does Australian law provide to prevent predatory pricing practices?

FIGURE 4 A supermarket cannot use low prices to harm other milk sellers.

Exclusive dealing

Exclusive dealing happens when one business makes another business agree not to buy from its competitors. For example, a hair products supplier might say a hairdresser can only buy from them if they don't buy from anyone else.

Sometimes this is okay if it doesn't hurt competition in the market. For instance, McDonald's sells Coca-Cola but not Pepsi, while KFC sells Pepsi but not Coke, so there are still choices for customers. Businesses must tell the ACCC about such agreements, and the ACCC will check to see if they are fair.

Resale price maintenance

Suppliers can't tell retailers what prices to set for their products. They can suggest a price, but it's illegal to force retailers to stick to it. Retailers should be able to compete on prices with each other.

It's also illegal for suppliers to set a minimum price that retailers can't go below or to stop them from offering discounts. However, suppliers can set a maximum price to prevent retailers from overcharging customers when they have no competition.

FIGURE 5 Retailers must be free to compete on price with other retailers selling the same products.

Mergers and takeovers

When two or more businesses join together, it's called a merger. If one business buys another, that's a takeover. Mergers and takeovers can reduce competition in a market. The law says businesses can't merge if it lowers competition too much.

Before merging, businesses can ask the ACCC for permission. If the ACCC thinks it won't hurt competition, they might allow it. If businesses merge without permission and it reduces competition, the ACCC can investigate and take action.

In 2008, Bendigo Bank and Adelaide Bank merged, and the Commonwealth Bank took over Bankwest. The big four banks — ANZ, NAB, Westpac and Commonwealth Bank — cannot merge with each other because it would hurt competition too much.

FIGURE 6 Australia's four big banks are prohibited from merging because this would severely reduce competition in the banking industry.

16.7.3 The role of the Australian Competition and Consumer Commission (ACCC)

The ACCC can investigate businesses for breaching the Competition and Consumer Act. They can take legal action against anyone suspected of wrongdoing. Sometimes, they can get a court order to take documents from businesses that might be acting unfairly.

FIGURE 7 ACCC officials may seize documents from businesses suspected of anti-competitive behaviour.

Only a court can decide if a law has been broken and can punish offenders. The ACCC helps bring cases to court to impose penalties and to help those harmed by the breach. Companies can be fined up to $10 million, while individuals can be fined $500 000.

The ACCC can also allow certain actions that seem unfair if they benefit the public. They monitor prices and approve price increases in markets with limited competition. The ACCC focuses on helping businesses follow the law rather than just punishing them.

16.7.4 When purchases go wrong

You may occasionally hear about a car model being recalled to fix a problem. You might also hear about people getting sick from food at a restaurant. We want every purchase to be safe, but that doesn't always happen. It's important to protect consumers and make sure the products we buy are safe.

16.7.5 Who keeps us safe?

Many groups help make sure the goods and services we buy are safe. These include government regulators and organisations like Choice. Their roles are explained in the next sections.

Government regulators

Governments at federal, state, territory and local level have established a number of bodies to ensure product safety.

- The ACCC includes product safety among its various roles.
- State and territory Consumer Affairs and Fair Trading authorities have a major role within their respective states.
- Customs and quarantine checks watch goods from overseas to find any dangerous products.
- Some organisations focus on specific products. For example, the Therapeutic Goods Administration makes sure medicines and devices, like wheelchairs, are safe.
- Local health authorities check restaurants, cafés and school canteens to ensure they are clean and safe.

FIGURE 8 Customs officers check containers of goods from overseas to prevent dangerous goods from entering the Australian market.

Other groups

Many organisations in the community share the responsibility for keeping products safe.

- *Businesses:* Manufacturers and sellers must make sure their products are safe. If a product harms someone, they can be sued. To avoid this, businesses should carefully control how they make their products.
- *Technical bodies:* Worldwide groups like the International Organization for Standardization (ISO) create quality standards for products. If a product meets these standards, it can show an ISO number. This helps consumers know it is safe and of high quality.
- *Consumers:* Buyers also have a responsibility for safety. Choice, which used to be the Australian Consumers' Association, has a magazine and a website. They test products and share their findings. Consumers should also check the safety of items like electrical cords and use safety features in cars to keep them safe.

FIGURE 9 If a product has ISO certification, it means it is safe and of high quality.

16.7.6 What do the government regulators do?

Federal, state and territory bodies have important jobs to keep products safe. They do many activities to ensure product safety.

General market monitoring

Government bodies check all markets for unsafe products. They look for news about injuries or deaths linked to products. They test new products and respond to consumer complaints. They also keep an eye on new products from other countries.

Encouraging safe practices

Regulatory bodies encourage safe practices through various measures:

1. *Negotiating product removal*: This involves gaining agreement from suppliers to remove dangerous goods from sale in their stores or outlets, including online outlets.
2. *Removing unsafe goods*: Products need to be recalled if they are found to be dangerous. People who bought the product should return it to the store. If it can be fixed, it will go back to the manufacturer. If it can't be made safe, buyers get a refund. Recalls are announced in the media, often with special notices in newspapers. If companies know who bought the product, they contact those people directly.

SkillBuilder discussion

Investigating

1. Discuss where and when you have seen a recall notice like the one in **FIGURE 10**.
2. Discuss the advantages and disadvantages of issuing these notices.

FIGURE 10 Manufacturers that discover a fault in any of their products are expected to recall these products for repair, replacement or refund.

3. *Promotion of safety management*: Government regulators want manufacturers to follow safety standards. There are two types: mandatory and voluntary. Mandatory standards must be followed. For example, electrical goods need clear instructions and warnings. Packaged food must show ingredients and nutrition information. Clothing must include care instructions. Voluntary standards are not required but can help suppliers promote their products. These usually focus on quality rather than safety.

4. *Publicity and education*: Government regulators aim to make sure everyone knows about product safety and any dangers. Consumer Affairs Victoria (CAV) and the Australian Competition and Consumer Commission (ACCC) work together and both help enforce Australian Consumer Law. They also help to teach people about their rights and product safety.

Solving safety problems and enforcing standards

Government regulators help businesses follow safety rules instead of just punishing them. They work with companies, investigate problems, and teach suppliers and consumers about safety. New rules are made when needed, and warnings are given if products are dangerous. Sometimes, products are so unsafe they get banned, like toys with small parts that can be swallowed. Toy packages usually show which age group they are for to avoid risks. If businesses don't follow safety rules or sell banned products, they can be fined over $1 million and might have to pay customers who got hurt. Businesses must report any harm within two days.

FIGURE 11 All packaged food must provide nutritional information on the packaging.

SkillBuilder discussion

Investigating

1. Do you think the potential fines and bans for failing to meet safety standards are appropriate?
2. Should government regulators be doing more or less to enforce these standards?

FIGURE 12 This toy wooden alphabet train was removed from sale because it contained dangerous small parts.

16.7 SkillBuilder activity COMMUNICATING

Complete your own research using the websites of Consumer Affairs Victoria (CAV) and the Australian Competition and Consumer Commission (ACCC). Locate the product recall pages and select three recalled products.

1. **State** the name of the product.
2. **Identify** the defect in the product.
3. **Explain** why that defect was dangerous.
4. What advice was given to consumers?
5. What did the ACCC recommend?

16.7 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3	4, 5	6, 7, 8, 9, 10

REMEMBER AND UNDERSTAND

1. Government regulators can take legal action if a person is injured after a supplier fails to remove a banned product from sale. True or False?
2. How can consumers play a role in product safety?
   A. Buy fewer products
   B. Only buy products from expensive stores
   C. Report faulty products to the business or the government body
   D. Complain about the product on social media
3. **Identify** two bodies established to maintain product safety.
4. Briefly **describe** each of the following.
   a. Price fixing
   b. Predatory pricing
   c. Exclusive dealing
   d. Resale price maintenance
5. **Explain** why competition between businesses is beneficial for consumers.
6. **Describe** the role of each of the following in ensuring product safety.
   a. Industry regulators
   b. Customs and quarantine
   c. Local government authorities

ANALYSE AND APPLY

7. **Explain** how you expect the ACCC to deal with each of the following situations.
   a. The only two garden maintenance businesses in a country town decide to merge and form one business.
   b. Five petrol station owners along a busy road meet every week to decide what prices to charge.
   c. A company selling electrical goods gives stores a list of suggested prices for its products. It refuses to sell to stores unless they stick to those prices.
   d. A big supermarket in the same mall as a small supermarket always prices its products 5 per cent lower. When the small store lowers prices, the big one lowers them even more.
8. Coles and Woolworths often receive criticism for selling their own brand of milk at a very low price. **Discuss** why you think they do this and whether it should be allowed.
9. What action can government regulators take if a person is injured after a supplier fails to remove a banned product from sale?

EVALUATE AND COMMUNICATE

10. **Evaluate** the role of education in product safety.

Answers and sample responses for this topic are available online.

LESSON 16.8 Inquiry: How is Aboriginal and Torres Strait Islander Peoples economics sustainable?

LEARNING INTENTION

By the end of this lesson you should be able to **explain** how Aboriginal and Torres Strait Islander communities made economic decisions about the use and distribution of scarce resources.

Background

In this inquiry, you will explore how Aboriginal and Torres Strait Islander Peoples used their local areas, trade routes and meeting places to meet their needs and wants. You will also discuss how they did this sustainably.

- Prior to the arrival of the First Fleet, how did Aboriginal and Torres Strait Islander Peoples satisfy their needs and wants?
- How did Aboriginal and Torres Strait Islander Peoples engage in exchange?

FIGURE 1 Aboriginal and Torres Strait Islander Peoples' trade routes in Australia. This map shows a criss-cross of trade routes, some more than 800 kilometres apart

Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task, you can use this rubric to self-assess.

Inquiry steps

Step 1: Questioning and researching

Write your own inquiry question and research your question. Using a search engine, **investigate** how Aboriginal and Torres Strait Islander Peoples recognised the land as theirs, how they used the land, and how they developed trade routes to meet other groups and exchange items.

Step 2: Interpreting and analysing

Analyse how Aboriginal and Torres Strait Islander Peoples were able to engage in exchange without the use of the money that Europeans brought with them.

Step 3: Evaluating, concluding and decision-making

Discuss how the means of exchange, use of trade routes and meeting places allowed for sustainable use of the land.

Step 4: Communicating

Write an answer to your inquiry question. Use a format of your choice agreed on by your teacher.

LESSON 16.9 Review

16.9.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

16.2 What are our needs and wants?

- The Australian economy is the total of all activities undertaken within Australia for the purpose of producing, distributing and consuming goods and services.
- We purchase goods and services to satisfy our needs and wants.
- We purchase goods and services in a market.
- Employees provide labour to businesses and receive money in return, enabling them to purchase goods and services from other businesses.
- The unlimited wants competing for limited resources create the problem of scarcity.
- The three choices an economy must make are what to produce, how to produce and who to produce for.

16.3 What types of businesses exist?

- People start a business for a number of reasons.
- The three main types of business ownership are: sole proprietorships (one owner), partnerships (two or more owners) and companies (up to 50 owners for private, unlimited for public).
- Other ownership structures include cooperatives and franchises.

16.4 What is economic sustainability?

- Production should consider current and future needs.
- Markets in Australia are influenced by what consumers wish to buy, including products that are healthy and environmentally friendly.

16.5 What is meant by demand and supply in the market?

- The law of demand states that as prices rise, demand for a product will fall.
- The law of supply states that as prices rise, supply of a product will increase.
- Demand and supply of a product can be shown diagrammatically on demand curves and supply curves.
- Equilibrium is where demand and supply intersect.

16.6 What are your rights as a consumer?

- Australian Consumer Law prohibits a range of practices that could mislead consumers.
- It is compulsory for sellers to provide all available information to consumers, and to ensure that buyers and sellers have equal rights in any purchase.
- Australian Consumer Law also provides a number of basic guarantees in relation to the quality of goods purchased.

16.7 What responsibilities do businesses, producers and government have to you?

- Practices that would lessen fair and open competition between businesses are banned under the Competition and Consumer Act.
- The ACCC has the power to take legal action through the courts to deal with businesses that fail to comply with the provisions of the Act.
- A number of different government regulators monitor product safety throughout Australia.
- These regulators encourage the development of safety standards, and seek to educate suppliers and the public on product safety.
- The regulators can ban dangerous products, or order the recall of products to ensure they are made safe.

16.8 Inquiry: How is Aboriginal and Torres Strait Islander Peoples economics sustainable?

- Aboriginal and Torres Strait Islander Peoples used their local areas, trade routes and meeting places to satisfy their needs and wants.
- Needs and wants were satisfied and goods were exchanged in a sustainable manner.

16.9.2 Key terms

business any activity conducted by an individual or individuals to produce and sell goods and services to make a profit
consumer a person or group who is the final user of goods and services produced within an economy
demand a need or want of consumers expressed by the spending of income
employees people who work for a wage or salary
equilibrium a resting point in a market where the forces of supply and demand are equally matched, and where the market is 'cleared'
goods physical or tangible items that satisfy needs and wants
income money earned through employment or investment
investigate to carry out a detailed and systematic inquiry to discover facts or information about a topic or issue
labour the human skills and effort required to produce goods and services
limited liability where shareholders cannot lose more than their investment in the event of the failure of the business
market an institution or organisation where goods and services are bought and sold at prices which are negotiated between buyers and sellers
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
producer an individual or a business involved in the production of goods and services
services actions done for you by others to satisfy your needs and wants
supply a market force that relates to the quantity of a particular good or service that producers are willing to sell at a given price over a period of time
sustainability meeting our own needs without compromising the ability of future generations to meet their needs
unlimited liability where a business owner is personally responsible for all the debts of their business
wants things people desire to feel happy or satisfied, but they aren't needed to survive or live comfortably

16.9.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

How do societies share resources to meet people's needs and wants? Why do consumers and businesses have rights and responsibilities?

1. Now that you have completed this topic, what is your view on the questions? 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 questions, outlining your views.

learnon

Post-test	Online post-test
eWorkbooks	Customisable worksheets for this topic Reflection
Digital document	Key terms glossary

16.9 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 6, 7, 11	3, 4, 5, 10, 12, 13	8, 9

REMEMBER AND UNDERSTAND

1. Which of the following accurately describes a need?
   A. Life can continue without it.
   B. It temporarily goes away when we are satisfied.
   C. All needs are the same.
   D. Our needs never change.
2. Which of the following items can be classified as a want?
   A. A container filled with water
   B. A container filled with food
   C. A container filled with lollies
   D. A container filled with air
3. Which of the following is not a resource used to produce goods and services?
   A. Land
   B. Labour
   C. Capital
   D. Money
4. Which of the following is not considered a part of the basic economic problem?
   A. Lack of money
   B. Relative scarcity
   C. Consumer sovereignty
   E. Opportunity cost
5. Identify the best definition of 'goods'.
   A. They are tangible items that we like.
   B. They are tangible items that we need.
   C. They are tangible items that we want.
   D. They are tangible items that satisfy what we need and want.
6. Businesses that show concern for the welfare of communities are known as _____ responsible.
   A. ethically
   B. environmentally
   C. socially
   D. morally
7. Which of the following can be used by a business to demonstrate their commitment to sustainability?
   A. Reducing waste
   B. Ethical sourcing of inputs
   C. Recycling
   D. All of the above
8. What is 'bait advertising'?
   A. When customers are fraudulently enticed into a business by lower prices on a small number of items
   B. When a business offers customers a special deal to persuade their friends to deal with the business
   C. When a business uses fake samples to entice the customer into the business
   D. When a business lowers its prices
9. When does a customer have no automatic right to return goods for replacement or refund?
   A. If the goods are found to be unfit for their usual purpose.
   B. If the customer has lost the receipt issued by the business.
   C. If the business clearly displays a 'No refunds or replacements' sign.
   D. If the customer changes their mind and decides not to keep the goods.

10. What does ACCC stand for?
    A. Australian Consumer and Competition Commission
    B. Australian Competition and Consumer Commission
    C. Australian Competition and Consumption Commission
    D. Association of Consumers and Competitors Commission
11. **Outline** the role of consumers in the economy.

ANALYSE AND APPLY

12. **Analyse** how the problem of scarcity arises.
13. **Explain** the concept of sustainability.

EVALUATE AND COMMUNICATE

14. **Evaluate** the relationship that producers and consumers have and its importance to the Australian economy.
15. **Suggest** why consumers need protection from the actions of producers.

Answers and sample responses for this topic are available online.

17 Working for a living

LESSON SEQUENCE

17.1 Overview 588
17.2 Why do people work? 590
17.3 What types of work are there? 594
17.4 How do you earn an income? 600
17.5 What is the role of entrepreneurs? 605
17.6 What responsibilities come with working? 608
17.7 How are Aboriginal and Torres Strait Islander Peoples entrepreneurs? 612
17.8 Inquiry: Who are the innovators and entrepreneurs? 616
17.9 Review 618

LESSON 17.1 Overview

INQUIRY QUESTION

Why do people work and what types of work can they do? Why is work so important to society?

There are many different types of work, workers and jobs. We all need to discover the right job for us. This can be difficult to do. Some people will change jobs and careers numerous times throughout their working life.

Your time at school will help you decide the type of work you would like to do later on in life. It will set you on the path to achieving that. A part-time job once you turn 15, work experience through school later on, and watching family and friends — all will contribute to you deciding upon your work path.

In this topic, we will consider the different types of work, why people work, the role of entrepreneurs and Aboriginal and Torres Strait Islander Peoples in working, and our responsibilities as workers.

learnon

Pre-test
Online pre-test

eWorkbook
Customisable worksheets for this topic

Digital document
Key terms glossary

Video eLesson
Work and entrepreneurship

SkillBuilder

Use the SkillBuilder activities to develop these Economics and Business concepts and skills:

- INVESTIGATING
- INTERPRETING AND ANALYSING DATA AND INFORMATION
- EVALUATING, CONCLUDING AND DECISION-MAKING
- COMMUNICATING

LESSON 17.2 Why do people work?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **explain** why people work
- **analyse** the contribution that work can make to an individual's identity and role within a community.

Tune in

Team up with a partner and mind map the reasons that people go to work.

FIGURE 1 If you had a big win, would you still work?

1. **No doubt you thought of money! What do you think are the best-paid occupations in Australia?**
2. **If you won the lottery tomorrow, would you still plan to go to work? Discuss your answer with a partner.**
3. **Write down the advantages and disadvantages of continuing to work if you won the lottery.**

17.2.1 What is work?

SkillBuilder discussion

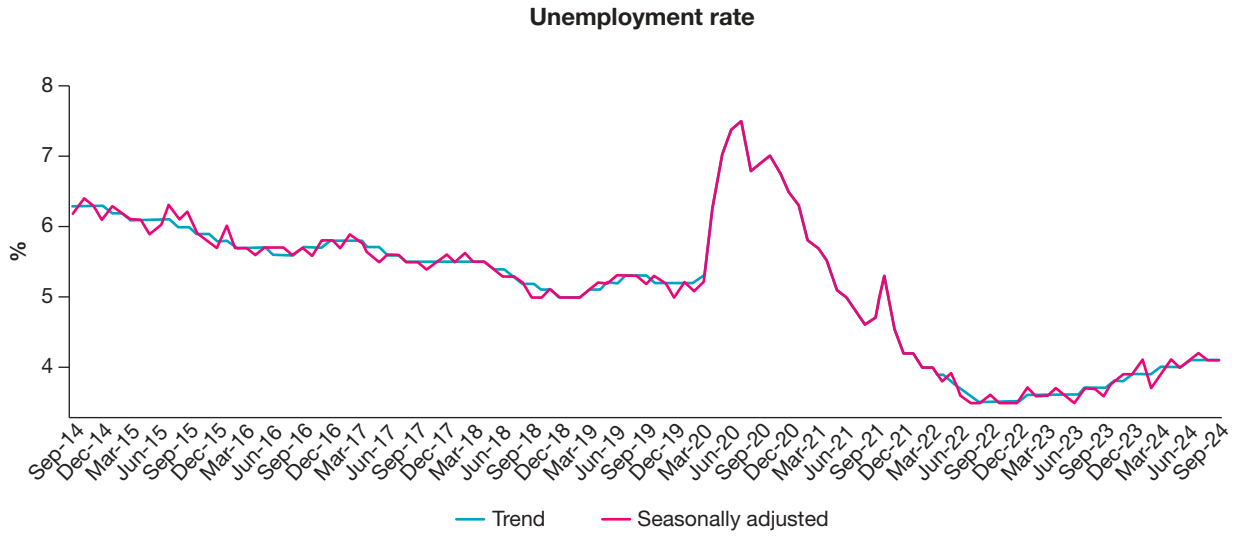
Interpreting and analysing data and information

1. Study **FIGURE 2**. What was the unemployment rate in Australia from 2014 to 2024?
2. How did the unemployment rate change between 2014 and 2024?
3. What factors might have influenced the unemployment rate in Australia during this time?

The Australian Bureau of Statistics says a person is 'employed' if they work for at least one hour in a week. This includes everyone from teens with part-time jobs to adults with full-time jobs.

To be 'unemployed', a person must not work at all, be looking for a job, and be ready to work. **FIGURE 2** shows the unemployment rate in Australia.

FIGURE 2 The unemployment rate in Australia from September 2014 to September 2024



Large month-to-month changes occurred during the COVID-19 pandemic, resulting in multiple trend breaks. The ABS recommends caution when using trend estimates published in spreadsheets in this release for this period. Information on trend breaks can be found in Labour Force, Australia methodology, September 2024.

Source: Australian Bureau of Statistics, Labour Force, Australia, September 2024, https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia/sep-2024.

17.2.2 The importance of work in our community

Since ancient times, people have worked hard to do things like hunt for food, gather berries and plant seeds.

When we hear 'labour', we often think of 'work'. Work is when people do tasks to earn money, using both their minds and bodies.

Supporting the community

When you work, you join the labour force, which means you earn money and connect with people who share your interests. Being part of this community helps you feel good about yourself and gives you a sense of belonging.

FIGURE 3 Aged care workers have a clearly defined role because they help an important group of people in our society.

17.2.3 Why do people work?

Even rich people work because there are many benefits to having a job, not just money.

Earning an income

The main reason we work is to earn money, called a wage or salary. When someone works, they are employed. To live, we need money. Many workers try to balance work and free time, which is called **work–life balance**.

Improving living standards

Imagine your teenage cousin just got her first pay from a part-time job. She decides to buy new running shoes with her money to help her train better.

Working gives people money to buy what they need and want. This is called satisfying **material living standards**. People with high incomes can buy lots of things like designer clothes, fancy cars and overseas holidays.

But work also affects **non-material living standards**, which relate to a person's quality of life. This includes things like crime rates, health and happiness. People who work usually feel happier, although this is hard to measure.

FIGURE 4 A cardiologist is a doctor who helps people with heart and blood vessel problems. Cardiology is one of the highest-paid jobs in Australia.

Self-esteem

In a recent survey, 200 employees of a factory were asked to write down the most important aspect of their work. The responses revealed that it was not money that was important. Sixty-seven per cent of the employees said the most rewarding aspects were knowing they had done the job well and receiving some praise from their supervisor.

SkillBuilder discussion

Evaluating, concluding and decision-making

1. Why is it important for workers to know they are doing their job well?
2. How can employers help workers feel appreciated for their work?
3. What are some signs that show a worker is doing a good job?

FIGURE 5 Knowing they are doing a job well is very important to many workers.

Happiness

For many people, work can make them happy. Studies show that if you enjoy your job and your co-workers, you'll feel happier in other parts of your life. **TABLE 1** summarises some of the non-financial and financial benefits of being employed and participating in the workforce.

TABLE 1 Some of the benefits of participating in the workforce

Non-financial benefits of participating in the workforce	Financial benefits of participating in the workforce
• The opportunity to use your skills and abilities in a positive way • Meeting and mixing with new people • Doing something you love and are passionate about • Increasing your self-esteem and confidence • Developing your natural strengths and talents • Being part of a group or a team at work • Having friends at work • Contributing to the Australian economy • Being happy	• Earning an income • Exchanging money for goods and services • Being a consumer • Having the ability to buy what you need and want • Creating and maintaining a good standard of living for your family

17.2 SkillBuilder activity INVESTIGATING

By this point in your life, you should have discussed your future aspirations. This activity will allow you to research this further and think about the different dimensions of a job.

1. **Investigate** the different types of jobs available. You can use the government websites such as Your Career or Jobs and Skills Victoria. Choose a job that interests you, like an actor, doctor or photographer.
2. Click on your chosen job profile and locate the expected wage/salary that this job pays. Write this down if it is stated. Do you think that this is a fair wage? How does it **compare** with other wages for other jobs?
3. Read the overview of the job. **Explain** how this job would contribute to making you feel part of a community. Would it involve you directly caring for a person or group of people? In what way is your chosen job important for society?
4. **Explain** three other benefits that you imagine this job would bring to you.

FIGURE 6 Enjoying something, such as photography, might be a good place to start when thinking about a career. However, many other aspects need to be considered.

17.2 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 4	3, 5, 6, 7, 8	9, 10

REMEMBER AND UNDERSTAND

1. **Identify** three important reasons people work.
   A. To earn an income
   B. To improve their standard of living
   C. To decrease their standard of living
   D. To increase their stress levels
   E. To feel improved self-esteem
2. **Determine** if the following statements are true or false.
   a. Work can be defined as something that you have to do to pay your taxes.
   b. According to a recent survey, employees generally care more about making money than about doing their job well.
   c. Work can be defined as human labour.
3. **Define** what is meant by 'being employed'.
4. **Identify** the correct options to complete the sentence.
   To be unemployed, you must not be employed for one **hour** / **day** / **shift** or more, you must be actively **completing** / **seeking** work, and you must be currently **unavailable** / **available** for work.
5. Look at the benefits that can be gained from participating in the workforce discussed in this lesson. Do you agree with them? **Explain** your answer.

APPLY AND ANALYSE

6. **Explain** what is meant by 'material living standards'.
7. **Outline** the difference between 'material' and 'non-material' living standards.
8. **Explain** how work can increase your material living standards.

EVALUATE AND COMMUNICATE

9. Work is important for providing people with self-esteem. **Explain** what this means and give an example of how someone may acquire higher self-esteem from their employment.

Answers and sample responses for this topic are available online.

LESSON 17.3 What types of work are there?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **identify** the different categories of work, like full-time, part-time, casual and volunteer work
- **explain** why people work and help their communities.

Tune in

Study the two images in **FIGURE 1**, which show two very different types of work.

FIGURE 1 Many different types of work exist.

1. **Brainstorm what work each person might be doing.**
2. **Estimate the salary that each person might earn.**
3. **Discuss how the work the person on the left is doing might contribute to society.**
4. **Discuss how the work the person on the right is doing might contribute to society.**

17.3.1 What counts as work?

Work means doing mental and physical tasks for money. When you get paid, it's called paid work, and the money you earn is called a wage or salary. But some work doesn't earn money, like cleaning your room or doing chores at home. Even though your parents might give you pocket money for chores, it's not considered income in economics. Other examples of unpaid work include family duties, schoolwork, volunteering and community service.

17.3.2 The labour force

Australia's labour force includes people who are working and those looking for jobs. This includes **full-time**, **part-time**, **casual** or **seasonal** work. It includes people aged 15 and over who are either employed or unemployed. People who are not regarded as part of the labour force include:

- people eligible for the state pension
- people who have retired from the workforce
- people with a physical or mental disability that prevents them from working
- full-time students who do not work
- full-time carers who look after children or other family members
- volunteers working without pay in institutions such as the State Emergency Service and charities.

In September 2024, 4.1 per cent of the labour force in Australia was unemployed.

SkillBuilder discussion

Communicating

1. What is the definition of the labour force?
2. Who is included in the labour force?
3. Why is it important to understand the labour force?

FIGURE 2 People who work or are looking for work are part of the labour force.

17.3.3 Types of workers

In Australia, workers are classified as full-time, part-time, permanent, casual, self-employed or seasonal. For example, a university student might choose to work part-time to balance work with studying. The four main types of work are listed in **TABLE 1**.

TABLE 1 Different types of workers

Type of worker	Features
Full-time worker	• Ongoing employment • Number of hours per week is 35 or more
Part-time worker	• Ongoing employment • Number of hours per week is fewer than 35 • Number of hours may be fixed or variable
Casual worker	• Employed on an 'as needed' basis • No permanent weekly roster • Hours vary from week to week; for instance, 10 hours one week and 3 hours the next • May work for more than one employer
Self-employed	• An individual who works for themselves

Some key facts about types of work include the following:

- The proportion of employed people who are classified as full-time has fallen over the past 10 years.
- In March 2025, the Australian Bureau of Statistics (ABS) reported that approximately 68 per cent of employed Australians were working full time. A decade earlier, in January 2011, the proportion was higher at 70 per cent.
- In contrast, part-time employment sits at around 30 per cent, with this figure fluctuating over time.
- In September 2024, 60.6 per cent of women were part of the paid workforce in Australia while 68.4 per cent of males were part of the paid workforce.

The unemployed

The unemployed are people who want to work but do not have a job right now. This includes those who lost jobs, are starting a new job or are between jobs.

Permanent, casual and seasonal workers

Permanent workers get paid holiday leave and sick leave. Casual workers do not get these benefits. Seasonal workers work only during certain times of the year. For example, apple pickers work in the harvest season, and ski instructors work in winter when there is snow.

SkillBuilder discussion

Communicating

1. What is a seasonal worker?
2. Why are ski instructors only employed during winter?
3. What skills do ski instructors need for their job?

FIGURE 3 Ski instructors are seasonal workers who are employed only during winter.

Voluntary work and other unpaid work

When we look at Australia's labour force, we tend to focus on who is employed, who is unemployed or who is seeking employment. But not all work is paid. We should also remember the important contributions from people who don't fit into these groups. These groups include:

- volunteers who help community groups, like doctors in Doctors Without Borders and country firefighters
- grandparents caring for grandchildren
- parents caring for a sick or disabled child
- parents who stay at home to raise the family.

FIGURE 4 A surf lifesaver is a trained volunteer who helps keep beaches safe on weekends. Surf lifesaving can be fun and may even lead to a job later.

According to govolunteer.com.au, each year, over 6 million Australians volunteer. People volunteer for many reasons. Some want to learn new skills or gain experience for their résumés. Others want to make friends, try something new, or help their community.

Volunteers are very important in our society. They help non-profit groups like the Volunteer Fire and Rescue Service, Meals on Wheels and community support groups. These volunteers don't get paid, but they give their time to help others. Reasons why people do this type of unpaid work include:

- to gain experience in a job or industry
- to acquire training, skills and/or work experience as part of formal programs to assist people to obtain work
- to test their job skills
- to contribute time and effort to a not-for-profit organisation.

FIGURE 5 Caring for a family member with a disability is a common type of unpaid work.

A lot of unpaid work happens at home, like cooking, cleaning, washing and caring for others. Experts say if this work was paid, it would be worth over $605 billion!

A 2021 report showed that women do most of the unpaid work, like household chores and caring for people. Women do 76 per cent of childcare, 67 per cent of cleaning, 69 per cent of caring for adults and 57 per cent of volunteering.

In wealthier areas, some couples hire help for these jobs. Still, if a household has 20 hours of unpaid work each week, a woman usually does about 15 hours, while a man does about 5 hours.

How has work changed?

The work available in an economy changes over time due to several factors:

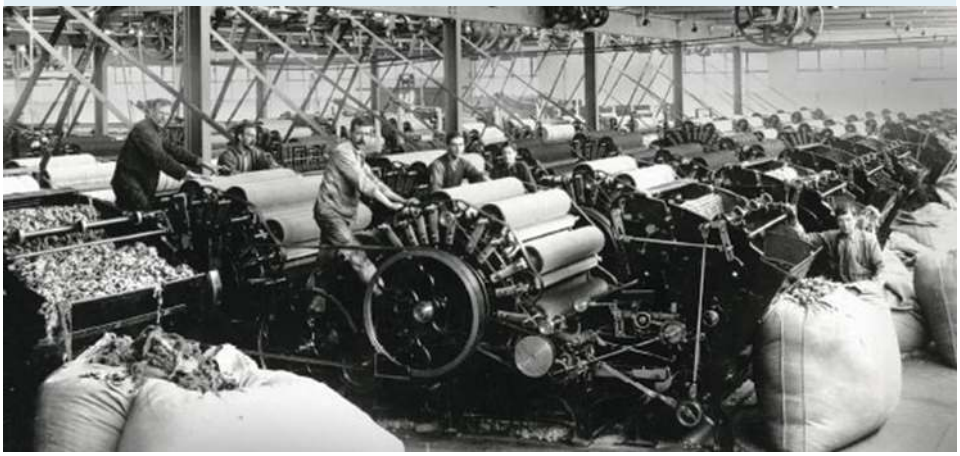
- Technological changes refer to advances in technology, the automating of tasks, and creation of new industries. This shifts the types of jobs available and the skills needed.
- Outsourced labour is when businesses move jobs to countries with cheaper labour costs, reducing jobs in higher cost areas while creating opportunities in lower cost regions.
- Communication changes refer to the rise of digital communication, which enables remote work and virtual collaboration, expanding global job opportunities and fostering the **gig economy**.
- Casualisation of the workforce means that more workers take on temporary, part-time, or contract roles instead of permanent, full-time jobs, offering flexibility but less job security and benefits

SkillBuilder discussion

Evaluating, concluding and decision-making

1. List five jobs that have largely disappeared over the last 100 years and discuss the reasons for this.
2. List five jobs that have emerged in the last 50 years.
3. Predict five jobs that might be created within the next 50 years.

FIGURE 6 Machinists at a typical wool mill in Geelong, Victoria, Australia in the early 1900s



17.3 SkillBuilder activity INVESTIGATING

This activity allows you to investigate the changing nature of work in contemporary Australia

1. With the help of your teacher, **discuss** an appropriate person to interview about their working life. This should be someone with more than 30 years working experience. It can be a parent or caregiver, a grandparent, a guest speaker, or a recorded podcast or interview.
2. Prepare a list of questions, using the following as headings or guides:
   - Hours worked
   - Wages and conditions
   - Skills required
   - Job satisfaction
   - Career length
   - Changes to the workplace
3. Take notes or record the interview (with the interviewee's permission), focusing on key insights from their responses.
4. Use the responses to prepare an answer to the following prompt:
   Discuss the significant changes that have taken place in the workplace over the last 30 years.

17.3 Exercise

learn on

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3	4, 5, 6, 8	7, 9, 10

REMEMBER AND UNDERSTAND

1. **Identify** the difference between paid and unpaid work.
   A. Unpaid work is rewarding and paid work is not.
   B. Paid work is doing a job for money. Unpaid work is doing tasks without getting paid.
   C. Paid work is doing a job for money. Unpaid work is doing tasks without pay.
   D. All of the above
2. **Recall** the least number of hours per week that an employee must work to be considered working full-time.
3. **Identify** three examples of volunteer work.
4. **Match** each of the following terms to the correct definition.

1. Part-time	a. The hours of work change each week.
2. Full-time	b. Two hours each day from Monday to Friday are worked.
3. Casual	c. At least 35 hours a week are worked.

5. **Determine** if the following statements are true or false.
   a. The role of women in the workforce has not changed since the 1960s.
   b. If work is not paid for, it does not count as work.
   c. A part-time worker is anyone who works under 25 hours a week.
   d. The proportion of employed people who are classified as full-time has fallen over the past 10 years.
   e. 'Award hours' refers to being awarded extra pay for working overtime.
   f. Casual workers are entitled to paid sick leave and annual leave as part of their working conditions.

APPLY AND ANALYSE

6. **Identify** what types of work are described in the following.
   a. Hours vary per week and employment is on an 'as needed' basis
   b. Ongoing employment but the number of hours per week is fewer than 35
   c. Tasks performed without receiving an income
   d. Performing services for one hour or more per week in return for receiving money or income
7. The number of people looking for and accepting part-time work has increased recently. **Analyse** why this may be occurring.

EVALUATE AND COMMUNICATE

8. Most people who work full-time happen to be men, while the greatest proportion of part-time and casual staff are usually women. **Explain** why this might be.
9. Voluntary workers play a significant role in society. Do you agree or disagree? **Justify** your response.
10. **Differentiate** between casual employment and part-time employment.

Answers and sample responses for this topic are available online.

LESSON 17.4 How do you earn an income?

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the reasons individuals choose to work.

Tune in

By now you will likely have given some thought to what you want to do when you leave education.

1. **What kind of occupation would you like to work in? Can you write down the specific job that you would like to do?**
2. **How do you feel about work? Are you excited about becoming an entrepreneur or working in a job that you think you will love? Explain your answer to a class peer or your teacher.**
3. **Brainstorm all the other ways that you could earn an income, aside from working for yourself or for someone else.**

FIGURE 1 Zookeeping is one of the jobs many young people aspire to do.

So far, we've learned about the need for work and the different types of work. In this lesson and future lessons, we will explore:

- why and how people earn an income
- what it means to be an entrepreneur
- starting a business as a means of earning an income
- how Aboriginal and Torres Strait Islander Peoples have acted as entrepreneurs in Australia.

17.4.1 Work as a source of income

As you get older, you start to see how important money is. You need money to have fun with friends, like going to the movies, ice skating or visiting an art gallery. This money often comes from your parents or caregivers who work.

SkillBuilder discussion

Evaluating, concluding and decision-making

1. Why is money needed to go to a concert?
2. What other activities require money?
3. How does spending money on activities like concerts affect a person's budget?

FIGURE 2 Going to a concert is just one of the many activities for which you need money.

Once you leave school, you'll likely join the workforce, if you haven't already started working while studying.

Most people work to earn a **wage**, which helps them a certain **standard of living**.

Entrepreneurs also work to make money, and they usually pay themselves a **salary**.

Some people earn a wage based on how many hours they work, while others get a salary, which is a fixed amount, no matter how many hours they work. But money can come from many places, not just jobs. Some of these sources are shown in **TABLE 1**.

SkillBuilder discussion

Communicating

1. How does having a job help someone earn income?
2. What types of goods and services can be purchased with income from a job?
3. Why is income important for meeting daily needs and wants?

FIGURE 3 Jobs provide income that is used to buy goods and services.

TABLE 1 Alternative sources of income

Alternative source of income	Description
Superannuation	Superannuation is the money that people save for their own retirement. Money is transferred from a person's weekly income and placed into a superannuation fund. People are able to access their superannuation upon retirement. Given that Australia's population is ageing, superannuation is an increasingly important form of income.
Commission	People such as real estate agents may earn a commission. This means that for every sale they make, they receive a small percentage of the money made. The more they sell, the larger the commission they receive.
Welfare payments	People may receive a welfare payment for a range of different reasons. Some retired people receive a pension to help them with their living expenses. Other people may receive a welfare payment if they are unemployed or if they are not working for some other reason (such as illness).
Rental income	Many people in Australia own an investment property. An investment property is one that the owners do not live in. Instead, they rent it out to tenants. The rent payments received from tenants provide an alternative source of income for the owners of the property.
Dividends	Some people choose to invest in companies. To do this they buy a 'share' in the company. These people will then become part owners of the business. They are known as shareholders. When the company makes a profit, it distributes some of the profit to the shareholders, and this is called a dividend.

17.4.2 Being a shareholder

When you turn 18, you can buy shares in a company, making you a shareholder. This means you own a small or large part of the business. As a shareholder, you can benefit from the company's growth. Some people buy and sell shares to earn money.

If a company grows and makes more profit, its share price may go up. This means if you sell your shares later, you can make a profit. Shareholders may also receive dividends, which are parts of the company's profit paid to them.

However, dividends aren't guaranteed. If a company loses money, it won't pay dividends. The company's board decides if and how much to pay. A person who invests in stocks or other things to make money is called a **speculator**.

17.4.3 Providing a rental service

Another way to make money is by renting out a house or apartment to people for a monthly fee. Some people rent out their holiday homes to earn extra cash. Others buy properties to rent for years and sell them when the price goes up.

FIGURE 4 Both residential and commercial properties can be leased out.

17.4.4 Receiving a social security benefit

Most people in Australia can get help from social security payments at some point in their lives. These payments support people in need by helping them pay for healthcare, housing, food and education. Another payment, Medicare, gives money back for some healthcare expenses.

FIGURE 5 Social security benefits include rebates from Medicare.

17.4.5 Sources of income for Aboriginal and Torres Strait Islander entrepreneurs

Aboriginal and Torres Strait Islander entrepreneurs play a big role in Australia's economy. They earn money like other Australians. Before COVID-19, Aboriginal and Torres Strait Islander businesses grew by about 12.5 per cent each year. More than 2300 Aboriginal and Torres Strait Islander businesses make more than $3 billion a year and employ over 11 000 Aboriginal and Torres Strait Islander Peoples.

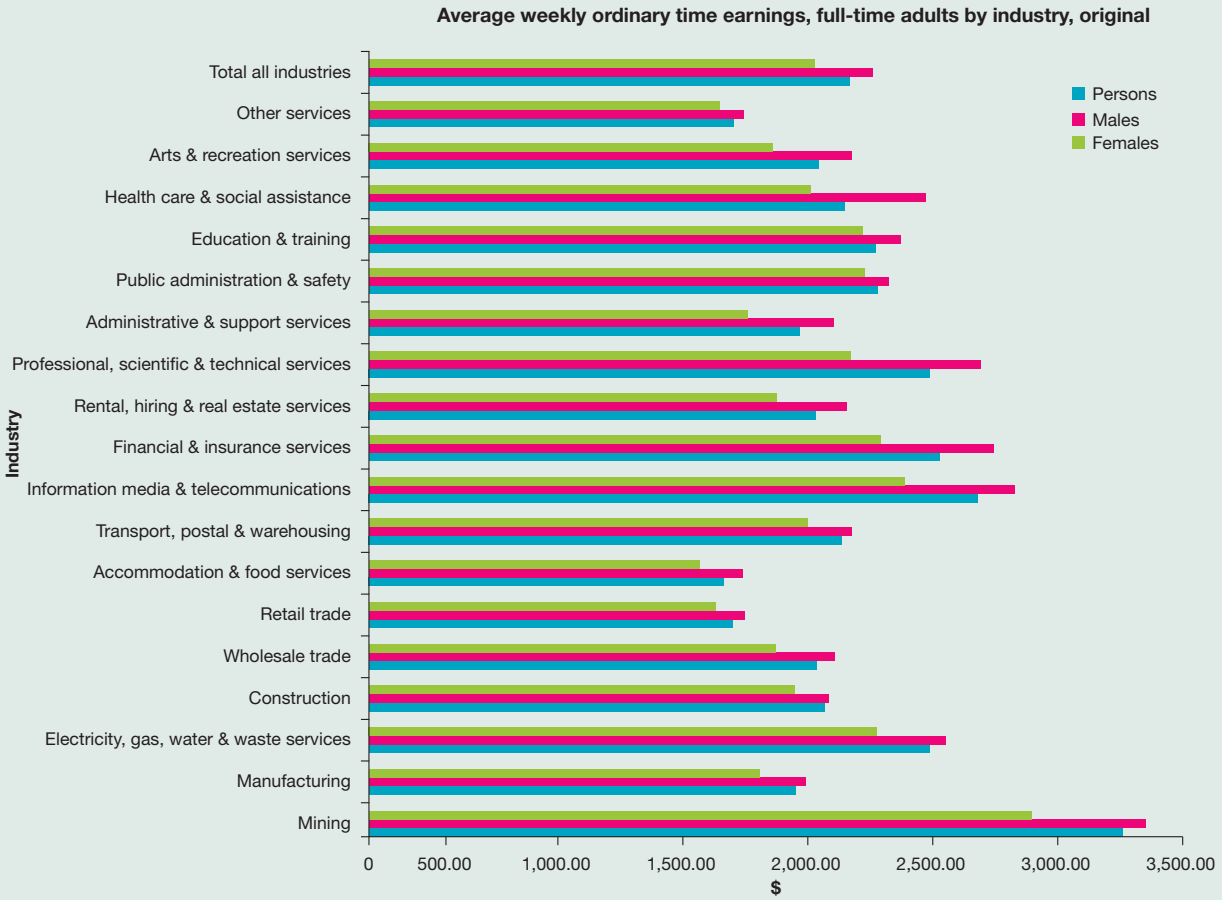
Work is important for Aboriginal and Torres Strait Islander Peoples. Many mix earning a living with cultural practices. For example, Josh 'Koomal' Whiteland is a Wadandi custodian who runs Koomal Dreaming in Busselton, Western Australia. He teaches visitors about native foods, bush medicine and traditional fire lighting.

Successful Aboriginal and Torres Strait Islander businesses also help their communities. The government supports these businesses, especially in regional tourism. Koomal Dreaming received help to improve kitchens and hire more local Aboriginal and Torres Strait Islander Peoples for food tours.

17.4 SkillBuilder activity INTERPRETING AND ANALYSING DATA AND INFORMATION

FIGURE 6 shows average weekly earnings for full-time workers in Australia.

FIGURE 6 The average weekly ordinary time earnings of full-time adults, by industry



Source: Australian Bureau of Statistics, Average Weekly Earnings, Australia May 2024.

1. **Identify** the five highest paying industries for all persons.
2. Choose three of the industries you have identified and **explain** why these are high-paying industries.
3. **Identify** the three lowest paying industries. **Explain** why these industries offer lower earnings.
4. **Outline** the trend between the amount males earn and the amount females earn in each industry.
5. **Explain** the potential reasons for your findings in the previous question.

17.4 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2	3, 4, 6	5, 7, 8

REMEMBER AND UNDERSTAND

1. **Determine** if the following statements are true or false.
   a. The income you can earn from a job can help you to improve your living standards.
   b. A wage is different from a salary.
   c. Dividends are a reliable source of income.
2. **Identify** three reasons a person may receive a welfare payment.
   A. They are working full-time.
   B. They are sick.
   C. They have retired and cannot support themselves.
   D. They are under the age of 16.
   E. They are unemployed.
   F. They are working for the healthcare system.
3. Rental income often comes from an investment property. **Propose** some of the risks involved in owning a rental property.
4. Rank each job below from 1 to 10. One is the highest status, and ten is the lowest. Write your number in the column on the right. **Compare** your list with your classmates' lists.

a. Entertainers	b. Doctors
c. Teachers	d. Bankers
e. Firefighters	f. Scientists
g. Police	h. Athletes
i. Plumbers	j. Computer programmers

APPLY AND ANALYSE

5. Answer the following.
   a. **Explain** what is meant by being a shareholder.
   b. **Outline** the benefits and risks of being a shareholder.
6. **Contrast** a wage and a salary.
7. **Explain** what is meant by the term 'standard of living'.
8. **Explain** how a person might combine different sources of income.

Answers and sample responses for this topic are available online.

LESSON 17.5 What is the role of entrepreneurs?

LEARNING INTENTION

By the end of this lesson, you should be able to:
- **explain** what an entrepreneur does
- **describe** the skills they bring to businesses in Australia.

Tune in

The word 'entrepreneur' is used a lot in business, but what is an entrepreneur? What does an entrepreneur look like? How do you know if someone is an entrepreneur? Being an entrepreneur is one way that a person can work and earn an income.

1. **Brainstorm the skills and qualities that an entrepreneur might have and share these with your class.**
2. **Make a list of famous or well-known entrepreneurs.**
3. **Next to your list of names, write down what you think the entrepreneur is mainly known for.**

FIGURE 1 What is an entrepreneur?

17.5.1 What is an entrepreneur?

An **entrepreneur** could be someone just like you. Entrepreneurs use their skills, knowledge and attitudes to turn ideas into actions. In Australia, the government supports people to start their own businesses and bring their ideas to life.

Entrepreneurs:
- persist in doing something about an opportunity they have recognised
- are not afraid to search for opportunities to promote their ideas
- thrive on the challenge of creating their own successful business
- have a problem-solving mindset
- are not afraid of taking risks
- are innovative.

An entrepreneur is someone who has an idea and turns it into a business. How old do you need to be? Any age! If you have a good idea and the drive to make it happen, you could be like these young entrepreneurs who have had big success stories:
- Sleepwear company, Night Sweet Thing, was started in 2019 by friends Bridey and Gandhari from New South Wales, Australia. They used TikTok to promote their business during COVID-19.
- Blake Garrett started his school software company, School Bytes, in 2015 when he was 17. He came up with the idea after hearing his school's office staff complain about their old system.
- Subway sandwich shops were the brainchild of 17-year-old US-based Fred DeLuca.
- Rip Curl, an Australian company, was started up in the Australian backyard of surfers Brian Singer and Doug Warbrick.
- Dell Computers was set up when 18-year-old Michael Dell realised it was a lot cheaper to build computers than to buy them ready made.

- Poppy King founded Poppy Industries at age 18 after recognising the gap in the market for matte lipstick.
- Molly Whiticker-Ferrie was aged 14 when she started her Melbourne-based business, Fairy Friends Forever, which specialised in birthday parties for girls.

Richard Branson

Richard Branson started the Virgin Group, which has companies like an airline and a mobile phone network. He began his first business at age 16, a student magazine. You might know him for his fun stunts when launching new projects, like his idea for space travel.

Branson is passionate and listens to his staff and customers. He carries a notebook to write down ideas and shares future plans with his team to inspire them to do their best.

FIGURE 2 Richard Branson

Lorna Jane Clarkson

Lorna Jane Clarkson started the activewear brand, Lorna Jane. While working as a dental therapist, she made leotards and noticed people wanted stylish workout clothes. In 1993, she and her husband, Bill, opened their first store. Now, they have over 130 stores worldwide.

The Clarksons took a risk by focusing on fitness clothing, even when others thought it was a small market.

FIGURE 3 Lorna Jane Clarkson

17.5.2 The difference between a business owner and an entrepreneur

We've seen examples of famous entrepreneurs, but what's the difference between a business owner and an entrepreneur? Both run businesses and help the Australian economy, but they act differently.

Business owners may start or buy a business and focus on running it every day to make a profit. They prefer to take small risks and make safe choices.

Entrepreneurs do more. They look for new opportunities and take bigger risks. They create a shared vision and demonstrate **initiative**, **innovation** and **enterprise**. A business owner might solve a problem for a **target market**, while an entrepreneur aims to make a big change in the world.

17.5 SkillBuilder activity COMMUNICATING

Many Australian entrepreneurs have launched successful businesses. Afterpay is an example of this.

FIGURE 4 Afterpay is an Australian company that lets people buy things now and pay later. It started in 2014 and has 16 million customers worldwide.

1. On your own or in pairs, research Australian entrepreneurs. An online search for the term 'Australian entrepreneurs' is a good starting point.
2. **List** three entrepreneurs you are interested in finding out more about.
3. Write a short summary on each entrepreneur. You should include the following:
   - What idea or product the entrepreneur has developed
   - How long the business has been running or when it started
   - Whether the entrepreneur's idea or product has changed in this time, or whether the entrepreneur has developed a new idea
   - The profitability of the business or the wealth that the entrepreneur has gained
4. Choose one entrepreneur to **investigate** further. At this stage, you should **discuss** the following:
   - Based on your research, what kind of attitude does your chosen entrepreneur have?
   - In your opinion, do you consider your chosen entrepreneur to be successful? **Justify** your answer.
5. Present your entrepreneur profile to the class.

17.5 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
2, 3, 4	1, 5, 6, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. **Define** what is meant by the term 'entrepreneur'.
2. Which of the following best describes the attributes of an entrepreneur?
   A. Persistent innovators who do not want the responsibility of owning a business
   B. Persistent innovators who provide the money to start a business
   C. Persistent and problem-solving innovators who pursue an idea for a business opportunity through to startup
   D. People who have the same attitudes as business owners, but are wealthier

3. Complete the following sentences.
   Entrepreneurs are _____ for the Australian economy. Entrepreneurs can be any _____. One of the defining features of an entrepreneur is that they are willing to take _____.
4. **Determine** if the following statements are true or false.
   a. Business owners and entrepreneurs are the same thing.
   b. Entrepreneurs are successful because they avoid challenges.
   c. Entrepreneurial behaviour is encouraged in Australia.
5. **State** what is meant by the following entrepreneurial behaviours.
   a. Seizing an opportunity
   b. Showing initiative
   c. Being innovative
   d. Being enterprising

APPLY AND ANALYSE

6. **Explain** the difference between a business owner and an entrepreneur.
7. **Explain** what is meant by a 'target market'.
8. Why is being an entrepreneur so important to the success of a business?

EVALUATE AND COMMUNICATE

9. **Distinguish** between innovation and enterprise.
10. Entrepreneurs and business owners take risks. **Describe** two risks they may take and why it is important that they take these risks.

Answers and sample responses for this topic are available online.

LESSON 17.6 What responsibilities come with working?

LEARNING INTENTION

By the end of this lesson you should be able to:
- **describe** some of the key responsibilities of being a worker in the Australian economy, including paying tax.
- **describe** the responsibilities of being an entrepreneur in the Australian economy.

Tune in

Imagine that you have developed a brand new type of white T-shirt that you want to produce and sell.

1. **List the factors you might consider when deciding to produce or sell this product.**
2. **What do you think are some laws or responsibilities you will need to comply with when producing your white T-shirt?**
3. **Make a list of five recent purchases that you have made.**
   Next to each item on your list, write down a law or responsibility the producer would have needed to comply with.

FIGURE 1 What do you need to consider when selling a new product?

17.6.1 Complying with laws and regulations

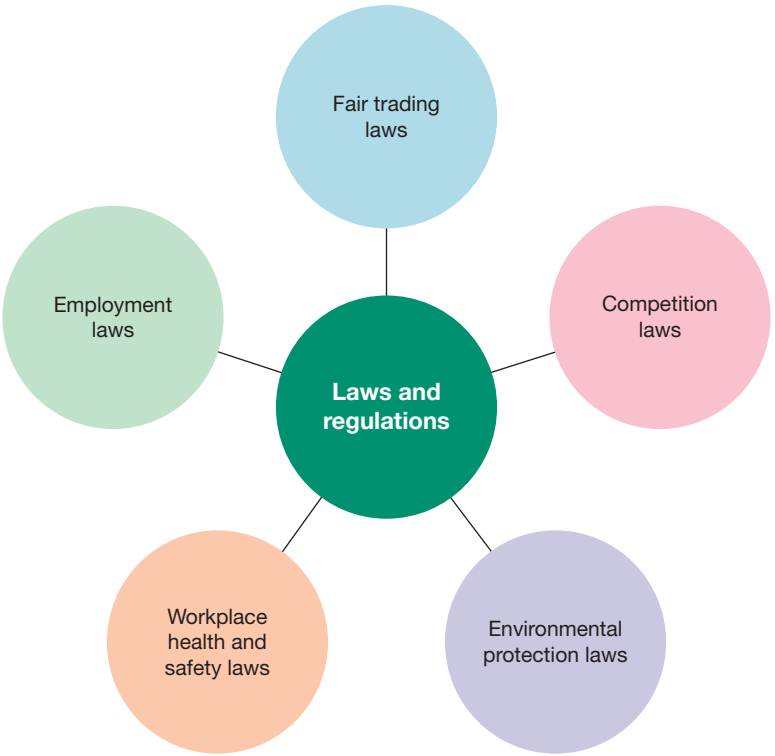
Laws in Australia protect consumers and the environment and ensure fair trading. They guide how businesses work with others and what their rights are. Entrepreneurs must follow these laws by looking after workers, caring for the environment and selling safe products. If they don't, it can lead to complaints, bad reviews, fines or business failure.

SkillBuilder discussion

Investigating

1. What are some laws entrepreneurs must follow?
2. How do regulations affect entrepreneurs' businesses?
3. Why is it important for entrepreneurs to follow these laws?

FIGURE 2 Some of the laws and regulations that entrepreneurs need to abide by



Fair trading laws

When selling something, you must follow fair trading rules. This means the product must be safe, fairly priced and meet Australian Standards. Buyers also have rights and guarantees.

Competition law

Entrepreneurs must follow the *Competition and Consumer Act 2010* (Cth). The Australian Competition and Consumer Commission makes sure businesses don't use false advertising or mislead customers with prices.

Employment law

An entrepreneur who cares about doing the right thing will follow the law by paying workers fairly and giving them their rights.

Workplace health and safety laws

All employers must follow workplace safety laws. Employees need a safe workplace, safe equipment and proper safety training. An entrepreneur who **values** safety might create new ways to keep workers safe.

Environmental protection laws

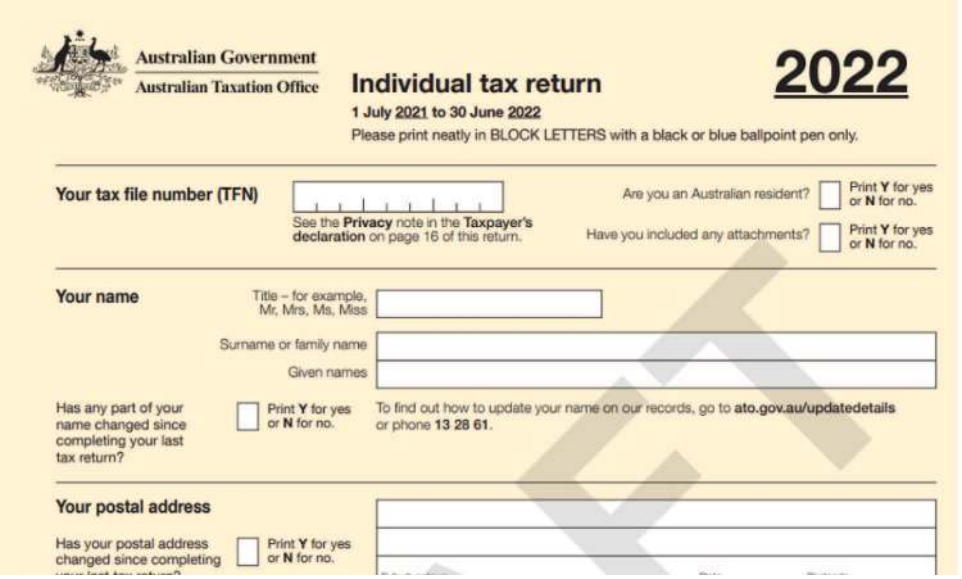
Some entrepreneurs care about the environment. Different states have different laws for this. Entrepreneurs who create eco-friendly products can succeed because many customers value the environment too.

Paying tax

One responsibility of all Australians who work is to pay income tax. Australia operates a **progressive income tax** system known as the **Pay As You Go (PAYG)** system. This means that income tax is automatically deducted from a person's pay each week, fortnight or month, depending upon how often they are paid.

It is called a progressive system because as a person's income rises, the percentage of their income paid in taxes increases.

FIGURE 3 A tax return form


Australian Government
Australian Taxation Office

Individual tax return

2022

1 July 2021 to 30 June 2022

Please print neatly in BLOCK LETTERS with a black or blue ballpoint pen only.

Your tax file number (TFN)

See the **Privacy** note in the **Taxpayer's declaration** on page 16 of this return.

Are you an Australian resident? Print **Y** for yes or **N** for no.

Have you included any attachments? Print **Y** for yes or **N** for no.

Your name

Title – for example, Mr, Mrs, Ms, Miss

Surname or family name

Given names

Has any part of your name changed since completing your last tax return? Print **Y** for yes or **N** for no.

To find out how to update your name on our records, go to **ato.gov.au/updatedetails** or phone **13 28 61**.

Your postal address

Has your postal address changed since completing Print **Y** for yes or **N** for no.

Source: https://www.tmsfinancial.com.au/tax-return/

It is a responsibility of workers to pay taxes. The government uses this tax revenue to pay for essential services such as roads, education, hospitals, defence and income support for those unable to earn an income themselves.

Progressive income tax

TABLE 1 Resident tax rates 2024–25

Taxable income	Tax on this income
0–$18 200	Nil
$18 201–$45 000	16c for each $1 over $18 200
$45 001–$135 000	$4 288 plus 30c for each $1 over $45 000
$135 001–$190 000	$31 288 plus 37c for each $1 over $135 000
$190 001 and over	$51 638 plus 45c for each $1 over $190 000

Source: https://www.ato.gov.au/tax-rates-and-codes/tax-rates-australian-residents

As can be seen in **FIGURE 3**, the percentage of income paid in taxes increases as income increases.

The first $18 200 of a person's income is free of tax — this is called the 'tax-free threshold'. Most school students with a part-time job won't earn more than $18 200 and so will not pay tax. However, a tax return is usually completed because a student may do extra shifts during holidays and may earn extra money and have to pay tax for that period. They may be entitled to a refund if their yearly income is still below $18 200.

17.6 SkillBuilder activity INVESTIGATING

Entrepreneurs are required to negotiate with various stakeholders as they go about pursuing their ideas.

1. **Construct** a mind map of the stakeholders that an entrepreneur may need to negotiate with.
2. Choose three stakeholders. **Describe** the kind of negotiation they may have with an entrepreneur.
3. Entrepreneurs must follow laws and treat customers fairly. They need to listen to their needs and concerns. Using the internet, **identify** information on treating customers fairly. You may like to visit the ACCC website.
4. Using the information you find, choose five areas of consumer law. For each one, **explain** how the entrepreneur should respond in a table like the one provided. The first one is already done for you.

Area of consumer law	How should the entrepreneur respond?
Customer rights and obligations	• The entrepreneur must provide safe goods that are fit for purpose and last a reasonable amount of time. • The entrepreneur must provide options for refund according to the law.

17.6 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4, 7	5, 6, 8	9, 10

REMEMBER AND UNDERSTAND

1. What is meant by fair trading?
   A. Selling a safe and fairly priced product
   B. Setting a price that all customers can afford
   C. Offering 10 guarantees on all items
   D. All of the above
2. Who must follow workplace health and safety laws?
   A. Employers
   B. Employees
   C. Employers and employees
   D. They are not laws, only recommendations

3. **State** whether the following statements are true or false.
   a. Entrepreneurs value money and success over all else.
   b. Business laws and regulations are designed to only benefit businesses.
   c. Entrepreneurs are exempt from fair trading laws.
   d. Following environmental protection laws benefits entrepreneurs and businesses because many customers value this
4. **Explain** why paying income tax is seen as a responsibility of people who earn an income.

APPLY AND ANALYSE

5. Do you think you have what it takes to be an entrepreneur? **Explain**, drawing attention to what you see as your strengths and weaknesses for such a career.
6. **Explain** how an entrepreneur's values can help them to meet employment laws.
7. **Describe** the values that you possess, and **outline** how these values might help you in your future.
8. **Explain** what is meant by a 'progressive income tax' and why this is considered a fair system.
9. Use the tax rates in 17.6.1 to **calculate** how much each of the following people would pay in tax:
   - Adam who earned $37 650
   - Catherine who earned $115 900
   - Rachael who earned $78 400
   - John who earned $267 200
   - Simon who earned $138 300

Answers and sample responses for this topic are available online.

LESSON 17.7 How are Aboriginal and Torres Strait Islander Peoples entrepreneurs?

LEARNING INTENTION

By the end of this lesson you should be able to **describe** the characteristics of Aboriginal and Torres Strait Islander entrepreneurs.

Tune in

You can find your purpose in your working life in many ways.

FIGURE 1 What's your purpose?

1. **Consider what you would like to do when you leave education and enter the world of work.**
2. **What would be your aim or purpose? Would you focus on earning money? If so, what would you do with the money that you make?**
3. **Would you focus on helping a community group? If so, which one and why?**
4. **What do you think the term 'profit with purpose' means? Discuss this with a partner.**

17.7.1 Aboriginal and Torres Strait Islander entrepreneurs

Aboriginal and Torres Strait Islander entrepreneurs have the oldest cultures in the world. They have spent thousands of years adapting to their environment and were some of the first bakers of bread. They are also known for land practices like aquaculture and firestick farming.

SkillBuilder discussion

Investigating

1. How do Aboriginal and Torres Strait Islander artists show entrepreneurial skills through their art?
2. Why is selling their art important for these artists?
3. What challenges might Aboriginal and Torres Strait Islander artists face as entrepreneurs?

FIGURE 2 Aboriginal and Torres Strait Islander artists show entrepreneurial skills when they produce and sell their art.

Since European settlement, Aboriginal and Torres Strait Islander Australians have not had the same chances as others. Now, programs are helping them achieve their goals. Like all entrepreneurs, they look for opportunities and take risks. Many focus on businesses that help their communities and have found success in tourism, art, clothing and natural products.

Tahnee Edwards is a proud Yorta Yorta and Taungurung woman. She started Gammin Threads as a side project while working at an Aboriginal and Torres Strait Islander family violence prevention service. Her business celebrates language and pride, offering 'chillwear' and accessories.

Through Gammin Threads, she empowers women and encourages living colourfully.

SkillBuilder discussion

Interpreting and analysing data and information

1. What types of products does Gammin Threads create?
2. How does Gammin Threads stand out with its colourful designs?
3. Why is Gammin Threads popular for its 'chillwear' and accessories?

FIGURE 3 Gammin Threads offers colourful 'chillwear' and accessories.

17.7.2 Community-run companies

Social traders, profit-for-purpose businesses and social enterprises all want to make the world better. They focus on social, environmental, cultural or economic causes. These businesses earn most of their money from sales and use at least half of their profits to support their mission. Unlike charities, they don't rely on donations.

The government supports Aboriginal and Torres Strait Islander entrepreneurs, just like other business owners. However, help for them often follows their own ways of doing business. Two main sources of support are the Indigenous Advancement Strategy (IAS) and Indigenous Business Australia, which offer grants and loans for their businesses.

Joint ventures

The Gumatj Corporation is a partnership between investors and traditional landowners. It represents the Gumatj people, who live in the Miwatj area near Darwin. The corporation runs various businesses in Gunyangara and Gove Peninsula to create local jobs.

A **cooperative** is a business model where customers or workers own and control the business together. Many Aboriginal and Torres Strait Islander entrepreneurs like this model because it helps them grow while keeping a community focus. In a cooperative, everyone benefits from the business's success, not just the owner.

CASE STUDY

Muru Office Supplies

Muru Group was founded in 2012 by Mitchell Ross, a Bidjigal man from La Perouse in southeast Sydney.

In 2014, a partnership was formed between the Muru Group and Complete Office Supplies (COS) to found Muru Office Supplies (MOS), a 100 per cent Australian-owned national Supply Nation–certified workplace supplies provider. The business sells office supplies including brochures, stationery, prints, labelling, and office and desk essentials among other things for the workplace.

MOS describes itself as a purpose-driven, community-focused organisation that contributes a percentage of all profits to education, employment, and health and **wellbeing** initiatives that support Indigenous communities.

For example, the business supports an early childhood education program that operates three days a week. The aim of the program is to improve literacy and numeracy skills through structured play. Over 30 Indigenous children receive free access to this program.

In 2017, Muru partnered with KPMG to fulfil a contract to supply. The contract includes supplying KPMG with products such as copy paper, office supplies and kitchen supplies, as well as printing and promotional items.

Source: https://supplynation.org.au/stories-of-success/mos-kpmg/ and https://muruoffice.com.au/

17.7 SkillBuilder activity INVESTIGATING

Clothing The Gaps is a social enterprise from Victoria, co-founded by Laura Thompson (Gunditjmara) and Sarah Sheridan (non-Indigenous). The business has 81 per cent of its staff from the Aboriginal and Torres Strait Islander community. It uses its profits to support health programs in Aboriginal communities and help close the life expectancy gap between Indigenous and non-Indigenous people.

1. a. Clothing The Gaps is an Aboriginal and Torres Strait Islander business with an objective other than profit. **Explain** what this business aims to do.
   b. **Propose** attributes that the owners of Clothing The Gaps are likely to have.

FIGURE 4 Clothing The Gaps founders Laura Thompson and Sarah Sheridan

2. Research another Aboriginal and Torres Strait Islander entrepreneurial venture. Typing 'Aboriginal and Torres Strait Islander entrepreneurs' into your browser will give you a good start.
3. **Identify** an Aboriginal and Torres Strait Islander business that interests you. Access its website and visit the 'About us' section to answer the following questions.
   a. What does the business sell?
   b. Does the business have a 'profit for purpose'? What aims does the business have?
   c. How did the entrepreneur behind the business achieve success?
   d. Does the business partner with other businesses or government agencies?
   e. What attributes are the owners of the business likely to have?

17.7 Exercise

learnon

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 2, 3, 4	5, 6, 7	8, 9, 10

REMEMBER AND UNDERSTAND

1. Complete the following sentence:
   Social traders, profit for purpose and social enterprise business have similar _____. They are motivated not only to make a _____, but also to _____ a public or community cause.
2. **Determine** if the following statements are true or false.
   a. Social traders, profit for purpose and social enterprise businesses are the same as charities.
   b. Aboriginal and Torres Strait Islander entrepreneurs tend to pursue profit-generating activities while supporting remote and rural communities.
   c. The government offers no support for Aboriginal and Torres Strait Islander entrepreneurs.
3. Aboriginal and Torres Strait Islander entrepreneurs often prefer the **sole trader** / **cooperative** / **partnership** business model because it is based around the idea of democratic ownership and control by the people who **created** / **run** / **use** the business.
4. **Explain** what is meant by a social enterprise.
5. **Outline** why Aboriginal and Torres Strait Islander entrepreneurs seek to support their local communities.

APPLY AND ANALYSE

Interpreting and analysing

6. **Explain** what is meant by a 'partnership' and outline how this is different from a 'cooperative'.
7. Read the case study on Muru Office Supplies (MOS).
   a. **Outline** what the business sells.
   b. **Explain** how this business helps the local Aboriginal and Torres Strait Islander community.
8. **Explain** how Muru Office Supplies makes use of partnerships to increase sales.
9. After reading the case study on MOS, **list** the values that the owner and founder might have.
10. **Justify** why it is important for Aboriginal and Torres Strait Islander entrepreneurs to receive support.

Answers and sample responses for this topic are available online.

LESSON 17.8 Inquiry: Who are the innovators and entrepreneurs?

LEARNING INTENTION

By the end of this lesson you should be able to:

- **summarise** a recent innovation
- **explain** the role of the entrepreneur within the economic and business environment.

Background

Society is diverse, and so is work. Work helps us and our communities in many ways.

SkillBuilder discussion

Investigating

1. How is the world of work diverse?
2. What different types of jobs exist in society?
3. Why is diversity important in the workplace?

FIGURE 1 The world of work is as diverse as society.

Before you begin

Access the **Inquiry rubric** in the digital documents section of the Resources panel to guide you in completing this task at your level. At the end of the inquiry task you can use this rubric to self-assess.

Inquiry steps

Step 1: Questioning and researching

Go to the **Australian Government Business** website in the Resources panel. It shows how entrepreneurs can get business support and new ideas.

Define what is meant by an 'entrepreneur'.

Using the **Australian Government Business** weblink in the Resources panel or other websites, find news and updates on new innovations.

Step 2: Interpreting and analysing

Select one innovation and **summarise** it. Include information about whether the innovation has any of the special features that enable a good or service to be more successful.

Explain how this innovation can benefit society.

Do you think that everyone can become an entrepreneur? **Explain** your answer.

Step 3: Evaluating, concluding and decision-making

Explain how you might like to contribute to society in the future. Will you be an entrepreneur? Will you work for someone else? Will this ideally be full-time or part-time? Will you volunteer? **Explain** the reasons for your answers.

Step 4: Communicating

Communicate your findings on the role of the entrepreneur. Use a format of your choice agreed upon by your teacher.

LESSON 17.9 Review

17.9.1 Key knowledge summary

Use this dot point summary to review the content covered in this topic.

17.2 Why do people work?

- Work is important for everyone. It helps us buy what we need and want. Work also has benefits that don't involve money.
- People work for different reasons: to earn money, to improve living standards, to gain prestige, to obtain self-satisfaction, to make friends and to help others.

17.3 What types of work are there?

- Work can be paid or unpaid.
- Work can be voluntary, and volunteers make an important contribution to the community.
- More men than women are in full-time employment. Women tend to have more part-time or casual employment.

17.4 How do you earn an income?

- Sources of income include work, owning a business, being a shareholder or providing a rental service.

17.5 What is the role of entrepreneurs?

- An entrepreneur takes on a risk by starting any business with an idea, hoping to make a profit through initiative and enterprise.
- Any person, of any age, can be an entrepreneur, as long as they have a great idea and the determination to make it happen.
- Business owners manage daily operations to make a profit. They reduce risks and make smart decisions. They may have ideas to solve problems and meet customer needs.

17.6 What responsibilities come with working?

- Entrepreneurs and workers are obliged to comply with government legislation related to their work.
- Paying taxes is a key responsibility for workers and entrepreneurs.
- Our tax system is a progressive tax system.
- Taxes are used by the government to pay for government services.

17.7 How are Aboriginal and Torres Strait Islander Peoples entrepreneurs?

- Aboriginal and Torres Strait Islander entrepreneurs are innovating and building strong business ventures.
- Many Aboriginal and Torres Strait Islander entrepreneurs incorporate community support into their ventures.

17.8 Inquiry: Who are the innovators and entrepreneurs?

- Entrepreneurs and innovation enable goods and services to be more successful.

17.9.2 Key terms

casual an employee who works only when needed
cooperative a farm, business or other organisation owned and run jointly by its members, who share the profits or benefits
enterprise the creative or bold efforts made by someone to achieve something new
entrepreneur a person who takes on a risk by starting a business with an idea, hoping to make a profit through initiative and enterprise

full-time an employee who works 35 hours or more per week, or who works the minimum number of hours stipulated by the industrial award for that occupation or industry
gig economy jobs that are particularly short term in nature. These include short-term contract positions, which are characterised by minimum wage and conditions.
initiative the first step or opening move in a series of actions
innovation either adding a new product to an existing product line, or significantly improving an existing product or process
material living standards access to physical goods and services
non-material living standards factors that affect a person's quality of life regardless of income
part-time an employee who works fewer than 35 hours per week
Pay As You Go (PAYG) Pay As You Go tax system
progressive income tax a tax system whereby the percentage of tax paid increases as income increases
salary fixed or regular payment for work completed or services performed
seasonal an employee who usually works during a season, such as winter or the fruit-picking season
speculator a person who invests in stocks, property or other ventures in the hope of achieving a profit and a source of income
standard of living quality of life as measured by the amount of money made by an individual or household (using income per capita or income per household)
target market a market at which a product is deliberately aimed
values things a person holds as being important; can affect the way you live and work
wage payment for work completed or services performed, usually dependent on hours worked per week or month
wellbeing an overall measure of quality of life
work–life balance the division of one's time and focus between working and family or leisure activities

17.9.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry questions posed in the Overview:

Why do people work and what types of work can they do? Why is work so important to society?

1. Now that you have completed this topic, what is your view on the questions? 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 questions, outlining your views.

learnon

Post-test	Online post-test
eWorkbook	Customisable worksheets for this topic Reflection
Digital document	Key terms glossary

17.10 Review exercise

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
1, 4, 7, 10, 15	2, 3, 5, 6, 8, 9, 13	11, 12, 14

REMEMBER AND UNDERSTAND

1. Sources of income include
   A. casual work and odd jobs.
   B. salaries from working full-time or part-time.
   C. payments from superannuation.
   D. all of the above.
2. What must you be to be officially considered employed?
   A. Actively contributing to society
   B. Working more than one hour in a full-time, part-time or casual position
   C. Over the age of 15 and looking for work
   D. All of the above
3. Which of the following groups is not part of the labour force?
   A. People actively looking for work
   B. Unemployed people
   C. Casual workers
   D. Pensioners
4. Why do most people work?
   A. To get rich and famous
   B. To buy a brand-new car and designer clothes
   C. To receive an income
   D. To fulfil a lifelong dream
5. What can material living standards be measured by?
   A. The amount of goods and services you can afford
   B. The feeling of satisfaction you receive from work
   C. How stressed you feel
   D. The levels of crime, and the leisure time and facilities you have access to
6. What is meant by non-material living standards?
   A. Factors that affect a person's quality of life irrespective of income
   B. Access to more goods and services
   C. Dividing your time between work and leisure
   D. All of the above
7. What is a financial benefit of participating in the workforce?
   A. Developing your skills and talent
   B. Being able to be a consumer
   C. Increasing your levels of happiness
   D. Contributing to the Australian economy
8. Working can improve self-esteem. What does self-esteem mean?
   A. Feeling of stress from too much work
   B. Feeling good about yourself and your accomplishments
   C. Being able to use your skills
   D. Earning money and increasing your material living standards
9. What can casual work be defined as?
   A. Full-time employment
   B. Volunteer or community support roles
   C. Working a set shift pattern each week
   D. Working only when needed

10. Unpaid work
    A. is not included in official measurements of work.
    B. includes caring for family members, and completing household chores.
    C. is mostly performed by women.
    D. includes all of the above.

ANALYSE AND APPLY

11. **Discuss** the benefits of being an entrepreneur.
12. **Discuss** the benefits of working as a volunteer.
13. **Explain** how Aboriginal and Torres Strait Islander entrepreneurs contribute to society.
14. Do we work for a living or do we live to work? **Explain** your answer.
15. Paying taxes is a responsibility. Do you agree? **Justify** your response.

Answers and sample responses for this topic are available online.

GLOSSARY

accused a person who has been charged with a criminal offence
acupuncture a medical practice in which long, sharp needles are inserted under the skin as a means of diagnosing, relieving or curing illness
agriculture cultivation of land, growing crops or raising animals
alluvium the loose material brought down by a river and deposited on its bed, or on the floodplain or delta
amenities features that make a place more pleasant or attractive
amulet charm believed to protect against evil
anaesthetic a drug to deaden pain
ancient history the period from the beginning of civilisation to the fall of the Roman Empire
appropriate technology technology designed for a specific place, is affordable and locally repairable
aquaculture the rearing of aquatic animals, or the cultivation of aquatic plants for food. Aquaculture was a major part of the pre-European settlement economies of Aboriginal and Torres Strait Islander communities.
aqueduct a structure built to carry water long distances
aquifer a body of permeable rock below the Earth's surface that contains water, known as groundwater; water can move along an aquifer
arid lacking moisture; especially having insufficient rainfall to support trees or plants
artefact an object made or changed by humans
artesian aquifer an aquifer confined between impermeable layers of rock; the water in it is under pressure and can flow upward through a well or bore
artificer a craftsperson or inventor
artisans skilled craftspeople
Asiatic peoples of Asia, including the Middle East
aspect feature or quality, or the direction something is facing
astrology interpreting the influence of the stars on human affairs
atmosphere the layer of gases surrounding Earth
auxiliaries soldiers in the Roman army drawn from areas conquered by Rome and made part of its empire
avalanches rapid movement of snow down a slope, usually under the influence of gravity; can also be triggered by animals, skiers or explosions
balance of power when minority parties/independents influence government decisions
barbarians the Roman term for all peoples who lived beyond the borders of the empire
barometer an instrument used to measure air pressure
beyond reasonable doubt the standard of proof required in a criminal trial where the prosecution must prove that the accused is guilty to such a high degree that a reasonable person would have little doubt that the accused committed the crime
biased one-sided or prejudiced; seeing something from just one point of view
bicameral a parliament with two houses
biodiversity the variety of life in a habitat or ecosystem
blasphemous great disrespect shown to God or to something holy, or something said or done that shows this kind of disrespect
built environment a place that has been constructed or created by people
bureaucrat a government official
business any activity conducted by an individual or individuals to produce and sell goods and services to make a profit
Cabinet the top-level decision-making group within the Australian Government made up of most or all ministers

canopic jars used to store the liver, lungs, intestines and stomach of the person being mummified
cassowary a large flightless bird related to the emu with a bare head and neck
castrated having had the testicles cut off
casual an employee who works only when needed
cataracts rapids, where the river's surface is broken by rocks
catchment the drainage basin of a river
cause and consequence 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
census a survey to count population and gather statistics in Australia
change the process by which places, environments or spatial patterns alter over time. In Geography, change can be natural (like erosion or climate change) or human-made (like urban development or deforestation).
chronology a record of past events in order of time, from Latin *chronos* meaning time and *logos*, meaning to work out
civil war a war between rival factions within one state or country
civilisations societies that have towns and features such as complex forms of government and religion
climate change any change in climate over time, whether due to natural processes or human activities
cloud seeding implanting clouds with substances to cause rain
colonial relating to the time when Australia was a British colony, under the control of the British government
committal hearing in very serious cases, the procedure held in a lower court to determine if enough evidence exists for the case to move to a higher court
community a group of people who live and work together, they share similar values; a group of people living in a particular region
concubines women who lived with the emperor in a relationship but were not married to him
conscripted forced to become a soldier
conservation to prevent waste or destruction
constellations groups of stars
constitution a set of rules that determines the structure of government and its law-making powers
consumer a person or group who is the final user of goods and services produced within an economy
contemporary issues the diverse range of current events and issues that are facing society
continuity and change the concept that while many changes occur over time, some things remain constant
continuous resource a resource that is never used up by humans
conurbation an extended urban area, usually made up of a town merging with the suburbs of a city
convention an unwritten rule, not a law; an accepted way of doing something
cooperative a farm, business or other organisation owned and run jointly by its members, who share the profits or benefits
counsel for the accused a lawyer who represents the accused person
Country the place where Aboriginal and Torres Strait Islander Peoples come from and where their ancestors lived; it includes the living environment and the landscape
crevasses a deep crack in ice
crucified to be killed by crucifixion, an ancient form of execution in which the victim was tied or nailed to a pole or (as was Jesus) a cross and left to die slowly in agony
cultural intolerance when individual differences are not accepted by others
cyclones intense low-pressure systems producing sustained wind speeds in excess of 65 km/h; they develop over tropical waters where surface water temperature is at least 27 °C
Daoism a Chinese philosophy and spiritual tradition that teaches people to live in harmony with the Dao (the way)
deities gods or goddesses
delta low, triangular area where a river fans out as it nears the sea
demand a need or want of consumers expressed by the spending of income

democracy a political system where citizens elect representatives to govern and make laws on their behalf, with key freedoms protected including speech, association, assembly, religion and movement
demographic describes statistical characteristics of a population
demotic script the simplest of the ancient Egyptian scripts; almost like handwriting
deported forced to leave the country
desalination a process that removes salt from sea water
dialects different forms of a language
direct action peaceful public activities to create change
discrimination unfair or prejudicial treatment of people and groups based on race, gender, age or sexual orientation
dissection the systematic cutting up of a body for medical study
diverse showing a great deal of variety
divination the skill of reading omens
DNA the material in all living things that carries genetic information
Dreaming The Dreaming in Aboriginal and Torres Strait Islander spirituality explains the beginning of Earth, life cycles, creation and nature. It shows everyone's place in the world and the importance of rituals and traditions.
drought a long period of time when rainfall received is below average
due process the procedures occurring during a trial that ensure people are treated fairly by the legal system
dugong a sea animal, sometimes called a sea cow, found mainly on the coasts bordering the Indian Ocean
ecological footprint total area of land used to produce the goods and services consumed by an individual or country
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
ecosystem a community of organisms, plants or animals and the environment they exist in
El Niño the reversal (every few years) of the more usual direction of winds and surface currents across the Pacific Ocean; this change causes drought in Australia and heavy rain in South America
electoral system the process for conducting elections and choosing representatives
emotive words words that create a strong emotional reaction
employees people who work for a wage or salary
enterprise the creative or bold efforts made by someone to achieve something new
entrepreneur a person who takes on a risk by starting a business with an idea, hoping to make a profit through initiative and enterprise
environment the natural and human surroundings in which people, plants and animals live, including ecosystems, landscapes and built environments
environmental resource a material found in nature that is necessary or useful to people
equilibrium a resting point in a market where the forces of supply and demand are equally matched, and where the market is 'cleared'
Etruscans advanced, civilised people who dominated early Rome from about 575 BCE to about 396 BCE
evaluation the process of assessing something to determine its value, effectiveness or impact
evaporation the process by which water is converted from a liquid to a gas and thereby moves from land and surface water into the atmosphere
evidence information that indicates whether something is true or really happened
Federation when separate states or colonies join to form one united country, sharing law-making power between the national and state governments
fly in, fly out (FIFO) workers who fly to work in remote places, work 7-to-21-day shifts and then fly home for extended leave

forage to search for provisions or food
forum an open meeting place of a town or city
franchise a business that gives the right to another person or business to sell goods or services using its name
frostbite damage caused to the skin when it freezes, brought about by exposure to extreme cold; extremities such as fingers and toes are most at risk, along with exposed parts of the face
full-time an employee who works 35 hours or more per week, or who works the minimum number of hours stipulated by the industrial award for that occupation or industry
gale force winds wind over 62 kilometres per hour
gig economy jobs that are particularly short term in nature. These include short-term contract positions, which are characterised by minimum wage and conditions.
global citizens people who are aware of the world and working to make it better
goods physical or tangible items that satisfy needs and wants
government a group of people with the power to rule over a country or state and make decisions and laws on behalf of the people
Great Pyramid the oldest and largest pyramid in Egypt; one of the Seven Wonders of the Ancient World
Great Sphinx monument with the body of a lion and the face of a man; located in Giza near the Great Pyramid
groundwater water that is stored underground in the cracks and spaces in soil, sand and rock. It comes from rain and water that soaks into the ground and collects in areas called aquifers.
halberds daggers mounted on axe handles
heresy an opinion or belief that contradicts orthodox beliefs, especially in religion
hieratic Egyptian script that was less decorative and complex than hieroglyphs
horticulture the growing of garden crops such as fruit, vegetables, herbs and nuts
hydrologic cycle another term for the water cycle
hydrometeorological hazards natural disasters caused by weather or water, like floods, storms or droughts
hypocaust an underfloor and water-heating system used in Roman villas and public baths
hypothermia when a person's core body temperature falls below 35 °C and the body is unable to maintain key systems; risk of death without treatment
hypothesis (plural: hypotheses) a theory or possible explanation
inclusiveness providing equal access to opportunities and resources for everyone
income money earned through employment or investment
infantry foot soldiers
informal sector jobs not officially recognised by the government
infrastructure the basic physical and organisational structures and facilities that help a community run, including roads, schools, sewage and phone lines
initiative the first step or opening move in a series of actions
innovation either adding a new product to an existing product line, or significantly improving an existing product or process
intensification the action of making or becoming something greater
interconnection the way people, places and environments are linked to each other through natural processes, trade, migration, culture and technology
interest group an organisation focused on specific issues or community needs
Inundation the seasonal flooding of the Nile
investigate to carry out a detailed and systematic inquiry to discover facts or information about a topic or issue
irrigation water provided to crops and orchards by hoses, channels or sprays or drip systems in order to supplement rainfall
isobars lines on a map that join places with the same air pressure
judge a court official who hears cases in the higher courts, such as the District or County Court, or the Supreme Court
judiciary a collective name given to the judges who preside over law courts

juror a person selected to hear and assess the evidence in a court case
jury a group of ordinary people randomly selected to hear and assess the evidence in a court case
justice the use of laws to treat people fairly and in a way that is morally right
labour the human skills and effort required to produce goods and services
Latin the language of Ancient Rome and its empire
legal aid the provision of legal assistance to those involved in a dispute or criminal matter who are unable to pay for legal representation
legal representation services performed by a qualified legal practitioner, such as a lawyer, who deals with legal matters on behalf of the person who has hired them
legal system a system for interpreting and enforcing the laws of a country
legislation a term used to describe laws passed by parliament
limited liability where shareholders cannot lose more than their investment in the event of the failure of the business
literacy rate the percentage of people over 15 who can read and write
liveable city a city that people want to live in, which is safe, well planned and prosperous and has a healthy environment
livestock animals raised for food or products
lobby group an organisation that tries to influence government decisions
location a point on the Earth where something can be found
loot goods or property taken from a defeated enemy after a battle
lore the accumulated traditional knowledge, beliefs and customs passed down from generation to generation in a society; it is passed on orally, not in written form
magistrate a court official who hears cases in a Magistrates Court
magistrates men elected by the citizens to run Rome for a year
mandate of heaven a Chinese expression meaning that a ruler had been chosen by the gods
market an institution or organisation where goods and services are bought and sold at prices which are negotiated between buyers and sellers
material living standards access to physical goods and services
mausoleum a large tomb structure
medieval of the Middle Ages
megadrought a drought lasting more than 20 years
meteorologists a person who studies and predicts weather
midden a mound of material, such as shells and bones, marking the place where people once lived
Middle Ages between ancient and modern historical periods (generally between the fifth and fifteenth centuries)
monsoon rainy season accompanied by south-westerly summer winds in the Indian subcontinent and South-East Asia
mound spring mound formation with water at its centre, formed by minerals and sediments brought up by water from artesian basins
multi-faith a society or environment where people of different religious beliefs coexist and are respected
multiculturalism a society in which the cultures and traditions of many different groups coexist and are encouraged
mummy a body that has been embalmed
natron a mineral salt used to dry out dead bodies
natural environment elements like wind, soil, water, plants and animals
natural resources resources such as landforms, minerals and vegetation that are provided by nature rather than people
needs goods or services that consumers consider necessary to maintain their standard of living
neighbourhood a region in which people live together in a community
non-government organisations (NGOs) non-profit groups working on humanitarian tasks
non-material living standards factors that affect a person's quality of life regardless of income
non-renewable resource a resource that cannot be renewed in a short time and is finite
objective information where data or events are presented without emotive words or opinion

opportunity cost the next best alternative given up whenever a choice is made
pagan a name used to refer to people who believed in non-Christian gods
papyrus paper made from crushing reeds
part-time an employee who works fewer than 35 hours per week
patricians members of the aristocratic families who founded the Roman Republic
patronage supporting and encouraging authors and artists
Pay As You Go (PAYG) Pay As You Go tax system
persecution hostility, violence or ill-will directed at a person or group of people on the basis of their personal characteristics
perspectives point of view or attitude
Philosophy study of the fundamental principles and causes of things
place a specific location on Earth that has unique physical and human characteristics, making it meaningful to people.
plebeians all non-patrician citizens of Rome
Pleistocene a period of Earth's history from about 2.6 million to 11 700 years ago, known for ice ages and early human development
pluralism a system or idea where different groups, beliefs or opinions are accepted and have the right to exist and be heard in society or government
political media news, articles and other content that provide information or opinions about politics, government and public issues
popular sovereignty the idea that the people have the power to choose their leaders and make decisions through voting
population density the number of people per square kilometre
potential resource a resource that exists but is unusable in its current state, such as salt water, ice and water vapour
precipitation a form of water from the atmosphere; e.g. rainfall, snow
prehistory the period before writing was invented
presumption of innocence the principle that all accused people who appear before a court are presumed to be innocent until the prosecution proves that they are guilty
primary research collection of original information
primary sources objects and documents that were created or written in the period of time that the historian is investigating
procedural fairness having fair procedures in place to protect the rights of all parties
producer an individual or a business involved in the production of goods and services
progressive income tax a tax system whereby the percentage of tax paid increases as income increases
prosecution the party bringing a criminal action against the accused
prosecutor the person who presents a criminal case on behalf of the state
public bath a public building complex containing baths of varying temperatures, and sports and beauty facilities; a popular meeting place for Roman citizens
pull factors reasons that attract people to come and live in a place
pumice lava ejected from a volcano that solidifies into a light, porous rock
push factors reasons that encourage people to leave a place and go somewhere else
rainfall variability the change from year to year in the amount of rainfall in a given location
referendum a process of allowing the people to vote on an important issue
region any area of varying size that has one or more characteristics in common
relative humidity the amount of moisture in the air
remote a place that is distant from major population centres
renewable resource a resource that can be naturally replaced if carefully managed
repeal removing a law so that it no longer applies
republic a system of government in which the head of state is not a monarch
resource allocation 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 the art of public speaking
rights the freedoms and protections guaranteed to all citizens in a democracy, including the right to vote, participate in government decisions, express opinions and be treated equally under the law
rites of passage ceremonial events that mark transitions in a person's life, for example some ceremonies apply to young people between 10 and 16 years, representing a point of transition from childhood to adulthood
royal assent the formal approval by the monarch's representative, and the final step necessary before a law comes into force
rule of law the legal principle that all citizens are subject to the law, and equal before the law, as it is upheld by independent courts
sago a starch food obtained from palm used to produce a flour
salary fixed or regular payment for work completed or services performed
Samnites a mountain tribe of central Italy
sarcophagus stone or wooden coffin (often inscribed or decorated) in Egypt
scale the ratio that shows how much smaller a map is compared to the real world, e.g., one centimetre on a map equals one kilometre in real life
scarcity the economic problem of having unlimited needs and wants, but limited resources to satisfy them
sea change the act of leaving a fast-paced urban life for a more relaxing lifestyle in a small coastal town
seagrass marine plants with the same basic structure as terrestrial (land) plants. They trap and stabilise sediment and provide habitats and food sources for green turtles and fish.
seasonal an employee who usually works during a season, such as winter or the fruit-picking season
secondary research collection of resources on an issue, prepared by others and offering different viewpoints
secondary sources reconstructions of the past written or created by people living at a time after the period that the historian is studying
secular not having a connection to religion
Senate the governing body in ancient Rome; (in theory) an advisory body of ex-magistrates
services actions done for you by others to satisfy your needs and wants
shadoof an irrigation device used to lift water from the river
significance the importance assigned to particular aspects of the past (e.g. events, developments, movements and historical sites)
soak place where groundwater moves up to the surface
social cohesion the degree to which communities are united by shared values, traditions and experiences
sole trader a person who owns and operates a business alone, taking full responsibility for its profits and losses
southern oscillation a major air pressure shift between the Asian and east Pacific regions; its most common extremes are El Niño events
specific powers areas that the federal government controls under the Constitution
speculator a person who invests in stocks, property or other ventures in the hope of achieving a profit and a source of income
stalemate a situation in a contest or conflict in which neither side can defeat the other
standard of living quality of life as measured by the amount of money made by an individual or household (using income per capita or income per household)
storm surges a sudden increase in sea level as a result of storm activity and strong winds; low-lying land may be flooded
subjective information that is based on opinion or bias
supply a market force that relates to the quantity of a particular good or service that producers are willing to sell at a given price over a period of time

sustainability the responsible use and management of resources to meet current needs while ensuring future generations can also meet theirs
sustainable able to be cared for and maintained
talons a claw, especially belonging to a bird of prey
target market a market at which a product is deliberately aimed
tenant farmers poor farmers who rented small plots of land
Thracian a native of the Roman province of Thracia
timeline a diagrammatic tool representing a period of time, on which events are placed in chronological order
torrential rain heavy rain often associated with storms, which can result in flash flooding
tree change the act of leaving a fast-paced urban life for a more relaxing lifestyle in a small country town, in the bush, or on the land as a farmer
trial the court process to determine whether someone committed a criminal act
tribalism behaviour and attitudes that stem from strong loyalty to one's own social group, sometimes in opposition to other groups
troposphere layer of the atmosphere closest to Earth, extending about 17 kilometres above Earth's surface, but thicker at the tropics and thinner at the poles; where weather occurs
typhoons the name given to cyclones in the Asian region
undernourished not getting enough food for good health and growth
unicameral a parliament with only one house
University of the Third Age a movement promoting lifelong learning during retirement or later life
unlimited liability where a business owner is personally responsible for all the debts of their business
uranium a dense grey radioactive metal used as a fuel in nuclear reactors
urban decay the process where a once functioning city or part of a city falls into disrepair and is abandoned. This is often the result of economic factors such as the decline of an industry leading to a lack of employment.
Valley of the Kings gorge on the Nile in Upper Egypt that contains many royal tombs
values principles that help you to decide what is right and wrong, and how to act in various situations
vassal state a state whose ruler recognises another, more powerful ruler as overlord
virtual water all the hidden water used to produce goods and services
virtue a moral standard or value
wage payment for work completed or services performed, usually dependent on hours worked per week or month
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
warlords generals from powerful landowning families
water footprint the total volume of fresh water that is used to produce the goods and services consumed by an individual or a country
water scarcity when the demand for water is greater than the supply available
water stress a situation that occurs in a country with less than 1000 cubic metres of renewable fresh water per person
weir a low dam built across a river to raise the level of upstream water to regulate the flow and catch fish
wellbeing an overall measure of quality of life
Westminster system based on the British Parliament and used by many countries, including Australia; named after the Palace of Westminster, where the British Parliament meets
White Australia Policy informal name for the *Immigration Restriction Act 1901*, which effectively prevented non-European immigration to Australia
whiteouts a weather condition where visibility and contrast is reduced by snow; individuals become disoriented because they cannot distinguish the ground from the sky
wilderness a natural place that has been almost untouched or unchanged by the actions of people
witness someone who saw or knows something important about a crime
work–life balance the division of one's time and focus between working and family or leisure activities
Xiongnu the ancient Chinese name for the nomadic Turkic tribes of Central Asia

INDEX

A

Aboriginal and Torres Strait Islander Peoples 20, 21, 38, 41, 391, 396–7, 534, *see also* Country, Deep Time, Dreaming, Everywhen
  and access to law 503–4
  Australia 22–3
    economics, sustainable 580–2
  economy 45–7
  entrepreneurs 612–16
    income for 603–4
  fire use 52
  food business 560
  history and culture 63
  initiation ceremonies 41–2
  laws 483
  'living museum' 395
  rites of passage 41
  sentencing courts 503–4
  skin names 37
  smoking ceremonies 393, 504, 521
  songlines 21–2
  spirituality 521
  trade routes of 46
  use of groundwater 254–6
Abu Simbel temple 112
access 480–2
  to justice 501–6
    community legal centres 503
    legal awareness 504
  to law 503–4
  to resources 403–4
  to water 280–1
accused (in a trial) 479, 507
active citizenship 460
active participant 536–7
acupuncture 217, 222
Adelaide Bank 575
Admonitions of Ipuwer, The 100
adopted gods 162–3
age, of pyramids 99–100
agriculture 273, 383, 423
air pressure 310–11
alluvium 301, 336
alphanumeric grid references 237
amenities 378, 423
amulets 90, 93, 122
anaesthetic 217, 222
Analects, The 201, 202
ancient China
  about 186–9
  big population 199
  civilisation 189–93
    affecting environment 198–201
    earliest dynasties 191
    physical features and beginning 189–92
    Warring States period (475–221 BCE)
  first emperor change 205–10
  Han dynasty rise and fall 210–15
  heritage of 215–19
    cultural sites 217
  influences of Confucianism 201–5
  inventions 215–17
    acupuncture 217
    gunpowder 217
    kites 217
    paper-making in 216
    seismographs 217
  life and death issues 193–8
    burials 195–7
    common people 194–5
    entertainment 195
    everyday life 195
    ruling classes 193–4
    women's hard lives 195
  natural environments 198–9
  religions and laws 201–5
ancient Egypt 76–80
  about 76
  Akhenaten and Nefertiti 102–6
  beliefs 92–6
    dead mummies 94–6
    journey to afterlife 92–3
  calendar 116
  effects of war and trade 106–10
    decline and fall 108
    First Intermediate (Middle) Period 107
    Old Kingdom to New Kingdom 106–8
    Second Intermediate (Middle) Period 108
  gods of 93–4
  greatest pharaoh 110–15
  makeup 116
  mathematics 116–17
  paper 115–16
  Rameses II 110–15
  River Nile 80–5
    defence 82
    farming 81–2
    religion 82–4
    transport 82
  social pyramid 85
  society 85–92
    nobles, priests, officials and scribes 87–8
    ordinary people 88–91
    pharaoh 86–7
    upper-class women 90–1
  truth about pyramids 97–102
  Tutankhamun 102–6
  women in 88–90
  writing 76–9
ancient Rome 130, *see also* Roman Empire
  army 142–5
  beliefs about death 158–60
    beliefs and funeral customs 158
    tombs and commemorations 158–9
  circus maximus 153
  class system 146
  culture 155–6
  growing power 134–7
  heritage 169–73
    Eastern Roman Empire and Christianity 169–70
    passing on culture 170–2
  laws and religion change 160–5
    spread of Christianity 163–4
  origins 134
  Pompeii 130–2
    Roman Republic 147
    slavery 150–3
    social divisions 145–7
anti-competitive practices
  banned 572–5
  exclusive dealing 574
  market power 573
  mergers and takeovers 574–5

predatory pricing 573–4
price fixing 573
resale price maintenance 574
anti-discrimination boards 467
anvil stones 49
aquaculture 60, 69
aqueducts 142, 177
aquifers 252, 336
Arcadis Sustainable Cities Index 410
archaeologist, role of 57
Arch of Constantine 165
arid 365, 423
armies 142–5
auxiliaries 142, 177
soldier's harsh life 142–4
structure 143
weapons and tactics 142
artefact 13
artesian water 253–4
artificers 187, 222
artificial intelligence 537
artificial levee 306
artisans and merchants 88
Asiatic 108, 122
aspects 351, 423
astrology 161, 177
atmosphere 249, 336
atmospheric and hydrological hazards 294
Augustulus, Romulus 166, 169
Augustus 148
Australia
Aboriginal and Torres Strait Islander entrepreneurs 613
Aboriginal and Torres Strait Islander Peoples 22–3
citizens participate in 460–4
climate 262–5
climate change and water security in 265–6
communities, influence of environment on 51–2
costliest natural disasters 294
courts work 487–93
Deep Time in 20–4
democracy 442–6, 466
diverse society 514–18
cultural diversity 516
multiculturalism 514–16
promoting cohesion 522–5
religion 518–22
Religious Discrimination Bill 525–6
traditions 523–4
values 523–4
European land occupation in 360
'food bowl' 298
freedom institutions 464–9
hierarchy of courts in 487–9
key issues in 537
natural hazards and disasters 295
parliamentary system 446–50
past investigation 57
place liveability 351–5
popular tourist destinations 351
rainfall variability 264
schoolchildren 515
trade and technology 45–51
water supply management 287
water usage 273
water variability 275–6
Australian Capital Territory 319
Australian Competition and Consumer Commission (ACCC) 572, 574, 609
role of 575
Australian Constitution 454, 457
advantages 465
anti-discrimination boards 467
creation of 464–5
disadvantages 465
free press 467–8
ombudsman offices 467
specific powers 472
Australian Consumer Law 566–8, 570, 582
Australian government 416–17
Australian Human Rights Commission 466–7
Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) 396
Australian Liberal Party 520
Australian Research Council 299
Australian Securities Exchange (ASX) 556
Australian Values Statement 523
avalanches 321, 336

B

Badu Islands 399–401
bait advertising 567
balance of power 444, 472
barbarians 165, 177
barometer 309, 336
Bartlett, Thomas 208
Bathurst and Melville Islands 42
Beaufort scale measures 314
Bendigo Bank 575
Berick, Wendy 62
beyond reasonable doubt 479, 507
bicameral 446, 472
Big Game Hunt 166
bike-sharing programs 388
biodiversity 255, 298, 303, 386, 423
Black Lands 81
blasphemous (charge against Jesus) 163, 177
blizzard 321
dangerous nature 321–2
Blue Nile 81
blue water 260–1
Book of the Dead of Hunefer 93
Brabham-Henley Brook 373
Branson, Richard 606
Bromwich, Robert 498
Bronze Age 29
Buddhism 202–3
built environment 351, 423
Bunjil the eagle, story of 25–7
bureaucrats 193, 222
Bureau of Meteorology 319
business 532, 583
concepts 534–7
and consumers, relationship 551–2
defined 541
opportunity cost 535–6
producers and government 572–80
skills 537–8
sustainability priorities of 561
types 554
work and 534–5
businesses ownership
alternative forms of 556–7
cooperatives 556
franchise 556–7
best form of 557
and entrepreneurs 606–7
forms of
corporation 555–6
partnership 555
sole proprietorship 554–5
Byron Bay 354–5

C

Cabinet 448, 457, 472
Caesar, Julius 147–8
calendar 116
Canduci, Alexander 174
canopic jars 95, 122

Carter, Howard 103
cartouche 77
cassowary 69
casualisation 598
casual work 595
cataracts 82, 122
catchment 287, 336
Catholicism 519
cause and consequence 4, 5, 11, 12, 13
census 373, 423
ceremonies 41, 43
  initiation 41–2
Charlemagne 170
child labour 383
Christianity 169–70, 519
  spread of 163–4
chronology 13, 192
Citarum River 288
citizenship 460
  ceremony 516
  civics and 430–3
citizens participate 460–4
  contacting representatives 461
  direct action 462
  electoral system 460–1
  working with groups 461
civic participation 431, 434
civics and citizenship 430–3, 504
  democratic institutions and systems 431, 433–4
  investigating contemporary 430–1
  issues 433
  participating in 431
civil war 99, 122, 147, 177
Clarkson, Lorna Jane 606
climate change 261–2, 336
  in Australia 265–6
climate graphs 237
climate, weather and 293
clime conditions 564
cloud seeding 336
cohesion 522–5
  values 523
colonial 483, 507
Colosseum 169
commemorations 158–9
committal hearing 495, 507
Commonwealth Bank 575
Commonwealth of Australia 465
Commonwealth Parliament 446
communicating 9–10, 431–2, 434
communication changes 598
communities 385–91
  community 423
  community-run companies 613–15
  defined 342
  importance of work 591
  legal centres 503
  studies 385–7
  transport strategies 387–90
compass 4, 215, 216
Competition and Consumer Act 2010 (Cth) 572, 575, 609
  competition law 609
concept diagram 238
concubines 187, 222
Confucius (551-479 BCE) 201
  philosophy of 201–2
Confucianism, influences of 201–5
conscripted 194, 222
conservation 38, 69
constellations 187, 222
constitution 464, 472 *see also* Australian Constitution
consumers 550, 576, 583
  ethical 520
  fair transactions 567
  government regulators 576
  guarantees for 568
  law and justice 566
  purchases 576
  relationship between businesses and 551–2
  responsibilities of sellers rights 570–1
  rights 566–72
  treating 567–8
continuity and change 3, 8–9, 13
continuous resources 247–9, 336
conurbation 379, 423
convention 472
Coober Pedy 365, 366
  future 366
  location map 365
cooperatives 556, 614, 618
Coriolis effect 312
corporation 555–6
  advantages and disadvantages 556
counsel for the accused 489, 507
Country *see also* Aboriginal and Torres Strait Islander Peoples, Deep Time, Dreaming, Everywhen 351, 423
  acknowledgement of 396
  Bunjil 25, 26
  changing 29
  connection to 21, 24, 62–64, 68, 69, 391–9
  Country and place 56–62
  healthy Country 25, 392–3
  healthy people 392–3
  kin 36–40
  maps of 20
  megafauna 33
  migration 34
  sustainability 393–4
  trade 47
  Welcome to Country 41
  Wurundjeri Peoples of Kulin Nation 394–5
  Yolngu Peoples of Arnhem Land 32, 394
country *vs.* city living 369–77
  attraction of 369
  demographic features 369–73
  education 372–3
  growth of suburbs 373–5
  medical issues 371–2
  sense of belonging 370–1
  transport 371
County Court 488
court *see also* fair trial
  actor pleads guilty in 491
  courtroom 489–90
  court work 487–93
  criminal laws 566
  criminal trial 490–1
  going to 487
  hierarchy 488–9
  independence of courts 484–5
  independent judge 495
  trial 490, 508
  witnesses 497–9
crevasses 321, 336
crucified 151, 177
cultural diversity 516
cultural intolerance 516, 527
culture 155–6, 396
cyclones 323–5, 336
  Australia 330–1
  causes and impacts of 323–32
  classification 324
  defined 323
  forms 325
  Hurricane Milton 327
  Judy and Kevin 329–30
  power of 327

D

Dairy Farmers Milk Co-operative 556
Damascenus 151
Dampier Archipelago 34
Dandan, Eman 517
Daoism 201–2, 222
Darlington, Robert 119
Davenport, Caillan 174
death
  in ancient China 193–8
  in ancient Roman 158–60
  and burials 195–7
  and funerary customs 42
Deep Time 20–4, 26, 33, 34 *see also* Aboriginal and Torres Strait Islander Peoples, Country, Dreaming, Everywhen
deities 82, 122
delta 81, 122
demand 583
  changing conditions for 564–5
  concept of 564
  defined 562
  equilibrium 563–4
  laws of 563
demand curve 562, 563, 565
democracy 147, 472
  Australia 446–50, 466
    citizens participate in 460–4
    contacting representatives 461
    parliamentary system work 446–50
  balance of power 444
demographic 369, 423
demotic script 76, 122
Department of Foreign Affairs and Trade (DFAT) 416
deported 211, 222
desalination 336
Devil's Marbles 21
Dhaka 380–4
  child labour 383
  education 382
  healthcare 383–4
  infrastructure 381–2
  jobs and economy 383
  location of 380
  poverty 383
  safety 382
dialects 22, 69
Diprotodon 33
direct action 462, 472
dirty water affecting health 281
dissection, human 217, 222
diverse 512, 527
diverse society *see also* Aboriginal and Torres Strait Islander Peoples
  cultural diversity 516
  multiculturalism 514–16
  promote cohesion in 522–5
  religion 518–22
    secularism 519
  Religious Discrimination Bill 525–6
  traditions 523–4
  values 523–4
divination 161, 177
division of powers 469
DNA 21, 69
Dodson, Mick 41
Draper, Robert 174
Dreaming 64, 254, 256, 257, 336, 392, 395 *see also* Aboriginal and Torres Strait Islander Peoples, Country, Deep Time, Everywhen
  creatures of 32–3
  defined 257
  stories 257–8
  tracks 21
Drought Resilience Mission 299
droughts 28–9, 256, 336
  297–309
  impact of 299–301
  Tinderbox Drought 297–9
due process 495, 507
dugong 48, 69

E

Earth's atmosphere 249, 259, 262, 275, 291, 292, 309
Eastern Han dynasty 213
Eastern Roman Empire 169–70
ecological footprint 386, 409–12, 423
economic resources 534
  types of 535
economics 532, 541
  Aboriginal and Torres Strait Islander Peoples 45–7
  being an active participant 536–7
  concepts 534–7
  problem-solving 537
  reasoning 537
  skills 537–8
economic scarcity 535
economic sustainability 559–62
  Aboriginal and Torres Strait Islander Peoples 580–2
  environmental sustainable resources 559–60
  organic food 560–1
economic system 536, 541
ecosystem 54, 69
education 372–3, 578
election 443, 444, 448
electoral system 460–1, 472
electrical storms 316
El Niño 275–6, 282, 297, 336
  southern oscillation 276, 279
El Niño-Southern Oscillation (ENSO) 275
emotive words 435
employees 550, 583
employment laws 609
Enabling Act 465
enterprise 606, 618
entertainment 195
entrepreneurs 534, 541, 555, 601, 618
  Aboriginal and Torres Strait Islander 603–4
  Branson, Richard 606
  business owner and 606–7
  Clarkson, Lorna Jane 606
  community-run companies 613–15
  defined 605
  innovators and 616–17
  role of 605–8
environment 230, 233–4, 239, *see also* water
  environmental change 233
  environmental protection laws 610
  environmental resources 246–9, 336
  sustainable resources 559–60
equality 479–80
equilibrium 563–4, 583
Etruscans 134, 177
European settlement in Australia 483–4
European unity 170–2
evaluation 431, 435
evaporation 263, 336
Everyday Life in Early Imperial China (Lowe) 195

Everywhen 20, 21 *see also* Aboriginal and Torres Strait Islander Peoples, Country, Deep Time, Dreaming
evidence 4, 13
exclusive dealing 574
Executive Council 448
executive government 448–9
executive power 457
expansion and trade 210–11
extreme weather 316–23
  blizzard 321
  Christmas 2023 319–21
  events 266, 291, 293, 316
  severe thunderstorms 317–18
  thunderstorms 316–17

F

Fair Trading 569
fair transactions 567
fair trial 493–501
  elements of 494–7
  independent judge 495
  judge and jury 495
  preliminary examination of evidence 495
  public hearing 495
  right to legal representation 495
  strict procedures and rules of evidence 495–7
  witnesses 497–9
Federal Emergency Management Agency (FEMA) 328
federal government powers 455
Federation 464, 472
firefighting 455
First Intermediate (Middle) Period 107
first Qin emperor 203
fishing practices 54–5
floods 28–9, 301
flash floods 302
floodplains 301
  anatomy 304
  assistance and recovery 304–5
  Brisbane 303
  causes of 2011 and 2022 303
  management 305–8
  Queensland 302–4
  by storm surges 326
  types of 302
fly in, fly out (FIFO) 349, 423
food insecurity 413
foraged 52, 69
forum 154, 177
founding fathers 464
franchise 541, 556–7
  franchisee 556
  franchisor 556
freedom institutions protection 466
free press 467–8
frostbite 321, 336
full-time work 595, 619
funeral customs 158, 195

G

general market monitoring 577
geographical concepts and skills 230–6
gig economy 598, 619
Gillard, Julia 119, 444
global citizens 416, 424
global rainfall 260
gods of ancient Egypt 93–4
Gold Coast 373–5
golden age 189
goods 549–50, 563, 568, 583
government policies 411
government regulators 576–9
  general market monitoring 577
  safe practices 577–8
  safety problems and enforcing standards 578–9
governments 484, 508, 535, 566
  businesses, producers and 572–80
  different levels of 454–9
  political parties 443–4
Governor-General 448
Great Artesian Basin 256
Great Barrier Reef 28, 29, 34, 351, 405
Great Pyramid 97, 116, 122
  inside 99
great slave rebellion 151–2
Great Sphinx 98, 122
Great Wall of China 186, 208, 217
  and achievements of Qin Shihuang 206–7
green water 260–1
groundwater 249, 252–9
  Aboriginal and Torres Strait Islander Peoples' use 254–6
  locating water 256–8
  mound springs of Oodnadatta Track 254–5
  Witjira-Dalhousie Springs 255–6
  artesian water 253–4
  and water cycle 252–3
guarantees for consumers 568
Gumatj Corporation 614
gunpowder 217

H

Haddon, A. C. 54
hailstones 317
hailstorm 319
halberds 194, 222
hammer stones 49
Han dynasty 199, 203, 205
  China expands 211
  Eastern 213
  expansion and trade 210–11
  rebellion and 211–14
  reforms 210–11
  rise and fall 210–15
  Silk Road 211
  Yellow Turbans 213–14
happiness 592–3
Harappan Civilisation 592–3
Harbour City 353
healthcare 330, 356, 357, 371, 377, 380, 383–4
heavenly powers 86
Herculaneum 132
heresy 169, 177
heritage 169–73
  of ancient China 215–19
Heritage Council of Victoria 60
Herodotus 82, 94
hieratic script 78, 122
hieroglyphs
  alphabet 77
  reading 78–9
  symbols 77
High Court 489
historical concepts and skills 4–5
  causes and consequences 9
  chronology 6–7
  communicating 9–10
  continuity and change 8–9
  significance 9
  sources 7–8
Hittites 111–14
honesty 567
horticulture 365, 424
House of Representatives 446–7

Howard, John 517
Hsin dynasty 212–13
human rights 466, 467
hunger
  causes 414
  distribution 413–14
  ending 415
  impact of 415
hung parliament 443
Hurricane Helene 326
Hurricane Milton 327
  aftermath of 328–9
  recovery 328–9
hydrologic cycle 249, 336
hydrometeorological hazards 291–7
  difference between weather and climate 293
  natural hazards 294–6
  weather change 291–3
hypocaust 156, 177
hypothermia 321, 336
hypothesis 13, 33, 97, 333

I

Ice Age 31
inclusiveness 523, 527
income 550, 583, 600–5
  for Aboriginal and Torres Strait Islander entrepreneurs 603–4
  alternative sources of 601
  rental service 602
  shareholders 602
  social security benefit 602
  work as source of 600–1
Indigenous Advancement Strategy (IAS) 614
Indigenous Business Australia 614
Indigenous Protected Areas (IPAs) 393
infantry 194, 222
informal sector 383, 424
infrastructure 305, 336, 349, 381–2, 424
initiation ceremonies 41–2
innovation 606, 619
innovators 616–17
intensification 48, 69
interconnection 230, 232, 239
interest groups 461, 472
International Organization for Standardization (ISO) 576
inventions 115, 215–17
investigate 581
investment property 601
irrigation 364, 424
Isobars 312, 336

J

Jarapiri 21
Jiang, Felicity 219
joint ventures 614–15
Jones, Stephen 526
judges 489, 495, 508 *see also* court
  independent 495
  judicial power 457
  judiciary 457, 472
jurors 489, 508
jury 490, 496, 508
justice
  access 501–6
  definition 478, 501
  principles of 478–83
    access 480–2
    equality 479–80
    fairness 479–82
  system 483–7
    British roots 484
    independence of courts 484–5
    Magna Carta 484–5
Justinian Emperor 169, 170
Juvenal 154

K

Kaiyu Superfoods 560
Kangaroo Island 352–3
Karlu Karlu 21
Katter, Bob 520
kinship 36–8
kites 217
knowledge fosters tolerance 516
Kom Ombo Temple 115
Koori Court 503, 504
Kulin Nation 57–8
  language 25
Kulin National Heritage Organisation 37
Kwaymullina, Ambelin 391

L

labour force 591, 595
Lake Carnegie 274
Lake Mungo 28, 58–60
land managed 51–6
  Australia communities, influence of environment on 51–2
  in Torres Strait Islands 54–5
    farming practices 54
    fishing practices 54–5
La Niña 275–6
Latins 170, 174, 484
legal aid 501–3, 508
  commissions 502–3
legal awareness 504
legal representation 495, 501, 502, 504, 508
Legislative Assembly 451
Legislative Council 451
limited liability 556, 583
literacy rate 358, 382, 424
Liu Bang 208, 210
liveability 344–8 *see also* place liveability
  in Badu and Moa 399–401
  cities 356–60
    characteristics of 420–2
    common 358–9
    rankings 357
liveability
liveable city 353, 424
livestock 365, 424
living standards 358, 592, 619
lobby groups 461, 472
local government services 456
loot 142, 177
lore 504, 508
Lowe, Michael 195
Lycett, Joseph 51

M

magistrates 147, 177, 488, 489, 508
Magna Carta 484–5
makeup 116
Malik, Shushma 174
mandate of heaven 191, 222
Margaret River 404
market 532, 541, 546, 583
  businesses exist 553–9
  businesses ownership. *see* businesses ownership
  economic sustainability 559–62
  goods and services 549–50
  needs and wants 548–53
  opportunity cost 550
  producers and consumers 550
  relative scarcity 550
  rights as consumer 566–72
market power, misuse of 573
mathematics 4, 116–17
mausoleum 187, 222

Maximus, Fabius 139
McKenzie, Regina 21
medieval 169, 177
megadrought 299, 336
megafauna, living with 31–6
  creatures of Dreaming 32–3
  great continent of Sahul 32
  occupation and migration 34
  power 33
Melbourne Magistrates Court 488
memorial tombstone 42
mergers and takeovers 574–5
Merseankh statue 89
meteorologists 275, 336
microfinance 417–18
middens 34, 69
Middle Ages 170, 177
millstones 49
Mindi 26
mithraism 162
Mitta Mitta River 402
Moa Islands 399–401
mobile apps 388
moiety 36
Monkey Mia 352
monsoon 26, 303, 307, 336
mound springs 254, 336
  of Oodnadatta Track 254–5
Mount Vesuvius 131
multiculturalism 514–16, 527
multi-faith 512
mummies 92–95, 103
Munga-Thirri 257
Mungo Man and Woman 58, 60, 63, 64, 66
Murphy, Joy 41
Murray-Darling Basin 288, 298, 469
Muru Office Supplies (MOS) 614
museums 60, 66–7
my place 350–1
myths 33, 174, 176
  of Romulus and Remus 134

N

National Broadband Network 371
National Climate Centre in Australia 276
National Land Transport Network 371
National Museum of Rome 146
natron 95, 122
natural environments 198–9, 346, 424
natural hazards 294–6
natural resources 74, 246, 369, 424, 537
needs 534, 541, 548–53
  defined 548
neighbourhood 350, 424
Nero, Emperor 163, 173–5
Nespekasut statue 87
net internal migration 364
net migration change 374
New Guinea 32
New Kingdom 108
Ngarigo and Walgalu Peoples 47
nobles 87–8
non-financial benefits 592
non-government organisations (NGOs) 416, 424
non-liveable city 377–85
  Dhaka 380–4
non-material living standards 592, 619
non-renewable resources 247, 336
Noongar people 351
Noosa, value of water in 268–71
  beaches and rivers 268–9

O

objective 350, 424, 435
Ochre 45
officials and scribes 87–8
Old Kingdom to New Kingdom 106–8
ombudsman offices 467
Oodnadatta Track 254–5
'Opal Capital of the World' 365
opportunity cost 535–6, 541, 550, 583
  defined 550
ordinary people, Egyptian 88–91
  artisans and merchants 88
  peasants 5–8, 107, 154, 193–6, 208, 210, 211–13
  women in 88–90
organic food 560–1
outsourced labour 598

P

pagan 169, 177
paid work 594
Pantheon 163, 171
paper 4, 76, 84, 116, 185, 215–217
  and printing 216–17
Papua New Guinea 48, 54, 276
papyrus 76, 81, 122
parliamentary system 446–50
  Governor-General 448
  House of Representatives 446–7
  Senate 447–8
  state and territory 450–4
partnership 554–6
part-time work 595, 619
patricians 145, 177
patronage 155, 177
Pay As You Go (PAYG) system 610, 619
paying tax 610
pearl shell trade 47
peasants 85–8, 107, 154, 193–6, 208, 210, 211–13
percussion stones 49
permanent workers 596
persecution 129, 163, 174, 519, 527
Perth 377–8
pharaoh 86–7
  earthly responsibilities 86–7
  Egypt's greatest 110–15
  gold emblem of 87
  power and responsibility 86–7
Philosophy 222
  of Confucius 201–2
Pitjuri 45
place liveability 348–56
  Australia 351–5
    Byron Bay 354–5
    Kangaroo Island 352–3
    Melbourne 353
    Monkey Mia 352
    Sydney 353–4
  factors that influence where you live 348
    cultural 348–50
    economic 348–50
    aesthetic 348–50
    spiritual 348–50
  my place 350–1
  objective and subjective measures 350
  pull factors 349
  push factors 349
places 230–2, 239, 424
  change 401–9
    access to resources 403–4
    in future 406–7
    on the move 402

sea change 404
tourism 405
town closed 402–3
characteristics 345
defined 342
groundwater connect 252–9
live in remote 360–9
moving for more space 363–4
question of survival 366–8
remote mining communities 362–3
rural communities sustainable 365–6
rural settlements 364–5
settling inland Australia 360–3
sense of 345
plebeians 145, 177
Pleistocene period 29
Plutarch 152
political media 435
political participation 460, 461
political parties 442–6
in Australian democracy 442–3
governments 443–4
pollution rivers 281–4
Pompeii 130–2
population density 358, 424
potential resource 249, 337
poverty 380, 383, 414, 415, 416, 553, 584
Powell, Bryon 37
powers
separation of 456–8
share 454–9
state and territory 455
tactics 135–7
precipitation 232, 249, 337
predatory pricing 573–4
prehistory 14
presumption of innocence 479, 508
price fixing 573
priests 87–8
primary education 382
primary research 332, 337
primary sources 7, 14
types of 7
principles of justice
access 480–2
equality 479–80
fairness 479–82
private corporations 556
problem-solving 537
procedural fairness 479, 508
producers 550, 583
and consumers 550
product safety groups 576–7
progressive income tax 610–11, 619
prosecution 479, 508
prosecutor 489, 508
public baths 156, 177
public corporations 556
public hearing 495
publicity 578
pukumani 42
pull factors 349, 424
pumice 130, 177
push factors 349, 424
pyramids
end, age of 99–100
heavenly sails 98–9
and hidden tombs 97–9
mysteries 98
truth about 97–102

Q

Qin Dynasty 206, 210, 219
Qin Dynasty: China's Ancient Revolution 208
Qin Shihuang 186, 205, 208
achievements of 206–7
Great Wall and 206–7
legacy of 219–20
reforms 207
ruler of Qin 206
Qin Shikuang 206
Queensland floods 302–4

R

rainfall variability 262, 337
Rameses II 110–15
fighting the Hittites 111–14
great ruler or great bragger 112–14
warrior as king 111
Rameses III 108
Rameses the Great 111
Rashid 76
reasoning 537
rebellion 211–14
Red Eyebrows 212
Reeves, Nicholas 104
referendum 465, 472
referral selling 567
reforms 210–11
Wang Mang 212
regional health services 372
relative humidity 263, 337
relative scarcity 550
religion change 160–5
religions 82–4, 518–22
ancient China
Buddhism 202–3
Daoism 202
ancient Roman 160–5
in Australian society 519–20
politics and legal influence 520–1
summary 520
Religious Discrimination Bill 525–6
remote 424
defined 342
remote mining communities 362–3
Remus 134
renewable energy 248
renewable resources 247, 337
rental service 602
repeals 457, 472
republic 134, 177
resale price maintenance 574
reserve powers 448
residential and commercial properties 602
residual powers 455
resources 534, 541, 550
access to 403–4
allocation 536, 541
classification 246–7
continuous 247–9
discovery 403–4
environmental sustainable 559–60
hydrologic cycle 249
need 246
non-renewable 247
renewable 247
types 246–52, 535
water cycle 249
water stay in 249–50
rhetoric 155, 177
Rise of Christian Europe, The (Trevor-Roper) 170
rites of passage 41, 69
ritual 21, 42, 52
River Nile 80–5
defence and 82
farming and 81–2
religion and 82–4
transport and 82
Rivers, W. H. R. 54

Roman Empire 148–9
expansion through war 138–40
fall 165–9
weakening empire 165
growth in 138–42
living in 153–8
impact on social change 154–5
Roman technology 156–7
virtues 155–6
Roman society 154
Roman Republic 134, 147
democracy 147
to empire 147–9
voting in 147
Romulus 134
royal assent 448, 472
rule of law 476, 478, 479, 481, 484, 485, 508
rules of evidence 495–7
rural communities sustainable 365–6
rural settlements 364–5

S

sacred writing 76
safe practices 577–8
Saffir-Simpson Scale 324
sago 48, 69
salary 591, 594, 601, 619
Samnites 134, 177
sandstone 45
sarcophagus 103, 122
scarcity 536, 542
Scholasticus 151
scribes 87–8
sea change 404, 424
seagrass 54
seasonal work 595
secondary research 332
secondary sources 7, 14
Second Intermediate (Middle) Period 108
Second Punic War 139
secularism 519, 527
seismographs 217
self-esteem 592
Senate 147, 177, 447–8
Seneca 151
sense of place 345
separation of powers 456–8
division of powers 458
executive power 457
judicial power 457
legislative power 457
services 563, 583
shadoof 81, 122
Shang dynasty 186, 191, 195
Shanghai 189
shareholders 602
share power 454–9, 469–70
federal government powers 455
state and territory powers 455
shifting cultivation process 233
Shihuang 203
significance 5, 14
silent partners 555
Silk Road 211
Silverton Wind Farm project 403
skin names 37
slavery 150–3
great slave rebellion 151–2
impact on social change 154–5
snowstorms 321
Snowy Mountains 47
soak 254, 337
society 85–92, 154
social cohesion 512, 527
social divisions 145–7
social need 553
Social Progress Index 524
social security benefit 602
social war 138–40
sole proprietorship 554–5, 557
songlines 21–2
southern oscillation 276, 279, 297, 337
Southern Oscillation Index (SOI) 276, 279
Spartacus 151
speculator 602, 619
SPICESS 230
spiritual beliefs 24–5
spirituality 38, 521
spread of Christianity 163–4
stalemate 111, 122
standing orders 446
state and territory parliaments work 450–4
eight separate 450–1
features of 451
governments, role of 452
state and territory powers 455
state-based organisations 467
Stone Age 29
storm surges 325, 337
strict procedures 495–7
subjective 350, 424, 435
Suetonius 173
Sulis Minerva 162
sun, creating breeze 311–12
superannuation 601
supply 583
changing conditions for 564–5
concept of 564
defined 563
equilibrium 563–4
laws of 563
supply curve 563, 565
Supreme Court 489
sustainability 230, 234, 239, 393–4, 409–12, 559
Australian government and NGOs 416–17
defined 559, 583
economic 559–62
hunger. *see* hunger
liveability and 409–12
rural communities 365–6
Sustainable Cities Index 410
Sustainable Development Goals 284–7, 415–18
Sydney 353–4
symbols 20, 36, 42, 46, 76, 77, 92, 208, 519
weather 312, 313, 314

T

Tacitus 163
tactics
army weapons and 142
of power 135–7
Tagai 25
talons 26, 70
target market 606, 619
tax-free threshold 611
technical bodies 576
technology
in ancient Australia 45–51
technological changes 598
teenagers 350
telehealth 372
tenant farmers 154, 177
terracotta warriors 187, 210, 217
Thames Barrier 306
Theodosius 165
Thinti-Thintinha Spring (Fred Springs) 257
Thracian 151, 177
thunderstorms 316–17
distribution in Darwin 318
severe 317–18
Thutirla Pula 257–9
timeline 6, 14

Tinderbox Drought 297–9
Tingarri Dreaming at Walawala 20
Tiwi Peoples 42–3
tombs 92, 93, 4, 97
Tutankhamun 102–104, 158–9
Tom Price township 362
topological maps 237
torrential rain 325, 337
Torres Strait Islander Peoples 30
  communities 25
  land managed 54–5
  tombstone openings of 42
  trade 48
totems 36, 38
Totems of the Manarrngu 36
tourism 405
Towards a New Dreaming (McKenzie) 21
trade 37, 106–10
  in ancient Australia 45–51
  expansion and 210–11
  pearl shell 47
  practices 47
  Torres Strait 48
Traditional Custodians 396
traditions, in Australian society 523–4
transport 82, 371
  transport strategies 387–90
tree change 404, 424
Trevor-Roper, Hugh 170
tribalism 516, 527
Troedel, Charles 37
tropical cyclones 325–7
troposphere 309, 337
Tutankhamun 102–6
  new mystery 104
tutini 42–3
2024 Summer Olympic Games 374–5
typhoons 323, 337

U

UN Sustainable Development Goals 284, 415–16
undernourished 413, 424
unemployment rate 591
UNESCO 217
unicameral 451, 472
University of the Third Age 387, 424
unlimited liability 555, 583
unpaid work 596–8
upper-class women 90–1
uranium 246, 337
urban decay 349, 424

V

Valley of the Kings 74, 122
values 431, 435, 517, 523, 527, 609, 619
  in Australian society 523–4
variability, water 273–6
vassal state 111, 122
Vélib program 388
virtual water 273, 337
virtues 155–6, 177
voluntary standards 577
voluntary work 596–8
Volunteer Fire and Rescue Service (VFRS) 596

W

wage 591, 594, 601, 619
Wandjina rock art 24
Wang Mang 211–12
wants 534, 542, 548–53, 583
  defined 548
war, effects of 106–10
warlords 213, 222
warm air 311
water
  across borders 287–8
  availability and accessibility 276–7
  distribution 259
  droughts and flooding rain 297–309
  enough 271–9
  as environmental resource 271–3
  everywhere 273
  extreme weather 316–23
  global rainfall 260
  green and blue 260–1
  groundwater 252–9
  hydrometeorological hazards 291–7
    difference between weather and climate 293
    natural hazards 294–6
    weather change 291–3
  locating 256–8
  in Nile Basin 282–4
  in Noosa 268–71
  quality of local waterway 332–3
  regional use of 272
  resource types 246–52
  supply variable 259–68
    Australia's climate 262–5
    climate change 261–2
    dry 262
    global rainfall 260
    green and blue water 260–1
    variable and evaporated 262
  usage in Australia 273
  variability 273–6
  virtual water 273
  wind blowing 309–16
  world 259
water-borne diseases 288–90
water cycle 249
  groundwater and 252–3
  operation 249
water footprint 273, 337
water refugees 280
water scarcity 277–8, 337
  access to water 280–1
  defined 280
  dirty water affect health 281
  human right to water 280
  overcome 279–91
  pollution rivers 281–4
  Sustainable Development Goals 284–7
water security, in Australia 265–6
water stress 280, 337
water supply, managing of 287
weather
  and climate 293
  map 312–15
  wind influences 309–10
weather change 291–3
weather maps 236
wedge-tailed eagle 26
weirs 60, 70, 305
wellbeing 614, 619
Westminster system 456, 472
whetstones 49
White Australia Policy 516, 527
White Nile 81
whiteouts 321, 337
wilderness 351, 424
winds 311
blowing 309–16
  air pressure 310–11
  Earth's rotation 312
  gale force 325, 336
  influences weather 309–10
  role of sun 311–12
  symbols on weather map 313, 314
    on weather map 312–15

Wivenhoe Dam 302
women
Aboriginal and Torres Strait Islander 40, 42, 54, 506, 613
ancient China 193
ancient Egypt 88–90
Australian Constitution 464
empowerment 415
hard lives 195
leadership 118
pharaohs 119
pregnancy 383
recorded and treated 118–20
ancient Rome 146, 160
upper-class 90–1
water scarcity and sanitation 271, 286, 382
workforce 596, 597
Woolworths 573
working/work 588
benefits of participating in 592
earn an income 600–5
entrepreneurs. *see* entrepreneurs
importance of 591
people 590–4
responsibilities with 608–12
law and regulations 609–10
types of 594–600
counts 594
labour force 595
unpaid 596–8
voluntary 596–8
work–life balance 591, 619
workplace health and safety laws 609
World History Encyclopedia 219
Wurundjeri Peoples of Kulin Nation 394–5

X

Xia 189
Xiongnu 206, 222

Y

Yellow Turbans 213–14
Ying Zheng 206
Yirandali Dalleburra People in Queensland 46
Yolngu Peoples of Arnhem Land 394

Z

Zhang Heng 217
Zhang Qian 211
Zhou dynasty 191, 194, 201
Zhou, Naaman 29
Zogo beliefs 25