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JACARANDA

HUMANITIES AND SOCIAL SCIENCES 8

FOR WESTERN AUSTRALIA

SECOND EDITION

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ROBERT DARLINGTON

JUDY MRAZ

GRAEME SMITHIES

MATTHEW RICHARDSON

MEREDITH BEATON

BENJAMIN ROOD

YASMINE McCAFFERTY

CATHY BEDSON

SIMON PHELAN

DENISE MILES

CONTRIBUTING AUTHORS

Ben de Vries | Crystal Wieringa | Nicole Gray

Alex Scott | Rebecca Robson

jacaranda

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

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

CONTENTS

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

1 HASS concepts and skills 2

1.1 Key concepts in HASS 2
1.2 Key skills in HASS 4
1.3 SkillBuilder: Identifying what you need to know 7
1.4 SkillBuilder: Collecting, recording and organising information 13
1.5 SkillBuilder: Selecting relevant information 19
1.6 SkillBuilder: Identifying patterns and relationships 24
1.7 SkillBuilder: Translating information 32
1.8 SkillBuilder: Forming conclusions 36
1.9 SkillBuilder: Evaluating the impact of a decision 40
1.10 SkillBuilder: Representing information in oral presentations 44
1.11 SkillBuilder: Developing effective texts through argument paragraphs 47
1.12 SkillBuilder: Reflecting on your learning 50
1.13 Review 53

RESOURCE SUMMARY 55

CIVICS AND CITIZENSHIP

2 Civics and Citizenship concepts and skills 58

2.1 Overview 58
2.2 Concepts in Civics and Citizenship 59
2.3 Skills in Civics and Citizenship 61
2.4 SkillBuilder: Writing inquiry questions for research 63
2.5 SkillBuilder: Using the deconstruct-reconstruct method 65
2.6 SkillBuilder: Developing argument paragraphs 68
2.7 SkillBuilder: Delivering an oral presentation 72
2.8 SkillBuilder: Writing and conducting a survey 74
2.9 SkillBuilder: Writing a submission 77
2.10 Review 81

RESOURCE SUMMARY 82

3 Rights, freedoms and participating in a democracy 83

3.1 Overview 83
3.2 Protecting our rights and freedoms 84
3.3 Freedom of speech and other democratic freedoms 89
3.4 Dissent in a democracy and taking direct action 98
3.5 Taking part in the democratic process 104
3.6 The role of members of parliament 109
3.7 Lobby and pressure groups 113
3.8 Thinking Big research project: A bill of rights for Australia? 118
3.9 Review 120

RESOURCE SUMMARY 123

4 Where do our laws come from? 124

4.1 Overview 124
4.2 How parliaments make laws 125
4.3 How courts make laws 128
4.4 Criminal law and civil law 131
4.5 Customary law in Aboriginal and Torres Strait Islander communities 135
4.6 Thinking Big research project: Western Australian court case investigation 140
4.7 Review 143

RESOURCE SUMMARY 146

5 Influences on Australian society and national identity 147

5.1 Overview 147
5.2 Traditional and changing views of Australian identity 148
5.3 Aboriginal and Torres Strait Islander cultures' influences on Australian national identity 151
5.4 Belonging to a new country – migrant experiences 156
5.5 Religion in Australia 158
5.6 The influence of religion on Australian society 163
5.7 Thinking Big research project: My family's identity 165
5.8 Review 167

RESOURCE SUMMARY 170

ECONOMICS AND BUSINESS

6 Economics and Business concepts and skills 172

6.1 Overview 172
6.2 Concepts in Economics and Business 173
6.3 Skills in Economics and Business 180
6.4 SkillBuilder: Conducting research into prices and markets 181
6.5 SkillBuilder: Interpreting and explaining supply and demand graphs 183
6.6 SkillBuilder: Evaluating an opportunity with a cost–benefit analysis 185
6.7 SkillBuilder: Writing a pitch for a new product/ business idea 189
6.8 Review 191

RESOURCE SUMMARY 193

7 Markets: Consumers, businesses and government 194

7.1 Overview 194
7.2 Participants in the market system 195
7.3 How markets operate 199
7.4 How price is set 205
7.5 Key economic questions for business 211
7.6 Government involvement in the market 216
7.7 Legal protection of consumer rights 222
7.8 Keeping consumers safe 227
7.9 Thinking Big research project: Please stop calling 231
7.10 Review 232

RESOURCE SUMMARY 235

8 Business decisions 236

8.1 Overview 236
8.2 The three main ways to own a business 237
8.3 Alternative ways to own a business 241
8.4 Opportunities for businesses 245
8.5 Responding to opportunities in the market 249
8.6 Thinking Big research project: Pitch a business idea 253
8.7 Review 255

RESOURCE SUMMARY 258

9 The changing work environment 259

9.1 Overview 259
9.2 Influences on work today 260
9.3 The significance of technology 265
9.4 Changes to the workforce 268
9.5 Work in the future 277
9.6 Thinking Big research project: Impacts of technology poster 284
9.7 Review 286

RESOURCE SUMMARY 289

GEOGRAPHY

10 Geography concepts and skills 292

10.1 Overview 292
10.2 Concepts in Geography 293
10.3 Skills in Geography 300
10.4 SkillBuilder: Recognising land features 302
10.5 SkillBuilder: Reading contour lines on a map 305
10.6 SkillBuilder: Using latitude and longitude 308
10.7 SkillBuilder: Calculating distance using scale 313
10.8 SkillBuilder: Drawing simple cross-sections 316
10.9 SkillBuilder: Interpreting an aerial photo 322
10.10 SkillBuilder: Understanding thematic maps 327
10.11 SkillBuilder: Comparing population profiles 331
10.12 SkillBuilder: Creating and reading compound bar graphs 337
10.13 SkillBuilder: Reading and describing basic choropleth maps 341
10.14 SkillBuilder: Drawing a line graph using Excel online only
10.15 SkillBuilder: Using positional language online only
10.16 SkillBuilder: Constructing a field sketch online only
10.17 SkillBuilder: Creating and describing complex overlay maps online only
10.18 SkillBuilder: Drawing a précis map online only
10.19 SkillBuilder: Creating and reading pictographs online only
10.20 SkillBuilder: Describing photographs online only
10.21 SkillBuilder: Constructing a basic sketch map online only
10.22 Review 348

RESOURCE SUMMARY 349

11 Landforms and landscapes 352

11.1 Overview 352
11.2 Different types of landscapes 353
11.3 The processes that shape landscapes 357
11.4 Underground landscapes 362
11.5 Australian landforms 366
11.6 Landscapes of Western Australia 373
11.7 Cultural significance of landscapes 375
11.8 Preserving and managing landscapes 380
11.9 Thinking Big research project: Karst landscape virtual tour 383
11.10 Review 385

RESOURCE SUMMARY 389

12 Landscapes formed by water 390

12.1 Overview 390
12.2 Landscapes formed by water 391
12.3 Coastal erosion 394
12.4 Which coastal landforms are created by deposition? 397
12.5 Managing coasts 401
12.6 Aboriginal and Torres Strait Islander use of coastal environments 406
12.7 Comparing coastal landforms 407
12.8 How does water form river landscapes? 410
12.9 Managing river landscapes 415
12.10 Landscapes formed by ice online only
12.11 Thinking Big research project: Coastal erosion animation 419
12.12 Review 421

RESOURCE SUMMARY 424

13 Geomorphic hazards 425

13.1 Overview 425
13.2 How mountains are formed 426
13.3 The world's mountains and ranges 435
13.4 How people use mountains 438
13.5 Earthquakes and tsunamis 443
13.6 Volcanic mountains 454
13.7 How do volcanic eruptions affect people? 462
13.8 Thinking Big research project: Earthquakes feature article 467
13.9 Review 469

RESOURCE SUMMARY 473

14 Urbanisation and migration 474

14.1 Overview 474
14.2 Where do Australians live? 475
14.3 What is urbanisation? 481
14.4 Is Australia an urbanised country? 484
14.5 Comparing urbanisation in the United States and Australia 487
14.6 Effects of international migration on Australia 491
14.7 People on the move in Australia 498
14.8 People on the move in China 501
14.9 Thinking Big research project: Multicultural Australia photo essay 504
14.10 Review 506

RESOURCE SUMMARY 509

HISTORY

15 History concepts and skills 512

15.1 Overview 512
15.2 Concepts in history 513
15.3 Skills in history 523
15.4 SkillBuilder: Recognising different perspectives 524
15.5 SkillBuilder: Explaining different historical interpretations 527
15.6 SkillBuilder: Interpreting medieval art as sources 530
15.7 Review 533

RESOURCE SUMMARY 537

16 From the ancient to the modern world 538

16.1 Overview 538
16.2 Examining the evidence 540
16.3 People on the move 543
16.4 Religions on the move 547
16.5 A different way of life 551
16.6 Rulers, religion and the changing map of medieval Europe 555
16.7 Migrations, invasions and empires in Asia 560
16.8 Population, cities and trade 564
16.9 Muslim traders and Africa 567
16.10 The emerging power of western Europe 570
16.11 Portuguese and Spanish voyages of discovery 573
16.12 Vasco da Gama opens the East 577
16.13 Consequences of the discoveries 580
16.14 Thinking Big research project: Time travel brochure 584
16.15 Review 587

RESOURCE SUMMARY 594

17 Investigating medieval Europe 595

17.1 Overview 595
17.2 Examining the evidence 597
17.3 The impact of the 'barbarian' invasions 600
17.4 Early medieval Christianity 603
17.5 Spreading Christianity in the Early Middle Ages 607
17.6 The feudal system 609
17.7 Life on the manor for men, women and children 613
17.8 The miller and the watermill 616
17.9 The knight 618
17.10 Medieval warfare 621
17.11 Castles 623
17.12 The power of the medieval Church 627
17.13 Monasteries and convents 629
17.14 The Crusades 633
17.15 The Age of Faith 636
17.16 Towns and trades 640
17.17 The Black Death 643
17.18 The Peasants' Revolt 648
17.19 Joan of Arc 652
17.20 The heritage of medieval Europe 656

17.21 Thinking Big research project: Festival of Lost Trades 659
17.22 Review 661

RESOURCE SUMMARY 669

18 Investigating the Black Death in Asia, Europe and Africa 670

18.1 Overview 670
18.2 How do we know about the Black Death? 672
18.3 What was the Black Death? 674
18.4 Living conditions and medical science in the Middle Ages 677
18.5 Religious beliefs 680
18.6 Trade and the spread of disease 683
18.7 Responses to the Black Death 689
18.8 How did the Black Death change society? 693
18.9 Weakening the feudal system 696
18.10 Medieval warfare 699
18.11 Review 702

RESOURCE SUMMARY 706

Glossary 706
Index 716

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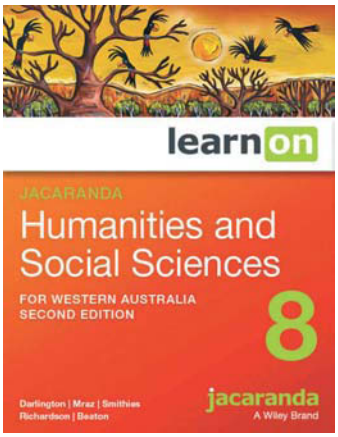
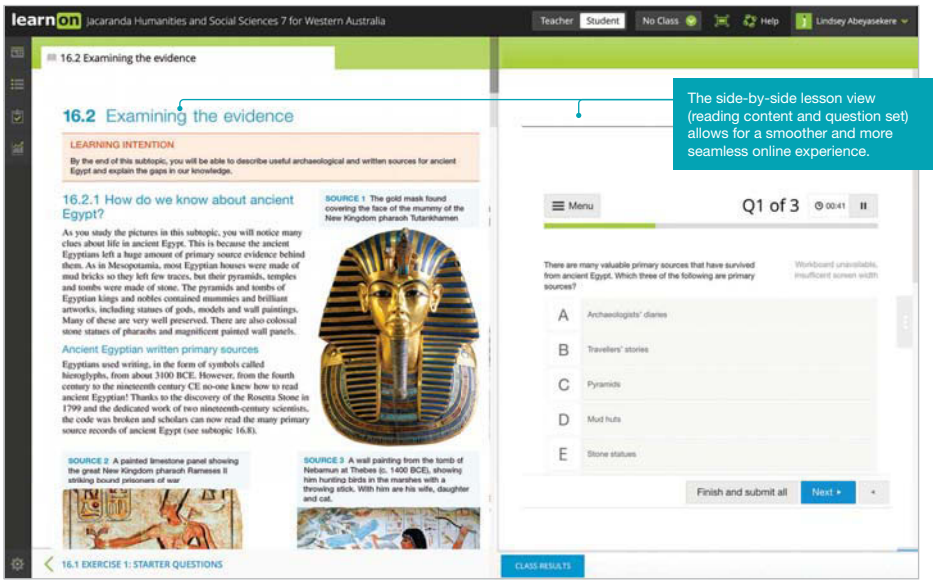
Jacaranda Humanities and Social Sciences for Western Australia 2nd Edition, includes a wealth of online resources. Teachers have access to powerful diagnostic and assessment tools through the learnON platform. Students have access to their own set of easy-to-use tools that have been specifically designed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

The power of learnON

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



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



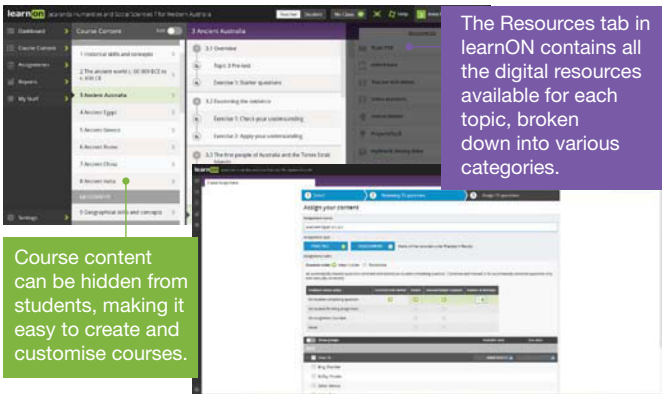
The side-by-side lesson view (reading content and question set) allows for a smoother and more seamless online experience.

Customise student learning

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

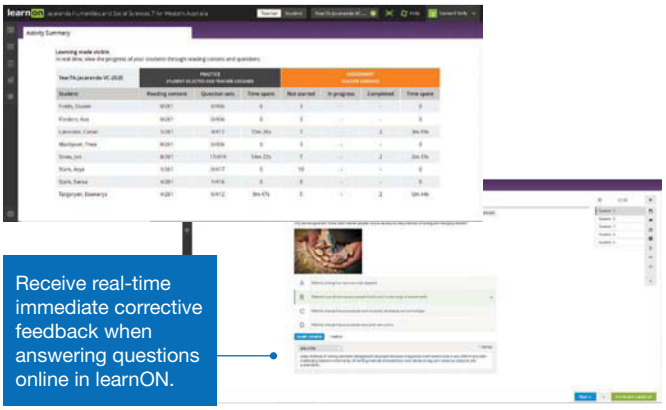
Teachers have complete control over which questions or tasks each student is assigned, whether it is for practice or assessment, their due dates and when they have access to results.

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



Track activity

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

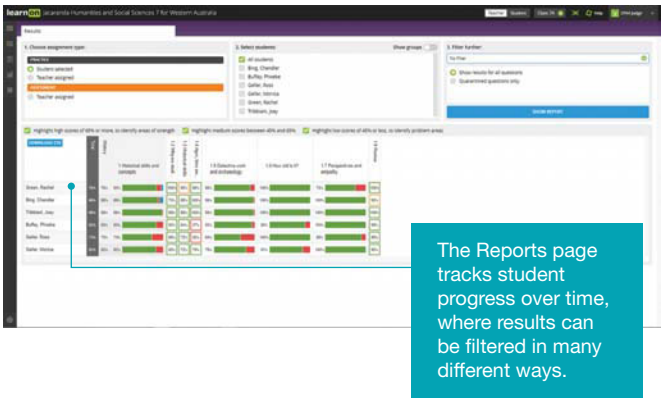


Provide meaningful feedback

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

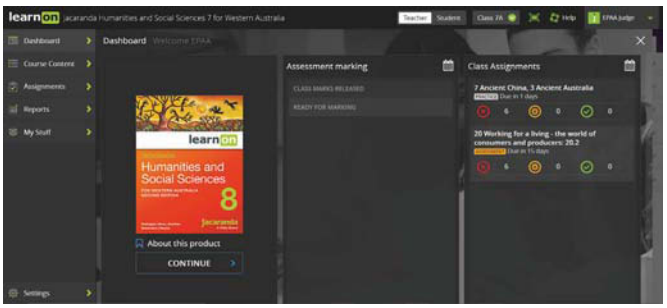
Gain deep insights

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



Keep track of your 'to do' list

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



NEW FEATURES

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

Explicit HASS skills teaching

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

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

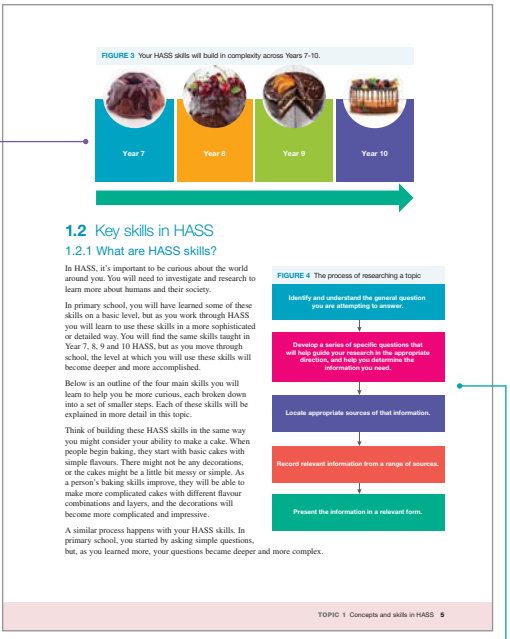


FIGURE 3 Your HASS skills will build in complexity across Years 7–10.

Year 7 | Year 8 | Year 9 | Year 10

1.2 Key skills in HASS

1.2.1 What are HASS skills?

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

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

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

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

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

FIGURE 4 The process of researching a topic

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

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

Locate appropriate sources of that information.

Record relevant information from a range of sources.

Present the information in a relevant form.

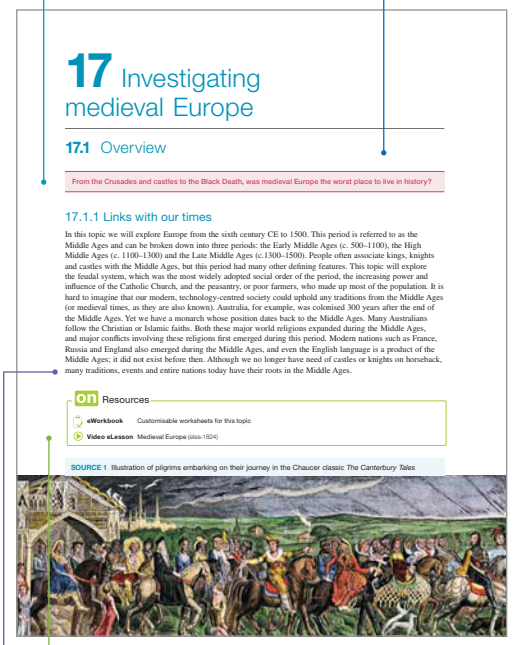
TOPIC 1 Concepts and skills in HASS 5

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

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

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

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


17 Investigating medieval Europe

17.1 Overview

From the Crusades and castles to the Black Death, was medieval Europe the worst place to live in history?

17.1.1 Links with our times

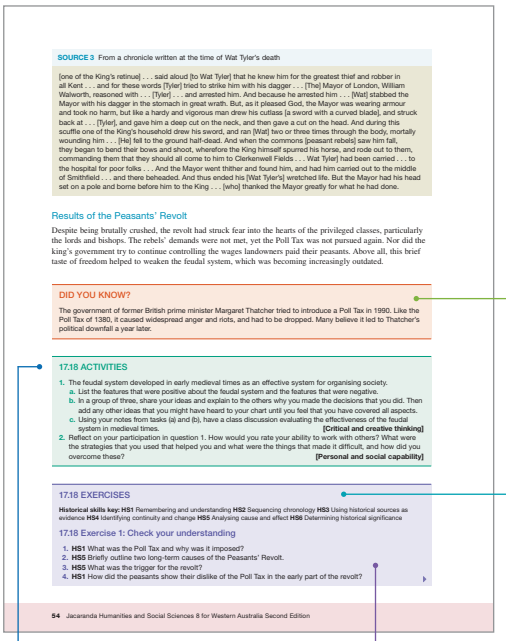
In this topic we will explore Europe from the sixth century CE to 1500. This period is referred to as the Middle Ages and can be broken down into three periods: the Early Middle Ages (c. 500–1100), the High Middle Ages (c. 1100–1300) and the Late Middle Ages (c.1300–1500). People often associate kings, knights and castles with the Middle Ages, but this period had many other defining features. This topic will explore the feudal system, which was the most widely adopted social order of the period, the increasing power and influence of the Catholic Church, and the peasantry, or poor farmers, who made up most of the population. It is hard to imagine that our modern, technology-centred society could uphold any traditions from the Middle Ages (or medieval times, as they are also known). Australia, for example, was colonised 300 years after the end of the Middle Ages. Yet we have a monarch whose position dates back to the Middle Ages. Many Australians follow the Christian or Islamic faiths. Both these major world religions expanded during the Middle Ages, and major conflicts involving these religions first emerged during this period. Modern nations such as France, Russia and England also emerged during the Middle Ages, and even the English language is a product of the Middle Ages; it did not exist before then. Although we no longer have need of castles or knights on horseback, many traditions, events and entire nations today have their roots in the Middle Ages.

on Resources

eWorkbook Customisable worksheets for this topic

Video eLesson Medieval Europe (eles-1824)

SOURCE 1 Illustration of pilgrims embarking on their journey in the Chaucer classic *The Canterbury Tales*


SOURCE 3 From a chronicle written at the time of Wat Tyler's death

[one of the King's retinue] . . . said aloud [to Wat Tyler] that he knew him for the greatest thief and robber in all Kent . . . and for these words [Tyler] tried to strike him with his dagger . . . [The] Mayor of London, William Walworth, reasoned with . . . [Tyler] . . . and arrested him. And because he arrested him . . . [Wat] stabbed the Mayor with his dagger in the stomach in great wrath. But, as it pleased God, the Mayor was wearing armour and took no harm, but like a hardy and vigorous man drew his cutlass [a sword with a curved blade], and struck back at . . . [Tyler], and gave him a deep cut on the neck, and then gave a cut on the head. And during this scuffle one of the King's household drew his sword, and ran [Wat] two or three times through the body, mortally wounding him . . . [He] fell to the ground half-dead. And when the commons [peasant rebels] saw him fall, they began to bend their bows and shoot, wherefore the King himself spurred his horse, and rode out to them, commanding them that they should all come to him to Clerkenwell Fields . . . Wat Tyler] had been carried . . . to the hospital for poor folks . . . And the Mayor went thither and found him, and had him carried out to the middle of Smithfield . . . and there beheaded. And thus ended his [Wat Tyler's] wretched life. But the Mayor had his head set on a pole and borne before him to the King . . . [who] thanked the Mayor greatly for what he had done.

Results of the Peasants' Revolt

Despite being brutally crushed, the revolt had struck fear into the hearts of the privileged classes, particularly the lords and bishops. The rebels' demands were not met, yet the Poll Tax was not pursued again. Nor did the king's government try to continue controlling the wages landowners paid their peasants. Above all, this brief taste of freedom helped to weaken the feudal system, which was becoming increasingly outdated.

DID YOU KNOW?

The government of former British prime minister Margaret Thatcher tried to introduce a Poll Tax in 1990. Like the Poll Tax of 1380, it caused widespread anger and riots, and had to be dropped. Many believe it led to Thatcher's political downfall a year later.

17.18 ACTIVITIES

1. The feudal system developed in early medieval times as an effective system for organising society.
   a. List the features that were positive about the feudal system and the features that were negative.
   b. In a group of three, share your ideas and explain to the others why you made the decisions that you did. Then add any other ideas that you might have heard to your chart until you feel that you have covered all aspects.
   c. Using your notes from tasks [a] and [b], have a class discussion evaluating the effectiveness of the feudal system in medieval times. **[Critical and creative thinking]**
2. Reflect on your participation in question 1. How would you rate your ability to work with others? What were the strategies that you used that helped you and what were the things that made it difficult, and how did you overcome these? **[Personal and social capability]**

17.18 EXERCISES

Historical skills key: HS1 Remembering and understanding **HS2** Sequencing chronology **HS3** Using historical sources as evidence **HS4** Identifying continuity and change **HS5** Analysing cause and effect **HS6** Determining historical significance

17.18 Exercise 1: Check your understanding

1. **HS1** What was the Poll Tax and why was it imposed?
2. **HS5** Briefly outline two long-term causes of the Peasants' Revolt.
3. **HS5** What was the trigger for the revolt?
4. **HS1** How did the peasants show their dislike of the Poll Tax in the early part of the revolt?

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

Prompts and support for students who require additional scaffolding.

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

onResources feature boxes provide guidance about additional resources online.

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

Activities extend student skills and provide classroom practice.

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

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

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

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

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

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

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

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

Skillbuilders model and develop key skills in context.

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

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

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

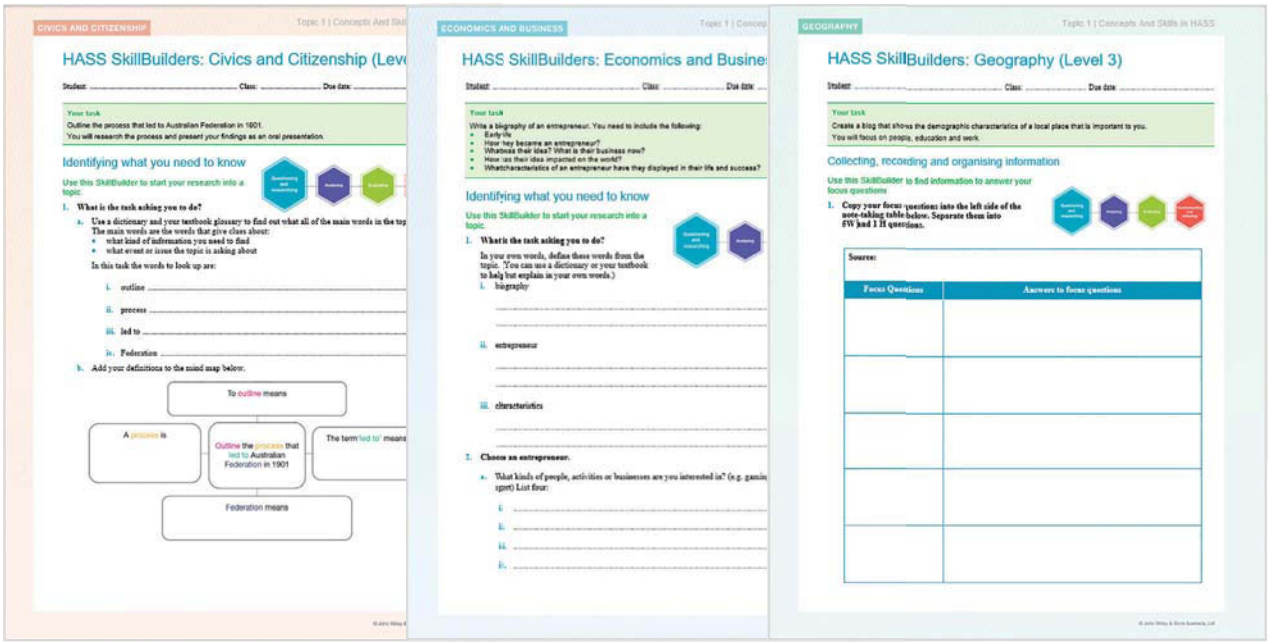
A range of questions and a post-test are available online and in print to test students' understanding of the topic.

Key terms are included in every topic review.

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

eWORKBOOK

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



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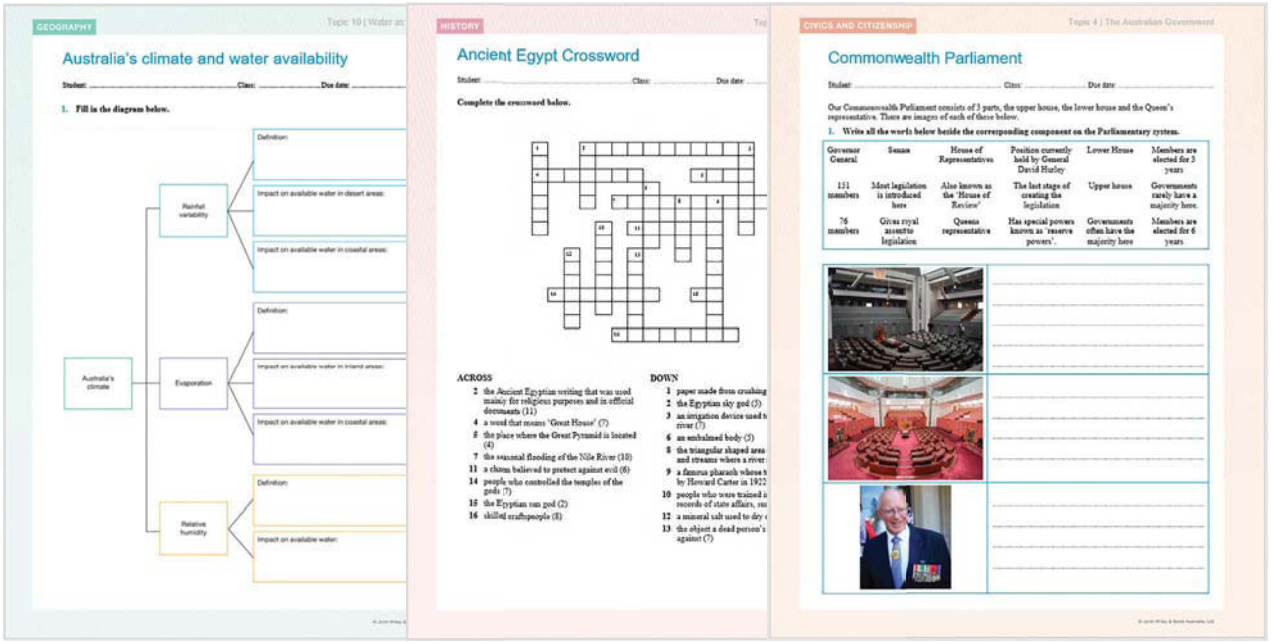

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The covers of the *Jacaranda Humanities and Social Sciences for Western Australia* series are the work of WA artist Emma Blyth.

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

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

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

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HASS concepts and skills

1.1 Key concepts in HASS 2
1.2 Key skills in HASS 4
1.3 SkillBuilder: Identifying what you need to know 7
1.4 SkillBuilder: Collecting, recording and organising information 13
1.5 SkillBuilder: Selecting relevant information 19
1.6 SkillBuilder: Identifying patterns and relationships 24
1.7 SkillBuilder: Translating information 32
1.8 SkillBuilder: Forming conclusions 36
1.9 SkillBuilder: Evaluating the impact of a decision 40
1.10 SkillBuilder: Representing information in oral presentations 44
1.11 SkillBuilder: Developing effective texts through argument paragraphs 47
1.12 SkillBuilder: Reflecting on your learning 50
1.13 Review 53

1 HASS concepts and skills

1.1 Key concepts in HASS

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

1.1.1 Overview

Welcome to Year 8 HASS. Think back to Year 7 HASS and what you learnt. This subject is all about us: humans. It's about where and how we live. It's also about how and where people lived in the past, how people different from you are living now, and what life might be like for people in the future.

As you know, HASS stands for **H**umanities **a**nd **S**ocial **S**ciences. In HASS there are four subjects:

- Civics and Citizenship
- Economics and Business
- Geography
- History.

Remember that HASS isn't just about each of these subjects individually; in HASS, you will also explore how each of these subjects are connected – just like the parts of our world are connected.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5380)

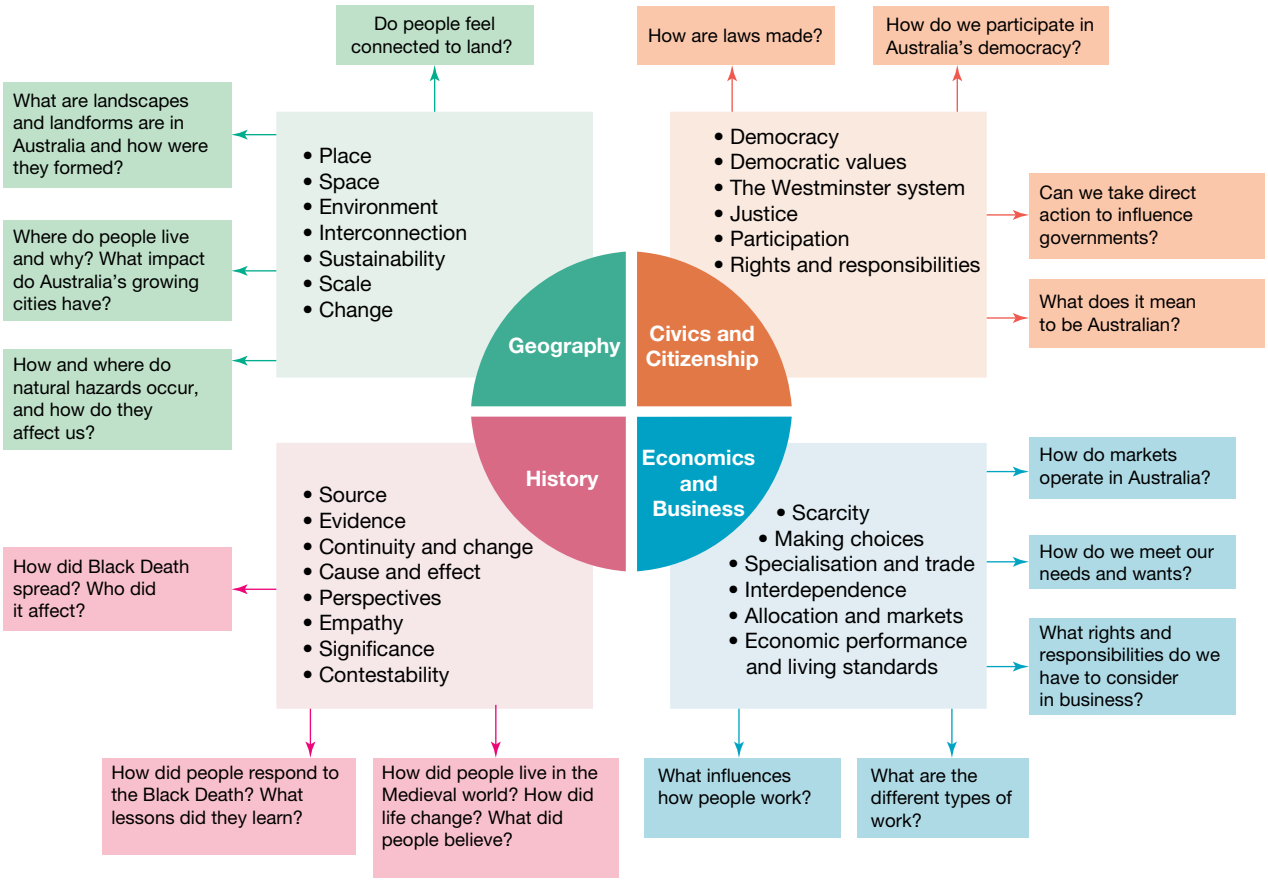
FIGURE 1 You will build your HASS skills this year, learning new skills and new ways to use the skills you learnt last year

1.1.2 Key concepts in Year 8 HASS

You learned the basics of HASS concepts last year but in Year 8 you will learn about them in more detail, with new thoughts and ideas for you to process. In HASS, you will learn about new ideas and events every year, but under the umbrella of these core concepts.

The big questions you will try to answer in HASS this year relate to things that affect your everyday life, as individuals, members of teams and families, and members of local and global communities. These big questions are outlined in **FIGURE 2**. Even if it doesn't seem like these things affect you at the moment, they will in the future. You will also continue building on what you learnt in Year 7 and how these concepts apply to everyday life.

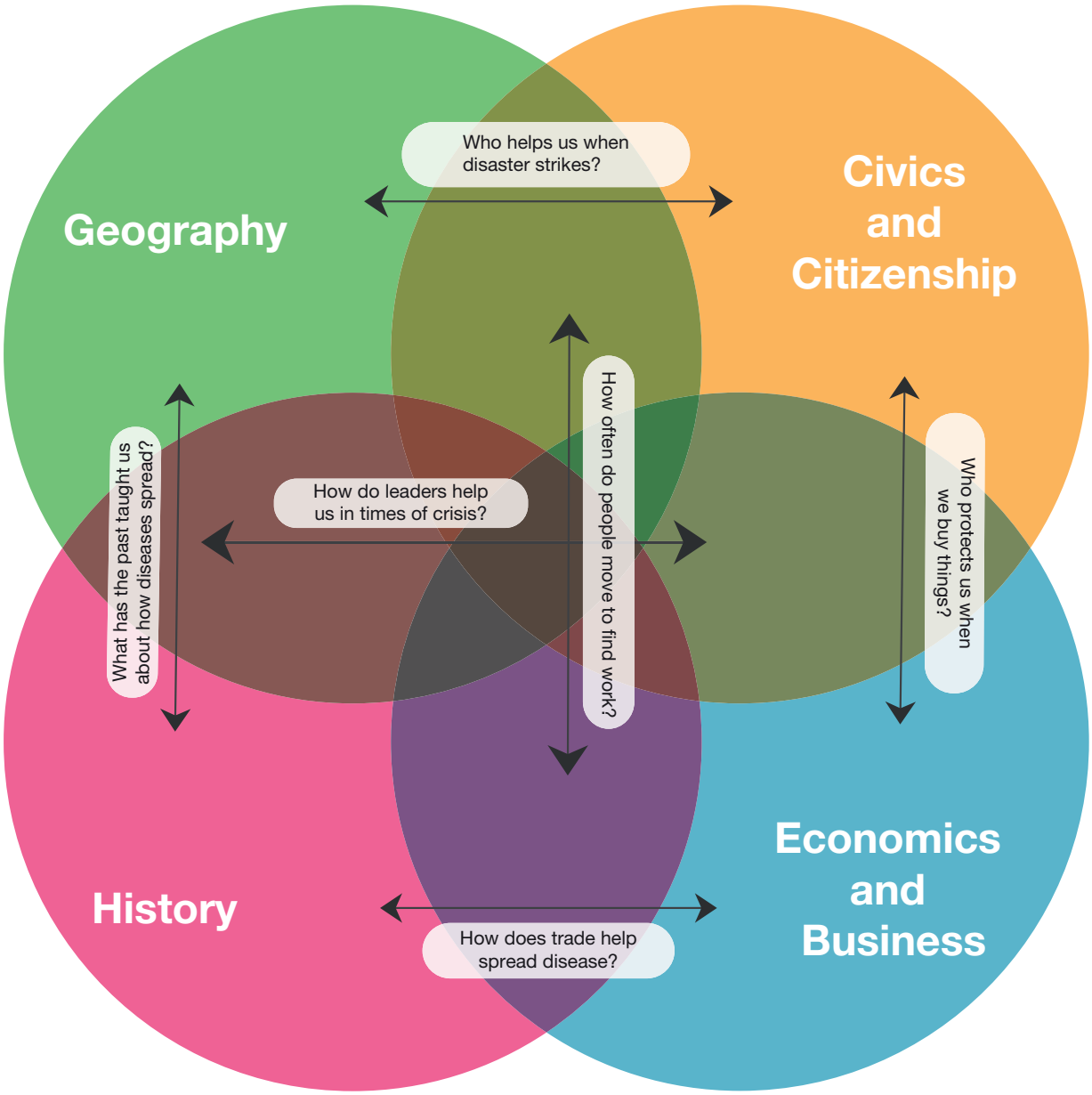
FIGURE 2 The main concepts in HASS for each subject



Just because there are four subjects within HASS, it doesn't mean they aren't connected. They all connect to each other in many ways.

For example, this year, you will explore some of the connections shown in **FIGURE 3**.

FIGURE 3 The different subject areas in HASS are all connected.



1.2 Key skills in HASS

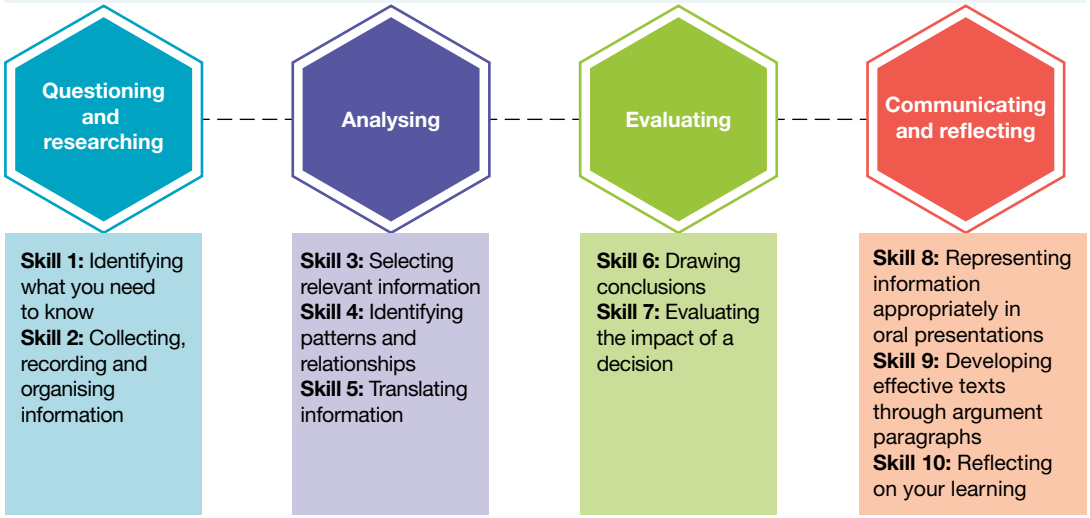
1.2.1 What are the HASS skills?

HASS involves asking questions and investigating issues, so it's important to be curious about the world around you. You will need to investigate, research and analyse to learn more about humans and their society.

In Year 7, you learned some of these skills on a basic level, but as you work through HASS you will learn to use these skills in a more sophisticated and detailed way, in the same way you are learning about the key concepts in more depth. You will find the same skills taught in Years 8, 9 and 10 HASS, but as you move through your schooling, the level at which you will use these skills will become deeper and more accomplished. You will also become more confident and independent in using these skills, both at school and in the real world.

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

FIGURE 1 Each HASS skill is made up of a set of smaller skills.



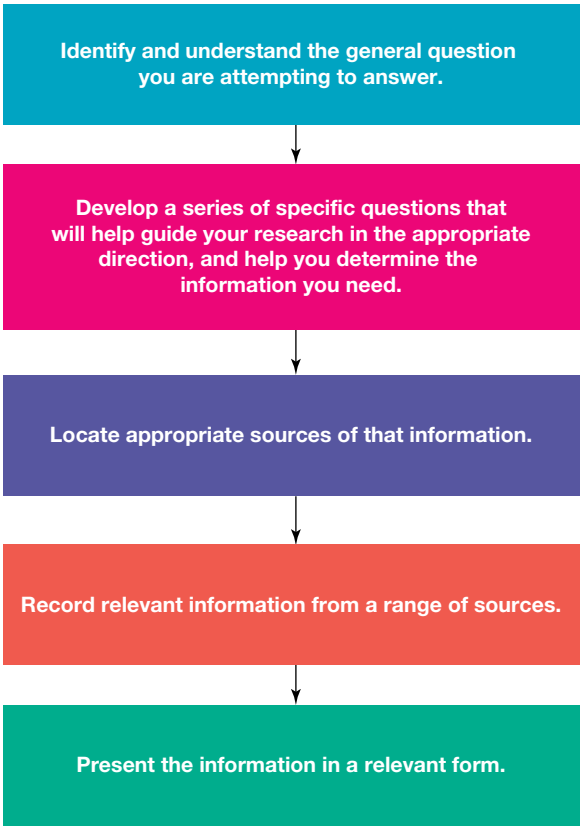
1.2.2 Questioning and researching

Questioning and researching are multi-step processes.

When you have been given a topic to discuss or a problem to solve you need to ask good questions about the topic to focus your research. Without that focus, you are looking for answers without any clear direction. When you have a task to complete, you don't want to leave the chances of finding the right information to luck.

This year, you will be refining and developing the two main questioning and researching skills you were introduced to across your HASS subjects in Year 7: creating well-focused inquiry questions and ensuring your information comes from a wide range of useful, accurate and reliable sources.

FIGURE 2 The process of researching a topic



1.2.3 Analysing

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

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

You began the process of analysing when you did your research – analysing whether sources were likely to be useful. You developed your analysis skills in Year 7, but now it is time to build on those skills by thinking about how relevant the information is on a deeper level than simply whether it answers the basics of a question.

1.2.4 Evaluating

Evaluating means looking at the information and sources you have gathered, as well as the relationships, trends and viewpoints you have discovered through your analysis, to come to conclusions about what you have learnt. It also involves weighing up the benefits or problems of possible solutions or actions.

This is the skill where you bring everything you have learnt together and make a judgement.

In HASS, you will often find that your evidence leads you to a conclusion that involves a 'yes, but...', or a 'sometimes' or a 'no, but...' In fact, the more skills you develop in HASS, the more likely you are to reach one of these 'grey area' conclusions. They generally show that you are thinking quite deeply about an issue and can see it from a range of perspectives. As you develop your ability to reason through problems faced by humanity, you become more skilled at working through those 'grey areas' and finding a solution that might work to lessen the harm and maximise the benefits of a change or an action.

1.2.5 Communicating and reflecting

One of the main parts of conducting research is communicating: sharing your findings with others. When you do this, you need to keep your audience in mind. For example, if you are creating an infographic for your Year 8 classmates you need to make sure they will understand what they are reading and be interested in reading it. This means you need to adjust your language and your way of presenting information to make it appropriate to them.

It is also important to use accurate and specific terminology to express what you are saying. This demonstrates to your teacher that you have built your subject vocabulary and can use the words you have learnt precisely. Referring to your evidence and sources to prove your argument will help to communicate your understanding clearly too.

The final part of any learning process is reflecting on what you have learnt. This means looking back at what you have *done* (questioning and researching, analysing, evaluating and communicating) as well as what you have *learnt* about the topic you have been investigating.

Reflecting on what went well and what you might be able to do better helps you to learn how to improve your skills and understanding.

Ask yourself questions such as:

- What did I do well?
- What could I do better next time?
- What did I learn?
- How can I apply this information in my life?

1.2.6 HASS skills focus in Year 8

DIDN'T WE DO THIS LAST YEAR?

In Year 8, some of the skill-building work you will be asked to complete and the processes you are asked to follow will be familiar; others will involve new stages to take you deeper into a process.

The familiar stages are to consolidate your understanding – in other words, to make what you learnt last year 'stick' and to make sure you remember the key concepts and skills well. This gradual building of difficulty and depth, mixed with a little repetition, is an important part of the process of careful skill-building.

Think of building these HASS skills in the same way as you might consider your ability for making a cake. Last year, you began baking basic cakes with simple flavours. There might not have been any decorations, or they might have been a little bit messy or simple. This year, your baking skills should improve; you will learn to make more complicated cakes with different flavour combinations and layers, and the decorations will become more complicated and impressive.

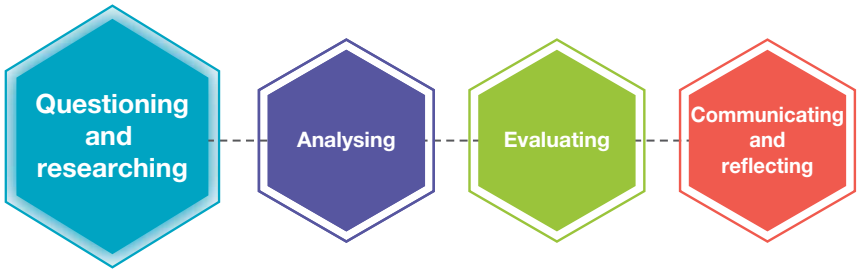
This is the same as your HASS skills. You begin with the basics – for example, asking good but straightforward questions. This year, as you learn more, your 'flavours' will become deeper and more complex, and your 'decoration' neater and more precise.

FIGURE 3 Your HASS skills will build in complexity across years 7–10.

1.3 SkillBuilder: Identifying what you need to know

1.3.1 When to use this SkillBuilder

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



1.3.2 Tell me

Identifying what you need to know means working out what you know and believe about a topic so you can identify what you don't know yet.

In Year 7, you were asked to simply **identify** your existing knowledge and beliefs on a topic but in Year 8 you will also need to briefly **describe** these and identify some of the perspectives or points of view that other people might have that are different from your own. Describing something well requires attention to detail.

Writing focus questions is an effective way to break a research topic or question down into smaller parts. This helps you to identify what you know or think about each part, and also to consider what other perspectives people might have. Even though this might not be stated in a topic, it is something you are expected to consider.

identify to recognise and name
describe to give details about features and characteristics of a person, place, thing or idea

Questioning and researching

In Year 8 HASS, the focus of this skill is developing strong, effective focus questions to help you research a topic.

1.3.3 Show me

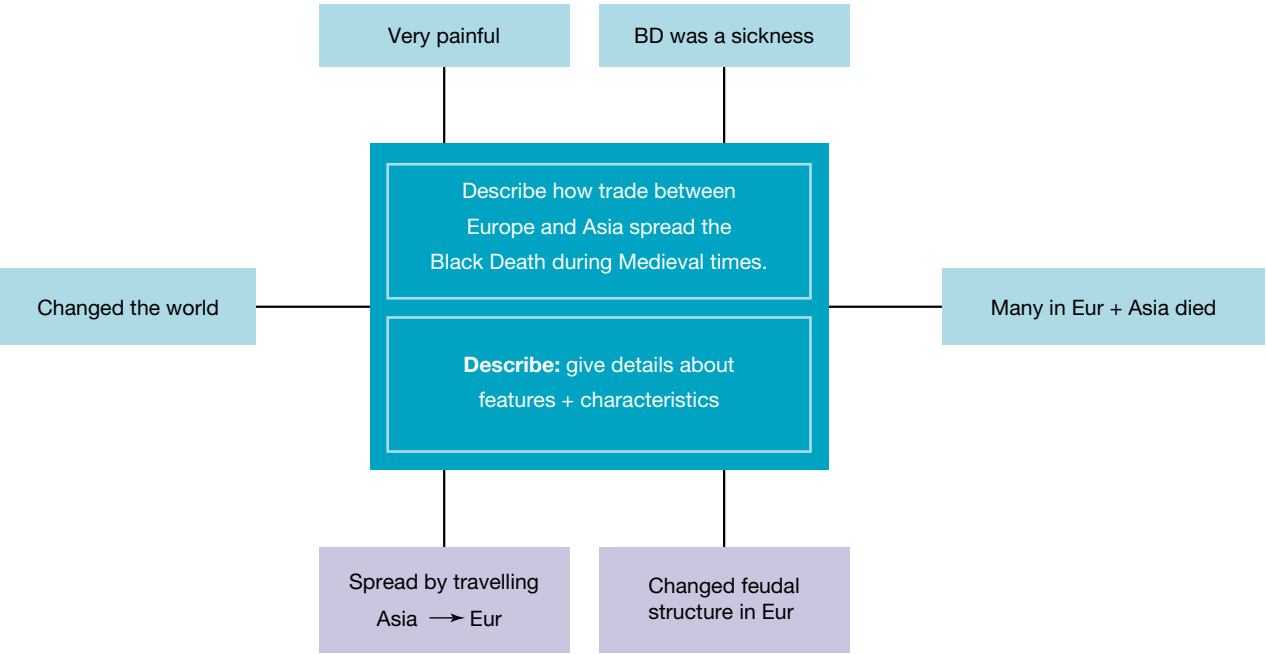
The following step-by-step process will make it easier for you to develop strong and effective focus questions for your research.

Imagine you have been given the following topic: Describe how trade between Europe and Asia spread the Black Death during medieval times.

Step 1: Identify what you already know or believe

- Find the main idea or event you have been asked to focus on (sometimes rewriting the topic as a question can help you to do this).
- Brainstorm key points or ideas that come to mind when you think about the topic.
- List:
  - what you know (fact)
  - what you think you know (possible fact)
  - what you believe (opinion)
  - what others might believe (possible opinion).
- Identify the main verb in the topic – these verbs tell you what you need to do in order to answer the question properly. (Write this in your brainstorm so you remember what the task is.)

FIGURE 1 Brainstorm your key ideas, including what the topic is asking you to do



WHAT IF I DON'T KNOW ANYTHING?

Remember there are no wrong answers in brainstorming; it doesn't matter if you only write a few words or ideas.

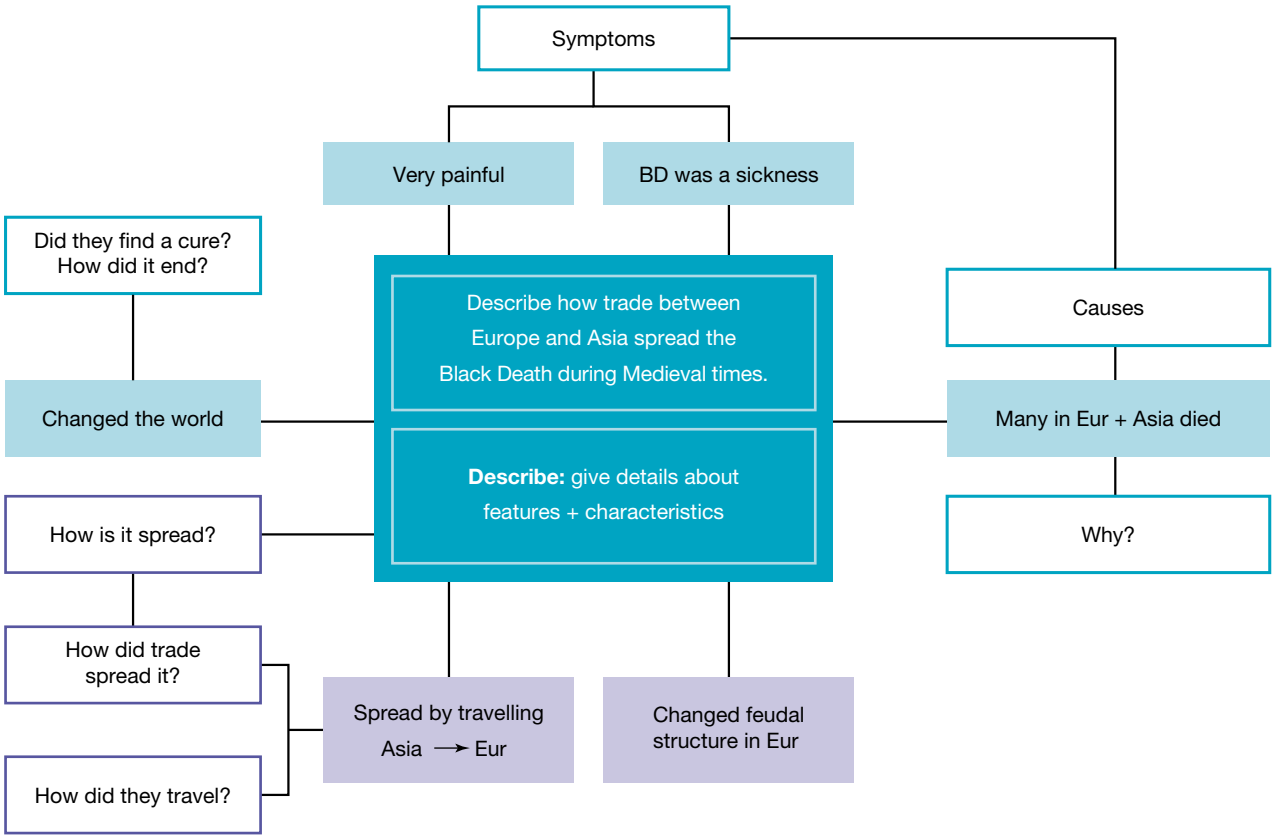
If you feel like you don't know anything about a topic, try some of these tips.

- Write any words, people or places that you think might be connected to the topic (add a question mark or circle an idea if you're not sure it's connected).
- Write questions related to each word that you remember (what is that? who is that? where did that happen?)
- Look in the question for clues – you could list *trade, Europe, Asia* and *Black Death* from this topic.
- Go back to your class notes or text to review some of the headings that remind you of what you have learnt.
- Ask yourself: did I learn something about this last year in HASS? Or do I know about something similar?

Step 2: Identify what you need to know to further your understanding

- Look at your brainstorm or list. What other related things don't you know?
- Use the 5W 1H words (**w**hat, **w**here, **w**hen, **w**ho, **w**hy, **h**ow) to prompt your memory or find gaps in your knowledge.
  - **What** was it? **What** were the consequences?
  - **Where** was it?
  - **When** did it happen?
  - **Who** was involved?
  - **Why** did it happen? **Why** did it end?
  - **How** did it happen?
- Add ideas or questions to your brainstorm.

FIGURE 2 Add to your brainstorm using the 5W 1H words to prompt questions



TIPS FOR EFFECTIVE BRAINSTORMING

Brainstorming is for making notes about your ideas; full words and sentences are not needed. It's a handy time-saver to develop your own brainstorming shortcuts for common words.

- Use abbreviations and initials; for example, in **FIGURE 1** Europe is abbreviated to Eur and Black Death is shorted to BD.
- Use symbols: +, =, →
- Important points can be underlined or highlighted.

Step 3: List what you know and what you need to find out

Re-read the question carefully.

- Consider the *verb* in the question. What is it asking you to do? For example, in this case you are being asked to '*Describe how*'. This means you need to give details: characteristics, features, trends, timeframes and methods of spread.
- Highlight the key topic terms. These are the main things you need to give details about. There are two key phrases here:
  - trade between Europe and Asia (in medieval times)
  - spread of the Black Death

In this case, your list of focus questions should include questions about the characteristics of the disease that helped it to spread, and details of how people traded at that time that helped Black Death to spread.

Based on your careful reading of the topic, use your brainstorm to create a table summarising what you know and what you will need to find out to answer the question. Target the specific things that the question asks about. Notice in the example in **TABLE 1** that there are some points from the brainstorm that aren't included. Those ideas aren't going to help answer this specific topic, so they have been left off the list.

TABLE 1 A summary of brainstorm ideas

What I know	What I want to know
The Black Death was a sickness that killed many people in Europe and Asia	How did the Black Death spread – from person to person or some other way?
It was very painfulLots of people died	How many people got it? How many people died? (Why? Lack of medicine, no knowledge of how to stop it, easily spread?)
It changed the world at the time	Who was blamed for the spread? (Did people think it was caused by something else?)
It was spread by people travelling from Asia to Europe	Where did trade between Asia and Europe start and end? What did they trade? Who were the traders?
It changed the feudal structure of medieval Europe	How did the Black Death stop spreading?

SHOULDN'T I JUST RESEARCH EVERYTHING IN MY BRAINSTORM?

Researching everything in your brainstorm is not an effective use of your time. Only list ideas from your brainstorm that relate to the topic. Some students fall into the trap of thinking that including greater volumes of information will automatically translate into a better mark, but this is not the case.

When your teacher asks you to research a specific question, they don't want to test your knowledge of the *whole* topic. They are testing your ability to respond to that *specific* topic – one part of that test is whether you can understand the topic well enough to know what it *is* relevant, and what it is *not* relevant to the question.

Giving irrelevant information in your answers is like responding to the question 'What's is your favourite food' with a half-hour explanation of the history of pizza. It might be vaguely related, but it's not relevant and it wasn't what you were asked.

Step 4: Write a hypothesis

Based on your list of what you do and don't know, write a **hypothesis**.

- With this topic, you are being asked to *describe*, so your hypothesis should be a sentence that summarises your ideas.
- If your topic asks you to come to a decision or argue something, your hypothesis should summarise your point of view.

Hypothesis: Trade spread the Black Death because sick people travelled and spread the illness as they moved around.

WHAT IF MY HYPOTHESIS IS WRONG?

Remember the point of your hypothesis is to focus your research. It doesn't matter if it is right or wrong. Sometimes when your hypothesis is wrong, it leads to much deeper and more interesting research.

Step 5: Review and format your focus questions

Effective focus questions are clear, ordered and cover all parts of the topic you need to answer.

- Use the 5W 1H process again to break down what you need to research.
- Try to include at least two or three questions for each part of the process.

hypothesis an idea or explanation that is used as a starting point for deeper investigation or research

TABLE 2 Build your focus questions to cover all areas of your research topic

What	Where	When	Who	Why	How
What is the Black Death?	**Where** did the Black Death start?	**When** did the Black Death start?	**Who** was impacted?	**Why** did it spread?	**How** did people try to stop the Black Death?
What were the symptoms?	**Where** did it travel to?	**When** did it end?	**Who** were the main traders?	**Why** didn't they just stop trading?	**How** did the disease spread?
What was done to prevent the Black Death?					

WHAT IF MY QUESTIONS CHANGE WHEN I START RESEARCHING?

Your questions will often change as you go deeper into a topic. If you are halfway through your research and come up with more questions or you need to ask different questions, update your table.

You may not develop the most effective focus questions at the beginning. This is a circular process: think, list, question, check, think, list, question, check …

1.3 ACTIVITY

Once you are comfortable with the 5W 1H process, try this approach to writing focus questions that go a little deeper into a topic. Focus questions can be divided into three basic types:

- **Literal questions** are where you find information such as dates, names and locations. These are generally 'who, when, where, what' questions.
- **Inferential questions** are designed to help you find information not specifically in the text, so you need to read the information and make deductions about what it is saying. These are generally 'how and why' questions.
- **Evaluative** questions are designed to help you make decisions and draw conclusions about what you are reading. They help you find problems and create possible solutions. These are generally questions that can begin with 'Do I think...?' or statements that start with 'I wonder if …'

Examples of these questions include:

Literal	Inferential	Evaluative
What is the Black Death?	**How** was the Black Death spread?	**Do I think** trade caused the spread of the Black Death?
Who was impacted by the Black Death?	**Why** did the disease have such a significant impact?	**Do I think** this same thing could happen now?
When did it happen?	**Why** did it spread?	**I wonder** if the disease would have spread if no one travelled?
Where did it happen?	**How** did it end?	**I wonder** if there were other factors that had a big role in spreading it?

Add some evaluative questions to your list of focus questions. **HASS skills: Questioning and researching**

1.3.4 Let me do it

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

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

Civics and Citizenship

Write a series of focus questions to guide your research of this topic:

Describe how laws are made in Australia.

Economics and Business

Write a series of focus questions to guide your research of this topic:

Describe the rights and responsibilities of businesses and consumers. Find a case study where consumer rights have not been met.

Geography

Write a series of focus questions to guide your research of this topic:

Choose a landform in Australia, such as Uluru. Identify and describe the spiritual and cultural connections people may feel with this place.

History

Write a series of focus questions to guide your research of this topic:

Describe how crime and punishment stayed the same and how it changed over the medieval time period.

literal to be exact, without exaggerating or misleading

inferential coming to a reasonable conclusion after piecing together evidence

evaluative based on assessing value

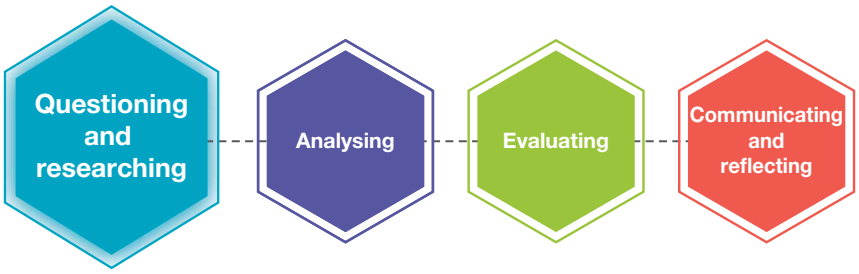
on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-4269), Level 2 (ewbk-4270), Level 3 (ewbk-4271)
Economics and Business: Level 1 (ewbk-4272), Level 2 (ewbk-4273), Level 3 (ewbk-4274)
Geography: Level 1 (ewbk-4275), Level 2 (ewbk-5374), Level 3 (ewbk-5375)
History: Level 1 (ewbk-5376), Level 2 (ewbk-5377), Level 3 (ewbk-5378)

1.4 SkillBuilder: Collecting, recording and organising information

1.4.1 When to use this SkillBuilder

This SkillBuilder develops your questioning and researching HASS skills. Use this SkillBuilder **after** you have closely examined your task, written your focus questions and written your hypothesis. Use this SkillBuilder **as** you start looking for sources of information.



1.4.2 Tell me

The collecting, record and organising information skill involves finding sources of information to answer your focus questions and fill in the gaps in your knowledge about a topic with **reliable**, **useful** and **accurate** sources.

There are many different types of sources, including websites, books, newspapers, statistics and maps. Some sources are more reliable and accurate than others, so you should never use a source unless you know it can be trusted. For example, a person might write their opinion of an issue in a blog. If they have not provided evidence for that opinion how do you know it is worth believing?

GOOD RESEARCHERS STAY FOCUSED

It might sound obvious, but to answer your research focus questions, you need to find sources that answer your questions. Don't be distracted by irrelevant information. If nothing in a source relates to your focus questions, move on.

How do you know if the facts are correct? The person who wrote them might have been paid to express a specific view or they might have formed their opinion without much knowledge of the topic. In contrast, a post written on the website of an academic organisation with a good reputation for research will have evidence and other sources to support what they are saying about the topic or idea.

reliable the information in the source is more accurate than other sources (you can rely on it more to be correct)
useful related to your research
accurate correct and factual

Good researchers know how to identify trustworthy information sources, and do not rely on data or information that they cannot verify as very likely to be reliable and accurate – no matter how relevant it might seem. You will also need to use both **primary sources** and **secondary sources**.

Questioning and researching

In Year 8 HASS, the focus of this skill is clearly recording and organising information for a range of source types to help you research a topic.

1.4.3 Show me

Let's use our medieval Europe topic from section 1.3.3 to get us started: Describe how trade between Europe and Asia spread the Black Death during medieval times.

Step 1: Complete a quick assessment of each source that looks useful

When you search for information using your focus questions, a lot of sources will be available, so you need to develop the skill of quickly vetting (testing) a source before you spend too much time reading and making notes from it – you're developing a radar to detect misinformation and poor research.

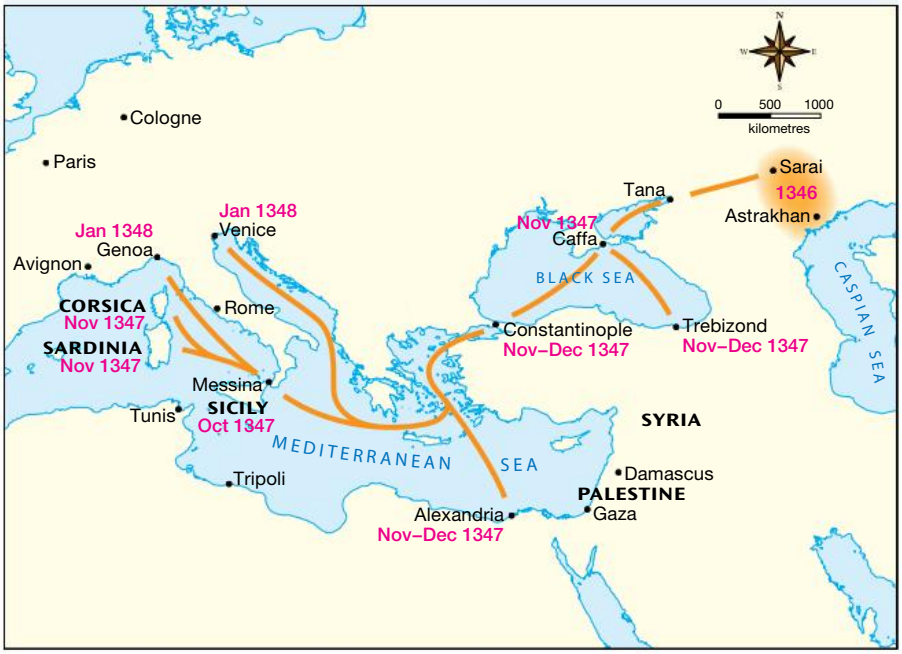
When you think you have found a source that might be useful, complete a quick test of whether it is likely to be reliable and accurate before you read or examine it in detail. At this stage, you are looking for signs to immediately discount a source. Ask yourself questions such as:

- Where did the source come from and who wrote it? (Is it reliable?)
- Where did the authors get their information? (Is it accurate?)

primary sources sources made at the time of the event

secondary sources made after the time of the event, using primary sources as evidence

FIGURE 1 Merchants and soldiers returning from Caffa in late 1347 soon spread the Black Death to the Middle East, North Africa and Italy.



Source: Darlington, R., Mraz, J., Smithies, G. & Richardson, M. (2018) *Jacaranda Humanities and Social Sciences for Western Australia 8*. Brisbane: John Wiley & Sons

Where did the source come from and who wrote it? (Is it reliable?)

- It came from a textbook from a well-known international publishing company.
- The book was written by named authors who are Humanities and Social Sciences teachers.

Where did the authors get their information? (Is it accurate?)

- A range of other sources confirm the information in the map.
- The sources of the information are listed in the textbook.

Based on this information, we can say this source seems very reliable and accurate, so we can continue looking at it to see if it is also genuinely useful, or whether it just seems to be useful at a glance.

Look at the main features of the source to assess whether it seems relevant to your topic and focus questions. For example, for visual sources you might consider the following.

TABLE 1 Features to consider when you are assessing a source

Type of source	Features to consider
Maps	• The title and key – do they seem related to your topic? • Location and scale – does the map cover the place and period of time you are being asked to consider?
Photos or illustrations	• Caption – does it seem related to your topic? • Visual elements – does the content seem directly relevant to your topic or focus questions?
Diagrams or charts	• The title – does it seem related to your topic? • The labels and features – does the data relate to the topic within the timeframe and place you are being asked to research?

Once you have determined that the source is likely to be relevant, which **FIGURE 1** definitely is, read it carefully and make notes on the details you have found that help to answer the topic.

What information did I learn about my topic?

- The Black Death began in Sarai in 1346 and spread west. It landed in Venice and Genoa in January 1348.
- The Black Death spread a long way in two years.
- The arrows show that the disease was spread by sea – most likely by shipping routes – which means sailors on ships were sick and when they docked at ports they infected the local people around them.

Step 2: Collect reliable and accurate information from a variety of sources

You should always use multiple sources in your research. In this case, you will need other sources in addition to the map because it hasn't answered all of your questions, and it raises even more questions. For example, did people travel overland? What happened when the disease arrived in Genoa and Venice?

Sometimes you might need to interrogate (question and examine closely) a source more closely before you can judge whether it is reliable, accurate and useful. Use the 5W process to assess the reliability and accuracy of a source more completely.

Consider **FIGURE 3** and how the 5W test has been applied to assess its reliability and accuracy in detail.

You will need to look carefully for some of this information but taking the time to check carefully is better than including incorrect or biased information in your research. For example, you need to read the 'About Us' section of ThoughtCo to learn that the contributors are teachers, academics and researchers – reliable, knowledgeable writers.

You can now make the judgement that the article is reliable and likely to be accurate. It is also useful because it answered some of the focus questions that the map had not answered in detail: how the disease spread, and how people tried to stop it.

FIGURE 2 Prompt questions for using the 5W questions to interrogate your sources

What	**What is the source?** • What kind of source is it: for example a website article, a report, a photo, a poster, a tv show, a painting? • What information does it give you? Is this backed up by other sources you have found?
Who	**Who created it?** • Was it created by someone with expert knowledge (for example, a specialist in the topic, someone who was there) • Was it created by a group who have something to gain from you believing them?
Why	**Why was it created?** • Was it created to make you think a certain way? • Was it created to be factual and not take sides?
When	**When was it created?** • Was it created close to the event? • Is it recent? Might it be out-of-date?
Where	**Where was it created?** • Was it created in a place that is related to the topic or written a long way away where people might have not been able to do their own research? • Was it created in a place that is respected for its research? • Was it published in a place where the public could change it?

FIGURE 3 An example of how you might assess a source: The Black Death comes to Europe, thoughtco.com, 30 July 2019

The Arrival and Spread of the Black Plague in Europe

1347: The Black Death Comes to Europe

The first recorded appearance of the plague in Europe was at Messina, Sicily, in October of 1347. It arrived on trading ships that likely came from the Black Sea, past Constantinople and through the Mediterranean. This was a fairly standard trade route that brought to European customers such items as silks and porcelain, which were carried overland to the Black Sea from as far away as China.

As soon as the citizens of Messina realized the illness that had come aboard these ships, they expelled them from the port. But it was too late. Plague quickly raged through the city, and panicked victims fled, spreading it to the surrounding countryside. While Sicily was succumbing to the horrors of the disease, the expelled trading ships brought it to other areas around the Mediterranean, infecting the neighboring islands of Corsica and Sardinia by November.

Meanwhile, the plague had traveled from Sarai to the Genoese trading station of Tana, east of the Black Sea. Here Christian merchants were attacked by Tartars and chased to their fortress at Kaffa (sometimes spelled Caffa.) The Tartars besieged the city in November, but their siege was cut short when the Black Death struck. Before breaking off their attack, however, they catapulted dead plague victims into the city in the hopes of infecting its residents.

What is the source? thoughtco.com website article

What information? reactions of people to Black Death, first recorded appearance, trade route details (supported by other sources and references in article)

Who created it? Melissa Snell, historical researcher - nothing to gai, it's free

Why was it created? factual information for school benifits

When was it created? 30 July 2019, not close to the event but recently updated

Where was it created? not close to place or time of event, but website reviews and edits for facts and research quality, content not able to be changed by public

CAN I USE WIKIPEDIA?

Wikipedia can be an easy starting point but remember that it is not always reliable. Any information gathered from Wikipedia should be checked against at least one other source to make sure it is accurate. To help ensure that your information is correct, use at least two sources to answer each question.

The most useful research information in Wikipedia is something you may never have looked at. If you scroll down through a Wikipedia entry, you will usually find sources listed at the bottom. These are the sources the authors have used to write the Wikipedia page. These sources will include primary and secondary sources, written by researchers and experts. They are often more reliable than the Wikipedia page itself.

Step 3: Make notes in your own words

When you have decided that your sources are accurate and reliable, highlight and make notes of the information that is useful. Often, to make sure you understand everything, you will need to read or examine a source more than once.

For **FIGURE 3** your notes might include:

- BD started in Asia → west to Eur
- took 2 years to reach Eur
- sailors spread disease – came ashore ill
- Townspeople: tried to keep infected ships out – BD spread anyway

As you can see, the information is summarised and has been written in different words from the article. It also uses short forms of words and symbols instead of full sentences. For help with making notes in your own words, go to SkillBuilder: Using the deconstruct–reconstruct method in subtopic 2.5.

DO I REALLY HAVE TO GO THROUGH A SOURCE MORE THAN ONCE?

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

Taking shortcuts with this part of the process means you might misunderstand or misuse the information you have found. The first pass or skim of a source is only to determine if it is worth using.

Step 4: Organise your notes

Clear and organised notes will help you find specific details later when you are writing your answers.

- Use diagrams or tables where appropriate
- Use headings to divide the information you find in each source. (Using your focus questions as headings makes it easier to see which questions you need to research further.)
- Always record the details of a source with the notes you have taken.
- When you are satisfied that you have found the answers to all the questions, collect the information about each focus question together.

Step 5: Follow ethical protocols or rules

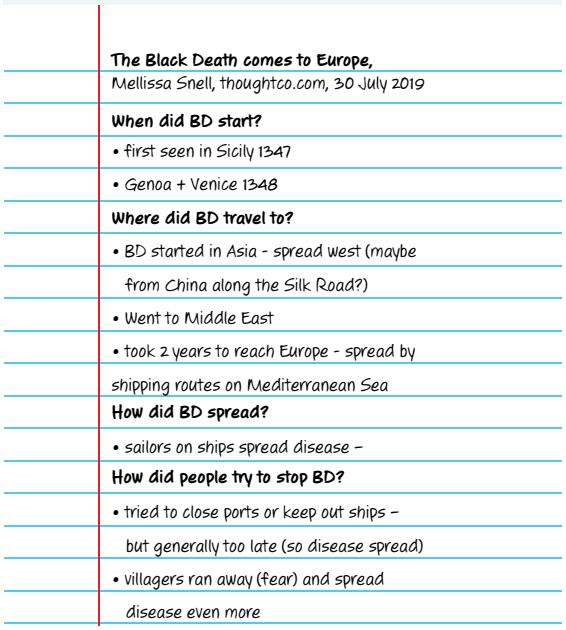
One of the most important rules in research is to **cite** all your sources. This means that if you use someone else's information or ideas, you need to show what, where and how you used their work.

This rule is important because it helps to show you have not broken the first rule of research: do not **plagiarise** even if it is by accident.

- Include all the details for the sources you use with the notes you took from that source.
- Put any information you have used word-for-word in quote marks, even in your notes.
- List all the places you got your information (all sources you used) in a bibliography or reference list.

There are many different systems used to show this information. Your school will have a specific referencing format that they use. One of the most common types in HASS is called Harvard referencing.

FIGURE 4 A simple but organised set of notes taken from **FIGURE 3**. You could also use a notation system such as Cornell Notetaking.


The Black Death comes to Europe,
Mellissa Snell, thoughtco.com, 30 July 2019
When did BD start?
• first seen in Sicily 1347
• Genoa + Venice 1348
Where did BD travel to?
• BD started in Asia - spread west (maybe
from China along the Silk Road?)
• Went to Middle East
• took 2 years to reach Europe - spread by
shipping routes on Mediterranean Sea
How did BD spread?
• sailors on ships spread disease –
How did people try to stop BD?
• tried to close ports or keep out ships –
but generally too late (so disease spread)
• villagers ran away (fear) and spread
disease even more

cite give the details of

plagiarise copy other people's work and present it as though it is your own work

TABLE 2 Harvard referencing format

Common reference	How to cite using Harvard referencing format
Books – one author	Author family name, author first name initial. (Year published). Title of book. City: Publisher, Page(s). **Example:** Darlington, K. (2018) *HASS is fabulous*. Brisbane: John Wiley & Sons
Books – two or more authors	Author family name, author first name initial., Author family name, author first name initial. (Year published). Title of book. City: Publisher, Page(s). (include all authors in the order they are on the cover) **Example:** Darlington, R., Mraz, J., Smithies, G. & Richardson, M. (2018) *Jacaranda Humanities and Social Sciences for Western Australia 8.* Brisbane: John Wiley & Sons
Websites with the author listed	Family name, First initial (Year published). *Page title.* [online] Website name. Available at: URL [Accessed Day Month Year] **Example:** Snell, M. (2019). *The arrival and spread of the Black Plague in Europe* [online], ThoughtCo., Available at: https://www.thoughtco.com/spread-of-the-black-death-through-europe-4123214 [Accessed: 21 March 2020]
Website without an author listed	Website name, (Year published). *Page title*. [online] Available at: URL [Accessed Day Month Year] **Example:** HASS in WA. (2021). *Developing my skills in HASS.* [online] Available at: www.HASSEmporiumWA.com.au [Accessed: 21 February 2020]

1.4.4 Let me do it

Practise your skills at collecting and organising information with the following activities.

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

Civics and Citizenship

Find reliable and accurate sources that describe how laws are made in Australia.

Economics and Business

Investigate the rights and responsibilities of businesses and consumers. Find reliable and accurate sources that describe a case study where consumer rights were not met.

Geography

Choose a landform in Australia, such as Uluru. Find reliable and accurate sources that describe the spiritual and cultural connections people may feel about this place.

History

Find reliable and accurate sources that describe how crime and punishment stayed the same and how it changed over the medieval time period.

on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-4269), Level 2 (ewbk-4270), Level 3 (ewbk-4271)
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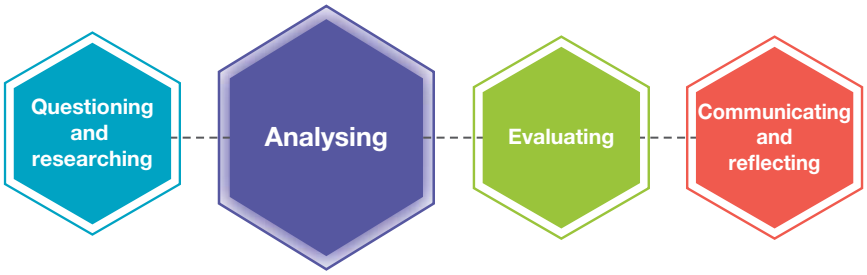
History: Level 1 (ewbk-5376), Level 2 (ewbk-5377), Level 3 (ewbk-5378)

1.5 SkillBuilder: Selecting relevant information

1.5.1 When to use this SkillBuilder

This SkillBuilder develops your analysing HASS skills. Use this SkillBuilder after you have refined your list of inquiry questions. Use this SkillBuilder **as** you start to make detailed notes from each source.



1.5.2 Tell me

From your research, you have collected sources that are reliable, accurate and generally useful. The first stage in analysing a source carefully is examining it closely to determine whether the *type* of information is relevant too.

You may have collected a lot of information, but is what you have collected fact or opinion? Are the sources primary or secondary sources?

Analysing begins with processing the information you have found. Ask yourself questions such as:

- What are the facts and ideas?
- What evidence is presented?
- What opinions are voiced?
- What questions are raised?

In Year 8 HASS, the focus of this skill is identifying types of information and assessing their relevance to your task.

1.5.3 Show me

Read **FIGURES 1**, **2** and **3** below. Critically examine each to find facts, evidence, ideas, opinions and questions. (You can assume their reliability and accuracy have already been checked.)

Step 1: Examine the task, your notes and sources

To answer a question well, you need to pick the information about the topic that is relevant, but you also need to pick the type of information that helps you to answer the question in the way it has been asked. For example, answering a question that asks you to *describe a process* requires you to find facts and examples of how the process works. A question that asks you to *discuss the effectiveness of a process* requires you to provides points for and/or against the process, so you will need to know how the process works but opinions about how effective it is will be more relevant to the question.

UNDERSTANDING TYPES OF INFORMATION

- You can break information down into three categories:
- **Facts**: information that is objectively true (not influenced by opinion or feelings).
- **Opinions**: a point of view or perspective that may be subjective (based on personal feelings rather than fact) or objective.
- **Questions**: issues or problems that are raised but not answered

What separates fact from opinion?

The difference between fact and opinion is that a fact is able to be proven to be true. Always be careful of opinions that are presented as facts and information that is presented without any supporting evidence. Sometimes it is very difficult to identify an opinion that has been disguised as a fact.

- **Evidence**: information that is used to show why a hypothesis, opinion or explanation is correct. When you analyse evidence, consider two things:
- Can it be verified (proven to be true)?
- Does it really show that the hypothesis, opinion or explanation is correct?

facts information that is objectively true (not influenced by opinion or feelings)

opinion a point of view that may be subjective (based on personal feelings rather than fact) or objective

questions issues or problems that are raised but not answered

evidence information that is used to show why a hypothesis, opinion or explanation is correct

Look at your notes to determine:

- What are the **facts**?
- What **evidence** is presented?
- What **opinions** are voiced?
- What **questions** are raised?

Summarise, label or organise the information based on its type.

FIGURE 1 'Freedom of speech in Australia', Darlington, Mraz, Smithies & Richardson, Jacaranda Humanities and Social Sciences 8 for Western Australia 2edn, John Wiley & Sons, 2018

1.3.1 The importance of freedom of speech

One of the key freedoms enjoyed by Australians is freedom of speech. In most cases we have the freedom to express our opinions publicly. However, there are some legal limits on freedom of speech. This is because our right of free speech must be balanced against the rights of other people who may be harmed by what we say.

For us to be able to exercise our democratic rights in a free society, we must have the right to express our opinions without risk of punishment. In many countries around the world, and throughout history, this right has not always existed. In some medieval societies, anyone who publicly criticised the king or the church could be executed. Even today, there are many countries where freedom of speech is very limited or non-existent, and people are punished for publicly expressing their opinions:

Australians highly valuethe right of free speech.

FIGURE 2 Free speech and free press around the world: North Korea, Lisa Sargent, 30 April 2013, freespeechfreepress.wordpress.com/north-korea/

In the nearly 70 years of North Korea's existence, little information has been known about the country until the great North Korea is not provided by the government but comes largely from North Korean defectors and South Korean North Korea is not provided by the government but comes largely from **North Korean defectors** and South Korean advocates. Though any information on speech restrictions in the country before Arduous March is extremely difficult to find, there have been several recent incidents of governmental suppression.

In 1989, Kim Young Soon, now a North Korean defector, was sent to Yoduk, one of North Korea's political prisons, after claiming Sung Hae Rim was the mistress of Kim John-Il and had his child. Though her statements were true, the government charged her with spreading rumors, claiming that doing so was defamation of the government.

In 2009, Korean-American missionary **Robert Park** was impression for illegally entering North Korea to draw attention to the country's human right issues. Park was released in February 2010 and sent back to America. Though he remains silent about the incident, it's been reported that he was totally tortured.

In january 2010, **the public execution of North Korean factory worker** arose after he called someone in South Korea to discuss North Korean rice prices.

Following the death of Kim Jong-Il in December 2011, **North Korean citizens were required to mourn**. Those who failed to display sadness were punished by the government.

Such punishments and radical restrictions such as these are exceedingly common. However, even those who have defected from North Korea are subject to the country's strict grip. In 2009, **Hwang Jang Yop**, the highest-level ranking North Korean official to ever defect to South Korea, was the target of an assassination attempt by two North Korean spies pretending to be defectors. Despite the high risk of being severely reprimanded for speaking out against the government or for obtaning outside information, 98 percent of North Koreans have received information

FIGURE 3 'Freedom of speech' from North Korea 101: The people's challenges, Liberty in North Korea, libertyinnorthkorea.org/learn-nk-challenges/

No Freedom of Speech

Criticism of the regime or the leadership in North Korea, if reported, is enough to make you and your family 'disappear' from society and end up in a political prison camp. It goes without saying that there is no free media inside the country. The only opinion allowed to be voiced inside the country is the regime's.

TABLE 1 Summarising the types of information in your sources in note form

Type of information	FIGURE 1	FIGURE 2	FIGURE 3
Facts	• Aust law limits freedom of speech • Some countries do not allow free speech (now and in past)	• Limited info about Nth K before 1995, most from defectors since	• Restrictions placed on media and free speech in Nth K
Evidence	—	• 1898 Kim Young Soon sent to prison for 'defaming govt' • 2009 Robert Park (Sth Korean) sent to prison for discussing poor human rights in Nth K • 2010 factory worker killed for phoning someone in Sth K to 'discuss rice prices' • Nth K people 'required to mourn' • 2009, Nth K attempted to kill Hwang Jang Yop • 98% Nth K people get info from outside	• People who criticise govt are put in prison if they are reported (and their family)
Opinions	• Aussies value free speech • Free expression of views is vital in a free democracy • Limiting free speech a little is needed to protect people	• Govt suppress the people • Punishment for speaking out is common	—
Questions	—	—	—

Step 2: Separate the kind of information you need

How you separate the kind of information you need will depend on the task you have been asked to complete. For example, if you have been asked to describe, you will need details about the features and characteristics. If you have been asked to discuss opinions on an issue, you will need to isolate the opinions. The key to this step is understanding the verbs (or actions) in the task you have been given because each action will require a slightly different type of information.

TABLE 2 Common verbs in HASS tasks and exercises

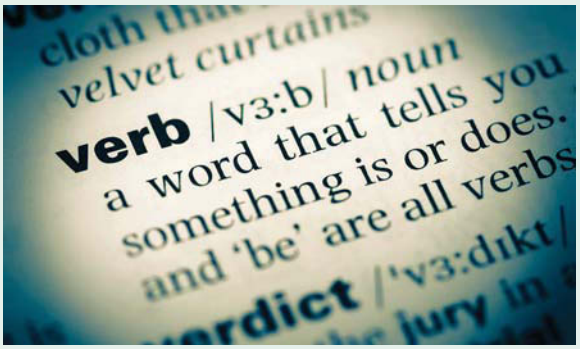
Task verb	Meaning	Example	Requires
Identify	Recognise and name	Identify a country that restricts freedom of speech	Basic facts (names)
Define	State the meaning and the identify essential qualities	Define 'freedom of speech'	Facts (definition)
Describe	State the characteristics and features	Describe punishments for North Korean citizens who criticise the government	Facts and evidence (characteristics and features with detail)
Outline	Describe in general terms; indicate the *main* features	Outline how the North Korean government punishes citizens who criticise the them	Facts (main features, general)
Summarise	Concisely state the relevant details	Summarise the ways in which Australians' freedom of speech is limited	Facts and evidence (listed)
Compare	Show how things are similar and different	Compare freedom of speech laws in Australia and North Korea	Facts, evidence and opinion (similar and different aspect and views)
Explain	Show cause and effect; make relationships between things clear; show why and/or how	Explain why a North Korean citizen might be afraid to defect	Facts, evidence and opinion (show why)
Discuss	Identify issues and provide points for and/or against	Discuss how freedom of speech is limited in Australia	Facts, evidence and opinion (identify issues for and against)
Predict	Suggest what might happen based on available information	Predict the consequences of Australia removing limits on free speech	Facts, evidence, opinion and some questions (questions in a source might provide tips for what may happen)
Propose	Present a point of view, idea, argument or suggestion for consideration or action	Propose how you might protect a North Korean citizen who defects to Australia	Facts, evidence, opinion and questions (suggesting a course of action)

UNDERSTANDING QUESTION VERBS

Use your questioning and researching skills to find a country where the citizens do not have the right to free speech.

Find one reliable source that discusses Australia's right to free speech and two sources that discuss the free speech (or lack of) in your chosen country.

Based on the information in these sources, write a series of ten HASS inquiry questions using the verbs in **TABLE 2**.



HASS skills: Questioning and researching
General capability: Literacy

1.5.4 Let me do it

Practise your skills categorising information to assess what is most relevant to the task with the following activities.

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

Civics and Citizenship

Find relevant information to discuss how laws are made in Australia.

Economics and Business

Find relevant information to discuss the rights and responsibilities of businesses and consumers. Find reliable and accurate sources that detail a case study where consumer rights were not met.

Geography

Choose a landform in Australia, such as Uluru. Find relevant information to describe the spiritual and cultural connections people may feel about this place.

History

Find reliable and accurate sources that describe how crime and punishment stayed the same and how it changed over the medieval time period.

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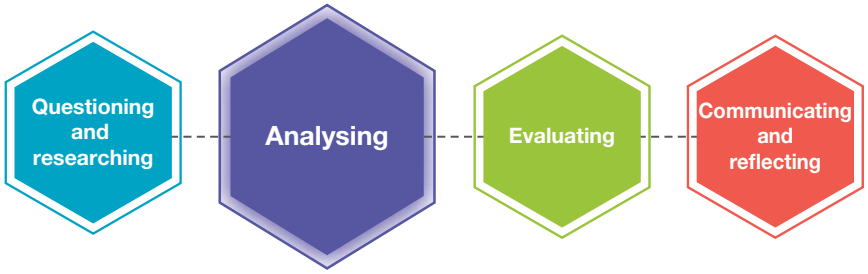
History : Level 1 (ewbk-5376), Level 2 (ewbk-5377), Level 3 (ewbk-5378)

1.6 SkillBuilder: Identifying patterns and relationships

1.6.1 When to use this SkillBuilder

This SkillBuilder develops your analysing HASS skills. Use this SkillBuilder **after** you have made notes from reliable sources. Use this SkillBuilder **to begin planning** your response.



1.6.2 Tell me

HASS tasks and exercises often require you to examine trends and connections. For example:

- identify whether there is any relationship (for example, a connection, such as cause and effect) between the ideas and/or facts
- suggest what relationships or connections a data set shows
- suggest what trends or patterns a data set shows
- suggest what different or similar views (perspectives) are shown or suggested.

In Year 8 HASS, the focus of this skill is accurately identifying links (similarities or differences) and patterns.

1.6.3 Show me

Step 1: Identify any relationships or trends

Look at your notes carefully. Can you see any connections in the information? Are there similar events that happened at different times or events that had flow on effects or started a chain reaction? These connections are called **relationships**.

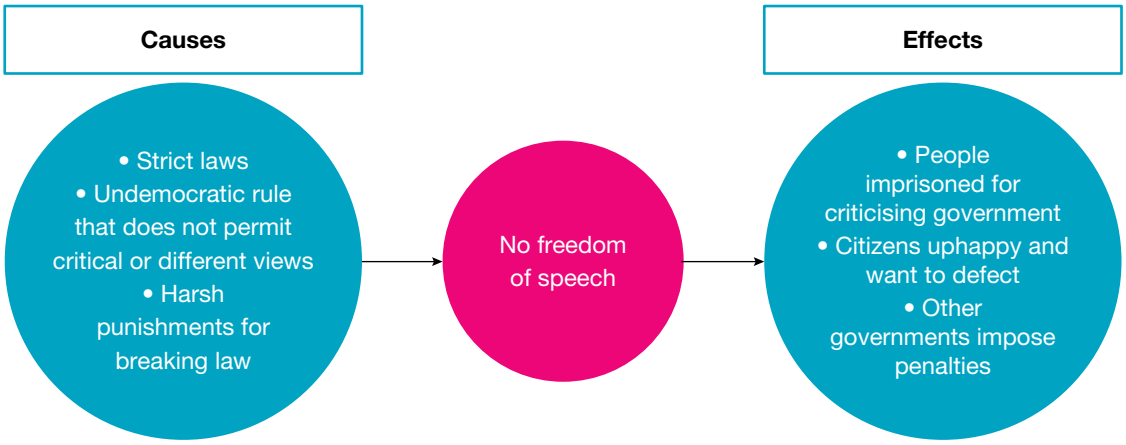
A **trend** is a pattern of change over time; for example, changes in growth, direction, size, frequency of occurrence, reactions, cost, beliefs or any other aspect of human society or the natural environment.

Cause and effect

Every event or action has follow-on effects, which are likely to be the cause of subsequent effects or consequences. Being able to identify patterns of **cause and effect** is an essential skill that allows us to explain how and why things happened, happen or might happen in the future.

It is important to understand that not all causes leading to a specific event are as equally significant as each other – some causes may have more influence than others.

FIGURE 1 Restricted freedom of speech: cause and effect



You will find examples of cause and effect relationships in all HASS subjects.

- Civics and Citizenship: Committing a crime leads to arrest and punishment
- Economics and Business: Selling your products cheaply leads to a reduced profit for your business
- Geography: Climate change has led to higher temperatures, more extreme weather conditions, rising sea leavels, flooding and increased cyclonic activity in some
- History: The spread of the Black Death led to at least a third of Europe's population dying within a four-year period

relationships connections between events

trend a pattern of change over time

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

DISCUSS

Consider **FIGURE 1**, which shows some of the causes and effects of a government not allowing its citizens to have freedom of speech.

- What other causes might lead to free speech being restricted in a society?
- In your view, what are the most significant causes?
- What other effects might result from restricted free speech in society?
- In your view, what is the most significant effect?

HASS skills: Analysing
General capability: Personal and social capability

Change over time

Change refers to something that is different from what has occurred in the past. This may occur over a long period of time and, in this case, it may be difficult to detect the precise moment of change. Change can also occur dramatically or suddenly.

You might be asked to compare events occurring at the same time, historical periods of time, or the present and the past. For example, **FIGURES 2** and **3** show views of the skyline of Perth in 1905 and 2019. You can see clearly that a lot of change has happened in the years between the photos, but there are also some things that haven't changed.

To identify change over time, we compare information to see what is similar and what is different.

DISCUSS

FIGURE 2 Perth from Kings Park, 1905

Observations

- Buildings are only a few storeys or one level (except town hall and churches)
- Houseboats and sailboats are on the river
- The road along the river is narrow and follows the shore
- There are many piers/docks next to the city
- The park covers the whole hillside down to the river
- The city is next to the river
- Smoke (factories?) near city

FIGURE 3 Aerial image of Perth in Western Australia, March 2019

Observations

- City is mostly multi-storey skyscrapers, with smaller buildings outside the CBD
- City is next to the river
- Piers close to the city
- Busy roads along river
- Park goes the whole way down to the river edge
- City spreads out a long way
- Buoys/markers on the river

Similar	Different
• The city is next to the river • Kings Park extends down to the river opposite the city	• More and much bigger buildings in 2019 • Some of the river was filled in for Riverside Drive

Look at the images of Perth in **FIGURES 2** and **3** carefully and discuss the following in small groups or as a class.

How might life have changed or stayed the same in Perth because of the changes you observed in the photos?

What different points of view might people have about these changes?

HASS skills: Analysing
General capability: Personal and social capability

Trends in graphs and charts

Tables, graphs and charts can provide a wealth of information about patterns and trends – general or overall changes. They clearly and concisely represent a data set visually, which makes any patterns easier to see.

When analysing a graph or chart, consider what each of these features tells you about the data.

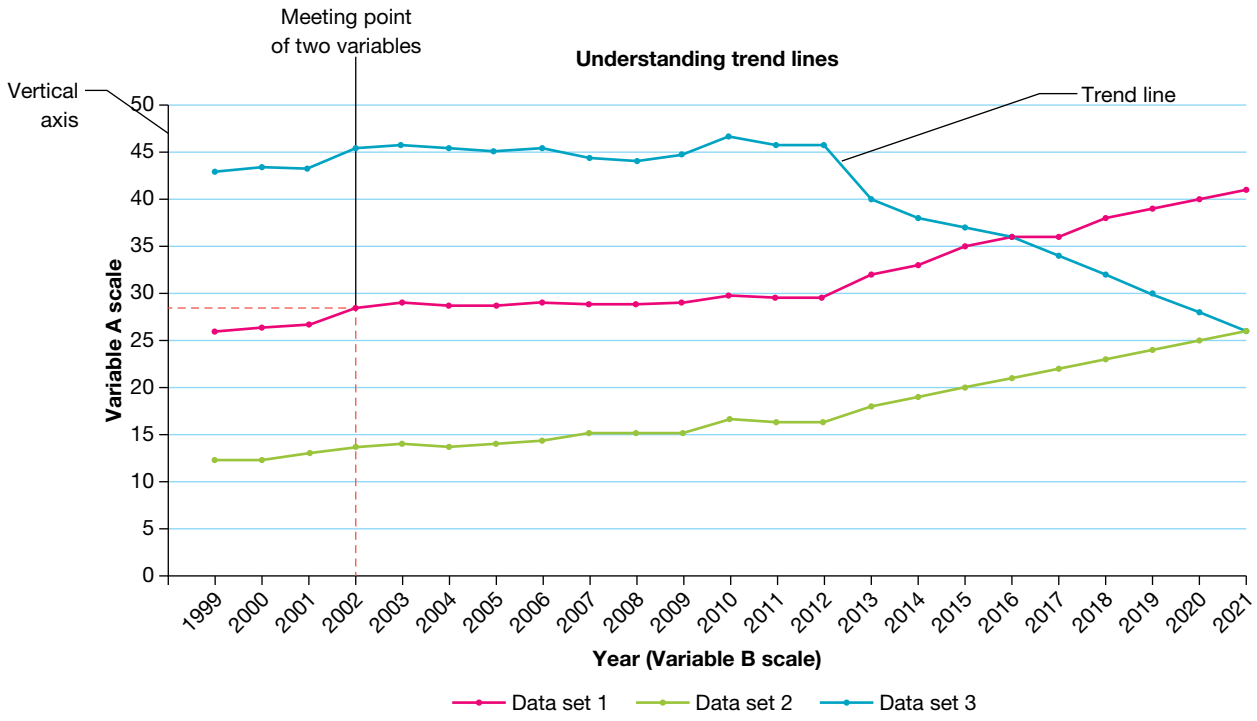
- Heading – summarises what data is represented
- Key – identifies what each of the lines on the graph represents
- Vertical (Y) and horizontal (X) axes – labels identify what variable each axis is showing

A **trend line** on a line graph shows an overall picture of what is happening; that is, whether a specific variable has increased, decreased or remained steady over time. Examine these lines in **FIGURE 4** closely – what changes are occurring?

For example, the trend line in **FIGURE 4** shows a gradual or slow upward trend for data sets 1 and 2, but after a gradual upwards trend from 1999–2012, data set 3 begins a sharp downward trend.

trend line the direction in which something is developing, moving or changing

FIGURE 4 Elements of a line graph



DISCUSS

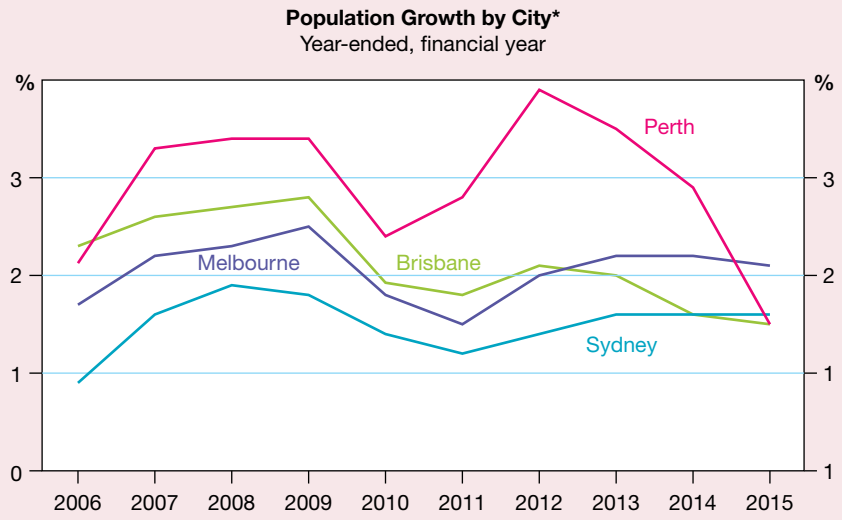
Examine **FIGURE 5** carefully. It shows the percentage of population growth in four of Australia's capital cities.

Examine each city's trend line.

Discuss how you would describe the trends in population growth in each city from 2005–2015 in general.

How does each city compare? Nominate someone in the class to write a list of words you can use to describe each trend line on the board during the discussion. **HASS skills: Analysing**

FIGURE 5 Population growth by city in Australia



* Greater capital city statistical area
Sources: ABS; RBA

Spatial distribution

The term '**spatial distribution**' refers to the way things are spread or distributed across places. It can also refer to patterns or trends, especially when you analyse the way things move, expand or reduce over time.

DISCUSS

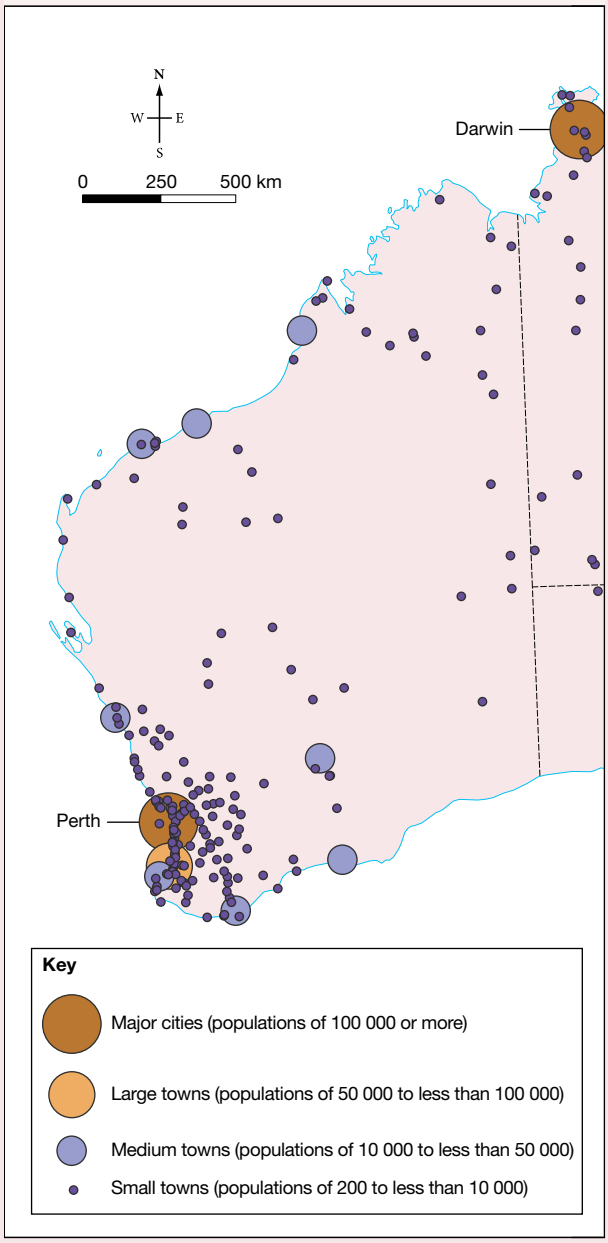
FIGURE 6 shows the distribution of people in Western Australia. Before discussing this map as a class, consider these questions individually or in small groups.

- What observations can you make about where people live?
- Might a map from 1916 might show a different pattern?
- Predict what a map from 2116 might look like. Do you think the distribution of people will be similar? Suggest reasons why or why not.

As a class, discuss how you would describe the spatial distribution of people in Western Australia based on this map. Write a paragraph describing the distribution together on the board.

HASS skills: Analysing

FIGURE 6 Distribution of Western Australia's towns by population size, 2016



Source: Australian Bureau of Statistics

Step 2: Identify different perspectives

Your viewpoint is your **perspective**. Other people have their own perspectives or points of view too. When you are researching events, places or people, it is important to find a balance of sources – sources are created by people, and people often have points of view about the information they are presenting.

spatial distribution the way things (e.g. population or land use) are spread across places

perspective a point of view, way of thinking, opinion or belief about an issue, event or thing

Use the following questions to help you identify different viewpoints on an issue.

- When was the source created?
- Who created the source and why?
- Who was the intended audience of the source, and how might this have affected its construction?
- What words, gaps in the information or examples give away the writer's view?
- In what ways does the source confirm or rebut what I already know or believe?
- How might the political/social/cultural pressures of the time or place have influenced the creation of the source?

For example, consider the first sentence of **FIGURE 7**, which comments on freedom of speech in North Korea.

FIGURE 7 'Freedom of speech' from North Korea 101: The people's challenges, *Liberty in North Korea*, libertyinnorthkorea.org/learn-nk-challenges/

Criticism of the regime or the leadership in North Korea, if reported, is enough to make you and your family 'disappear' from society and end up in a political prison camp. It goes without saying that there is no free media	• Created 2019 • Liberty in North Korea, campaign for freedom in NK • Intended audience of people not in North Korea; purpose to highlight how bad life in North Korea is and to encourage people to donate to help • 'disappear', 'political prison camp' • Confirms belief there is no freedom of speech in North Korea • Published by US organisation working to help people leave North Korea so their whole aim is to make the government there sound cruel and unfair to its people.

Step 3: Explain how viewpoints affect our understanding

Once you have identified and analysed patterns, and analysed the viewpoints in your information, explain how these relationships and viewpoints impact on the way we should interpret the information.

For example, **FIGURE 7** was written by an organisation that believes that the North Korean leadership are oppressing their people. That doesn't necessarily make it untrue, but it is a good demonstration of why using only one source or too many subjective sources might not be the best way to produced balanced research.

1.6 ACTIVITIES

Consider **FIGURES 8** and **9** carefully.

FIGURE 8 Index of economic freedom 2020, The Heritage Foundation, 2020. The index measures freedom based on 12 factors including the right to own property, effectiveness of the judiciary, government integrity and business freedom.

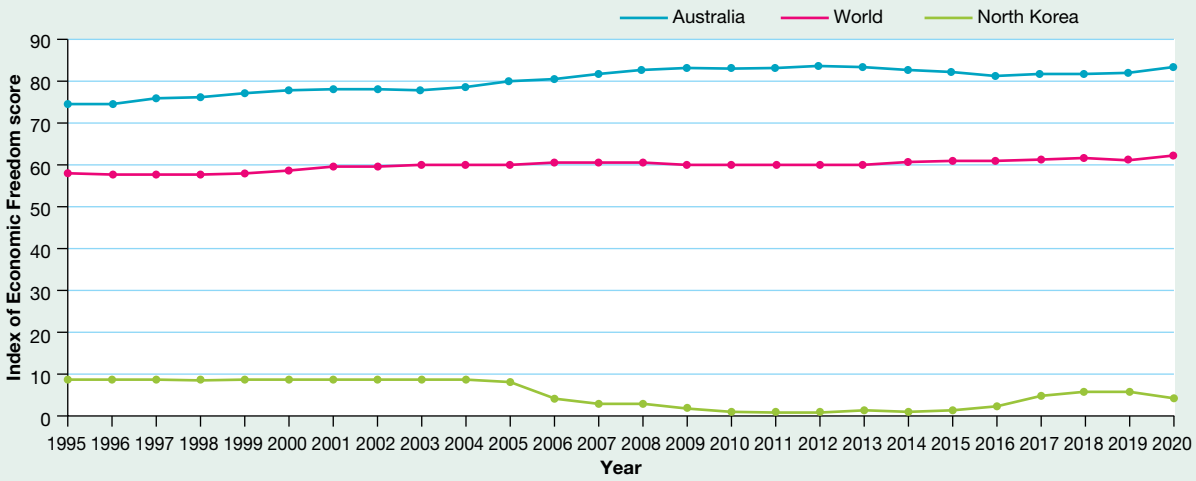


FIGURE 9 World Press Freedom Ranking for North Korea, Reporters without Borders, 2020

Year	Ranking		Year	Ranking	
2019	179 / 180	↑	2015	179 / 180	=
2019	180 / 180	=	2014	179 / 180	↓
2019	180 / 180	↓	2013	178 / 180	=
2019	179 / 180	=			

1. What patterns or trends can you identify relating to freedom in North Korea and Australia?
2. Does this information confirm or contradict your view of freedom in Australia compared to other countries?
3. What generalisations about freedom, if any, can we make based on this data? Explain how you came to your conclusion.

HASS skills: Analysing
General capability: Personal and social capability

1.6.4 Let me do it

Practise your skills analysing patterns and perspectives with the following activities.

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

Civics and Citizenship

Find relevant information to discuss how laws are made in Australia and analyse the patterns and perspectives in the sources you find.

Economics and Business

Find relevant information to discuss the rights and responsibilities of businesses and consumers. Find reliable and accurate sources that detail a case study where consumer rights were not met, and analyse the patterns and perspectives in the sources you find.

Geography

Choose a landform in Australia, such as Uluru. Find relevant information to describe the spiritual and cultural connections people may feel about this place, and analyse the patterns and perspectives in the sources you find.

History

Find reliable and accurate sources that describe how crime and punishment stayed the same and how it changed over the medieval time period. Analyse the patterns and perspectives in the sources you find.

on Resources

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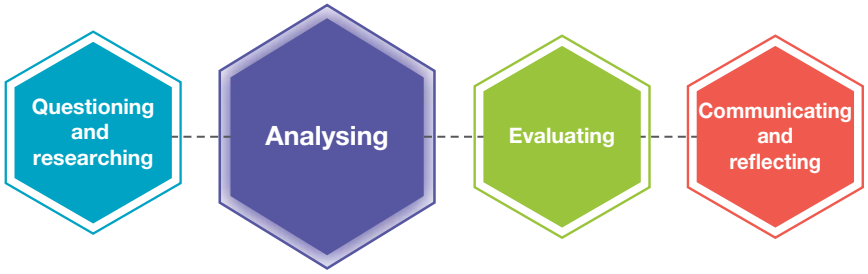
History: Level 1 (ewbk-5376), Level 2 (ewbk-5377), Level 3 (ewbk-5378)

1.7 SkillBuilder: Translating information

1.7.1 When to use this SkillBuilder

This SkillBuilder develops your analysing HASS skills. Use this SkillBuilder **after** you have examined your information for patterns and relationships. Use this SkillBuilder **to start writing** your response.



1.7.2 Tell me

Translating information into your own words or diagrams helps you understand the information you are learning about, but it also demonstrates to others that you know your topic, not that you're just copying information from others. By using subject-specific words, you are also showing your audience that you understand the information you are presenting.

In Year 8 HASS, the focus of this skill is finding the most effective way to display your information.

1.7.3 Show me

Step 1: Present the information in your own words

Always present information in your own words to show you have understood what is being said and what you have learnt.

While you may have taken care not to copy other people's words in your notes, before you start writing is a good time to:

- look up words that you wrote down in your notes but don't really understand
- include all the correct technical or subject-specific terms.

When you draft your writing, use your notes to create your paragraph. You might choose to use copies of charts, graphs or maps created by others, but always cite the information source, just as you would in a bibliography or reference list.

Step 2: Create visuals to show information, if needed

Sometimes you will need to present information and evidence in different ways. This could be to show similarities and differences between relationships, or to present data and statistics that help prove your hypothesis.

What you need to notice in the is step is the, "if needed". Sometimes people will make graphs and charts because they look good but actually don't supply the information that is needed to prove the hypothesis. So, if you decide you need a diagram or visual aid make sure it shows what you intend to show clearly. One informative and clear diagram is much better than several pretty diagrams that don't say a lot.

Even with your own diagrams, charts and graphs, you need to include all the details to show where your information was sourced.

Infographics

An **infographic** gives an overview of a topic or idea using images, charts and small sections of text. They are a collection of information in different formats.

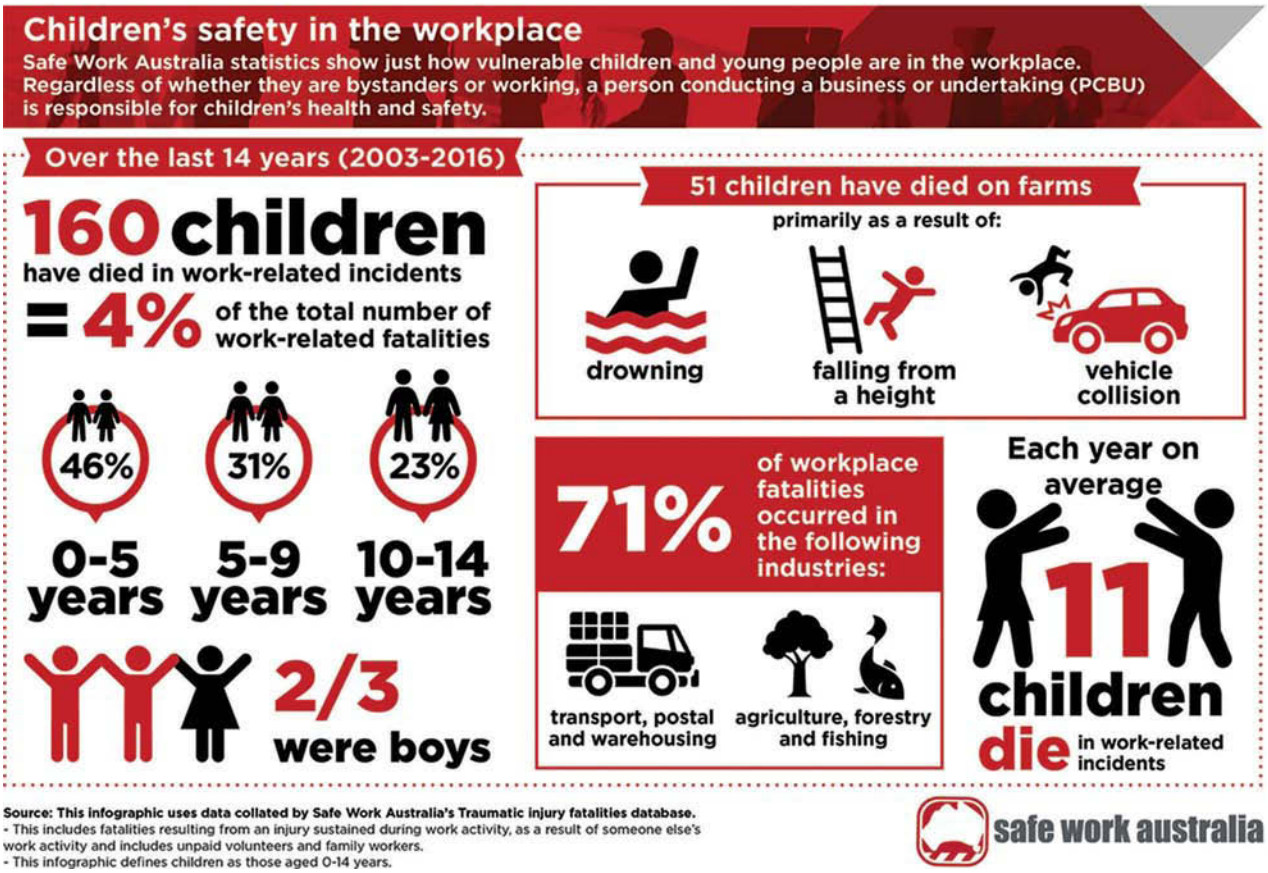
Infographics are useful for giving people small chunks of information in a way that captures their attention. For example, infographics are often used for public information campaigns because they communicate data in a way that most people can easily understand.

An infographic should always include:

- a title that shows the main topic and timeframe
- images that relate to each piece of information
- striking colours or contrasts to grab attention
- large text that it can be easily read
- simple language so that it can be easily understood.

infographic ta visual way of presenting data and information with images and very little text

FIGURE 1 Worksafe Australia's infographic showing dangers that children and young people might face in a workplace



Pictographs

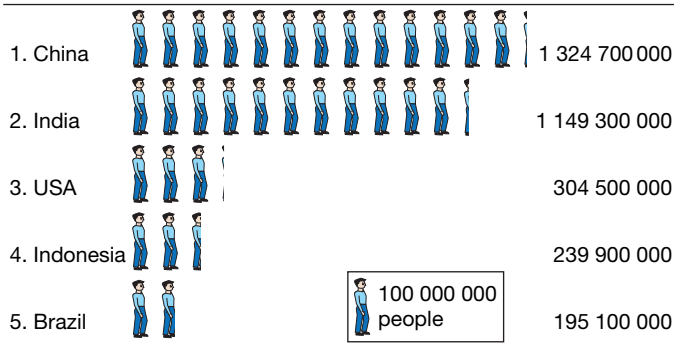
A **pictograph** is a graph that uses pictures to represent numbers, instead of the bars or dots that are traditionally used on graphs. Data can be drawn vertically or horizontally.

Pictographs are useful for simplifying data so people can understand it quickly and easily. For example, you might use a pictograph on a poster to be displayed in a public space, such as a shopping centre, rather than a graph.

A pictograph should always include:

- a title
- a key
- labelled rows of data.

FIGURE 2 Top five countries by population, 2008



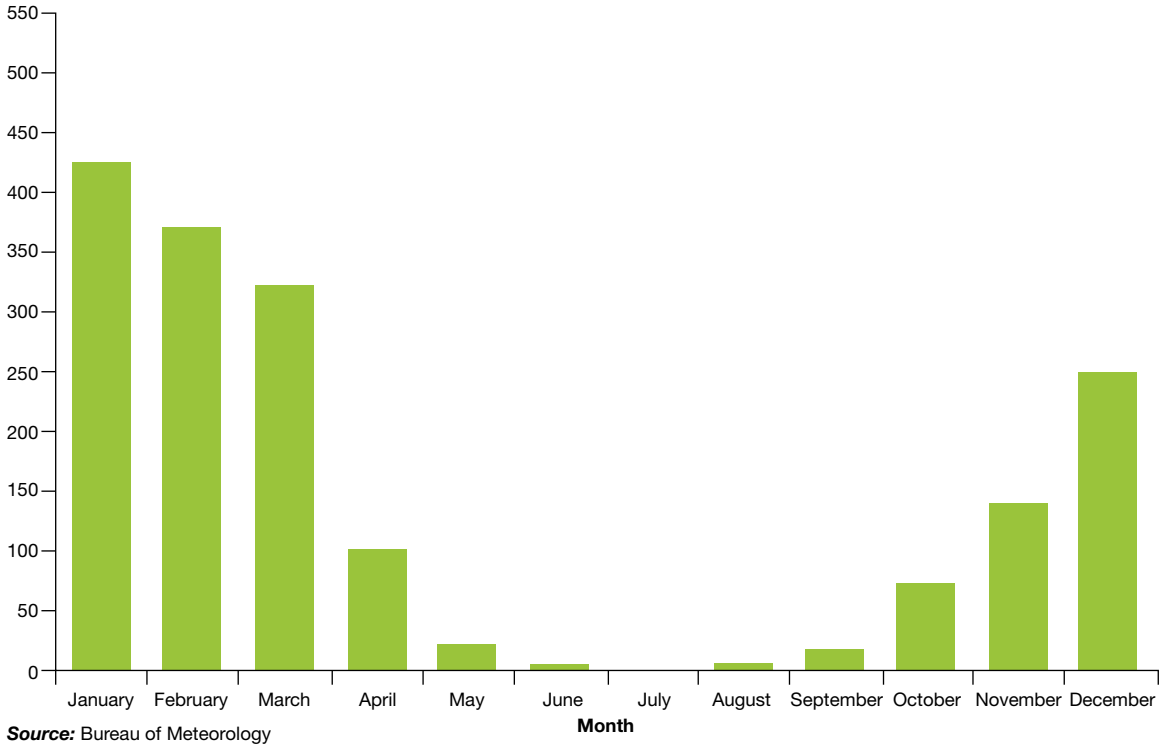
Graphs

Column graphs are useful for comparing quantities. They can help us understand and visualise data, see patterns and gain information. For example, we can use them to help understand rainfall patterns in different months.

A column graph should always include:

- a title
- source information
- ruled and labelled axes
- space between each column.

FIGURE 3 Features of a column graph

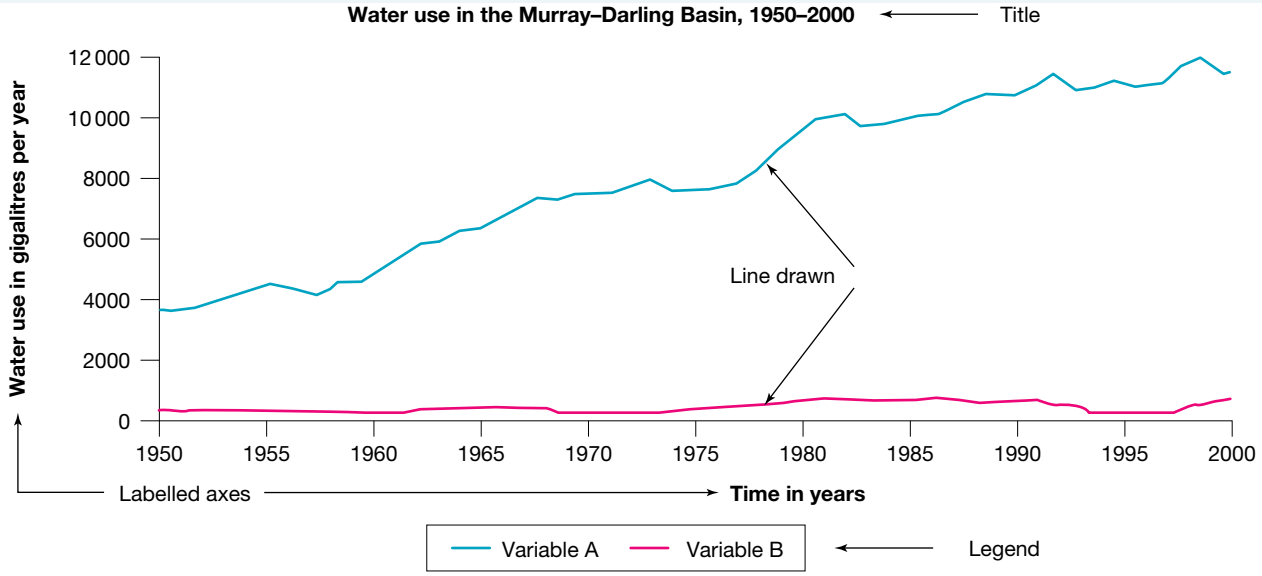


Line graphs are very useful for showing trends (patterns of change over time) and comparing data.

Line graphs should always include:

- an appropriate scale to show the data clearly
- labelled axes
- small dots joined by a line to make a smooth curve
- a legend, if necessary
- a clear and accurate title that explains the purpose of the graph
- the source of the data.

FIGURE 4 Features of a line graph



Source: Include full source details here

on Resources

Interactivity Creating and reading pictographs (int-3155)
Creating a simple column or bar graph (int-3135)
Drawing a line graph (int-3131)
Drawing a line graph using Excel (int-3158)

Video eLesson Drawing a line graph using Excel (eles-1662)

1.7.4 Let me do it

Practise your skills to find the right way to show your information with the following activities.

For more help with this activity, you might:

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

Civics and Citizenship

Find relevant information to discuss how laws are made in Australia and translate the information into a new format.

Economics and Business

Find relevant information to discuss the rights and responsibilities of businesses and consumers. Find reliable and accurate sources that detail a case study where consumer rights were not met and translate the information into a new format.

Geography

Choose a landform in Australia, such as Uluru. Find relevant information to describe the spiritual and cultural connections people may feel about this place and translate the information into a new format.

History

Find reliable and accurate sources that describe how crime and punishment stayed the same and how it changed over the medieval time period. Translate the information into a new format.

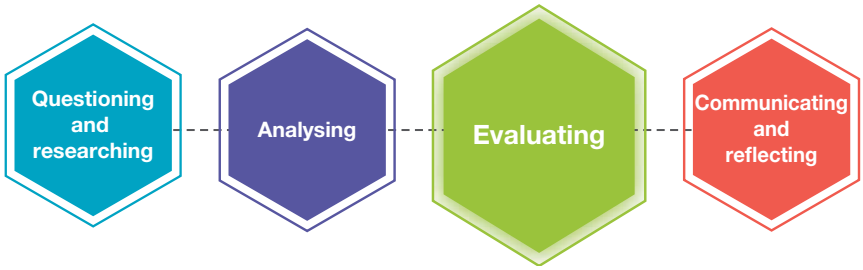
on Resources

eWorkbook Civics and Citizenship : Level 1 (ewbk-4269), Level 2 (ewbk-4270), Level 3 (ewbk-4271)
Economics and Business : Level 1 (ewbk-4272), Level 2 (ewbk-4273), Level 3 (ewbk-4274)
Geography : Level 1 (ewbk-4275), Level 2 (ewbk-5374), Level 3 (ewbk-5375)
History : Level 1 (ewbk-5376), Level 2 (ewbk-5377), Level 3 (ewbk-5378)

1.8 SkillBuilder: Forming conclusions

1.8.1 When to use this SkillBuilder

This SkillBuilder develops your evaluating HASS skills. Use this SkillBuilder **after** you have collected sources that appear to be reliable and useful. Use this SkillBuilder **to start writing** your response.



1.8.2 Tell me

Forming conclusions means making a judgement or decision about what you have learned, and determining if there are any challenges, issues or problems. Can you see any obvious problems or issues about the topic that require action? Can you think of any solutions that might resolve an issue?

In Year 8 HASS, the focus of this skill is forming an evidence-based conclusion.

1.8.3 Show me

You will have drawn some conclusions from your analysis. You may even have considered the conclusions that other people might draw from the same information.

It may be that you haven't changed your point of view or it may be completely different. You just need to make sure it is an *informed* point of view based on evidence – informed not only by the facts, but also by the way that any action or solutions you suggest will affect other people, places, and human and natural systems. It can be difficult to do this without listening to and empathising with other points of view.

Step 1: Consider your data and information

An approach to problem solving that relies heavily on numerical data might not provide the best solution to a problem or course of action to take. Humans are varied and complex, so deciding on an approach or action to take needs to take into account a wide range of evidence and perspectives.

The idea of an 'evidence-based conclusion' might sound like you should make your decision based only on **quantitative** data – measurable figures such as financial cost or the number of species that will be protected – but this is not the case. Evidence can also be **qualitative** – reflected in qualities, characteristics and features that are described rather than measured. Qualitative evidence might include interviews with people discussing how an event affected them or observing and describing how a landscape changes over time.

DISCUSS

What decisions in your daily life might you make based mostly on quantitative data? Think of some examples of decisions you might make based only on number-based data such as cost or time.

What decisions in your daily life might you make based mostly on qualitative data? Think of some examples of decisions that you might make based only on what you have heard from other people, read descriptions or reviews of, or seen for yourself and wanted to try.

What decisions in your daily life might you make based on both qualitative and quantitative data?

Large-scale human problems, of the kinds we examine in HASS, are rarely solved by one individual in the 'real' world. Problem-solving and decision-making involve working collaboratively in groups, negotiating and using teamwork to solve an issue and develop a plan for action. A successful democracy and democratic values require collaboration, consensus, participation and empathy because we are interconnected and interdependent.

This means to come to a strong evidence-based conclusion, we need to work with or listen to the views and perspectives of others. They may have interpreted the situation very differently. Try these steps for a successful discussion about an issue.

- Give each person a chance to express an opinion about the discussion point being considered. Write down each person's key points.
- Do not allow any argument or disagreement until everyone has expressed an opinion on a discussion point.
- Once everyone's opinions on the discussion point have been shared and written down, read out the opinions and discuss them to determine whether or not everyone is in agreement.
- If there is disagreement, allow those on each side of the argument the opportunity to put their point of view to convince the majority. This shouldn't just be restating your point of view or an opinion. The best way to convince people you are right is to be able to support your view (back it up) with strong evidence and reliable expert opinion.
- Seek the maximum level of agreement on each point discussed by allowing people to make some changes to their opinions to accommodate the views of others.

quantitative information that provides measurable figures

qualitative information that provides characteristics and description

WHAT IF WE CAN'T REACH A CONSENSUS?

If you reach a point where you can't form a conclusion, discussion points that might help you reach one could include:

- What are the advantages and disadvantages for individuals and for our society as a whole?
- What are the advantages and disadvantages for the environment – locally, nationally or globally?
- What will the advantages and disadvantages be in the short- and long-term?
- If a change were to be considered, what are some of the ways you might convince others to support the change?
- If you do not wish to change, how do you convince others to support the current situation?

Step 2: Suggest possible alternatives for action

Using the information and data you have collected, brainstorm lists of solutions or ideas for change. Once you have written as many as you can think of, go back and look at each one. Follow these steps:

- Ask yourself: Would it work – why or why not? Draw on your research to find evidence to support your decision.
- If it wouldn't work or there is no evidence to support an idea, cross it off your list with a brief note why.
- If it would work and you have strong evidence to support the idea, put a tick next to it and a brief reason why.
- If it is a possible but perhaps not a strong option, put a question mark next to it and a brief reason why.

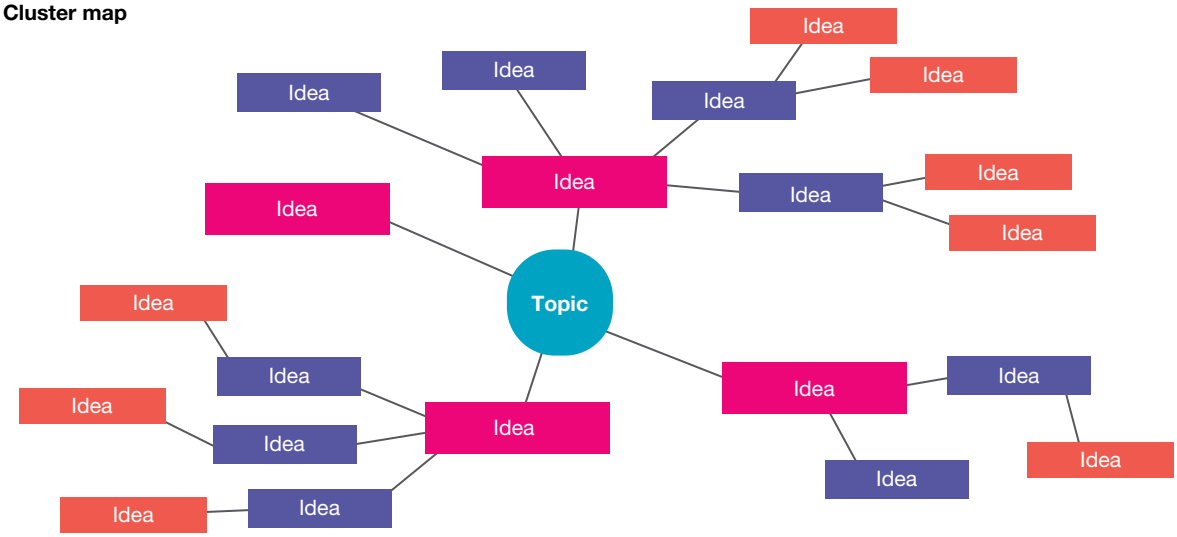
Work through the list until you have solutions or ideas for change that seem possible, then identify the effects these ideas or solutions would have. The effect is the change that would take place if the idea or solution was implemented or the action was taken. These can be positive, negative or neutral (no change).

Decide which of these they would be and briefly explain why. Ideally, good solutions and ideas will have a positive or neutral effect on the problem, and the fewest negative impacts. A negative effect makes the problem bigger or shifts the problem somewhere else.

Drawing a cluster map or mind map can help you to see the potential alternatives that could be the basis of your action plan, or even to map the consequences of historical actions.

FIGURE 1 Cluster maps can show how ideas or action and consequences are connected.

Cluster map



Step 3: Consider whether the effects are worth the consequences

When you have discarded ideas that would have negative effects, it is time to look at the positive and neutral effects of the remaining solutions. This is when you ask yourself: 'Is it worth it?'

How will people and the environment involved be affected or changed? If the change is positive, then it is worth the consequences. Sometimes if the effects are neutral you need to think about if it is worth implementing the solution at all. Over time will the change become positive or negative?

One way of doing this is to create a PMI chart.

- The **P** is a listing of all the 'pluses'.
- The **M** is a listing of all the 'minuses'.
- The **I** is a listing of what is still 'interesting' – the questions or ideas that you know are important or relevant, but you can see how they might fit on both the P and the M sides. (These are often the 'grey areas' that might not have an answer at all. They might be both positives or negatives depending on perspective.)

For example, would the strategies that people employed to combat the Black Plague work for an outbreak of disease today? How effective would it be to stop ships and their crew from coming ashore to stop a disease spreading?

P	M	I
Stops new carriers coming ashore and spreading it	The sick people on the ship might die without treatment	Should a city or country look after their own citizens first?
The city saves money by not having to treat the sick people from the ship	People might try to get off the ship anyway and no one would know where they went onshore if it was in secret	Is it everyone's responsibility to do their best for other people, no matter where they come from?

1.8.4 Let me do it

Practise forming strong evidence-based conclusions with the following activities.

For more help with this activity, you might:

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

Civics and Citizenship

Find relevant information to discuss how laws are made in Australia. What changes might improve the process?

Economics and Business

Find relevant information to discuss the rights and responsibilities of businesses and consumers. Find reliable and accurate sources that detail a case study where consumer rights were not met. Suggest ways in which the situation might be resolved.

Geography

Choose a landform in Australia, such as Uluru. Find relevant information to describe the spiritual and cultural connections people may feel about this place. What actions, rules or changes could be implemented to ensure that all Australians understand and respect those connections?

History

Find reliable and accurate sources that describe how crime and punishment stayed the same and how it changed over the medieval time period. What conclusions can you draw about the long-term impact of the changes?

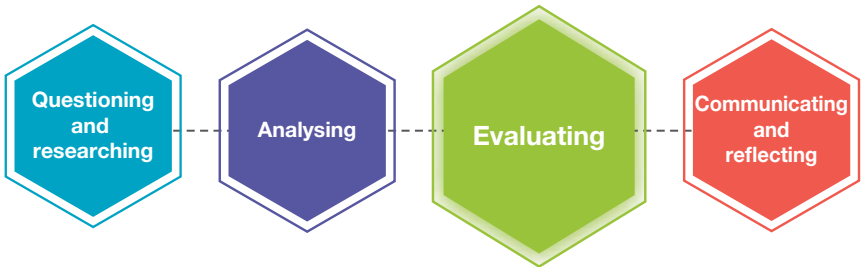
on Resources

eWorkbook Civics and Citizenship : Level 1 (ewbk-4269), Level 2 (ewbk-4270), Level 3 (ewbk-4271)
Economics and Business: Level 1 (ewbk-4272), Level 2 (ewbk-4273), Level 3 (ewbk-4274)
Geography: Level 1 (ewbk-4275), Level 2 (ewbk-5374), Level 3 (ewbk-5375)
History: Level 1 (ewbk-4275), Level 2 (ewbk-5374), Level 3 (ewbk-5375)

1.9 SkillBuilder: Evaluating the impact of a decision

1.9.1 When to use this SkillBuilder

This SkillBuilder develops your evaluating HASS skills. Use this SkillBuilder **after** you have finished analysing your data. Use this SkillBuilder **to start writing** your response.



1.9.2 Tell me

To make good decisions that benefit society, either as a whole or a small section of it, you have to understand and consider others' perspectives.

Examining evidence includes evaluating and predicting what situations are like or will be like for other people – now and in the future. It is also important to be able to empathise with people from the past so we can understand why they made the decisions that they made and learn lessons from them.

In Year 8 HASS, the focus of this skill is comparing different perspectives and views.

1.9.3 Show me

Step 1: Identify relevant perspectives

It can be a challenge to really understand how other people felt or how they viewed certain situations, especially when they come from a time period, place or culture very different to your own. However, this is a crucial part of being able to evaluate any proposal.

To do this, you will need to:

- Identify who is likely to be affected by a proposed action (list the broad groups or types of people who will be affected)
- Understand each group's perspective or views in general – their background, beliefs, needs and wants, and what they value – and how they are likely to be affected by the proposed action.

The focus questions in **TABLE 1** can help to provide a framework for developing a better understanding of a group and their perspective. Not every question will be relevant in every situation.

TABLE 1 Understanding the factors affecting perspective

Focus question	Some specific factors to consider
Who were/are these people?	Think about age, gender, wealth, education, language, religion, ethnic background
Where did/do they live and when?	Consider the place in terms of its geographical location (including urban, rural, suburban, remote) and its environment (desert, coastal, grasslands, forest)
How did/do they live?	Think about their homes, jobs, families, communication and travel;consider the size and interaction between the communities or groups in their society
What was/is important to them in daily life, and in the long-term?	Consider their needs and how they were met (food, water, shelter, health, hygiene, security)
What did/do they believe in?	Identify their religious or cultural beliefs (belief in a god/s and a moral code, attitudes to education, gender, power, money, looking after people who are in need, working for the good of the whole community rather than individuals)
What did/do they fear and what did/do they hope for?	Think about what they valued or needed most: safety from enemies, a good supply of fresh water, privacy, free choice, to please God? People often react with fear when they believe a change will affect their basic needs or what they value the most in life. What most people hope for is obtaining or holding on to the things they need and value.
Did/do they all think and feel the same or did/do they have differing perspectives?	Consider if there are smaller groups or individuals within the community who might have different views to the majority based on gender, age, experience, education, political belief, wealth, their job or other factors

Imagine your school decided to start classes at 11 am and finish at 7 pm every day, based on research that shows that teenagers need to sleep later in the morning than adults.

Apart from affecting students, school staff and parents/guardians would also be affected, and probably have a strong viewpoint about the proposed change.

TABLE 2 Parents and guardians: factors affecting their perspective

Focus question	Group affected: Parents/guardians
Who are these people?	Parents and guardians of students at your school: adults (early 30s+) from different backgrounds/cultures, etc.
Where do they live and when?	Present day, suburban outer Perth area
How do they live?	Connected to world online, generally live and work in local area, many homes, all adults, work full time
What is important to them in daily life, and in the long-term?	Food and shelter for their family and people they care about, being healthy and having somewhere to live, raising their children to be healthy and happy, time to do the things they enjoy
What do they believe in?	Varies, but generally believe in looking after their family, some have strong religious beliefs
What do they fear and what do they hope for?	Fear losing their job, home or other needs; their loved ones becoming sick or in trouble; hope for health, happiness, money to buy what they want and need
Do they all think and feel the same, or do they have differing perspectives?	No, many different views e.g. some are more religious (lots of Muslim and Christian homes); some don't care as much about finishing school
Based on what you now about these people, what is likely to be their view on this proposed change? Why	Likely to be against it: • Worried about students travelling home later at night (safety) or being at home alone each morning • Means spending less time with their families • Too late for some students to concentrate • For religious families, this might interfere with religious commitments • Evening meal would have to be quite late • The times wouldn't match with most people's working hours during the day so it would make their family routine difficult/different

WHAT IF I DON'T KNOW ANYTHING ABOUT THE PEOPLE?

You might not know much about them, but that doesn't mean you can't find out. Do a quick search online. Is anyone who fits the profile of the group posting about their life and interests online? Is anyone writing about this issue?

Step 2: Compare the different viewpoints

Compare each groups' perspective with the consequences of the action: why would they think that way?

- Would it destroy or protect something they value?
- Is it disrespectful of or in line with their beliefs?
- Would it meet or deny them things they need and want?

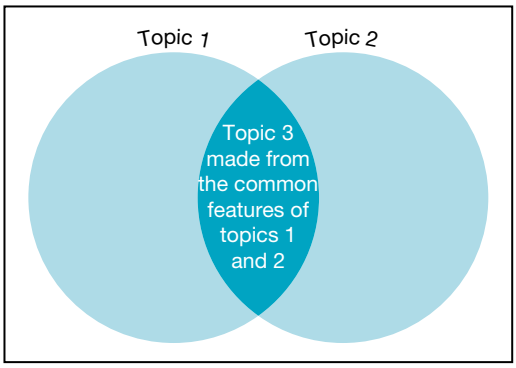
Consider whether the groups are likely to take the same view, and whether they are likely to think this for the same or different reasons. If you're not quite sure by looking at your notes or tables, you could consider working through this comparison with a Venn diagram.

A Venn diagram is used to compare the similarities and differences between things. The simplest are created from two intersecting circles, but they can be used to compare more than two things – just add more circles.

Once you have isolated the common reasons for or against a proposed change by affected groups, consider whether their response is justified.

- Will the proposed action really have the impact they expect?
- Are the negative impacts outweighed by the positive ones?
- Are their views based on reliable information?
- Will their viewpoint lead to the best outcome overall or are they only considering the benefits and costs for themselves?

FIGURE 1 A Venn diagram is used to show the differences between topics, ideas or views, and their common features



1.9 ACTIVITIES

1. What view or views would staff at your school have about this proposed change about school times? Complete the table to consider their perspective.

Focus question	Group affected: Staff
Who are these people?	
Where do they live and when?	
How do they live?	
What is important to them in daily life, and in the long-term?	
What do they believe in?	
What do they fear and what do they hope for?	
Do they all think and feel the same, or do they have differing perspectives?	
Based on what you now about these people, what is likely to be their view on this proposed change? Why?	

2. Draw a Venn diagram to compare the similarities and differences between the parents/guardians' reasons for being against the proposed change, and those of teachers.

HASS skills: Evaluating
General capability: Personal and social capability

1.9.4 Let me do it

Practise your skills evaluating impacts of proposed action with the following activities.

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

Civics and Citizenship

Discuss the costs and benefits of how new laws are made in Australia. Identify how this new law would affect people in your community. Identify three different types of people who would be affected and explain how they would most likely respond to your proposal.

Economics and Business

Find reliable and accurate sources that detail a case study where consumer rights were not met. What action would you take to provide the consumer with justice? What would the impacts of your decision be for each of the parties involved and how would each party respond to your decision?

Geography

Choose a landform in Australia, such as Uluru. Find relevant information to describe the spiritual and cultural connections people may feel about this place. What action would you take to protect the cultural or spiritual heritage of this place? Explain how your action would affect at least three different groups who might use or live near this place, and how they might respond.

History

Find reliable and accurate sources that describe how crime and punishment stayed the same and how it changed over the medieval time period. If you were a medieval lawmaker, what law would you like to introduce? Explain how your action would affect three different groups in society, and how each group might respond.

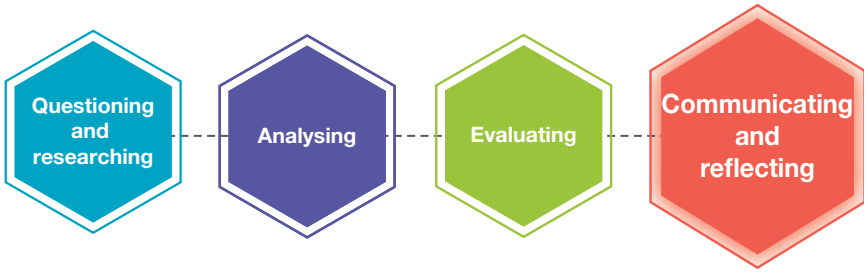
on Resources

eWorkbook Civics and Citizenship : Level 1 (ewbk-4269), Level 2 (ewbk-4270), Level 3 (ewbk-4271)
Economics and Business: Level 1 (ewbk-4272), Level 2 (ewbk-4273), Level 3 (ewbk-4274)
Geography: Level 1 (ewbk-4275), Level 2 (ewbk-5374), Level 3 (ewbk-5375)
History: Level 1 (ewbk-4275), Level 2 (ewbk-5374), Level 3 (ewbk-5375)

1.10 SkillBuilder: Representing information in oral presentations

1.10.1 When to use this SkillBuilder

This SkillBuilder develops your communicating and reflecting HASS skills. Use this SkillBuilder **to help with creating** an oral presentation.



1.10.2 Tell me

Representing information appropriately means making sure you are saying what you want to say in the right way. There is no point trying to describe the symptoms of the Black Death in a graph. However, if you represent the data about the disease's spread in a graph or create a diagram that shows the development of symptoms, people will understand what you are saying, and they will learn from it.

You need to look at what you are being asked to do, your hypothesis and your information. What is the best way to make sure you are addressing all three of these things in an oral presentation?

A successful oral presentation starts before a single word has been spoken:

- You must research and plan your speech properly. Being organised and prepared will give you confidence in yourself and in your subject material.
- *Proper use of visual aids*. Are you going to use PowerPoint, Keynote or any other visual aids? If so, you need to consider how to use these tools properly. Avoid overloading your audience with a cluttered combination of visual and audio information.
- *Delivery*. The final key to a successful presentation is the delivery. Sustained eye contact and a confident, well-projected voice will help you deliver your intended message.

In Year 8 HASS, the focus of this skill is choosing an effective way to present specific information in an oral presentation.

1.10.3 Show me

Two of the most common assessment tasks or assignments that students are asked to complete are written responses (for example, an explanation or description) and oral presentations.

When people present information to an audience, they often use accompanying visuals – slides with charts, graphs, summary points or images; however, not everyone uses them effectively.

Step 1: Prepare what you want to say and show

Create a plan that outlines the main ideas and the order you want to cover them in your presentation. Include specific evidence from your research for each main point. This is just a skeleton of your speech, so write in point form and just refer to where you can find the evidence rather than copying all the details out

TABLE 1 Preparing for your presentation

Identify the purpose of the presentation	To explain how trade helped to spread the Black Death
Key message	That traders on ships brought the Black Death ashore when they stopped in ports to deliver goods
Main points	**1.** The BD began earlier in cities on major trade routes; evidence: map with dates in textbook **2.** The BD spread along similar routes as traders shipping goods; evidence: article from thought.co **3.** BD spread inland with people from port cities or near overland trade routes; evidence: National History Museum website

Using visuals

Visual information can add to your presentation. However, if used incorrectly, it can decrease the effectiveness and clarity of your message.

Some of the most common errors people make when creating presentation slides include:

- Too many words: keep the text on your slides to a key sentence or heading at most
- Tiny font: trying to put too many words on a slide often results in a font too small for your audience to read
- Too many different transitions and animations: a good presentation is consistent and suited to the topic. Too many spinning or fast transitions can be very distracting for an audience that is trying to listen carefully.
- Too many slides: the focus of your presentation should be you.

Make sure that any visual aids serve a clear purpose. Do not make any of the mistakes shown in the **How not to use PowerPoint** weblink in the Resources tab.

Step 2: Plan and practise your delivery

The effectiveness of your speech often relates to the connection you make to your audience. Sustained eye contact and a confident delivery of your speech are two ways to boost this connection – one relies on the other. Iif you are not confident, you will be less likely to make eye contact in a relaxed and engaging way.

WHAT IS SUSTAINED EYE CONTACT?

Sustained eye contact requires more than looking up from your notes every now and then, and it certainly does not include staring at people in your audience until they feel uncomfortable, either. It means looking around your audience as you speak, making and holding eye contact with members of your audience for a few seconds at a time.

Building confidence

Strategies for improving your presentation skills will depend on how confident you feel speaking in front of other people. For many people, it isn't enjoyable or a natural skill. If this is you, try out the following Level 1 strategies to reduce your nerves. If you are more confident, and love an audience, try some 'pro tips' from Level 3.

FIGURE 1 Find your level to begin improving your oral communication skills.

1

- **Notes:** Write your speech on cards. Use card, not paper, because it doesn't bend. (This is also a good opportunity to reuse cardboard that is bound for recycling.)
- **Organisation:** Write in black or blue, but order your cards with big red numbers in case they get mixed up or you drop them. You can also use an old keyring and holes in the top corner of the cards to keep then in order.
- **Stage directions:** Write instructions on your cards in a different colour to the words you will say. Include instructions to pause and breathe, change a slide and look up.
- **Slides:** Put information on your slides that is colourful and interesting; this will draw people's attention so they will look at your slide rather than watching you. Do not summarise your whole speech in slides.
- **Rehearse:** Practise with your cards and presentation at home, in the mirror or with your family/friends if you can. Don't ask them for feedback, just ask them to listen so you can get used to having an audience.

2

- **Notes:** Write the most important parts of your speech on cards, using headings and main points only. Include specific details that you must explain correctly (e.g. data, quotes or words you find hard to remember/pronounce)
- **Organisation:** Write in black or blue, but order your cards with big red numbers in case they get mixed up or you drop them.
- **Stage directions:** Write instructions on your cards: pause, change a slide, move from podium, point out image on slide, relax and explain this part without your cards.
- **Slides:** Put information on your slides that adds to what you are saying (a heading signalling a change of topic), or illustrates it (a picture or graph). Do not summarise all of your key points on your slides.
- **Rehearse:** Practise with your cards and presentation at home, in the mirror first and then with your family/friends. Ask them for feedback about your speech and your performance.

3

- **Notes:** Write headings and important quotes and data on cards or try a single card with a list of key points in order.
- **Organisation:** Write in black or blue, but order your cards with big red numbers.
- **Stage directions:** Use natural hand gestures. Rehearsing gestures looks forced, and can make you look more nervous than you really are. If you are really confident, you might even try a little audience participation by asking for a show of hands or a volunteer.
- **Slides:** Put information on your slides that adds to what you are saying (a heading signalling a change of topic), or illustrates it (a picture or graph). Talk through aspects of the visuals, or point them out, without needing notes.
- **Rehearse:** Practise with a focus on your timing and fluency. Play with the delivery until it feels just right; for example, experiment with which words to emphasise and where to pause.

1.10.4 Let me do it

Practise your skills presenting your ideas well with the following activities.

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

Civics and Citizenship

Develop a presentation that explains the process of making laws in Australia.

Economics and Business

Find reliable and accurate sources that detail a case study where consumer rights were not met. Create a presentation to discuss what happened and how the situation was resolved.

Geography

Choose a landform in Australia with cultural or spiritual significance, such as Uluru. Develop a presentation that explains its value and how we can protect it.

History

Develop a presentation that illustrates the key changes in crime and punishment during the medieval time period.

on Resources

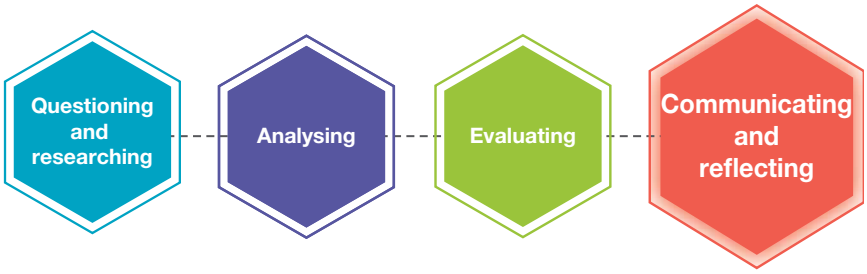
Weblink How not to use PowerPoint

eWorkbook Civics and Citizenship: Level 1 (ewbk-4269), Level 2 (ewbk-4270), Level 3 (ewbk-4271)
Economics and Business: Level 1 (ewbk-4272), Level 2 (ewbk-4273), Level 3 (ewbk-4274)
Geography: Level 1 (ewbk-4275), Level 2 (ewbk-5374), Level 3 (ewbk-5375)
History: Level 1 (ewbk-5376), Level 2 (ewbk-5377), Level 3 (ewbk-5378)

1.11 SkillBuilder: Developing effective texts through argument paragraphs

1.11.1 When to use this SkillBuilder

This SkillBuilder develops your communicating and reflecting HASS skills. Use this SkillBuilder **to help with creating** your response.



1.11.2 Tell me

One of the most common ways that you are assessed in your school career is by writing extended (longer) responses to information, especially descriptions and explanations.

An effective extended response for HASS subjects has several characteristics. It clearly explains the essence of an issue or topic and contains evidence and examples. The two main types of extended responses to focus on this year are explanations and discussions.

The purpose of an **explanation** is to make relationships clear (cause and effects, or patterns) and to show the 'how and the why' of an issue with evidence and examples.

Discussions outline the main issues and present the arguments for and against an idea.

Communicating and reflecting

In Year 8 HASS, the focus of this skill is writing effective paragraphs to express a clear point of view.

1.11.3 Show me

Step 1: Structure your paragraphs

An argument paragraph presents a point of view. Beginning with a topic sentence (also called a thesis statement), the paragraph then explains the point of view and supports 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:

- **T**opic sentence – describes what the argument paragraph addresses
- **E**xplanation – explains your main argument in detail
- **E**vidence – supports your argument with at least one piece of evidence
- **L**inking sentence – links the paragraph back to the main question.

Imagine you have been asked to write a paragraph arguing that climbing Uluru should have been banned when the title deeds to the land were handed back to the Anangu people in 1985.

The following paragraph is an example of the kind of paragraph that you might write. It was written using the TEEL structure. The different parts of the paragraph have been colour-coded to make it easier to see TEEL in action (Topic, Explanation, Evidence, Link).

Tourists should have been prevented from climbing Uluru after the land title was returned to the Anangu people on 26 October 1985. Uluru is a sacred place for the Anangu people. Tourists have been climbing the rock, against traditional laws, since the late 1930s. In the 1990s, the Anangu people began asking visitors not to climb the rock out of respect for their culture, but many people did not follow their request. The return of the title to the land by the Australian government in 1985 would have been the perfect time to allow the values and beliefs of the Anangu people to completely determine the way Uluru was used by others. The climb has now closed, but it is estimated that the side of the rock that people used to climb will take up to ten years to lose its grey colour. The manager of the Uluru-Kata Tjuta Park believes that the track worn into the side of the rock may take thousands of years to recover. Had the climb been banned in 1985, after only 22 years of climbers following the chain-path up the rock, rather than 57, the damage would have been far less. People should never have been climbing the rock but considering it was clear at the hand-back in 1985 that climbing was disrespectful, this would have been the perfect time to begin the ban.

FIGURE 1 Tourists are no longer able to climb Uluru.

explanation a response to a topic or question that outlines how and why something happens, and the relationships involved, and provides supporting evidence and examples

discussions responses to a topic or question that present arguments for and against an idea, supported with evidence and examples

Step 2: Use terms that are accurate, specific and appropriate

Once you have a draft of a paragraph, look over it. Do you have the right words in the right places? More importantly, do you know what they mean? If you are unsure, look them up or change them. If you can't understand them will your audience be able to?

When you are outlining an argument, it is also important to use the right cultural and legal terms. The more precise you are, the more authoritative your paragraph will sound.

For example, consider the difference between these sentences:

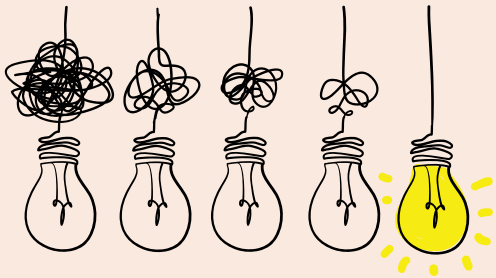
- **Tourists** should have been prevented from climbing Uluru after the **land title was returned** to the **Anangu** people on **26 October 1985**.
- **People** should have been prevented from climbing Uluru after the **Indigenous** people were **given the land back** in **1985**.

These two sentences say the same thing, but the pairs of words in bold show the power of finding the right words.

- **Tourists/people:** be specific and accurate. What kind of people? They are not local people; they are visitors to the area.
- **land title was returned/given the land back:** use the accurate and correct terms that reflect the legal status of the land ownership
- **Anangu/Indigenous:** use the appropriate term to describe the title holders of the land
- **26 October 1985/1985:** be specific. Facts and exact dates of important events add weight to your argument. They show that you have been precise in your research and the information you are providing.

IS YOUR MESSAGE CLEAR?

It's great to experiment with language but be careful with your word choices. People often fall into the trap of thinking that a longer answer or more complicated language makes them sound impressive and clever. Sometimes, a clear and simple message is the most effective.



1.11.4 Let me do it

Practise your skills creative effective paragraphs with the following activities.

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

Civics and Citizenship

Write at least two paragraphs discussing the process of law-making in Australia.

Economics and Business

Write at least two paragraphs discussing whether Australians have too many consumer rights.

Geography

Choose a landform in Australia with cultural or spiritual significance, such as Uluru. Write at least two paragraphs discussing whether the landform should be closed to the public to protect it from harm.

History

Write at least two paragraphs to discuss the key changes in crime and punishment during the medieval time period.

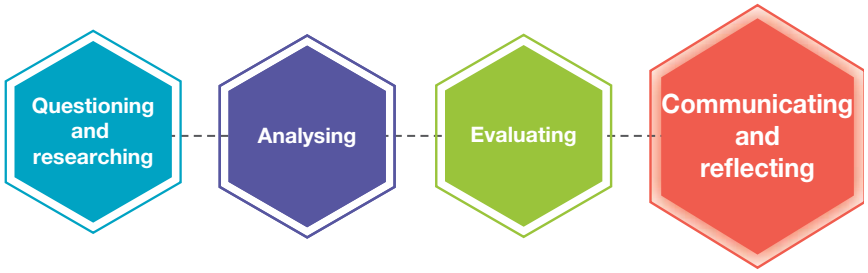
on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-4269), Level 2 (ewbk-4270), Level 3 (ewbk-4271)
Economics and Business: Level 1 (ewbk-4272), Level 2 (ewbk-4273), Level 3 (ewbk-4274)
Geography: Level 1 (ewbk-4275), Level 2 (ewbk-5374), Level 3 (ewbk-5375)
History: Level 1 (ewbk-5376), Level 2 (ewbk-5377), Level 3 (ewbk-5378)

1.12 SkillBuilder: Reflecting on your learning

1.12.1 When to use this SkillBuilder

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



1.12.2 Tell me

Reflecting on your learning means thinking about what you learned and how well you are developing the skills of HASS.

Ask yourself questions such as:

1. What did I learn?
2. How can I apply this to my life?
3. How well did I research?
4. What can I improve for next time?

In a reflection it is important to be as specific as possible. This is how you learn.

Instead of: I wrote my questions well.

Try giving more detail: I wrote the 5W 1H questions well, but I think I can improve my evaluative questions for next time. I can do this by making them more specific to the hypothesis I am proving.

In Year 8 HASS, the focus of this skill is identifying how you can improve your skills and deepen your understanding.

1.12.3 Show me

It is important to reflect on each step in a task or process. Chances are you have been reflecting and changing as you have gone along, but take some time to think about which stage of a project you found the most interesting, rewarding, difficult or frustrating.

Step 1: Look back at your process

There are many great ways to reflect on what you have learned and how you went about a process. One way is two stars and a wish: what are two things you thought you did well, or really enjoyed? What is one way you can improve in the process for next time?

- What did I do well?
- What could I do better next time?
- What did I learn?

For example:

Two stars:

1. I found a range of relevant and reliable sources.
2. I was able to communicate what I learned from the sources in an effective presentation.

One wish: I think I could have suggested more detailed and effective solutions. I found it difficult to suggest how other people might feel about my ideas.

Try to do this for each step in the process.

WHAT IF I CAN'T THINK OF ANYTHING?

Your process of reflection doesn't need to be a lengthy analysis of what you did and did not do. It might but a few words that will make you really proud of yourself and some ideas for what to do better. The next time you are asked to use these skills you can look back on the improvements and immediately know what you need to work on to improve.

If you can't think of what to write, start with adding one phrase to each of these sentence starters.

- The questions I wrote at the start of my research were ... (helpful? hard to write? too off the topic?)
- The information I found was ... (useful? hard to understand? not really trustworthy?)
- Before this task, I didn't know ... (a fact? a skill?)
- One question that I have after completing this task is ...

Step 2: Consider how the task could apply in your life

When you have reflected on how you might improve your HASS skills further, think about how the concepts and skills you have learnt from a task might be useful in your life outside school.

These thoughts don't need to be about the topic, they can be things like:

- When I see things in my social media feed, I will have a better understanding of whether the information is reliable or unreliable.
- I will be able to structure my paragraphs more effectively
- I have a more organised approach to making notes.

1.12.4 Let me do it

Think about how your HASS skills are developing.

For more help with this activity, you might:

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

Civics and Citizenship

Look back through your research and communication. List what you did well and what you can improve. Explain three ways that you might use the knowledge and skills you have gained in other areas of your life.

Economics and Business

Look back through your research and communication. List what you did well and what you can improve. Explain three ways that you might use the knowledge and skills you have gained in other areas of your life.

Geography

Look back through your research and communication. List what you did well and what you can improve. Explain three ways that you might use the knowledge and skills you have gained in other areas of your life.

History

Look back through your research and communication. List what you did well and what you can improve. Explain three ways that you might use the knowledge and skills you have gained in other areas of your life.

on Resources

eWorkbook Civics and Citizenship: Level 1 (ewbk-4269), Level 2 (ewbk-4270), Level 3 (ewbk-4271)
Economics and Business: Level 1 (ewbk-4272), Level 2 (ewbk-4273), Level 3 (ewbk-4274)
Geography: Level 1 (ewbk-4275), Level 2 (ewbk-5374), Level 3 (ewbk-5375)
History: Level 1 (ewbk-5376), Level 2 (ewbk-5377), Level 3 (ewbk-5378)

1.13 Review

1.13.1 Key knowledge summary

Questioning and researching

1. Develop focus questions to help you research a topic.
   - Step 1: Identify what you already know or believe.
   - Step 2: Identify what you need to know to further your understanding.
   - Step 3: List what you know and what you need to find out.
   - Step 4: Write a hypothesis.
   - Step 5: Review and format your focus questions.
2. Record information from different sources.
   - Step 1: Complete a quick assessment of each source that looks useful.
   - Step 2: Collect reliable and accurate information from a variety of sources.
   - Step 3: Make notes in your own words.
   - Step 4: Organise your notes.
   - Step 5: Follow ethical protocols or rules.

Analysing

3. Find information that is right for your specific research task.
   - Step 1: Examine the task, your notes and sources.
   - Step 2: Separate the kind of information you need.
4. Look for links (similarities or differences) and patterns.
   - Step 1: Identify any relationships or trends.
   - Step 2: Identify different perspectives.
   - Step 3: Explain how viewpoints affect our understanding.
5. Find the right way to show your information.
   - Step 1: Present the information in your own words.
   - Step 2: Create diagrams or visuals to show information, if needed.

Evaluating

6. Form a point of view.
   - Step 1: Consider your data and information.
   - Step 2: Suggest possible alternatives for action.
   - Step 3: Consider whether the effects are worth the consequences.
7. Weigh up the costs and benefits of change.
   - Step 1: Identify relevant perspectives..
   - Step 2: Compare the different viewpoints..

Communicating and reflecting

8. Show information clearly.
   - Step 1: Prepare what you want to say and show.
   - Step 2: Plan and practise your delivery.
9. Use effective paragraph structure and vocabulary.
   - Step 1: Structure your paragraphs.
   - Step 2: Use terms that are accurate, specific and appropriate.
10. Explain how you might use what you have learnt in the future.
    - Step 1: Look back at your process.
    - Step 2: Consider how the task could apply in your life.

1.13.2 Key terms

accurate correct and factual
cause and effect an event or action that leads to other events or actions
cite give the details of
describe to give details about features and characteristics of a person, place, thing or idea
discussions responses to a topic or question that present arguments for and against an idea, supported with evidence and examples
evaluative based on assessing value
evidence information that is used to show why a hypothesis, opinion or explanation is correct
explanation a response to a topic or question that outlines how and why something happens, and the relationships involved, and provides supporting evidence and examples
facts information that is objectively true (not influenced by opinion or feelings)
hypothesis an idea or explanation that is used as a starting point for deeper investigation or research
identify to recognise and name
inferential coming to a reasonable conclusion after piecing together evidence
infographic a visual way of presenting data and information with images and very little text
literal to be exact, without exaggerating or misleading
opinion a point of view that may be subjective (based on personal feelings rather than fact) or objective
perspective a point of view, way of thinking, opinion or belief about an issue, event or thing
pictograph a graph that uses pictures to represent data
plagiarise copy other people's work and present it as though it is your own work
primary sources sources made at the time of the event
qualitative information that provides characteristics and description
quantitative information that provides measurable figures
questions issues or problems that are raised but not answered
relationships connections between events
reliable the information in the source is more accurate than other sources (you can rely on it more to be correct)
secondary sources made after the time of the event, using primary sources as evidence
spatial distribution the way things (e.g. population or land use) are spread across places
trend a pattern of change over time
trend line the direction in which something is developing, moving or changing
useful related to your research

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5380)
Reflection (ewbk-5379)
Student learning matrix (ewbk-4268)

RESOURCE SUMMARY

on Resources

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

1.3 SkillBuilder: Identifying what you need to know

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

1.4 SkillBuilder: Collecting, recording and organising information

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

Weblink
- ABS

1.5 SkillBuilder: Selecting relevant information

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

1.6 SkillBuilder: Identifying patterns and relationships

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

1.7 SkillBuilder: Translating information

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

Video eLesson
- Drawing a line graph using Excel (eles-1662)

Interactivities
- Creating and reading pictographs (int-3155)
- Creating a simple column or bar graph (int-3135)
- Drawing a line graph (int-3131)
- Drawing a line graph using Excel (int-3158)

1.8 SkillBuilder: Forming conclusions

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

1.9 SkillBuilder: Evaluating the impact of a decision

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

1.10 SkillBuilder: Representing information in oral presentations

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

Weblink
- How not to use PowerPoint

1.11 SkillBuilder: Developing effective texts through argument paragraphs

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

1.12 SkillBuilder: Reflecting on your learning

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

1.13 Review

eWorkbook
- Reflection (ewbk-5379)
- Student learning matrix (ewbk-4268)

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

CIVICS AND CITIZENSHIP

CIVICS AND CITIZENSHIP CONCEPTS AND SKILLS

2 Civics and Citizenship concepts and skills 58

DEMOCRACY AND LAW IN ACTION

3 Rights, freedoms and participating in a democracy 83

4 Where do our laws come from? 124

5 Influences on Australian society and national identity 147

2 Civics and Citizenship concepts and skills

2.1 Overview

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

2.1.1 Introduction

As a student of Civics and Citizenship, you are developing the knowledge and skills that will be needed by you and society now and into the future. In your study of Civics and Citizenship, you will cover topics around Australia's democratic systems of government and the justice system. Studying Civics and Citizenship may be necessary for your chosen career, or help indirectly by giving you broader knowledge and skills, especially in the understanding of government and legal systems. You will also learn about your rights and responsibilities, such as the right to publicly express your views and the responsibilities and expectations that come with that right.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-3395)

FIGURE 1 Protesters marched through the streets of Perth, 26 January 2020, calling for Australia Day to be replaced as a sign of respect to Aboriginal and Torres Strait Islander peoples.

2.2 Concepts in Civics and Citizenship

LEARNING INTENTION

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

2.2.1 Why study Civics and Citizenship?

Western Australia is generally a safe place in which to work and travel, in comparison to many other countries in the world, due to many factors. We have laws enforced by police that apply to the whole community. Public roads are built and maintained by local councils and state government. Many essential services are provided by the government, such as electricity, hospitals and the post. Western Australia also has comparatively low unemployment levels.

Most of these factors are dependent on having a stable and secure government, and parliamentary representatives, who are accountable to the people who elected them.

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

2.2.2 What are the main concepts in Civics and Citizenship?

Democracy

Democracy is a political system in which citizens choose the way in which they are governed (who and how the country is run). Australia is a democratic country because we elect (vote for) people to run our local, state and federal (national) governments.

Democratic values

Democratic values are the standards or instructions that shape a democracy. The values that shape our Australian democracy include:

- having free and fair elections
- having consistent rules that governments and courts have to follow
- respecting individuals' freedom to have their own views, ideas and beliefs
- equality of race, religion, gender and ethnicity.

You will explore these values in more depth as you study the different parts of our political system.

FIGURE 1 Abraham Lincoln was President of the United States from 1861–1865.

"...that this nation, under God, shall have a new birth of freedom – and that government of the people, by the people, for the people, shall not perish from the earth."
– Abraham Lincoln, 19 November 1863

DISCUSS

Abraham Lincoln was President of the United States of America during the American Civil War, when a number of southern states formed the Confederacy and sought to break away from the Union. Lincoln's short speech at the dedication of the Soldiers' National Cemetery in Gettysburg, Pennsylvania has become historic for many reasons. One of these reasons was the way he succinctly described democracy, without even using the word.

Democratic systems of government are appealing for a number of reasons, including the fact that they aim to be representative. In your study of Civics and Citizenship, you will learn more about the liberal democratic system of government that Australia chose to adopt in 1901.
As a class, discuss what government 'by the people' might mean.

Civics and Citizenship concepts: Democracy, Democratic values

The Westminster system

Westminster is the area of London in which the British parliament is found, hence the British system of government is called 'the Westminster system'. Australia's system of government is based on the Westminster system. In HASS this year, you will learn about the basic structure of this system and begin to understand the benefits and problems with the way this system has developed over time.

Rights and responsibilities

The study of Civics and Citizenship is not only about what the government or legal system provides or protects for us as citizens, such as the right to vote or the right to practice our religion. With these rights also come responsibilities. You will study what the system needs us to do to keep it working well. This includes responsibilities such as voting and keeping our democratic values, upholding laws and respecting the rights and freedoms of others.

FIGURE 2 How do you define justice? Is the idea of justice the same in all cultures and groups? Can you think of any situations or examples that you have felt were not just?

Justice

The idea of justice is that people are treated fairly and in a way that is morally right in the eyes of the law. This is one of the key values in the Australian legal system, but that doesn't not mean it is always achieved. In Civics and Citizenship, you will learn how our justice system works, and examine the ways in which it does or does not achieve its aims.

Participation

The concept of participation is about how you as an individual can be involved in the political and legal systems in Australia. This year you will learn about the democratic freedoms you have in Australia and how you can participate to the law-making process through submissions to parliament, lobby groups and taking direct action.

2.2.3 Your focus in Year 8

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

- The freedoms that enable active participation in Australia's **democracy** within the limits of law, including freedom of speech, association (which groups you can join), assembly (who you can meet or assemble with), religion and movement
- How citizens can participate in Australia's democracy, including use of the electoral system, contact with their elected representatives, use of lobby groups and **direct action**
- How laws are made in Australia through parliaments (statutory law)
- How laws are made in Australia through the courts (common law)
- The types of law in Australia, including **criminal law**, **civil law** and the place of Aboriginal and Torres Strait Islander **customary law**
- Different perspectives about Australia's **national identity**, including Aboriginal and Torres Strait Islander perspectives and what it means to be Australian

2.3 Skills in Civics and Citizenship

LEARNING INTENTION

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

2.3.1 What skills will you build this year?

The skills you will develop across all of your HASS subjects fall into four main groups: questioning and researching, analysing, evaluating, and communicating and reflecting. While you will work on building these skills across all of your HASS subjects this year, you will use these skills in specific ways in Civics and Citizenship in Year 8.

2.3.2 Questioning and researching

Questioning and researching involves locating relevant and detailed information and/or data from a range of appropriate sources. In Civics and Citizenship this year, you will construct more refined questions to frame research and use a variety of methods to collect and record relevant information. You will need to follow appropriate processes in gathering this information and follow ethical protocols for citing your sources. It will also be important to identify differences between primary sources (e.g. a cartoon, speech, artefact) and secondary sources (e.g. reference books, such as a dictionary or encyclopedia) and explore your research questions from a range of different perspectives, or points of view.

2.3.3 Analysing

Analysing involves interpreting information to identify the main features or ideas, then examining the information closely to determine how the parts relate to the whole. In Civics and Citizenship this year, you will be analysing a variety of sources including political advertising, speeches, media releases, court judgements, cartoons and news reports.

democracy a form of government in which the people determine how they will be governed

direct action showing your disapproval or disagreement with the government and their policies by directly trying to influence their decisions and the views of the public, for example through protesting

criminal law the branch of law that judges whether someone has committed a crime, and punishes them if they are found guilty

civil law the branch of law that protects people's rights and property

customary law rules for behaviour developed by and for Aboriginal and Torres Strait Islander peoples

national identity the parts of a society that make people feel like they belong, such as shared values or sense of identity. Defining Australia's national identity is complicated and often debated because of our country's cultural diversity and history.

The skills you develop will help you to determine what kinds of information you can rely on to be accurate, how to determine if information is current, and how to spot bias in information that is presented as being factual. You will also refine your skills analysing different types of data, such as graphs, tables and charts of election results or opinion poll results.

2.3.4 Evaluating

You will learn to draw evidence-based conclusions by evaluating information and/or data, taking into account uncertainties and multiple points of view. This year, you will focus on exploring different perspectives or points of view and how these are revealed in a source of information. You will use your understanding of different perspectives to suggest responses to contemporary events or issues that best suit everyone involved.

2.3.5 Communicating and reflecting

By communicating and reflecting, you will develop your ability to reflect on findings from your research and analysis, and to formulate and present descriptions, explanations and argue a point of view, using relevant terminology. You will also develop your ability to present information in a range of formats to suit the intended audience. This includes essays, oral presentations, debates, tables and cartoons.

2.3.6 SkillBuilders in the topic

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

The SkillBuilders you will use in Year 8 are:

1. Writing inquiry questions for research
2. Using the deconstruct-reconstruct method
3. Developing argument paragraphs
4. Delivering an oral presentation
5. Writing and conducting a survey
6. Writing a submission.

FIGURE 1 These petitions were presented to parliament in 1963 by the Yolngu people of Yirrkala, in the Northern Territory, and raised issues relating to their dispossession from their traditional lands. If you were researching this issue, what extra information would examining this source give you that an online text-only transcript of the documents would not?

FIGURE 2 What factors might affect an Australian's point of view of this Australian stamp from 1988?

2.4 SkillBuilder: Writing inquiry questions for research

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to write focussed inquiry questions for your research in Civics and Citizenship.

2.4.1 Tell me

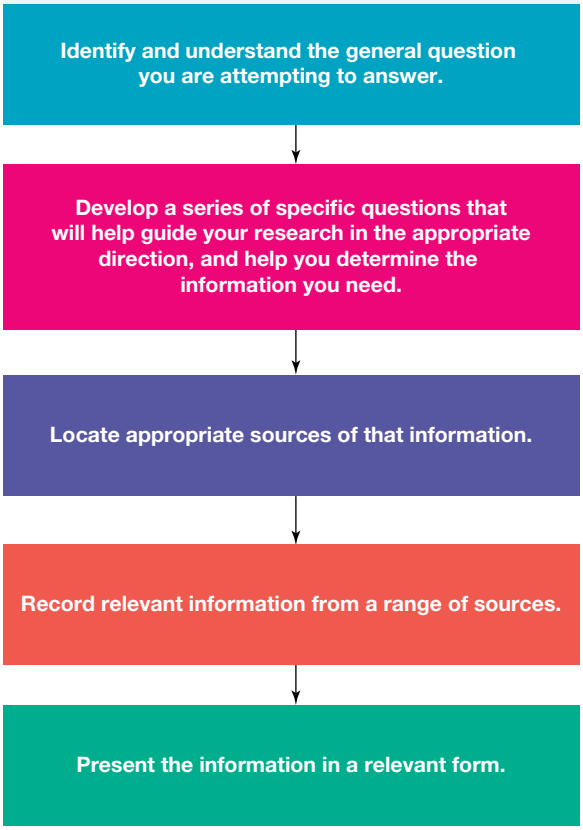
Writing inquiry questions is part of the questioning and researching skill in HASS. In Year 7, you began writing inquiry questions to help you focus your research. At a Year 8 level, you will build this ability to locate relevant and detailed information and/or data from a range of appropriate sources.

When you are asked to 'do research' you need to investigate a particular topic or event. To do this investigation well, it is important to have questions to guide your investigation (inquiry). The purpose of this skill is to help you understand and create helpful inquiry questions.

In Civics and Citizenship this year, you will use this skill to start investigating topics from sources such as this textbook and websites. You may also conduct your own research with surveys.

When carrying out your own research, the steps in **FIGURE 1** can provide a useful guide. You might remember this process from Year 7. This SkillBuilder will show you how to use these steps for the slightly more complicated questions and tasks you will complete in Year 8.

FIGURE 1 How to carry out your own research



2.4.2 Show me

Many countries throughout the world have a 'bill of rights' or 'charter of rights' to protect the rights and freedoms of their citizens. Imagine you have been asked to find out what a bill or charter of rights is, and how it protects people's rights and freedoms. You will need to plan your investigation and break it into some clear steps.

Step 1

Your first step is to clearly identify the essential *key questions*. These could be expressed as follows: 'What is a bill or charter of rights? What is a good example of a bill or charter of rights? What rights does it actually protect? How does it protect these rights?'

Step 2

It is now necessary to break these key questions down into a series of more specific *inquiry questions*. These could include:

1. What is a bill of rights?
2. What is a charter of rights?
3. Is there any difference between a bill of rights and a charter of rights?
4. What is one major country that has a bill or charter of rights?
5. How did that country get a bill or charter of rights?

6. What rights or freedoms does that bill or charter protect (for example, freedom of speech; freedom of association)?
7. Can those rights be easily taken away by a government repealing them? Or are they like the rights protected by the Australian Constitution, which need a referendum to be changed?
8. What can people do if they think their rights under that bill or charter have been affected by the actions of the government or someone else?
9. How well does the bill or charter work? Are there any examples of occasions when someone has successfully taken legal action to protect his or her rights?

Step 3

The next step is to locate appropriate sources to test your inquiry questions. Ask yourself: will my questions find all the information I need? Try searching online with your questions – is your search finding relevant, accurate sites?

There is a wide variety of sources that can be used for research, including textbooks, websites and books written by experts in the subject. You need to ensure that the sources of information you use are relevant to your topic and reliable. To do this, start with sources from trusted educational institutions or official organisations, such as this textbook or the Museum of Australian Democracy.

Internet searches can bring up a huge list of information sources, but not all of them are reliable. You need to carefully select a small number of sources that are reliable.

REMEMBER: BE CAREFUL WITH SITES THAT CAN BE EDITED BY THE PUBLIC

Wikipedia is often one of the first sources suggested in a web search, and yes, Wikipedia often has reliable information. It is a good starting point to understand a topic. However, because Wikipedia articles can be edited, it is recommended to go to the sources listed at the bottom of the Wikipedia article page. If there are no sources listed, then that specific article may be unreliable. If there are sources listed, it may be a good idea to use these directly. To help ensure that your information is correct, it is a good idea to use at least two sources to answer each question. Keep your inquiry questions beside you as you read each source and note the location of the source material for your answers.

Step 4

Once you have done some basic research, refine your questions based on the results of your test searches.

- Can you be more specific?
- Do you need to ask broader questions in some areas?

2.4.3 Let me do it

2.4 ACTIVITY

Practice the skill of writing inquiry questions with the worksheet in the Resources tab to respond to the following topic.

1. In Australia, the state of Victoria has brought in a Charter of Human Rights and Responsibilities and the Australian Capital Territory has a bill of rights known as the Human Rights Act. Select one of these and prepare a report explaining:
   a. what rights are protected by the bill or charter you have selected
   b. what actions can be taken by a person to protect his or her rights under that bill or charter.

2.5 SkillBuilder: Using the deconstruct-reconstruct method

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to write a paragraph in your own words using information from your research in an ethical way.

2.5.1 Tell me

The deconstruct-reconstruct method is part of the questioning and researching skill in HASS. At Year 8 level, you will learn how to avoid plagiarising another person's work by making careful notes from sources of information.

Copying another person's work without acknowledging the author is plagiarism, whether it is copied from the student sitting next to you in class or from an article you found on the internet. For many students, plagiarism occurs simply because they do not know how to read information and then use it appropriately in their own work. The deconstruct-reconstruct method teaches you how to use another person's work appropriately.

FIGURE 1 Copying someone else's work without acknowledging the author is plagiarism.

2.5.2 Show me

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

Step 1

You should first read the entire source from beginning to end. It might be tempting, but for this first readthrough do not highlight or take notes You want to simply read and take in the meaning of the author's work.

Step 2

When you have read the information once, the second step is to re-read it. The more times you watch a movie, the better you can see the elements that the director wants you to see. Similarly, the more times you read a source, the better you can see the elements that the author wants you to see. When re-reading a source, you should use a table like the one shown below to help you collect information and organise your own thoughts.

You should divide your table into two columns: 'quotes/facts' and 'notes'. In the 'quotes/facts' column, write only factual or statistical information. The 'notes' column is for any ideas and questions that you might have after reading the quote or fact. You can write this section in dot points or full sentences – whatever makes sense to you. You do not necessarily need to comment on each quote or fact you record; similarly, you may write notes that do not relate to a specific quote. Completing this section is crucial because these notes will form the basis of your writing.

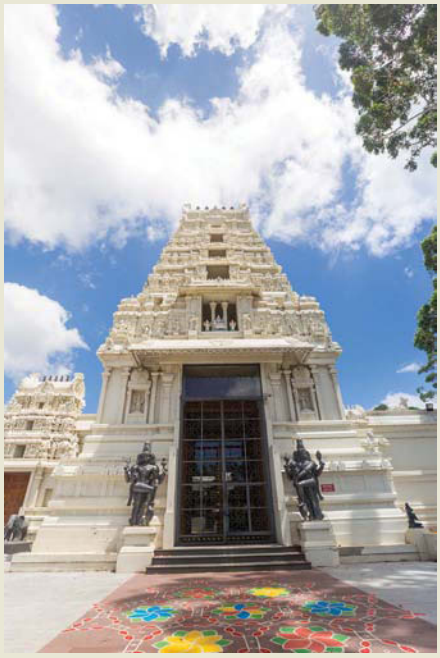
Quotes/facts	Notes
• Factual information • Direct quotes from authors or other people • Statistics	• Ideas and questions you might think of while reading the source • Dot points and/or whole sentences

Let us use one of the paragraphs about Hinduism from your textbook to practise the deconstruct-reconstruct method.

FIGURE 2 *Humanities and Social Sciences for Western Australia* 8, 2nd Edn, Darlington et al, John Wiley & Sons, Milton 2020. (Image: Sri Venkateswara Temple, Helensburgh, NSW.)

Hinduism

Hinduism is the oldest major religion in the world and has been practised for more than 5000 years. Hinduism in Australia, however, only began in the mid-nineteenth century. Although there is evidence of Hindu crews trading with the First Fleet, the first major period of Hindu immigration occurred well after the establishment of the Australian colonies. Hindu immigrants undertook several roles in early Australian society – as labourers, camel drivers, domestic staff and merchants. By 1911, there were over 1000 people in Australia who were affiliated with the Hindu faith. However, as with Islam, the growth of Hinduism in Australia was negatively affected by the White Australia policy. Today, Hinduism is a popular religion especially among Indian, Sri Lanka, Fijian and South African immigrants. According to the 2016 Australian census, Hindu practitioners accounted for 1.9 per cent of the population.



This is what your notes might look like:

Quotes/facts	Notes
• Hinduism is more than 5000 years old. • It began in Australia in the middle of the nineteenth century.	• Hinduism was the world's first religion. • Where did Hinduism begin? • How old are the other religions mentioned in this section?
• By 1911, there were more than 1000 Hindus in Australia.	• Australia had only a small Hindu population at the start of the twentieth century. • Which state had the biggest population? • Did they feel isolated in this small community?
• Hindu immigrants undertook several roles in early Australian society.	• Hindu immigrants had a number of different jobs in colonial Australia, many based on the environmental conditions of their home countries.
• In 2016, 1.9 per cent of all Australians practised Hinduism.	• How many people is this in total numbers? • What factors have helped Hinduism grow so much in recent years? • How does this growth rate compare to other religions?

Step 3

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

The paragraph below has been written using the information summarised in the practice table. Extra research has also been completed to answer some of the questions written in the notes column.

> Some of the world's religions have been around for 5000 years. One of these long-standing religions is Hinduism. Although Hinduism is such an old religion, it began in Australia only during the mid-nineteenth century. Historically, Hindu communities have been small in size, with only about 1000 Australians identifying themselves as Hindu in 1911. Hindu immigrants had a number of different jobs in colonial Australia, many based on the environmental conditions of their home countries. At the most recent Australian census (2016), the total of Hindu practitioners was 440 300. This figure shows how much the religion has developed in Australia.

As you can see, the *meaning* of the paragraph created by the deconstruct-reconstruct method and the one upon which it is based is exactly the same. Both paragraphs discuss the early history of Hinduism in Australia, and both paragraphs use similar statistical information to support this discussion. However, because the deconstruct-reconstruct method has been used, the written text itself is completely different. The author has synthesised information and created an original piece of writing.

2.5.3 Let me do it

2.5 ACTIVITY

Practise using the deconstruct-reconstruct method by choosing any paragraph from this resource and applying the three steps of the process.

To do this, complete the step-by-step worksheet from the Resources tab.

2.6 SkillBuilder: Developing argument paragraphs

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to present a clear point of view about a topic using two well-constructed argument paragraphs.

2.6.1 Tell me

Writing argument paragraphs is part of the communicating and reflecting skill in HASS. In Year 7, you practised using the TEEL structure in your argument paragraphs. In Year 8, you will build your skills in presenting your argument in a straightforward way, and using your arguments together in a longer piece of writing, such as an essay.

Many times in your academic career at school and beyond, you will be asked to write responses to questions that need several paragraphs. An effective essay or extended response has several characteristics.

- It clearly explains the background of an issue.
- It contains strong evidence and multiple examples.
- It discusses the positives and negatives of an issue.

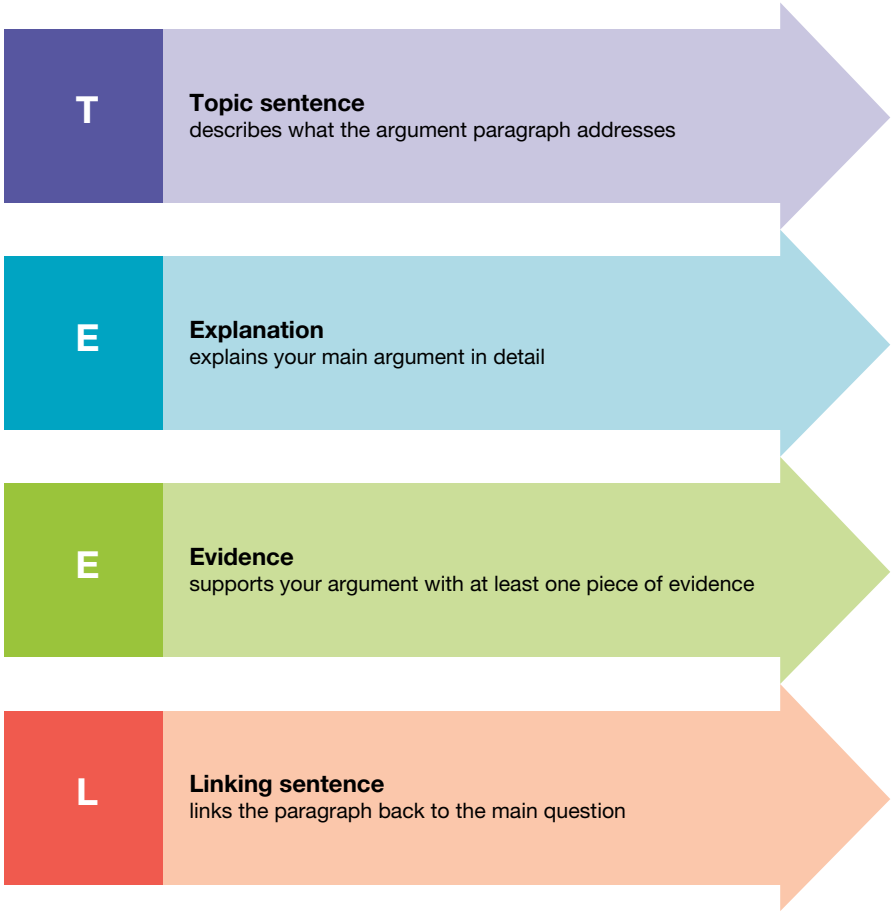
This final characteristic is best demonstrated through argument paragraphs. An argument paragraph is a section of an essay that presents a point of view.

2.6.2 Show me

Imagine your teacher asks you to write two paragraphs in response to the following statement: 'The Aboriginal flag should be the only national flag of Australia'.

Step 1

As you learnt in Year 7, an argument paragraph has the following structure:



The first step in writing your paragraph is to collect your information: your key arguments, the reasons why you believe each argument is true or important, and the evidence that supports each argument. One way to make sure you have all the information you need to to set it out in a table to help you plan.

For this topic, 'The Aboriginal flag should be the only national flag of Australia', you might include these two key arguments:

T	What is the argument I am making in this paragraph?	National flags are powerful symbols.
E	Why do I believe this argument is true or important?	Flags are used as a representation of a country and its people internationally, so they should be a symbol of the people and the country.
E	What evidence can I use to back up my argument?	The symbolism of the Aboriginal flag and why it represents all of Australia
L	How does this link to the main topic?	Because the symbol is powerful, we should have a flag that really reflects Australia

T	What is the argument I am making in this paragraph?	We are no longer ruled by Britain.
E	Why do I believe this argument is true or important?	The current flag was designed a long time ago, when the influences of Britain were much greater and does not represent Australia today.
E	What evidence can I use to back up my argument?	It includes the symbols of place country – the Union Jack.
L	How does this link to the main topic?	Australia's flag should represent modern Australia, not the past.

Step 2

Draft both of your paragraphs using the TEEL planning structure, paying close attention to how each part of the paragraph works together. Your paragraph should not read like a list of your four TEEL sections, but should flow smoothly. One way to do this is to think about the transitions between your sentences.

Transition phrases (groups of words that show you are moving from one thing to the next) and conjunctions (connecting words between parts of a sentence that show their relationship) will help you with the smooth movement from one part of your paragraph to the next.

Simple transition phrases you could use include:

- This is supported by ...
- This is demonstrated by ... - For this reason ...
- The most significant reason this should be the case is …
- The evidence supporting this includes ...

The more experience you have writing, the more subtle (or more fluent to read) your transitions will become.

Step 3

Because you have been asked to write two paragraphs, the final step is to make sure you have a smooth shift from the first to the second paragraph. This helps to make your writing easier to read and makes your argument clearer.

To decide the best way to do this, look at the question you have been asked for clues.

In this example, you have been asked to write two paragraphs explaining your reasons for why the Aboriginal flag should be the national flag of Australia. In this case, start both paragraphs with a phrase that shows you are introducing a new idea related to that topic. For example:

- One reason why we should use the Aboriginal flag as our national flag is…
- The most important reason we should change our flag is…
- Changing the flag would also be an important way to show…

Try not to repeat the same phrase or structure to start each of your paragraphs; variety is what will make your writing easier and more interesting to read.

Your final response might be:

One significant reason why we should use the Aboriginal flag as our national flag is that flags are the simplest and most powerful representations of a country and its people. They commonly contain symbols of culture, values and history. Because Aboriginal and Torres Strait Islander peoples are the true owners of this land, it should be their culture, their values and their history that are represented in Australia's national flag. The background of the Aboriginal flag is divided horizontally into a black half and a red half. The black section represents the Aboriginal and Torres Strait Islander peoples of Australia and the red section represents the connection Aboriginal and Torres Strait Islander peoples have to the land. The middle of the flag is a yellow disc that represents the provider of life: the sun. The Aboriginal flag reflects much about the Aboriginal people, and thus Australia itself. For this reason, the Aboriginal flag should be the only national flag used in Australia.

To show respect for the traditional owners of this land, we should not be using a national flag that includes symbols of Britain. The current flag was designed a long time ago when the influences of Britain were much greater and does not represent Australia today. The British symbols also represent the taking of land, culture and language from traditional peoples of Australia, and this should not represent Australia today. The Union Jack on the flag is a reminder of these awful events in our past. Australia's flag should represent modern Australia, not the past. Changing it will show greater respect for Aboriginal and Torres Strait Islander cultures.

2.6.2 Let me do it

2.6 ACTIVITY

Below are some essay topics that you can use to form the basis of your argument topics. To do this complete a step-by-step worksheet from the Resources tab.

Use the information and tips in this SkillBuilder to practise writing your own argument paragraphs. Be sure to use the TEEL structure – it will help you logically organise your thoughts and arguments.

You will need to do some research before writing your practice paragraphs.

1. Australian identity: no such thing exists.
2. It is not important for a country to have a national identity.
3. The Aboriginal flag should be the only official flag of Australia.
4. Religion and government should remain separated.
5. It is impossible for people from different backgrounds to share common values.
6. New migrants should abandon their traditions and customs and adopt an Australian way of life.
7. New migrants should not be allowed to speak their native language after they arrive in Australia.

2.7 SkillBuilder: Delivering an oral presentation

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to present a short, structured speech or presentation to a specific audience for a specific purpose.

2.7.2 Tell me

A successful oral presentation starts before a single word has been spoken, with these three stages.

- *Preparation* – You must research and plan your speech properly. Being organised and prepared will give you confidence in yourself and in your subject material.
- *Proper use of visual aids* – Are you going to use PowerPoint, Keynote or any other visual aids? If so, you need to consider how to use these tools properly. Avoid overloading your audience with a cluttered combination of visual and audio information.
- *Delivery* – The final key to a successful presentation is the delivery. Sustained eye contact and a confident, well-projected voice will help you deliver your intended message.

FIGURE 1 Preparation and delivery are key elements of a successful presentation.

2.7.3 Show me

Step 1

The first step in preparing your oral presentation is planning what you will say. Preparation is key to presenting your ideas well to an audience. This is especially true if you are nervous about public speaking.

Use the following table to help you plan the elements of your presentation.

TABLE 1 Preparing for your presentation

Purpose of presentation	To explain how to deliver successful oral presentations
Key message	That through proper practice and planning, you can overcome your potential fear of public speaking
Secondary message	Explain the elements of successful oral presentations: • preparation – research and planning • proper use of visual aids • delivery – sustained eye contact and confident delivery of the speech.

Step 2

Think about the strategies you could use to make sure your audience remembers and understands you message. Visual information can add to your presentation, but if used incorrectly, it can decrease the effectiveness and clarity of your message.

Make sure that any visual aids serve a clear purpose. Do not commit any of the mistakes shown in the **How not to use PowerPoint** weblink in the Resources tab.

Step 3

The effectiveness of your speech often relates to the connection you make with your audience, so the third step is to practice.

Confident eye contact requires more than simply looking up from your notes every now and then. You need to make and hold eye contact with members of your audience. This will only be possible if you have practised your speech often and know the content extremely well. Sustained eye contact will also improve your delivery of the speech itself. Remember not to rush your speech, and be sure to explain your points clearly and carefully.

FIGURE 2 Speaking in public can be daunting, but try to connect with your audience even if you are feeling nervous.

2.7.3 Let me do it

Complete the following activity to practise this skill.

2.7 ACTIVITY

Investigate the national identity of a nearby Asian country. Working either individually or in pairs, you will need to deliver a five-minute oral presentation in which you discuss your chosen country and how its national identity is displayed. You could present either in person to your class, or by video.

Draw up a table (similar to **TABLE 1**) to help you prepare and plan your speech. Then use the procedure discussed in this SkillBuilder to ensure that your presentation is successful. You can also complete a step-by-step worksheet from the Resources tab to help you with this task.

on Resources

Weblink How not to use PowerPoint

2.8 SkillBuilder: Writing and conducting a survey

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to construct a simple survey to collect information about a specific issue or research question.

Collecting information through a survey is part of the questioning and researching skill in HASS. In Year 8, you will extend the ways you research by collecting data and information yourself, as well as using information that has already been published.

2.8.1 Tell me

A survey is the process of collecting data for the purpose of analysing an issue. It consists of putting a set of questions to a sample group of people. For example, a political party might conduct a survey to find out whether citizens are satisfied with the party's policies.

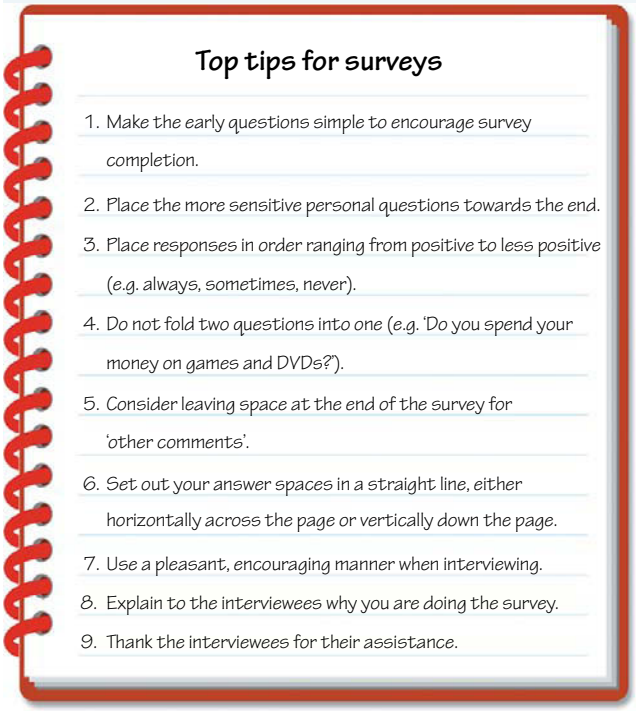
Surveys are an efficient way of collecting information from a large number of people. The questions can range widely to reveal people's attitudes, values, opinions and beliefs on political or legal issues.

A good survey:

- has a clear written introduction
- has simple questions early on
- places more sensitive personal questions towards the end
- leaves enough room for all the questions to be answered
- is of reasonable length
- is well presented
- is clearly analysed once responses are collected.

FIGURE 1 outlines more tips on creating a good survey.

FIGURE 1 Survey tips



2.8.2 Show me

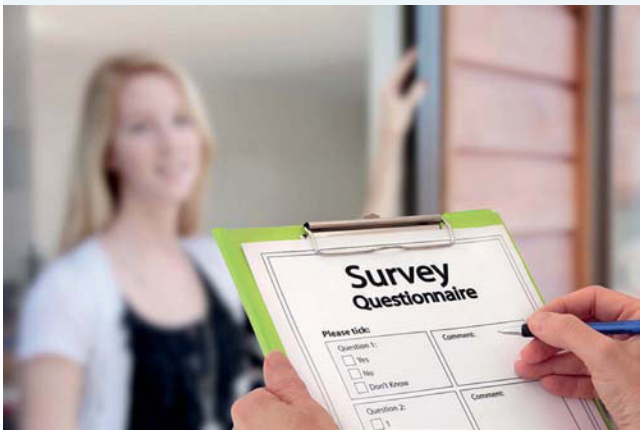
Step 1

Decide what you want to learn from your survey. You need to clearly decide the goals of your survey beforehand, otherwise your survey results will be unclear.

Step 2

Decide whom you want to survey. Will your target group include both young people and adults, or just young people? How many people will you survey? Generally, the more people you survey, the more reliable your results will be.

FIGURE 2 Personal interviews may be conducted in a variety of places, such as at shopping centres or outside theatres. Personal interviews usually cost more to conduct than other survey methods.



Step 3

Decide what method you will use to collect the data. Consider factors such as cost, speed and whether sensitive information is involved. Survey methods include:

- personal interviews
- telephone survey
- mail survey
- email survey
- internet/intranet webpage survey.

Online formats such as Survey Monkey and Google Forms are a useful method of conducting surveys online.

Step 4

Design your survey. Start with a friendly introduction to encourage people to complete the survey. Work out your questions. There are two main types of survey questions.

- Open questions allow the respondent to record their thoughts about an issue. Look at the examples provided in the **FIGURE 3** sample survey for ideas.
- Closed questions ask the respondent to select an answer from a range of options; for example, yes or no.

Try to keep your survey short and your questions simple. Make sure the layout is uncomplicated and easy to follow.

FIGURE 3 Examples of different types of questions

<table>
<tr><th>Question type</th><th>Example</th></tr>
<tr><td>RATING SCALE</td><td>How would you rate the performance of our courts? Please circle one response.

Excellent **Good** **Fair** **Poor**</td></tr>
<tr><td>AGREEMENT SCALE</td><td>How much do you agree with the following statements? Please tick one response.
<table>
<tr><th></th><th>Strongly agree</th><th>Agree</th><th>Disagree</th><th>Strongly disagree</th></tr>
<tr><td>The courts treat everyone fairly.</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Australia's judges are independent.</td><td></td><td></td><td></td><td></td></tr>
</table></td></tr>
<tr><td>MULTIPLE CHOICE</td><td>What is your age? Please circle one response.

Age: 12–14 15–16 17–18 Over 18</td></tr>
<tr><td>OPEN–ENDED</td><td>Why do we allow people to appeal court decisions?

.. ..
.. ..
.. ..
.. ..
.. ..</td></tr>
</table>

TIPS FOR CREATING CLOSED QUESTIONS

Closed questions that ask respondents to rate something against a scale should have an even number of options for such a scale. This is because people often go for the easy option and pick the middle number. An even number of possible ratings (e.g. 1–6, instead of 1–5) means than respondents can't just pick the middle 'neutral' number.

Step 5

Conduct a small trial of your survey to make sure the questions are clear and will achieve your goals. Make any necessary changes based on feedback from the trial.

Step 6

Conduct your survey and collate the results. These can then be analysed for patterns or anything unusual. When you analyse the results, consider working out percentages. For example, the females aged 12–16 surveyed spend 10 per cent of their money on computer games, while the males aged 12–16 spend 25 per cent.

2.8.3 Let me do it

Complete the following activity to practise your skills.

2.8 ACTIVITY

In a small group, design and conduct a survey. It is to be a paper-based survey carried out by personal interview. Note that paper surveys should allow enough room for interviewees to write their answers. (If it is difficult to meet in person, you can plan the survey via video chat and create a simple online survey.)

In your group, select one of the following topics for your survey:

- Australian cultural identity
- An Australian republic
- Recognition of Aboriginal Australians in the Constitution
- Freedom of speech

You can also complete a step-by-step worksheet from the Resources tab to help you with this task.

2.9 SkillBuilder: Writing a submission

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to write a structured submission to an organisation or government body that clearly identifies a problem and suggests what action should be taken to resolve the problem.

2.9.1 Tell me

A formal submission is a written communication (letter or email) to an organisation or government body that requests that a specific action takes place, or that expresses an opinion on an issue. Submissions from the public are often called for by parliamentary committees investigating community issues, or current bills going through parliament. Any Australian citizen or resident may write a formal submission to government. Formal submissions are also used to request permission from government agencies, for example, permission to hold a community event. You practiced this skill in Year 7, when you practised writing argument paragraphs; in Year 8 you will refine your process.

FIGURE 1 There can be hundreds or thousands of communications sent to government departments, so it's important to know how to ensure yours is seriously considered.

A submission is similar to an essay in that it should have a clear structure and developed ideas, but it is different because it often asks for the recipient to take action, and may be more personal (often written in the first person).

The purpose of learning how to write a submission is to apply written communication skills in 'real-world' scenarios, and to enable you to be an active participant within our democratic society. FIGURE 1

2.9.2 Show me

Your submission may be one of hundreds of letters sent to that government department or parliamentary committee, therefore it is important that is it clear and concise (short).

Step 1

Identify the specific issue/s you wish to have addressed and why they are a problem. An example of an issue that someone might want addressed is:

Hyun's mother slipped down some steps at a council-run swimming pool and bruised her hip. Hyun has also seen several other people trip or slip on the same step.

Specific issue: poor safety at the local pool means people are being injured

Step 2

Research or investigate the issue to clearly identify specific problems that need addressing, and possible solutions that may solve those problems.

Hyun investigated:

- Are the steps broken? No.
- Is the floor slippery and wet? Yes.
  - Maybe the floor needs more matting at the top of the stairs to soak up water?
- Do the steps have clear anti-slip flooring or grip strips? Yes, but it has come off in some places.
  - Needs replacing/fixing
- Are there any safety measures such as warning signs? No.
  - Needs a warning sign that stairs may be slippery
- Specific problems and potential solutions:
  - The stairs are often wet from people who have just been swimming.
  - The anti-slip flooring strips are not effective and need fixing.
  - There are no warning signs and there should be.

Step 3

Research and identify the people or organisations that have responsibility for the issue (or may have influence in addressing the issue). Monitor public information channels to find out if there are opportunities for public submissions, such as Parliamentary Committees and Inquiries or complaints to council.

DISCUSS

Review the information provided by the City of Perth regarding how to submit a petition or submission (see the weblinks in the Resources tab). Discuss the requirements for making a petition. Do they give everyone in the community an equal opportunity to request action? Investigate the council rules where you live. Do they have similar requirements? As someone who is under 18 in the City of Perth, you are not eligible to vote, which means you may not be eligible to petition or make a submission to your council. What is your view of this? How else could you make yourself heard by your local representatives?

Hyun wasn't sure which level of government was responsible for the pool, so he searched online to find out that it was maintained by his local government (council). He rang the council and discovered the right person to address his submission to was the Ms Tan, the Council's properties manager.

Step 4

Once you have identified your issue and specific points, and researched who your submission should be addressed to, you need to write your submission. Remember that you might have to write several drafts and edit your final version to create the best submission you can.

The following tips are a useful guide for writing your submission:

- clearly address the issue (or terms of reference for a parliamentary committee)
- stay 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
- only include documents that directly relate to your key points
- only include information you would be happy to see published on the internet (if writing to a parliamentary committee).

Hyun could write the following submission:

Dear Ms Tan,

I write to express concern with the safety of the exit stairs by the north gate of Low-Water Public Swimming Pool.

I live a few blocks from the pool and swim there regularly with my family. Recently my mother fell down the north gate stairs and injured her hip. I have also seen other adults and small children slip at a similar point of the stairs. While I understand that any staircase near a swimming pool will be likely to get wet, and that it is our responsibility to move around the pool safely, the stairs do require some maintenance and better safety warnings. Primarily, there are three problems that make the stairs unsafe:

1. The anti-slip strips that had been applied to the stairs have come loose in some places or have worn away.

2. There is no matting at the top of the stairs, so water runs from people's legs and feet down the stairs making them wet.

3. There is no warning sign that the stairs might be slippery.

The stairs could be made much safer if each of these problems were fixed. I have included photographs of the stairs so you can see the issues I have raised. I look forward to hearing from you with regards to this matter.

Kind regards,

Hyun-Jin Park

FIGURE 2 The stairs outside near the pool get especially wet when the pool is busy.

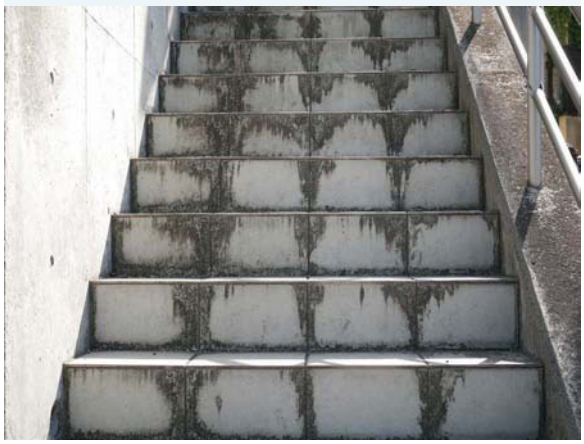


FIGURE 3 Loose and worn-out grips and warning tapes

Step 5

When your submission has been written and edited, you need to send it.

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.

2.9.3 Let me do it

Practice writing a formal submission by selecting one of the following issues, or choosing an issue that is important to you, and working through the steps. If it is an issue that genuinely concerns you, you may choose to send the submission to the relevant organisation.

Complete the following activity to practice your skills.

2.9 ACTIVITY

Write a submission to ask a local or state government body about one of the following issues. You can also complete a step-by-step worksheet from the Resources tab to help you with this task.

Examples of different levels of issue:

That your local government:

- fixes a specific intersection or section of road that is dangerous
- changes or fixes something in a local park
- changes their policy about an issue that affects you or your family, such as waste removal or pet registration.

That the state government:

- relaxes the laws about wearing bike helmets on public roads and paths
- makes public transport to regional areas more affordable.

on Resources

Weblinks Making a submission (Parliament of NSW)
Making a submission to a Committee (WA parliament)
Making a submission to a Senate Committee (Australian Parliament House)
Petition to Council or a Committee submission

2.10 Review

2.10.1 Key knowledge summary

2.2 Concepts in Civics and Citizenship

- Democracy is a political system in which citizens choose the way in which they are governed.
- Democratic values are the standards or instructions that shape a democracy.
- Australia's system of government is based on the British Westminster system.
- Legal and political systems need everyone within the system to meet certain responsibilities in order for everyone to make the most of their their rights
- Justice, as a concept, means that people are treated fairly and in a way that is morally right in the eyes of the law
- Participating in political and legal processes is an important part of a society. This occurs in a range of ways, such as participating on a jury, expressing your views to your political representatives, protesting or voting in elections.

2.3 Skills in Civics and Citizenship

This year you will focus on:

- Questioning and research: forming strong and well-focussed research questions and ensuring all of your notes are clear, accurate and well referenced.
- Analysing: examining a variety of sources including political advertising, speeches, media releases, court judgements, cartoons and news reports.
- Evaluating: exploring different perspectives or points of view and how these are revealed in a source of information.
- Communicating and reflecting: develop your ability to reflect on findings from your research and analysis, and to formulate and present descriptions, explanations and argue a point of view, using relevant terminology.

2.10.2 Key terms

civil law the branch of law that protects people's rights and property

criminal law the branch of law that judges whether someone has committed a crime, and punishes them if they are found guilty

customary law rules for behaviour developed by and for Aboriginal and Torres Strait Islander peoples

democracy a form of government in which the people determine how they will be governed

direct action showing your disapproval or disagreement with the government and their policies by directly trying to influence their decisions and the views of the public, for example through protesting

national identity the parts of a society that make people feel like they belong, such as shared values or sense of identity. Defining Australia's national identity is complicated and often debated because of our country's cultural diversity and history.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5395)
Reflection (ewbk-5394)
Student Learning Matrix (ewbk-5387)

RESOURCE SUMMARY

on Resources

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

2.4 SkillBuilder: Writing inquiry questions for research

eWorkbook
- SkillBuilder: Writing inquiry questions for research (ewbk-5388)

2.5 SkillBuilder: Using the deconstruct-reconstruct method

eWorkbook
- SkillBuilder: Using the deconstruct-reconstruct method (ewbk-5389)

2.6 SkillBuilder: Developing argument paragraphs

eWorkbook
- SkillBuilder: Developing argument paragraphs (ewbk-5390)

2.7 SkillBuilder: Delivering an oral presentation

eWorkbook
- SkillBuilder: Delivering an oral presentation (ewbk-5391)

Weblink
- How not to use PowerPoint

2.8 SkillBuilder: Writing and conducting a survey

eWorkbook
- SkillBuilder: Writing and conducting a survey (ewbk-5392)

2.9 SkillBuilder: Writing a submission

eWorkbook
- SkillBuilder: Writing a submission (ewbk-5393)

Weblinks
- Making a submission (Parliament of NSW)
- Making a submission to a Committee (WA parliament)
- Making a submission to a Senate Committee (Australian Parliament House)
- Petition to Council or a Committee submission

2.10 Review

eWorkbook
- Reflection (ewbk-5394)
- Student Learning Matrix (ewbk-5387)

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

3 Rights, freedoms and participating in a democracy

3.1 Overview

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

Does everyone have the same rights and freedoms? Why not?

3.1.1 Introduction

What is a **right** and how are rights protected in Australia? When we speak of rights and freedoms, we are usually referring to the way individuals are treated in a particular organisation or community. These can include the rights that students have within a school, or the rights that employees have within a workplace. Most importantly, it includes the rights we have as citizens of Australia.

In Australia we are said to be governed by the 'rule of law'. This means that no person is above the law, no matter how rich or important they are. Our rights and freedoms are protected by some provisions in our **Constitution**, as well as by **laws** that govern our behaviour. We expect our elected representatives in Parliament to reflect our values and to represent us honestly, and we have the right to present our views to those representatives.

right an entitlement to be treated in a particular way. A legal right is a right that can be enforced by law.

constitution a set of rules that determines the structure of government and its law-making powers

laws the system of rules that Australia recognises as regulating the actions of its citizens, which it may enforce by the imposition of penalties and sanctions

on Resources

- **eWorkbook** Customisable worksheets for this topic (ewbk-5406)
- **Video eLesson** Rights and freedoms (eles-2260)

FIGURE 1 In Australia, freedom to protest is one of our natural democratic rights.

3.2 Protecting our rights and freedoms

LEARNING INTENTION

By the end of this subtopic, you will be able to define key terms such as 'referendum', 'democracy' and 'rights', and understand the role of the Constitution and governments in protecting our rights freedoms.

3.2.1 What laws protect us?

Under the rule of law, the protection of our rights and freedoms comes from a number of sources. The Australian Constitution includes provisions that protect some of our basic rights. In addition, state and federal governments have passed laws aimed at protecting many of our rights as citizens.

3.2.2 Rights contained in the Constitution

The Australian Constitution contains a number of sections that ensure that Australia must be ruled as a **democracy**. It also includes five specific rights. Because these five rights are written in the Constitution, they cannot be changed or taken away without a **referendum**.

Protecting democracy

The Constitution ensures that Australia must be governed as a democracy in the following ways:

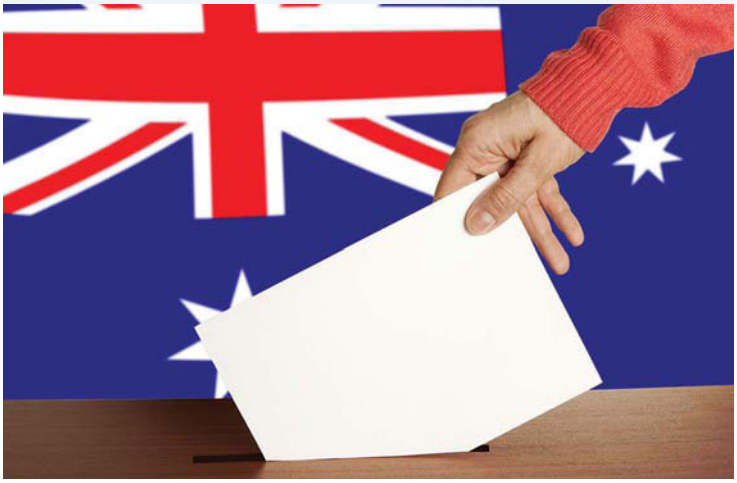
- Representatives to both houses of parliament are elected by a direct vote of the people.
- Each person has only one vote for each house of parliament, so all voters are equal.
- Parliament is limited to a three-year term, so all the members have to face the voters on a regular basis to be judged on their performance.
- All laws passed by the parliament have to be agreed to by a majority of members, so they represent the wishes of the majority of voters.
- There is a division of powers between the federal and state governments, so power is spread between these two levels of government.
- The courts are independent of government, so they can enforce the law fairly and equally to all.

democracy a form of government in which the people determine how they will be governed

referendum a process of allowing the people to vote on an important issue, such as a proposed change to the Constitution

FIGURE 1 Our rights and freedoms unite us as Australians.

FIGURE 2 A direct vote of the people is required to elect members of parliament.



Five express rights

Our Constitution contains a small number of rights. Because they are clearly expressed in the wording of the Constitution, they are known as 'express rights'. The five express rights are as follows:

1. *Freedom of religion*. Under section 116 of the Constitution, the government cannot force anyone to follow any one religion, nor can it prevent anyone from freely practising his or her own religion.

FIGURE 3 Freedom of religion is guaranteed by our Constitution. Out of 22 major world religions, 18 are practised in Australia.

2. *Trial by jury*. Under section 80 of the Constitution, anyone accused of a serious crime under Commonwealth law must be tried in court by a **jury**. This right only applies to Commonwealth law, so it is a very limited right. Most criminal law is decided by state governments, and criminal trials take place in state courts. Trial by jury in these state courts is not protected by the Constitution, but is covered by state laws.

jury in a criminal trial, a randomly selected group of people who decide the guilt or innocence of an accused person

FIGURE 4 Trial by jury is guaranteed by our Constitution for anyone charged with a serious offence under Commonwealth law.

3. *Compensation for acquired property*. Sometimes the Commonwealth Government may need to take over property from individuals or organisations. They may do this, for example, when they are building new freeways or railways. Under section 51(xxxi) of the Constitution, if the government does this, it must be on 'just terms'. This means that the person who owns the property must get a fair price for that property.

FIGURE 5 If the government needs to take over property, the owner is entitled to a fair price under our Constitution.

4. *Residential non-discrimination*. Under section 117 of the Constitution, no state government can treat someone differently, or discriminate against a person, just because he or she is a resident of a different state.
5. *Interstate trade and commerce*. Under section 92 of the Constitution, all trade between the states must be completely free. This means that no government, or any other person or business, can do anything that interferes with the free operation of commerce across state borders.

FIGURE 6 Under our Constitution, all trade across state borders must be free from interference.

3.2.3 Rights protected by legislation

Federal, state and territory parliaments have all passed **legislation** designed to protect the rights and freedoms of all members of the community. For example, they have all passed laws designed to make it illegal to discriminate against any person based on certain personal characteristics. This means that you cannot treat someone differently or unfairly because they happen to be different from yourself or from the majority of society. Under these laws, it is illegal to discriminate against anyone on the basis of:

- gender or gender identity
- sexual orientation
- pregnancy
- breastfeeding
- marital status
- status as a carer
- age
- race
- skin colour
- nationality
- ethnicity
- parental status (including childlessness)
- physical features (Victoria only)
- religious belief or activity
- physical impairment
- mental illness or disability
- a personal association with anyone having any of the above characteristics.

This means that an employer cannot refuse to employ someone because of any of the above characteristics. It also means that a business owner cannot use any of the above as a reason to refuse to do business with a person. For example, the owner of a restaurant cannot refuse entry to a person based on any of the above characteristics. These laws are designed to ensure that all members of Australian society are treated fairly and equally.

legislation a law made by Parliament

FIGURE 7 Employers interviewing job applicants must treat them all equally.

on Resources

Video eLessons The Australian Constitution (eles-2076)
What is Parliament? (eles-2077)

Weblink Australian Human Rights Commission

3.2 ACTIVITY

Use internet resources to identify three laws, passed by either a state parliament or the Commonwealth Parliament, designed to make it illegal to discriminate against any person based on his or her personal characteristics.

HASS skills: Analysing, Evaluating

3.2 EXERCISE

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

Learning pathways

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

Check your understanding

1. What is the meaning of the term 'democracy'?
2. In what way is freedom of religion protected in Australia?
3. In what circumstances does the Constitution guarantee a jury trial to an accused person?
4. Choose two democratic rights and explain what they are.
5. Identify and explain five ways in which the Australian Constitution protects our rights.

Apply your understanding

6. What safeguards does the Constitution provide for anyone who has his or her property taken by the Commonwealth Government?
7. Some members of the community have called for a ban on the burqa, the full body covering worn by some Muslim women. Why would such a ban probably be unlawful in Australia?
8. A woman qualified as a doctor in Perth and moved to Queensland to live. The Queensland medical authorities attempted to prevent her from practising as a doctor, because she did not gain her qualifications there. Explain why such action would be unlawful.
9. When we refer to free trade between the states, what does this mean in terms of the powers of the federal and state parliaments?
10. Examine each of the following cases and determine whether or not there has been a case of discrimination. Explain your reasons.
    a. A woman was unsuccessful in gaining a job because she was pregnant.
    b. A real estate agent refused to rent an apartment to an Aboriginal or Torres Strait Islander family.
    c. A man failed to get a job as a bus driver because he had no driver's license.
    d. A taxi driver with a sign on his cab saying 'No dogs' refused to pick up a blind person with a guide dog.
    e. A carpenter advertised for an apprentice to work with him and specified that only males should apply.
    f. A menswear store advertised for a model for its advertising catalogue and specified that only males should apply.

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

3.3 Freedom of speech and other democratic freedoms

LEARNING INTENTION

By the end of this subtopic, you will be able to explain the importance of various democratic freedoms, and the ways in which they are limited.

3.3.1 The importance of freedom of speech

One of the key freedoms enjoyed by Australians is freedom of speech. In most cases, we have the freedom to express our opinions publicly. However, there are some legal limits on freedom of speech. This is because our right of free speech must be balanced against the rights of other people who may be harmed by what we say.

FIGURE 1 Australians highly value the right of free speech.

For us to be able to exercise our **democratic** rights in a free society, we must have the right to express our opinions without risk of punishment. In many countries around the world, and throughout history, this right has not always existed. In some medieval societies, anyone who publicly criticised the king or the church could be executed. Even today, there are many countries where freedom of speech is very limited or non-existent, and people are punished for publicly expressing their opinions. These include:

- Iran, a country in the Middle East, is ruled under Islamic religious law. This means that all citizens are expected to observe religious practices as prescribed by the government. Failure to do so can be punished by the authorities, with the possibility of imprisonment, and even execution, for failing to adhere to strict religious laws.
- In North Korea, it is illegal to say or do anything that criticises the government or is seen to insult the country's leader, Kim Jong-un. It was recently reported that a man was thrown into prison for wiping up a spilt drink with a sheet of newspaper. Someone noticed that the newspaper featured a photo of Kim Jong-un and reported the man, who was imprisoned for insulting the leader.

FIGURE 2 Kim Jong-Un is revered as the leader of North Korea, and any criticism of him or his government within that country is punishable by a long prison sentence or even death.

democratic supporting democracy, or the system of government where supreme power is vested in the people and exercised directly by them or by their elected representatives under a free electoral system

3.3.2 Limits on our freedom of speech

Our right to freedom of speech in Australia is said to be limited by the 'bounds of law'. The word 'bounds' is an old-fashioned form of the word 'boundaries'. We understand boundaries to be limits on what we may do in any set of circumstances. The limits or boundaries on our freedom of speech are imposed by laws that prohibit (among other things) hate speech, bullying, defamation and obscenity.

FIGURE 3 AFL footballer Eddie Betts was subjected to racist abuse on social media in early 2019.

Hate speech

Australia's laws against racial discrimination place a limit on our right of free speech. It is illegal in Australia to publicly use language that is likely to offend, insult, humiliate or intimidate anyone because of that person's race, colour or national or ethnic origin. Very few people have actually been brought to court under this law, but it sends a strong message to the community about using racially abusive language. In February 2019, AFL footballer Eddie Betts was subjected to anonymous racial abuse on social media. His club, the Adelaide Crows, vowed to track down the person who posted the abuse and to 'name and shame' them. Unfortunately, social media has become a favourite avenue for many people to attempt to abuse others anonymously.

DISCUSS

After watching the **Je suis Charlie** video eLesson in the Resources tab, discuss as a class the meaning of the term 'Je suis Charlie', the phrase used by people showing support for free speech after the terrorist attack on the satirical magazine *Charlie Hebdo* in Paris in early 2015. Discuss whether you think there should be limits on free speech. What are the pros and cons of placing limits on free speech?

General capability: Ethical understanding

Bullying and harassment

In recent years, state governments have acted to protect people from bullying, particularly in the workplace. In February 2010, four men and the company they worked for were fined a total of $335 000 for bullying a young waitress who later committed suicide. The waitress, Brodie Panlock, took her own life after months of bullying at the café where she worked. Much of the bullying involved name-calling and using offensive language towards Ms Panlock, who was 19 years old. Following this case, the Victorian state government brought in a new law against workplace bullying, allowing for prison sentences of up to 10 years for anyone

found guilty of this offence. In recent years, sexual harassment in the workplace has become a significant issue, with a 2018 survey by the Australian Human Rights Commission reporting that in the previous 12 months, 23 per cent of women and 16 per cent of men had experienced sexual harassment at work.

FIGURE 4 The suicide of 19-year-old Brodie Panlock led to a change in the law in Victoria regarding workplace bullying.

Source: AAP Image/Channel Seven News

Defamation

Defamation occurs when one person writes or says something likely to damage the reputation of another person. Any communicated material that harms the reputation of another person is said to be 'defamatory'. If you believe someone has defamed you, you can take legal action (that is, you can sue that person). For your legal action to be successful, you have to prove the following:

- The defamatory material was published or communicated to someone other than yourself. It is not defamatory if the person communicates it only to you, and no-one else sees or hears it. It would be defamatory, though, if someone published it on his or her Facebook page, or anywhere likely to be read by other people.
- It has to be clear that it is you as an individual the person is referring to. If someone said that members of your sports team were cheats, you could not sue them unless they clearly identified you in person.
- There has to be some clear damage to your reputation. If the material is likely to prevent you getting a particular job, or in some other way can be seen to disadvantage you, you may have a good legal case.
- The material must be untrue. If someone communicates material about you that can be proven to be true, then that person has a strong defence if you try to take legal action for defamation. In this case, a court may rule that no defamation has occurred.

FIGURE 5 Spreading rumours likely to damage another person's reputation could be defamatory.

The law relating to defamation puts a limit on free speech but it also protects innocent people from having their reputations ruined publicly. It demonstrates that any right to freedom of speech imposes an obligation on all of us to use that right responsibly.

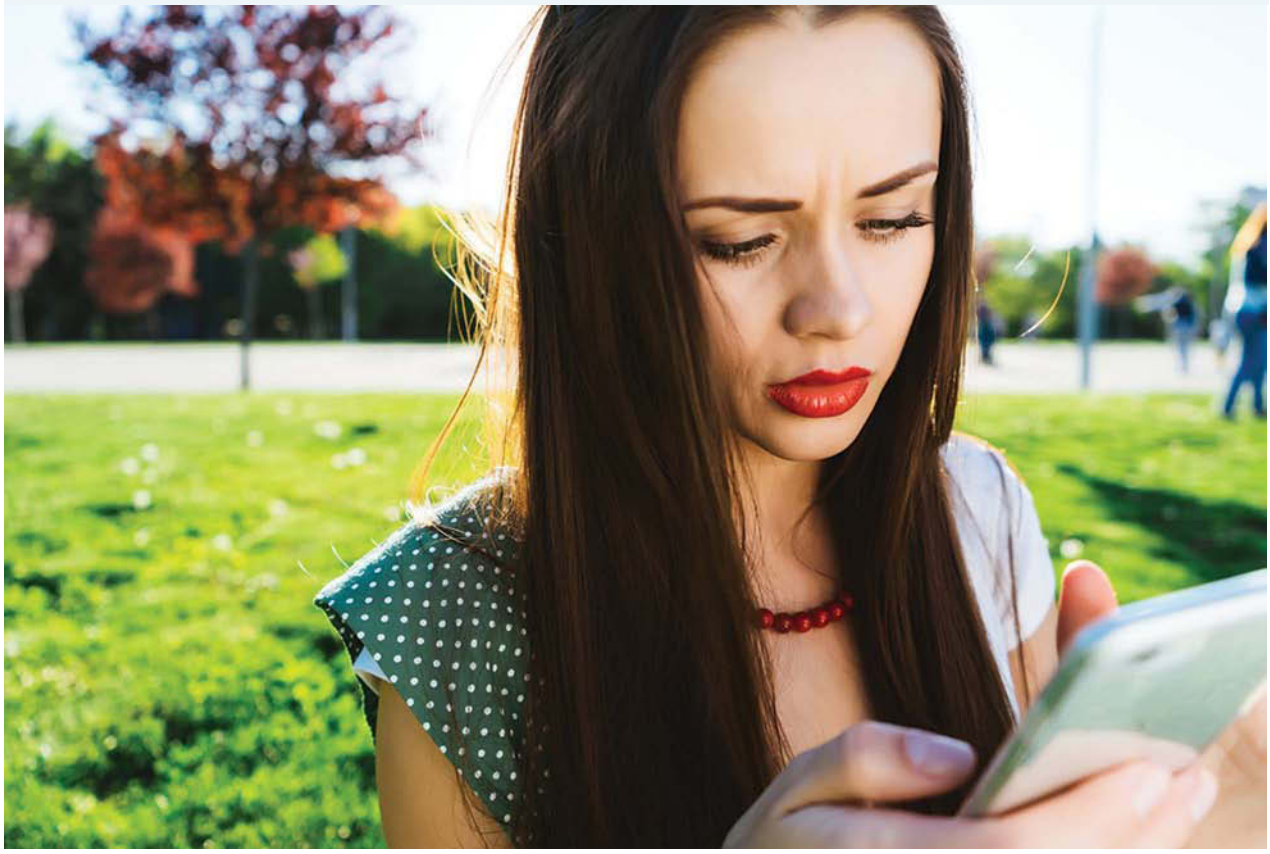
Obscenity

Freedom of speech is also limited by the need for all written and spoken material to conform to reasonable community standards. Laws against obscenity are designed to protect these standards. Obscenity laws vary by state and territory, but generally cover cases such as the following:

- *Offensive language.* If you are caught swearing loudly in public, you can be charged with using offensive language in a public place.

- *Sexually explicit or violent material.* A number of laws govern the publication or display of such material. In some cases, film and television classification authorities may place restrictions on violent or sexually explicit material by giving it an 'R 18+' classification. Some other material (such as child pornography) is banned completely, and people can be prosecuted and imprisoned for possessing it. Recently there has been a lot of publicity relating to the practice of 'sexting' by teenagers. This is seen as child pornography and has serious consequences for anyone caught participating in the practice.

FIGURE 6 Sending obscene images on a mobile phone is illegal and can lead to the person responsible being charged with an offence.



Despite these limits, freedom of speech plays a significant role in Australia's democracy. Our right of free speech allows the open exchange of political ideas and policies. This means that when we vote to elect representatives to parliament, we should be fully informed about the promises and policies of all candidates. No-one can restrict the rights of political parties and their candidates from getting their message out to voters.

3.3.3 The benefits of living in a democracy

In addition to freedom of speech, there are a number of other freedoms we associate with living in a democracy. These include freedom of association, freedom of assembly, freedom of movement and freedom of conscience. All of these freedoms have been included in international **treaties** that have been agreed to by Australian governments. Any attempt to limit these would be seen as an infringement (a violation or restriction) of our democratic rights.

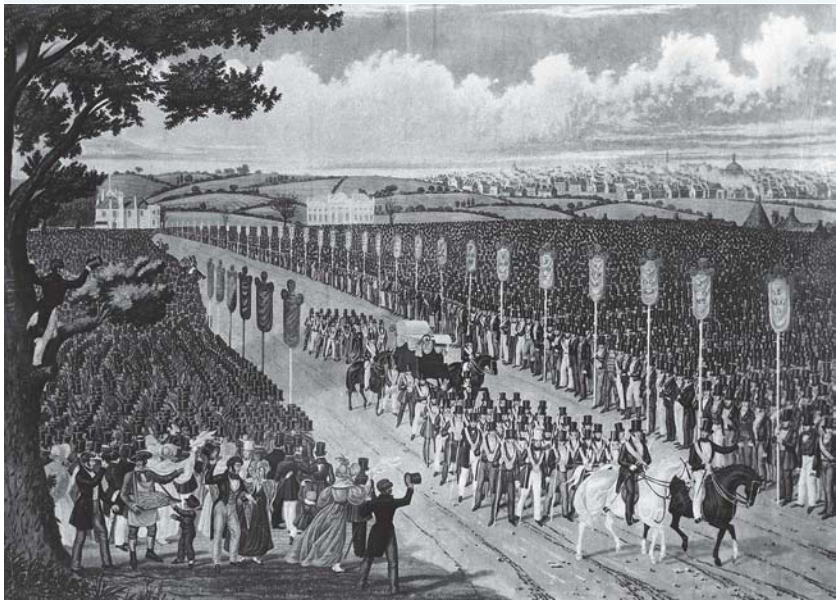
treaty a formal agreement between two or more countries

Freedom of association

It is generally accepted in Australia that we have the right to have anyone we wish as a friend. It is also accepted that we can socialise with any individual or group of people we choose. This is freedom of association at its simplest level, but our right to freedom of association goes further than this. Fundamental to freedom of association is the right to join any group, club or organisation we wish. This means that we have the right to join any political party, religious group, sporting club or **trade union**. While we take this right for granted, it has not always been protected. At different times, in different countries, it has been severely limited.

- Much of our legal and constitutional system comes from Britain. Trade unions were banned in Britain in 1799 under laws known as the Combination Acts. Although these laws were repealed in 1825, there were still strict limitations on what unions were allowed to do. In 1834, a group of six men from the village of Tolpuddle in southern England formed an association to campaign for better wages for farm workers. They were prosecuted, found guilty and sentenced to seven years' **transportation** to the colony of New South Wales. They became known as the Tolpuddle Martyrs, and were regarded by many as heroes for standing up for the right to freedom of association. Following public protests, they were released in 1836 and allowed to return to England.
- In 1951, the Menzies government in Australia tried to ban the Communist Party by holding a referendum to change the Australian Constitution. Because the Communist Party believed in the overthrow of existing society, many people viewed it as a dangerous organisation. The Communist Party had only a relatively small number of supporters and members, and most Australians were strongly opposed to communism. Nevertheless, the referendum failed and the Communist Party remained a legal organisation. It appears that most Australians were not prepared to sacrifice the right to freedom of association – not even to ban an organisation they did not support.

FIGURE 7 Between 50 000 and 60 000 people gathered outside London to protest at the transportation of the Tolpuddle Martyrs in 1834.



Freedom of association is an important part of our democracy. Having the right to elect representatives to make laws on our behalf works most fairly when we have a number of alternative candidates from which to choose. Freedom of association allows anyone to form a political party (or any other organisation) to campaign for new laws or changes to existing laws. Anyone can join such groups and, if they gain enough support, their ideas and proposals can eventually become law. Australian democracy is stronger because we have many different groups and ideas to choose from when we vote.

trade union an organisation of employees formed for mutual support, and to seek improvements in pay and working conditions for its members

transportation the process of sending convicts to a penal colony

Freedom of assembly

Related to freedom of association is freedom of assembly. This gives individuals and groups the right to assemble (or come together) for a meeting, or the right to assemble in public to protest against actions by a government or other organisation. Freedom of assembly can be limited, depending on the type of assembly and its location. In Australia, there is no specific law that protects freedom of assembly. It is included in international treaties that have been agreed to by Australian governments, and is therefore regarded as one of our natural democratic rights. State governments are usually responsible for dealing with public order, and so will make laws that deal with public protests. In this way, freedom of assembly is subject to the bounds of law.

FIGURE 8 Freedom of assembly includes the right to public protest.

While there are generally no restrictions on any group holding a meeting in a hall or similar space, assembling in a public space may limit the access of others to that space. For example, a protest march along a busy main road may cause severe traffic problems. It is for these reasons that some state governments have placed restrictions on freedom of assembly. Most people would accept that, for any assembly or protest to be legal, it should be peaceful and not threaten bystanders. In most cases, the organisers of public protests in Australia make sure their activities are well publicised in advance, so they can attract the largest number of supporters to their actions. This means that the authorities can plan to ensure minimum disruption to people going about their normal business.

Freedom of assembly, including the right to public protest, provides many groups with a means of having their views heard by the broader public. If these views then gain support among large numbers of people, they can influence a government to change laws or make new laws to deal with the issue under protest. (See subtopic 3.4 for further discussion of this issue.)

Freedom of movement

As with other rights, freedom of movement is limited by the bounds of law. We have the freedom to move freely within most public spaces in the community, but obviously we do not have the right to trespass on someone else's private property. The right to freedom of movement allows us to move freely between different towns and cities, and to move between the states of Australia without restriction – a right reinforced by the constitutional right of free trade and commerce between the states. Freedom of movement also gives us the right to leave Australia for work or a holiday, and to return at any time.

FIGURE 9 Freedom of movement includes the right of Australians to leave the country and return at any time.

Freedom of movement is sometimes restricted as a means of protecting the public. Before trial, a person accused of a crime may be prevented from leaving the state or country. After floods or bushfires, people may be lawfully prevented from entering an area declared a natural disaster area. When parents are in dispute over the custody of children during a divorce, courts may restrict the movement of those children to ensure they have regular access to both parents.

Any general attempt to restrict people's right of movement could limit their rights to participate in Australian democracy. If we wish to attend a meeting or public lecture to find out more about a political issue, we should be free to do so. Similarly, we must be able to get to a polling place to vote in an election. Freedom of movement therefore enables us to exercise our democratic rights.

FIGURE 10 Freedom of conscience gives us the right to think and believe differently from those around us.

Freedom of conscience

Freedom of conscience means that we have the right to hold opinions and to express those opinions freely. It applies to religious views, political views, scientific ideas or any other beliefs or ideas we may have. It means we can hold our own beliefs and not be forced to accept the beliefs of others.

As we know from the discussion in subtopic 3.2, freedom of religion is protected by the Australian Constitution, but the broader concept of freedom of conscience is included in international treaties agreed to by Australian governments. Freedom of conscience has not always been guaranteed, and is still not guaranteed in some countries.

- In some Muslim countries (including Saudi Arabia and Iran), anyone who converts from Islam to another religion (such as Christianity) is guilty of a crime. The person will usually be imprisoned and may be subject to the death penalty.
- In Indonesia in August 2018, a Buddhist woman complained about the volume of the Islamic call to prayer, broadcast over loudspeakers near her home. She was charged and convicted of blasphemy, with the court finding that her complaint was 'an insult to Islam' and sentencing her to 18 months in prison. This is in spite of Indonesia being a country in which six different religions, including Buddhism, are officially recognised as being equal before the law.

In Australia, expressing one's own conscientious beliefs is subject to the same bounds of law that apply to freedom of speech generally. Freedom of conscience is important in a democracy because we need to have choices when we vote. The free exchange of political ideas can help us to decide who we want to represent us in parliament and make laws on our behalf. We will usually vote for people whose beliefs and values are as close as possible to our own because they are more likely to make laws we agree with.

FIGURE 11 Galileo Galilei was imprisoned by the Catholic Church because he published scientific findings that were different from accepted beliefs.

DISCUSS

'There are a number of freedoms we associate with living in a democracy such as Australia.' What does the concept of freedom mean to you? Discuss how our freedoms are protected in Australia and if there are any limitations on these freedoms.

General capability: Ethical understanding

on Resources

Video eLessons Je suis Charlie (eles-2430)
Dangerous ideas (eles-2427)

3.3 ACTIVITY

A number of states are considering changing the laws dealing with sexting. Using internet resources, find out the following:

a. Which states have changed the law or are considering changes?
b. What changes to the law are being considered?

HASS skills: Analysing, Questioning and researching
Civics and Citizenship concept: Justice

3.3 EXERCISE

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

Learning pathways

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

Check your understanding

1. What is meant by the term 'bounds of law'?
2. Outline the purpose of laws against obscenity.
3. In what ways do laws against racial discrimination put limits on our right of free speech?
4. What are the four elements you would have to prove to be able to successfully to take legal action against someone for defamation?
5. Explain why freedom of speech is important in supporting democracy in Australia.
6. Who were the Tolpuddle Martyrs?
7. Why did the Menzies government try to ban the Communist Party in 1951?
8. List two examples of freedom of conscience.

Apply your understanding

9. What are the likely consequences of each of the following actions?
   a. A group of employees in a factory engages in name-calling and using insulting language towards a workmate, who becomes afraid to go to work as a result.
   b. A passenger on a bus begins harassing a family of African migrants, using racist language and telling them to 'go back where they came from'.
   c. A 14-year-old girl sends a topless photograph of herself to her boyfriend's phone. The boy keeps the photograph on his phone and, when they break up, he resends it to all his friends with nasty comments about the girl.
10. Why are the freedoms of association, assembly, movement and conscience important in maintaining Australia as a democratic society?
11. In October 2013, the Queensland government brought in new laws directed at members of motorcycle clubs, particularly those labelled as members of 'criminal motorcycle gangs'. The laws prohibit any gathering of those members in groups of three or more. They also ban such members from going to certain declared locations, promoting their organisation or recruiting new members.
    a. Identify two rights or freedoms that may have been breached by these laws.
    b. The Queensland government has claimed that the laws are designed to protect innocent people from violent bikie gangs. Explain whether or not you agree with this argument, and give reasons for your response.
    c. The government that brought in these laws was democratically elected by a huge majority of the voters. Do you believe this gives the government the right to make any laws it wishes, or should there be some limits on the power of governments to restrict basic rights and freedoms? Give reasons for your answer.
12. Outline one way in which freedom of assembly might be restricted by the bounds of law.
13. Describe two circumstances when it might be reasonable to restrict a person's freedom of movement.

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

3.4 Dissent in a democracy and taking direct action

LEARNING INTENTION

By the end of this subtopic, you will be able to identify how citizens can take direct action to influence government actions, and evaluate the effectiveness of demonstrations and defiance of the law.

3.4.1 The right to disagree

Not everyone will agree with actions taken by our governments. In a democracy – where we all have freedom of conscience, freedom of speech, freedom of association and freedom of assembly – we have the right to express that disagreement. When a person (or group of people) expresses that disagreement publicly, it is known as dissent. In a democratic country like Australia, the right to dissent is one of our basic rights.

3.4.2 Expressing dissent

Expressing dissent is one of the ways in which we can participate in a democratic society. While we are required to obey the law, we are not required to blindly follow whatever a government tells us. Every individual is free to undertake a range of activities in an attempt to have a particular law changed – for example, to organise and participate in a demonstration or public rally, or to sign a **petition** supporting a change in the law. (Details of such activities are discussed in section 3.4.4 .) Participation in a rally or protest march allows many people who disagree with particular government policies to express their point of view. Such protests are also aimed at changing those policies and convincing other undecided citizens to support their cause.

3.4.3 CASE STUDY: Protests against offshore detention

On 27 October 2018, demonstrators in Sydney and Melbourne rallied to protest against the federal government policy of keeping asylum seekers on Manus Island and Nauru. Since 2013, asylum seekers who attempt to come to Australia by boat have been placed in detention on these two islands. The aim of the policy has been to discourage people from risking their lives by paying people-smugglers to transport them to Australia in unsafe boats. Prior to 2013, a number of asylum seekers had died at sea when boats they were travelling in sank.

petition a formal request for change signed by many people

FIGURE 1 Sydney protesters rally to support refugees being detained by the Australian government.

Those attending the demonstrations believed that it was cruel to keep the asylum seekers in detention for such a long time. They pointed to the deteriorating mental health of some of the refugees who had been detained for over five years. Demonstrators in Melbourne heard a phone call from one of the refugees on Manus Island who described his situation as one of suffering and hopelessness. The rally in Sydney was also addressed by singer Jimmy Barnes, who described the government policy of offshore detention as 'criminal' and 'disgusting'.

3.4.4 Taking direct action

Most of the time, people are prepared to participate in Australia's democracy by exercising their right to vote at state, federal and local government elections. Circumstances arise at other times when many feel that an issue requires immediate action, or they believe that the government is making the wrong decisions. In these circumstances, people will often take direct action to influence government actions. Direct action usually consists of some form of public demonstration, and can sometimes involve citizens deliberately breaking the law to bring their views to public attention.

Demonstrations

A demonstration is a public protest in which people take to the streets to protest against the actions of the government, or to raise awareness of an issue of concern. The success of a demonstration depends on how many people participate. It also depends on how well they can capture public support. Most demonstrations involve marching through the city streets or protesting outside a significant public location.

FIGURE 2 People protesting along the streets of Perth asking for climate change action. A demonstration is a way different groups can make their views known to government and the general public.

Over the years, many causes have resulted in different types of demonstration. Not all involved street marches.

- In the late 1960s, demonstrations against Australia's involvement in the Vietnam War were relatively small, often with only a few hundred protesters. They were largely dismissed by the government as the views of a small minority. As more people became aware of the issues, the size of the demonstrations grew, culminating in protest marches in all major cities and towns across Australia in May 1970. More than 200 000 demonstrators marched in Melbourne (this was the largest event), Sydney, Brisbane, Adelaide, Perth, Hobart and many rural towns across Australia. Within 18 months, Australian troops had been withdrawn from Vietnam. Go to the **Melbourne moratorium march** weblink in the Resources tab for more information on the protests against the Vietnam War.

FIGURE 3 In May 1970, marchers outside the Melbourne Town Hall protested against Australia's involvement in the Vietnam War.

FIGURE 4 Vietnam War Moratorium march in Fremantle, 21 May 1970.

- On 23 October 2018, more than 150 000 unionists and their supporters rallied in Melbourne in support of the ACTU 'Change the Rules' campaign. The campaign is aimed at improving pay and conditions for workers, specifically:
  - a fair minimum wage
  - the protection of penalty rates
  - pay rises that reflect the cost of living
  - equal pay for equal work
  - better job security.

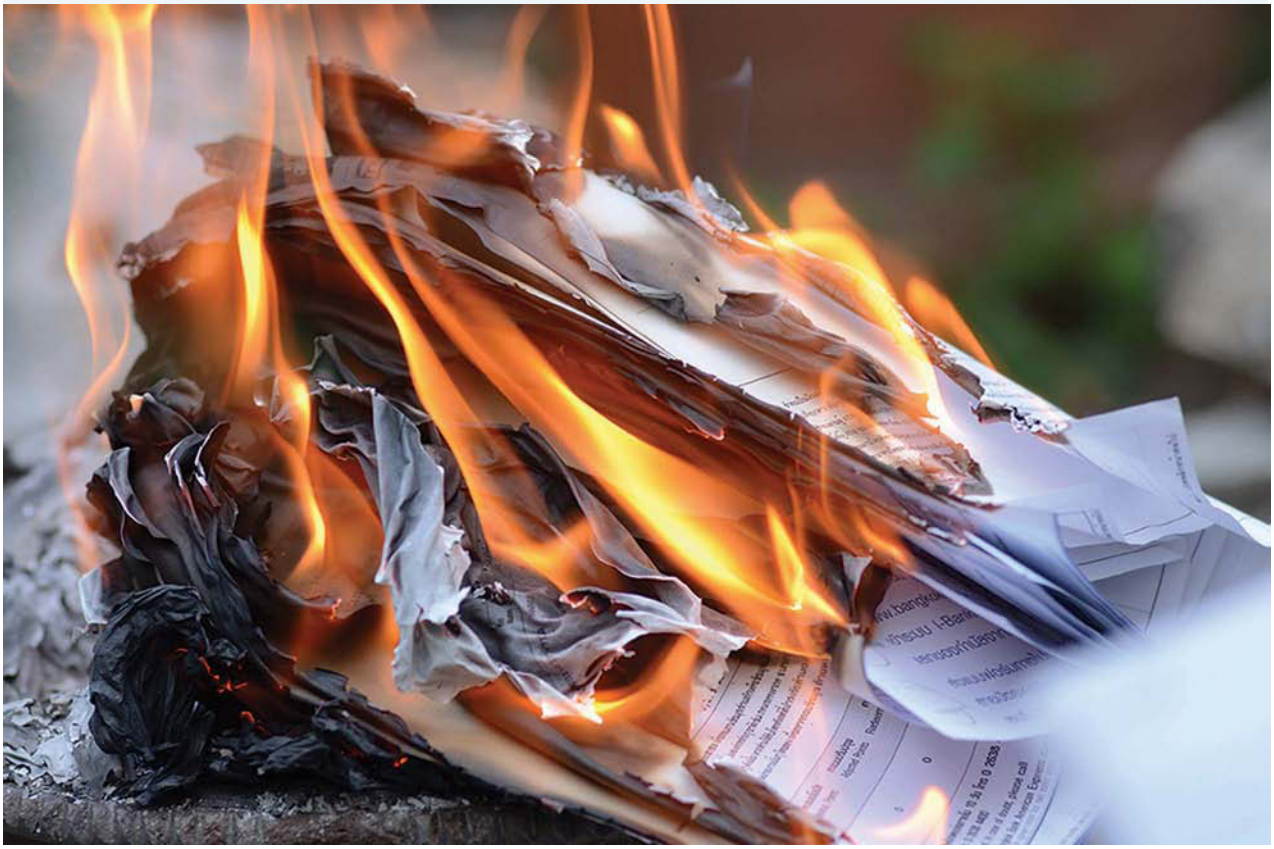
  Several streets in the centre of the city were closed to traffic, and trams were diverted from Swanston Street as protesters marched from the Trades Hall in Lygon Street, Carlton to Flinders Street Station. The ACTU vowed to continue to organise rallies and to make workers' pay and conditions an issue in the 2019 federal election.

FIGURE 5 Unionists and supporters rallying to demand a change in the rules for determining wages and conditions for workers in Perth.

Defiance of the law

Another very public way of campaigning on an issue is to deliberately break the law. This is sometimes done when a group of people believe that a particular law is bad or unfair. They argue that if enough people deliberately break the law, it will convince the government to change or **repeal** that law. On other occasions, protesters deliberately break the law because they realise that their arrest and trial will help publicise an issue.

FIGURE 6 Many of those conscripted to fight in the Vietnam War burned their conscription documents and refused to report to the army.



- In the late 1960s, one of the main grievances arising from Australia's participation in the Vietnam War was the use of **conscription** to increase the number of soldiers that could be sent to fight in that war. Many of those conscripted chose to defy the law by burning their conscription documents and refusing to join the army. The court cases and imprisonment of many of these young men helped to turn public opinion against the war.
- In 1982, as protests grew against the proposed Franklin Dam on the Franklin River in Tasmania, the Tasmanian government passed laws making much of the area around the construction site private property. It also began to prosecute anyone caught trespassing there. Protesters attempted to set up a blockade to prevent earth-moving equipment from being used on the dam site. More than 1400 people were arrested for trespassing, with more than 500 imprisoned. In 1983, the newly elected federal government passed laws prohibiting the construction of the dam. Go to the **Franklin River blockade** weblinks in the Resources tab to find out more information on this issue.

repeal to remove a law so that it no longer applies

conscription a process by which people are required to join the armed forces, even if they do not wish to do so

FIGURE 7 Protesters set up a blockade in 1982 to prevent earth-moving equipment being brought onto the Franklin River dam site in Tasmania.

3.4.5 The effectiveness of direct action

Demonstrations can be effective if they attract media attention. This highlights the issue and can influence members of parliament, particularly if the cause gains public support. When thousands of people rallied at Cottesloe Beach in Perth in 2014, many different conservationists and community members joined to protest against Western Australia's catch-and-kill shark policy. However, if demonstrations become violent they may be less effective because they are less likely to win community support. In 2017 protests against the government's decision to complete stage 8 of the Roe Highway in Perth became violent and unlawful. Protesters locked onto trees and machinery in an attempt to stop the decision to clear land, much of which was Beeliar Wetlands. The WA government of Colin Barnett subsequently lost the election eight weeks later.

FIGURE 8 6000 people protested against shark culling in Western Australia in February 2014.

Disobeying the law can be effective if it raises media awareness of the issue. It can be particularly useful if it can show that the law is out of date or unfair, and needs to be changed. Breaking the law to highlight a cause, however, can lead to prosecution and may result only in turning public opinion against that cause.

on Resources

Weblinks Melbourne moratorium march
Franklin River blockade 1
Franklin River blockade 2

3.4 ACTIVITIES

1. Using internet resources, identify who has been involved in expressing dissent towards the following government actions and the methods they have used to present their views.
   a. The development of the Adani mine in Queensland
   b. The detention of asylum seekers on Nauru and Manus Island
   c. Laws preventing same-sex marriage

   Civics and Citizenship concept: Justice
2. Why were so many people in Australia opposed to this country's involvement in the Vietnam War in the 1960s and early 1970s? Use internet resources to research the main reasons for this opposition.

   HASS skills: Questioning and researching

3.4 EXERCISE

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

Learning pathways

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

Check your understanding

1. Why is it reasonable for groups and individuals to express dissent towards government policies and actions?
2. Give two examples of limits or bounds of law, and explain how they could reasonably be placed on dissent in Australian society.
3. What do we mean by 'direct action' as a form of political activity?
4. Why did some young men opposed to conscription during the Vietnam War break the law? How did they do this?
5. How did the Franklin River protesters defy the law during that campaign?

Apply your understanding

6. Is dissent directed towards government policies or actions a positive or negative influence on Australian democracy? Give reasons for your answer.
7. In both the anti-conscription campaign during the Vietnam War and the Franklin blockade, people broke the law to achieve their aims. Their campaigns were ultimately successful. Is it appropriate for people to break the law to achieve the changes they want? Give reasons for your answer.
8. Can you think of occasions when it would definitely not be appropriate to break the law?
9. School students in many parts of the world have taken time off school to protest against government inaction on climate change. Should such action take place in school hours or at weekends or after school? Justify your answer.
10. The WA Liberal government of Colin Barnett lost the 2017 state election amid protests against the construction of stage 8 of Roe Highway. As the government was replaced through a democratic election, were violent protests justified? Explain your answer.

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

3.5 Taking part in the democratic process

LEARNING INTENTION

By the end of this subtopic, you will be able to identify and explain the different ways citizens can participate in the democratic process.

3.5.1 How to have your say

What makes Australia a democracy? Most people would probably say that the right to vote for our government is the answer to that question. While voting in elections is important, it is certainly not the only way of participating in the democratic process. There are many other ways in which we can have our voices heard and influence the future of our country.

One of our key rights as Australian citizens is the right to actively take part in democratic processes. We can do this in a number of ways. First, there is our right to vote – a right that can be exercised by all Australian citizens over the age of 18. Then there is our right to freedom of speech, which allows us to express our opinions through a variety of methods. We can write letters to the newspapers, we can phone in to talkback radio, and we can publicise our views on social media using Facebook or Twitter, or even create our own website or blog. In addition, there are opinion polling companies that conduct surveys of ordinary people on all sorts of issues. They then publish the results of these surveys.

3.5.2 The electoral system

Our system of government is a democracy. This means it is based on the idea that we elect representatives to make laws for us. Because we vote for them, these representatives are expected to make laws that we agree with. If they do not do that, then we can vote for different representatives at the next election. Those with the right to vote have the opportunity to elect representatives to:

- the Commonwealth Parliament in Canberra
- the state or territory parliament sitting in each capital city
- local councils in the city, town or shire in which the electors live.

FIGURE 1 Many young people have not registered to vote, so they are allowing others to make decisions for them.

Voting is compulsory in Australia, and all Australian citizens aged 18 years or over are legally required to enrol to vote. You can enrol any time after your sixteenth birthday, either online or by filling in a paper form. Go to the **Voting enrolment form** weblink in the Resources tab to view the paperwork you need to complete to register to vote.

Electing a Commonwealth Parliament

The Australian parliament is bicameral, which means it consists of two 'houses' – the House of Representatives (the lower house) and the Senate (the upper house). Elections for both houses are usually held at the same time, but members of the two houses are elected in a different way:

- The House of Representatives has 151 members, each elected for three years. Each member represents an **electorate** or 'seat' that covers a particular geographic area. All electorates have roughly the same number of electors,

electorate an area of Australia that elects one member to parliament

about 90 000 each. States with larger populations, such as New South Wales and Victoria, elect the largest number of members. States with smaller populations, such as Tasmania and South Australia, elect much smaller numbers.

- The Senate has 76 members. Each of the six states elects twelve senators regardless of size or population, and the Northern Territory and Australian Capital Territory each elect two senators. In contrast, the members of the lower house are elected on the basis of population. Because there are so many representatives from New South Wales and Victoria, they could out-vote all the other members combined. The Senate was created with equal numbers from each state to act as a safeguard against this happening in the upper house.

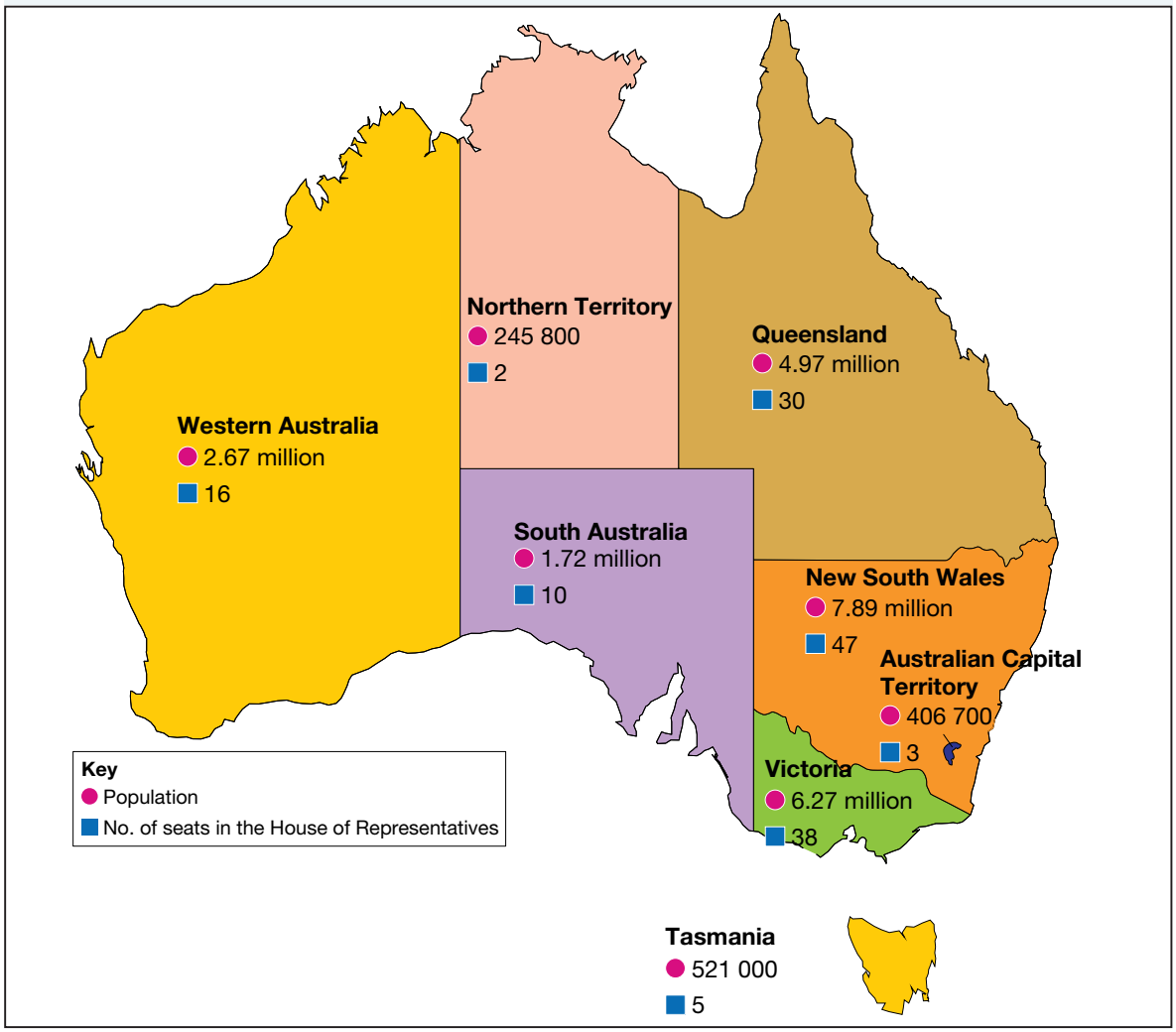
Electing a state or territory parliament

Five of the six states also have bicameral parliaments, while Queensland, the Northern Territory and the Australian Capital Territory parliaments each have only one house. Each parliament has its own electoral system, but the basic principle remains similar to that of the Commonwealth Parliament: representatives are elected to reflect the wishes of the voters. If the voters do not believe that their representatives are doing a good job, they can vote them out at the next election.

Because Australia has a democratic form of government, the most basic way in which we participate is by exercising our right to vote. Recent figures have suggested that as many as 25 per cent of young people aged 18 to 24 have not enrolled to vote. This means they are missing out on an opportunity to participate and are allowing other people to make decisions for them.

int-7877

FIGURE 2 Population and the House of Representatives



3.5.3 Social media

In today's world, it seems that millions of people are almost constantly connected. Your ability to access websites, emails and social media from almost anywhere through your smartphone means that you can express an opinion on any issue, to almost anyone, anytime, anywhere. In the same way, you can access the opinions of others or seek information almost continuously if you wish. Social media has allowed individuals and groups to participate in the democratic processes in a variety of ways. Here are some examples:

- The activist group GetUp! has conducted online campaigns on political issues including the indefinite detention of refugees on Nauru and Manus Island, climate change, and the Adani coal mine in Queensland. GetUp! uses its website as a means by which its members and followers can express their opinions and call for changes in the law.
- The online organisation Change.org allows people to create petitions and get others to sign them on its website.
- On 30 November 2018, more than 15 000 school students went on strike from school in cities and towns all over Australia. They were protesting against what they saw as insufficient government action to address the issue of climate change. The impetus for the action came originally from a 15-year-old student in Sweden who protested outside her country's parliament building on the same issue. News of her action spread through social media, and was picked up by two students from Castlemaine in Victoria. These two students travelled to Bendigo in V ictoria, to protest outside the office of a federal member of parliament. News of these protests soon spread, and a group called 'School Strike 4 Climate Australia' was set up to plan a nationwide student strike. Students made use of a website (www.schoolstrike4climate.com), Facebook, Twitter and Instagram to publicise the strike. A second, larger strike took place on 15 March 2019, to continue to pressure politicians into taking stronger action on climate change.
- Almost every member of parliament in Australia today has a Twitter account. Every Prime Minister since Kevin Rudd in 2007 has had a Twitter account, and they have all made extensive use of it to promote their political messages on a daily basis.

FIGURE 3 In March 2019, thousands of school children from all over Australia went on strike from school to demand more action on climate change.

Members of parliament, supporters of particular political parties, opponents of the same political parties, as well as people campaigning for new laws can all use social media to get their message across. While the use of social media can be positive in the spread of news and information, recent events have suggested that the effects are not all positive. In the American presidential and congressional elections in 2016, there is evidence to suggest that social media, such as Facebook, was used to spread false information, deliberately aimed at influencing the way people voted. Without thorough fact-checking by the administrators of social media platforms, there is always a risk that this could happen in other countries and future elections. Such activity would seriously undermine democracy and democratic institutions.

FIGURE 4 Everyone can use social media to get his or her message across.

3.5.4 Opinion polls

Opinion polls are surveys of people from all over Australia and all walks of life. They are conducted by a number of different polling companies. Most of these companies conduct their surveys by phoning people and asking them a series of questions. While conducting their surveys, the polling companies often also ask the people being surveyed their age and level of income in order to make sure the survey includes a broad range of people.

FIGURE 5 Opinion polling companies conduct surveys by phoning large numbers of people.

Polling companies conduct many different surveys in their attempts to measure people's opinions. They can be hired by businesses to survey what potential customers think about new products. They can also conduct surveys to find out whether a particular advertising campaign has been effective by asking people about their awareness of certain advertisements shown on television.

A small but important part of their business is to conduct surveys on people's attitudes to government policies and actions. To achieve this, they will survey people to find out whether they support or oppose a proposed law or other government action. When an election is close, they will also conduct surveys to find out who people intend voting for. Such opinion polls play an important role in our democratic processes.

The major polling companies often have an arrangement with the daily newspapers in Australia's capital cities to provide information about the popularity of political parties and their leaders. Polling company Ipsos has such an arrangement with the *Age* in Melbourne and the *Sydney Morning Herald*. These newspapers publish poll results conducted by Ipsos. Melbourne's *Herald Sun*, Sydney's *Daily Telegraph*, Brisbane's *Courier-Mail*, Adelaide's *Advertiser* and Hobart's *Mercury* all publish political polling carried out by Galaxy Research. The slightly different method used by each company means they sometimes get different results, but they can still be a valuable way for people to participate in the democratic process.

Effectiveness of opinion polls

Opinion poll results can tell members of parliament whether or not the decisions they have made, and the laws they have introduced, are acceptable to voters. Polling companies regularly survey people to find out who they

would vote for if an election were to be held immediately. In the months leading up to an election, they carry out surveys every week. These will often tell both the politicians and the public whether the government is likely to be re-elected or whether a change of government is likely. They are also a good way of finding out what the average citizen would like a government to do in the future.

FIGURE 6 Daily newspapers regularly publish the results of opinion polls.

Opinion polls on people's voting intentions are sometimes believed to influence the way people vote. One influence is called the' bandwagon effect'. It suggests that if undecided voters see an opinion poll showing that a particular person or party is more popular, they will jump on the 'bandwagon' and decide to vote for that person or party. Another influence is called the 'underdog effect'. This suggests that if some people see a poll showing that a particular person or party is likely to lose an election, they will feel sorry for this 'underdog' and will therefore vote for that person or party.

on Resources

Weblinks Voting enrolment form
GetUp!
Change.org

3.5 ACTIVITIES

1. Use the **GetUp!** weblink in the Resources tab to answer these questions.
   a. Describe one issue the organisation has been campaigning on recently.
   b. Identify an issue that the organisation claims to have campaigned successfully on in the past.

   HASS skills: Questioning and researching
2. Use internet resources to find a newspaper report of an opinion poll.
   a. Which newspaper published the report?
   b. Which polling company conducted the poll?
   c. When was the poll conducted, and how many people were surveyed?
   d. What were the results of the poll?

   HASS skills: Questioning and researching

3.5 EXERCISE

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

Learning pathways

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

Check your understanding

1. What is an electorate?
2. What is the estimated percentage of people aged between 18 and 24 who have not registered to vote?

3. How do opinion polling companies carry out surveys of people's opinions?
4. Why do polling companies ask about age and level of income?
5. Why do the major newspapers have close relationships with particular polling companies?

Apply your understanding

6. What particular right do Australians have that makes this country a democracy?
7. Why is the Senate elected in a different way from the House of Representatives?
8. Explain one way in which social media has been used to influence political debate in Australia.
9. Do you think the bandwagon or underdog effect is likely to be more powerful? Give reasons for your answer. Compare your answers with others in your class.
10. At election time political parties engage in extensive marketing and advertising campaigns, often using the same methods used to advertise products to consumers. Identify and explain two possible risks in this approach that may undermine the main principles of democracy.

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

3.6 The role of members of parliament

Aboriginal and Torres Strait Islander readers are advised that this topic may contain photos of or references to people who have died.

LEARNING INTENTION

By the end of this subtopic, you will be able to explain the role of a member of parliament (MP) and discuss how MPs can assist their local community and provide a direct link to the government.

3.6.1 Members of parliament in the local community

Members of parliament sit in the parliamentary chamber, debating legislation and voting to pass or reject it. However, this is only a small part of their work. As representatives of a particular electorate, they have an important role in the local community that is represented by that electorate. In this community role, they can often be approached by ordinary citizens requesting them to take some action and work to make improvements in that community.

Federal parliament sits for only about 18 to 20 weeks per year, so many members of parliament can often spend as much as 30 weeks of each year in their local electorates. It is during this time that a member will be engaged in a variety of electorate activities.

FIGURE 1 Members of parliament often perform official opening ceremonies in their electorates.

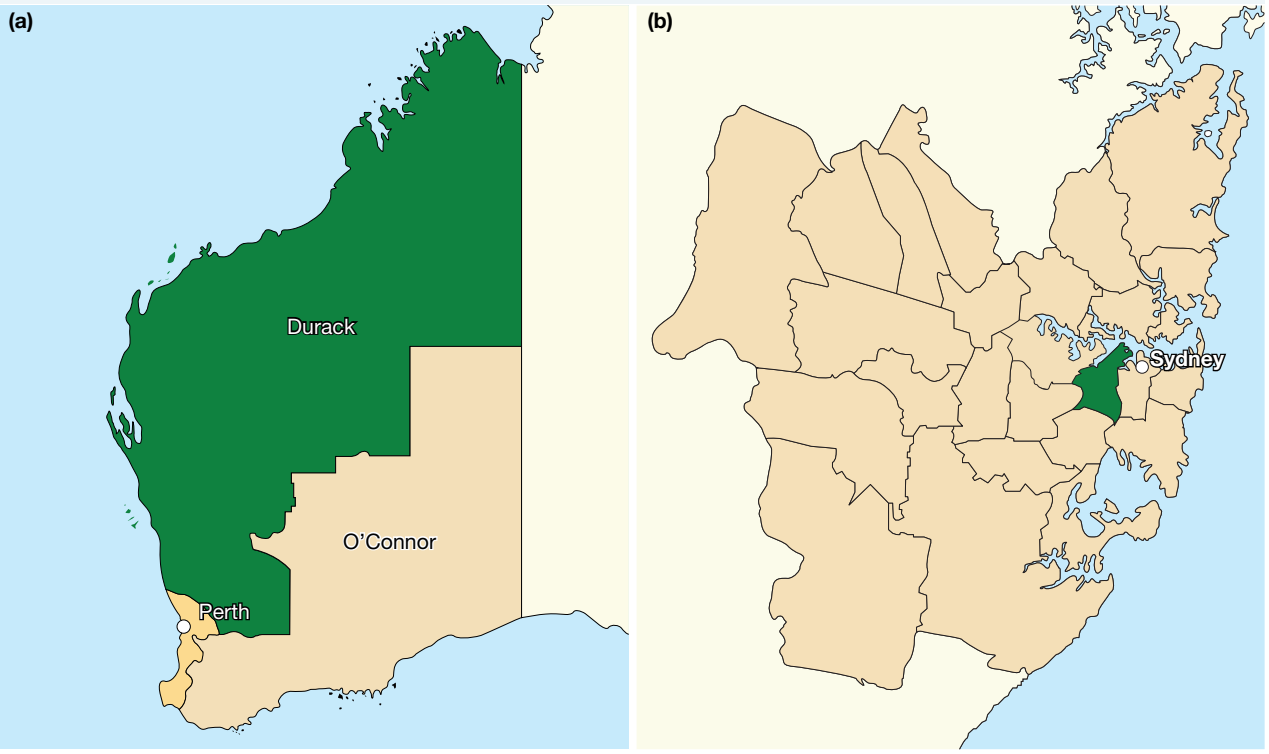
Helping the community

Because each electorate has a similar number of voters, the electorates can vary in geographical size depending on how densely populated they are. This means that an inner-city electorate will be smaller in area than a rural electorate because the population in the country is more thinly spread. For example, the smallest Australian electorate in terms of geographical size is Grayndler, which is in the south-eastern suburbs of Sydney. It has a total area of 32 square kilometres. The largest in area is Durack, which takes up most of country Western Australia. It covers more than 1.6 million square kilometres. This is approximately 60 per cent of the total area of Western Australia, equivalent to more than 20 per cent of the total landmass of Australia. Its voters are spread out on cattle stations, mining towns and remote Aboriginal communities. As you can imagine, it is much harder for the member for Durack to maintain contact with the voters than it is for the member for Grayndler. Nevertheless, both members will attempt to perform similar duties in relation to their respective communities.

Every member of parliament maintains an office in his or her electorate. Members representing very large electorates such as Durack will probably have electorate offices in more than one town. Those in large electorates also spend a great deal of time travelling around the electorate. Members are regularly called on to visit schools, sporting clubs and various other community groups. They often have the task of making presentations to individuals and groups, and performing opening ceremonies for new community facilities.

Members also take up issues on behalf of their electorates as a whole. An example would be a local project, such as the construction of a major road or the provision of some other community facility. The local member will often take up the case with the relevant government minister. Local members also campaign to improve community facilities within their electorates, such as hospitals, community health centres, aged care services and childcare service . They also often provide support to local sporting clubs and other community recreational organisations. Most voters would wish to see their local member active supporting their community.

FIGURE 2 The divisions of (a) Durack in Western Australia and (b) Grayndler in New South Wales



Ultimately, it is the voters in each electorate who judge the performance of their local members of parliament at every election. Members need to maintain strong links with their local communities and to publicly support the interests of their electorates if they want to be re-elected.

Helping individual voters

When they are in their electorates, members of parliament spend much of their time helping individual voters. They have a small staff in their electorate offices to help them do this. Voters may have problems dealing with Centrelink or some other government department. Or they may be seeking assistance with immigration or taxation issues, or dealing with problems concerning health or education matters.

The member can intervene personally in the issue and may write to the relevant minister or telephone a contact within

FIGURE 3 A member of parliament can often help individual voters.

the government department concerned. Members of parliament are influential people and usually have lots of contacts, including those in community groups as well as in government departments. If a member personally intervenes on behalf of someone in his or her electorate, this will usually get high priority attention from the government department.

Providing a direct link to parliament

Voters can sometimes raise issues that have significance beyond the electorate. When several members are approached on a similar issue, this may become a matter for the government to investigate further. In many country areas, farmers have expressed concern about the possible impact of coal seam gas mining on their farms. They are concerned that the extraction of coal seam gas may pollute water supplies and have other serious effects on agricultural land. As a result of citizens raising this issue with their local members, inquiries have been initiated by the Commonwealth Parliament as well as state parliaments in New South Wales, Victoria and Queensland. Some state parliaments have introduced or updated laws to regulate the coal seam gas industry, including Western Australia.

Members of parliament often make themselves available to meet people from their electorate who are visiting Parliament House in Canberra. This often happens when groups of people contact the member's office before travelling to Canberra. Members also regularly meet school groups from their electorates and will take the time to show them around the parliament. There is an education centre in Parliament House where visiting school groups can meet their federal members and learn all about the operation of parliament.

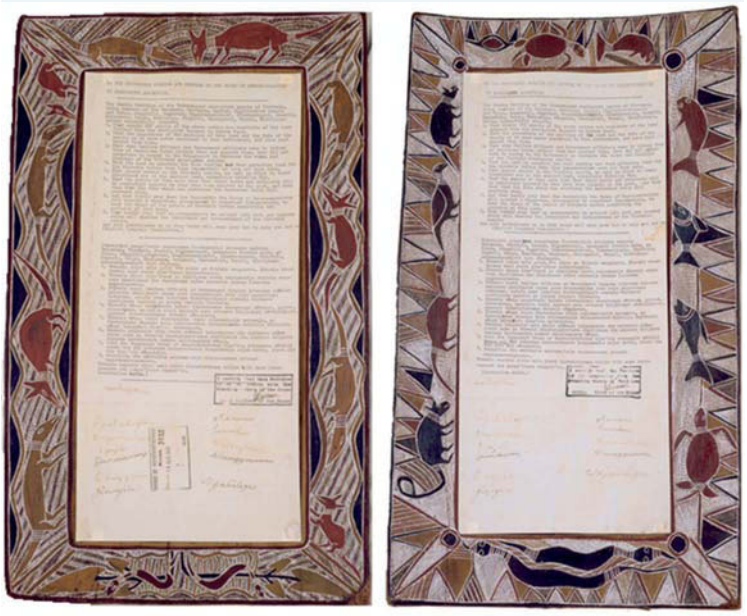
Helping with petitions to the House of Representatives

An important way in which voters can bring an issue to the attention of the parliament is to organise a petition. Members of parliament can provide advice on the preparation of petitions to be presented to the House of Representatives. Members will also make sure the petition goes through the formal processes that are necessary for the petition to be dealt with. The House of Representatives has a Petitions Committee to deal with all petitions to be presented to the lower house. The local member will ensure that the petition is passed on to the Petitions Committee.

How effective are petitions?

Parliament receives hundreds of petitions each year and not all will result in action from the government. Petitions alone are usually not enough to force a government to take action, but they can be successful in drawing parliament's attention to an issue. Petitions can gain support because they are a peaceful means of effecting change. Any citizen can organise a petition, but petitions that gain more signatures are more likely to bring about change. Two of the most famous petitions presented to parliament were prepared in 1963 by the Yolngu people of Yirrkala, in the Northern Territory, raising issues relating to their dispossession from their traditional lands. These petitions were made on pieces of bark, with traditional designs painted around the outside and typed petitions glued in the centre. These are now on display at Parliament House in Canberra (see **FIGURE 4**).

FIGURE 4 The famous Yirrkala petitions were presented on bark, with traditional paintings around the outside.



on Resources

Weblinks Petitions
Change.org

3.6 ACTIVITIES

1. Use the **Change.org** weblink in the Resources tab to identify a petition on the website that you believe is worth supporting. Prepare a one-minute speech to convince the rest of your class to support that petition.
Civics and Citizenship concept: Participation
2. Use internet sources to learn the name of the member for Durack, how many electorate offices that member has and where those offices are located. **HASS skills: Questioning and researching**
3. Who is your local member of federal parliament? Where is his or her office located?
Civics and Citizenship concept: Democracy
4. Who is your local member of state parliament? Where is his or her office located?
Civics and Citizenship concept: Democracy

3.6 EXERCISE

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

Learning pathways

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

Check your understanding

1. Roughly how many weeks per year are members of parliament likely to spend in their electorates?
2. What is the smallest federal electorate in Australia in terms of area?
3. Describe three ways in which members of parliament can assist people in their local community.
4. What is a petition?
5. Why do electorates vary so much in geographical size?

Apply your understanding

6. How are petitions dealt with once they reach parliament?
7. Suggest some ways that a local member of parliament might be able to help you and your family.
8. Imagine you wanted to present a petition to parliament. Identify and explain three things that you might need to do if you wanted to increase the chances of that petition being successful.
9. Members of the Commonwealth Parliament are paid more than $200 000 per year. Some people argue that, because they spend less than half the year in Canberra, and only four days a week in Parliament when they are there, they are overpaid. Is this a fair assessment of a member's work? Give two reasons for your opinion.
10. Technological developments mean that the opinions of ordinary people can be expressed through online methods such as social media. Does this make the parliamentary system of one member representing everyone in an electorate obsolete in today's world? Could it be replaced with a system where everyone can go online to vote in favour or against proposed legislation? Identify two possible strengths and two possible weaknesses of such a system, when compared to our present system.

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

3.7 Lobby and pressure groups

LEARNING INTENTION

By the end of this subtopic, you will understand what is meant by the term 'lobby' in a political context, and explain what a pressure group is and how they influence government.

3.7.1 What do lobby and pressure groups do?

While individuals and community groups may approach their local member of parliament to promote a particular issue, there are organisations set up to carry out this activity in a more professional manner. Known as lobby groups and pressure groups, they operate with the aim of influencing the decisions that governments make.

3.7.2 Lobby groups

Lobbying is a process of approaching members of parliament to argue a case for change in the law. Many organisations seek meetings with their local member or the relevant government minister to put forward a case for change. In recent years, lobbying has become a professional activity. Businesses have been set up to carry out lobbying on behalf of various clients, who pay the lobbying business a fee.

The Commonwealth Government has established a special **code of conduct** for lobbyists, as well as a register of lobbying businesses and their clients. Approximately 250 lobbying businesses are registered, employing more than 550 lobbyists. Over 1800 organisations are registered as clients of these lobbyists, including businesses such as the major banks, and major manufacturing and mining companies; sporting bodies such as the Australian Football League and National Rugby League; educational organisations such as universities; and community organisations as diverse as the Salvation Army and the Wilderness Society. All are prepared to pay a fee to have a lobbyist present their views to members of parliament.

FIGURE 1 The big four Australian banks are all clients of lobbying businesses.

Employing the services of an expert to lobby for your cause can be effective because many lobbyists are former members of parliament or former government officials. These people know the workings of government and have personal contact with many serving members of parliament. The downside of using an organisation to lobby for your cause is that you must pay a fee for this service.

lobbying approaching members of parliament to argue a case for change in the law

code of conduct a set of standards of behaviour that all participants are expected to follow

3.7.3 Pressure groups

A pressure group is any group that attempts to influence public opinion on particular issues. Like lobby groups, pressure groups try to convince governments to make or change laws to help achieve their aims. Examples of pressure groups include environmental groups, as well as groups formed to campaign for improvements in particular community facilities. Organisations representing the interests of employers and employees also operate as pressure groups.

int-5662

FIGURE 2 Protecting Australia's natural environment

Ningaloo Reef, Western Australia

In 2011, Ningaloo Reef in Western Australia was added to the World Heritage list.

Ningaloo Reef was saved from a marina development plan, which would have brought pollution, erosion and destruction to this pristine area.

Great Barrier Reef, Queensland

At the G20 summit in Brisbane in 2014, Barak Obama called for Australians to protect this World Heritage listed site, which is under threat.

There are government proposals to dump dredge spoils into the Great Barrier Reef marine park, leading to further erosion of the fragile reef, which has already lost 50 per cent of its coral cover over the last several decades. The World Heritage Committee is considering whether to put the reef's heritage listing on the 'in danger' list.

Franklin River, Tasmania

Environmentalists successfully campaigned to save this beautiful river from being destroyed. In late 1982, protests were growing against the construction of a dam in southwest Tasmania that would have flooded the Franklin River. At that time, a federal by-election was held for the federal electorate of Flinders in Victoria. Voters were encouraged to write the words 'No dams' on their ballot papers, and around 42 per cent of voters did so.

This action taken by voters is credited with encouraging both major parties to promise to intervene in the Franklin Dam issue during the federal election that was held in March 1983.

Environmental groups

Organisations campaigning to protect the natural environment have been active in Australia since the 1960s. Generally, they aim to prevent the actions of business or government from damaging areas of environmental importance. Organisations such as the Australian Conservation Foundation (ACF) and the Wilderness Society engage in fundraising to help pay for these campaigns. The ACF began by campaigning for the protection of the Great Barrier Reef in the 1960s, and has run many other successful campaigns since then. The Wilderness Society came to national attention in 1982, when it led the campaign to save the Franklin River in southwest Tasmania from being flooded by a new dam. Since then it has campaigned to protect native forests in Tasmania and Victoria, and areas of natural beauty as widespread as the Ningaloo Reef in Western Australia and the Arkaroola Wilderness Sanctuary in South Australia.

Employee and employer groups

Traditionally, employee groups such as trade unions have been set up to protect the interests of workers in a particular industry or workplace. Examples include organisations such as the Australian Workers' Union; the Shop, Distributive and Allied Employees' Association; and the Australian Services Union. Unions often conduct campaigns on issues that affect their members.

In the same way, employers in many industries have set up organisations to help them when they are negotiating wage and conditions agreements with their employees. Examples include Master Builders Australia and the Australian Retailers Association.

FIGURE 3 Unions often conduct campaigns on issues that affect their members.

Both employer organisations and unions have also set up national organisations to protect their larger interests and to campaign on broad issues. The Australian Council of Trade Unions (ACTU) operates as a pressure group, campaigning on issues that affect all employees. The Australian Chamber of Commerce and Industry (ACCI) performs a similar function for employers.

An example of the way in which these organisations operate can be seen in the issue of penalty rates. Penalty rates are higher wages paid to employees who work on weekends or public holidays, or at other times outside traditional weekday hours. They were originally established to compensate employees for having to work at these more difficult times. Many people argue that, since so many businesses now operate seven days a week, having special rates of pay for weekends is out of date.

FIGURE 4 Unions and employer organisations represent the interests of their members.

FIGURE 5 National union and employer bodies operate as pressure groups to further the interests of their members.

In early 2014, the federal government set up an inquiry to examine the operation of the laws that govern wages and working conditions. One of the areas to be looked at was the issue of penalty rates. The ACCI argued that penalty rates should be abolished because they impose an unfair cost on employers in restaurants, cafés and shops that operate seven days a week. The ACTU argued that penalty rates should be retained because they compensate people for having to work on weekends when they could be spending time with their families.

In campaigns like this, both sides try to influence the government in relation to any possible changes to the law. They also run advertising and publicity campaigns to try and influence the general public, knowing that governments will take notice of what the voters want. If opinion polls show that most voters believe that penalty rates are a good thing, the government would be reluctant to remove them. If opinion polls show that the majority of voters are opposed to penalty rates, the government would be more likely to change the law to abolish penalty rates. Pressure groups like the ACTU and the ACCI can have a strong influence on the final result.

FIGURE 6 Workers in the hospitality industry are often paid penalty rates for working on weekends.

In 2017, the Fair Work Commission, Australia's national workplace relations tribunal, reduced penalty rates on public holidays and Sundays in the retail, fast food, hospitality and pharmacy industries. The ACCI said that the decision delivered important reductions in excessive penalty rates. It claimed that this would help retail and hospitality businesses create more jobs and offer more hours, particularly for young people. By contrast, the ACTU said that the decision to cut Sunday and public holiday pay would give almost one million Australian workers a huge pay cut.

DISCUSS

'Lobby groups should not be able to charge fees to present the views of others to members of parliament.' What would be the different perspectives that the following groups of people would have on this issue? Discuss how their values and beliefs might be different or similiar.

- A member of an environmental group campaigning to protect the Great Barrier Reef
- A member of an employer group campaigning to reduce penalty rates
- An undecided voter

General capability: Critical and creative thinking

on Resources

Interactivity The road (int-5432)

Weblinks Environment organisation 1
Environment organisation 2
Commerce
Trade unions

3.7 ACTIVITIES

1. Use either of the **Environment organisation** weblinks in the Resources tab to choose an environmental organisation and identify two campaigns that your chosen organisation is focusing on. **HASS skills: Questioning and researching**
2. Use internet resources to investigate the activities of Greenpeace and the Sea Shepherd organisation. What are these groups trying to achieve? What activities do they undertake to achieve these aims?

HASS skills: Questioning and researching

3.7 EXERCISE

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

Learning pathways

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

Check your understanding

1. What is a lobby group?
2. List two different organisations that use lobby groups to present their views to members of parliament.
3. What is a pressure group?
4. What is the difference between the ACTU and the ACCI?
5. What are penalty rates?

Apply your understanding

6. Why do lobby groups often employ former members of parliament?
7. Identify and explain two examples where pressure groups have been successful.
8. Identify two arguments in favour of people being paid penalty rates and two arguments against. Which arguments do you think are the stronger? Are you opposed to or in favour of penalty rates? Compare your views with the rest of the class.
9. Many powerful businesses and other organisations have plenty of money to employ lobbyists to influence government decisions, while ordinary citizens do not have this power. Outline two risks that this situation could bring to the principles of democracy.
10. Which is likely to produce the best result for the majority in society – a law changed because of lobbying or a law changed as a result of the efforts of pressure groups? Explain reasons for your opinion.

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

3.8 Thinking Big research project: A bill of rights for Australia?

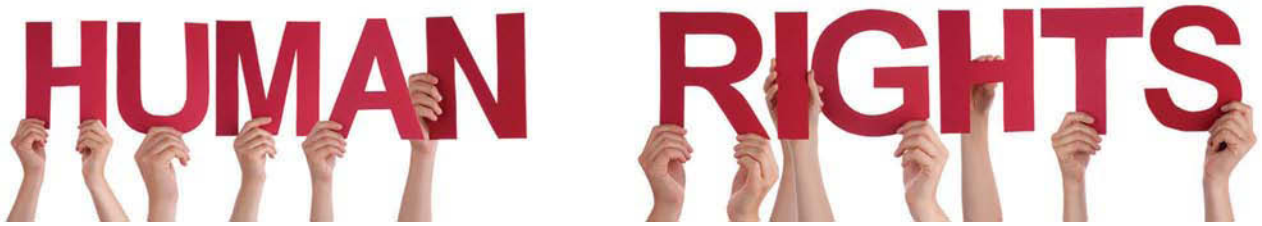
Scenario

Many countries throughout the world have a bill of rights or charter of rights to protect the human rights and freedoms of their citizens. Australia is one of the few western democracies that does not have such a bill or charter. Britain, the United States, Canada and New Zealand are countries that have similar democratic systems to us, and all have this type of protection. A bill of rights can be part of a country's constitution, in which case it can be quite difficult to change; or it can be legislation passed by a parliament, which can be changed by that parliament at any time, provided the changes are supported by a majority of members of that parliament. The United States Bill of Rights became part of that country's constitution in 1791. Most people say that a constitutional bill of rights would better protect the rights of citizens because it cannot be changed by politicians. The Australian states of Victoria and Queensland, as well as the Australian Capital Territory have all introduced legislated charters of rights.

Task

The government is considering creating a bill of rights for Australia, but many citizens don't know what that means. Your task is to find out what a bill or charter of rights is, and how it protects people's rights and freedoms. This will involve investigating bills or charters of rights in one or more overseas countries, as well as examining Australian state versions. You should then present your findings in an informative way to help people understand what a bill of rights will mean for Australia.

Follow the steps detailed in the **Process** section to complete this task.



Process

- Open the ProjectsPLUS application for this topic. Click the **Start new project** button to enter the project due date and set up your project group. Working in pairs or small groups will enable you to share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered.
- In the **Media centre** you will find an assessment rubric to guide your work.
- You should research the bill or charter of rights from one of the following countries:
  - Britain
  - The United S tates
  - Canada
  - New Zealand.
- Gather information to answer the following questions.
  1. What is a bill of rights?
  2. What is a charter of rights?
  3. What are the main differences between a bill of rights and a charter of rights?
  4. What is one major country that has a bill or charter of rights?
  5. How did that country get a bill or charter of rights?
  6. What rights or freedoms does that bill or charter protect (for example, freedom of speech, freedom of association)?
  7. Can those rights be easily taken away by a government repealing them? Or are they rights protected by a constitution, and need a more difficult process to be changed?
  8. What can people do if they think their rights under that bill or charter have been affected by the actions of the government or someone else?
  9. How well does the bill or charter work? Are there any examples of occasions when someone has successfully taken legal action to protect his or her rights?
  10. In Australia, the state of Victoria has brought in a Charter of Human Rights and Responsibilities. Explain what rights are protected by that charter.
  11. What actions can be taken by a person to protect his or her rights under that charter?
- You can easily find information about bills and charters of rights in different countries through the usual search engines. Make use of more than one source for each area of research and list all sources at the end of your report.
- Present your report using a layout and language that will be easily understood by Australians of all ages and backgrounds. Images can help to add interest and context to your report.
- Submit your report to your teacher for assessment and feedback.

on Resources

ProjectsPLUS A bill of rights for Australia? (pro-0176)

3.9 Review

3.9.1 Key knowledge summary

3.2 Protecting our rights and freedoms

- The Constitution guarantees certain democratic rights, such as the right to directly elect members of parliament, and a requirement that elections must be held every three years.
- The Constitution also contains five express rights, including freedom of religion and a right of free trade between the states.
- Federal and state parliaments have also passed laws to promote equal opportunity and to make it illegal to discriminate against individuals.

3.3 Freedom of speech and other democratic freedoms

- The right of free speech is an important right but it is limited by the bounds of law.
- Freedom of association, freedom of assembly, freedom of movement and freedom of conscience are all important freedoms enjoyed in Australia. These are also limited by the bounds of law.

3.4 Dissent in a democracy and taking direct action

- In a democracy such as Australia, we all have the right to dissent against laws passed by parliament. We can express our dissent publicly and vote for political parties that promise to change those laws.
- Some groups and individuals attempt to influence parliament by taking direct action. This can include demonstrations and protest marches, as well as defiance of the law.

3.5 Taking part in the democratic process

- All citizens over the age of 18 have the right to vote in Australian elections, although they need to register to take full advantage of this right.
- Social media can be used to spread ideas and opinions, and to gain support for changes in the law.
- Participating in opinion polls allows us to have our views communicated to our members of parliament, and may influence some of their decisions.

3.6 The role of members of parliament

- Local members of parliament can assist individuals in their electorates, and can ensure that petitions from the voters are tabled in parliament.

3.7 Lobby and pressure groups

- Lobby groups attempt to influence members of parliament on behalf of businesses and other groups. They aim to have laws passed that favour the group they represent, or have laws changed if they disadvantage that group.
- Pressure groups are groups of people who try to influence public opinion on particular issues. They include groups such as environmental campaigners and trade unions.

3.9.2 Key terms

code of conduct a set of standards of behaviour that all participants are expected to follow

conscription a process by which people are required to join the armed forces, even if they do not wish to do so

constitution a set of rules that determines the structure of government and its law-making powers

democracy a form of government in which the people determine how they will be governed

democratic supporting democracy, or the system of government where supreme power is vested in the people and exercised directly by them or by their elected representatives under a free electoral system

electorate an area of Australia that elects one member to parliament

jury in a criminal trial, a randomly selected group of people who decide the guilt or innocence of an accused person

laws the system of rules that Australia recognises as regulating the actions of its citizens, which it may enforce by the imposition of penalties and sanctions

legislation a law made by Parliament

lobbying approaching members of parliament to argue a case for change in the law

petition a formal request for change signed by many people
referendum a process of allowing the people to vote on an important issue, such as a proposed change to the Constitution
repeal to remove a law so that it no longer applies
right an entitlement to be treated in a particular way. A legal right is a right that can be enforced by law.
trade union an organisation of employees formed for mutual support, and to seek improvements in pay and working conditions for its members
transportation the process of sending convicts to a penal colony
treaty a formal agreement between two or more countries

3.9.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

Does everyone have the same rights and freedoms? Why not?

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

on Resources

eWorkbook	Customisable worksheets for this topic (ewbk-5406)
	Reflection (ewbk-5405)
	Crossword (ewbk-5404)
	Student learning matrix (ewbk-5398)
Interactivity	Rights, freedoms, democracy and the law crossword (int-8235)

3.9 Review exercise

Multiple choice

1. What is democracy?
   - A. Any form of government where laws protect the freedom of speech
   - B. Any form of government with rights protected by a constitution
   - C. Any form of government in which the people determine how they will be governed
   - D. Any form of government with two houses of parliament
2. How are our democratic rights protected by the Constitution?
   - A. The Constitution protects a person's property
   - B. The Constitution protects freedom of movement
   - C. The parliament is elected by direct vote of the people
   - D. The Constitution cannot be changed easily
3. Why is freedom of religion one of our rights in Australia?
   - A. Freedom of association allows us to join any religion we wish
   - B. Most world religions are practised in Australia
   - C. Freedom of speech allows us to express any religious beliefs we wish
   - D. It is protected by the Constitution

4. When a government wishes to take possession of a person's property, what must it ensure?
   A. All buildings are demolished as soon as possible
   B. The owner is compensated fairly
   C. The owner receives another property of equal value
   D. It does not interfere with the owner' s rights to freedom of movement
5. The Tolpuddle Martyrs were transported to the Australian colonies for stranding up for what?
   A. Their democratic rights
   B. Freedom of speech
   C. Freedom of religion
   D. Freedom of association
6. When might it be reasonable to restrict a person's freedom of movement?
   A. They are likely to protest against the government
   B. They are awaiting trial for a criminal offence
   C. They are likely to use obscene language in public
   D. They have racially abused another person in public

Short answer

7. When might a protest gathering be reasonably restricted by government?
8. List the five 'express rights' outlined in the Constitution.
9. Briefly explain the process of electing members to the Senate.
10. Why do opinion polling companies ask the age and income level of those they survey?
11. How can local members of parliament assist individuals and community groups?
12. What happens when a petition is presented to parliament?
13. Explain how lobby and pressure groups influence government decisions.
14. What is the ACCI an example of?
15. What is the Franklin Dam campaign of 1982 an example of?

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 3 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

3.1 Overview

Video eLesson
- Rights and freedoms (eles-2260)

3.2 Protecting our rights and freedoms

eWorkbook
- Express rights (ewbk-5399)

Video eLessons
- The Australian Constitution (eles-2076)
- What is Parliament? (eles-2077)

Weblink
- Australian Human Rights Commission

3.3 Freedom of speech and other democratic freedoms

eWorkbook
- Freedom of speech (ewbk-5400)

Video eLessons
- Je suis Charlie (eles-2430)
- Dangerous ideas (eles-2427)

3.4 Dissent in a democracy and taking direct action

Weblinks
- Melbourne moratorium march
- Franklin River blockade 1
- Franklin River blockade 2

3.4 The role of members of parliament

eWorkbook
- Our system of government (ewbk-5401)
- Our federal parliament (ewbk-5402)

Weblinks
- Petitions
- Change.org

3.7 Lobby and pressure groups

Interactivity
- IThe road (int-5432))

Weblinks
- Environment organisation 1
- Environment organisation 2
- Commerce
- Trade unions

3.8 Thinking Big research project: A bill of rights for Australia?

ProjectsPLUS
- A bill of rights for Australia? (pro-0176)

3.9 Review

eWorkbook
- Reflection (ewbk-5405)
- Crossword (ewbk-5404)
- Student Learning Matrix (ewbk-5398)

Interactivity
- Rights, freedoms, democracy and the law crossword (int-8235)

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

4 Where do our laws come from?

4.1 Overview

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

How does the law say Australians should behave? Who made those rules and why should we follow them?

4.1.1 Introduction

What would happen if there were no laws? People would probably do as they pleased. There might be riots, crime and chaos, and it might not be safe to travel anywhere.

Laws are the legal rules that act as guidelines for behaviour. We have laws to protect us and to settle disputes. Laws are also used to give consequences to people who break them. But who actually makes these laws? How are our laws made?

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5416)

Video eLesson What if we had no laws? (eles-2264)

FIGURE 1 Laws are created to discourage wrongful behaviour such as rioting.

4.2 How parliaments make laws

LEARNING INTENTION

By the end of this subtopic, you will be able to:

- explain the law making process
- explain the difference between a Bill and an Act of Parliament
- define the term *royal assent*.

4.2.1 The law-making process

A parliament consists of the law makers at the state and federal levels of government. Most laws in Australia are made by our federal and state parliaments. These laws are called **statute laws**. Most Australian parliaments have a lower house and an upper house. Parliaments make laws by passing a **Bill** through both houses.

A law made by Parliament is called **legislation**, a statute or an **Act**. Before any proposed laws can become Acts of Parliament, they have to be debated and passed by both houses of Parliament and then approved by the **Crown**. During the debate in parliament, the government explains why the law is needed and why it will be good for Australia. The **Opposition** may try to argue why this is not the case. Let us see, step by step, how all of this might happen in federal parliament.

4.2.2 Executive law

When Parliament passes legislation, many of the clauses in the new law can be very general, and details of how the law is to be applied are not always included. The legislation will delegate power to the relevant government minister to make detailed rules and regulations, particularly to deal with new situations as they might arise. These rules and regulations make up what is known as executive law, or delegated law, because the power is delegated to the minister, who is a member of the executive, the **Cabinet**, to develop these regulations. Executive law also applies to the power the minister has to make appointments to particular positions in the government, such as ambassadors to overseas countries. Because such regulations and orders have to be made with the approval of the Governor-General at the federal level, or the state Governor, they are known as Governor-General in Council Regulations, or Governor in Council Regulations. These regulations also have to be tabled in Parliament, and can be removed or overruled by a majority vote in the Parliament.

statute laws laws made by Parliament

Bill a proposed law that has not yet been agreed to by Parliament or received royal assent

legislation a law made by Parliament

Act a law passed by Parliament

Crown the Queen's authority in the Australian parliament, represented by the Governor-General at the federal level and a Governor at the state level

Opposition the main political party in the lower house of parliament not in power

Cabinet the main group of parliamentary members from the governing party

on Resources

Interactivity How laws are made in parliament (int-5703)

Weblinks Commonwealth Parliament

int-5703

FIGURE 1 How laws are made in Parliament

STEP 1
A proposed new law, or changed law, is discussed in Cabinet. Often, people in Australia put pressure on the government to change something. A decision is then made on what to do.

STEP 2
If the government decides to proceed, government lawyers are as to draft a Bill. A Bill is basically a 'first draft' of an Act of Parliment.

STEP 3
Copies of the Bill are given to all members of the lower house (House of Represen-tatives). The members read the material in their own time. This is known as the 'First Reading'.

STEP 4
The Bill goes through a 'Second Reading'. During this stage, the responsible minister (for example the Minister for Immigration if the Bill is to do with migrants) describes the main purpose and likely benefits of the Bill. Speakers from the government and opposition say what they think about it. Debates may take weeks. Then there is a vote. If the majority vote in favour, the Bill moves to the next stage in the process.

STEP 5
The Bill is debated again, this time bit by bit. This stage is known as Consider-ation in Detail as each part of the bill is discussed in detail. Changes to the Bill may be made.

STEP 6
The Bill, including any changes made during step 5. goes through a 'Third Reading' in the house. A vote is taken. If the majority vote for it, the Bill is passed through to the Senate.

STEP 7
The upper house (the Senate) goes through similar processes to those outlined in steps 3 to 6. If the Senate decides to change something, the Bill is referred back to the House of Representa-tives for another debate and vote. Sometimes the Senate may refuse to approve a Bill. If the Senate votes to approve the Bill, it is sent to the Governor-General for royal assent.

STEP 8
If the Governor-General approves and signs the Bill, it becomes an Act of Parliament. It is proclaimed and legally binding for all Australians.

4.2 ACTIVITIES

1. Working in pairs, use the **Commonwealth Parliament** weblink in the Resources tab to find out about a new law that is going through parliament at the moment.
   a. Briefly describe the law you have found and explain what stage it has reached.
   b. In your opinion, will this proposed law be changed much on its way through parliament? Give reasons for your answer. **HASS skills: Questioning and evaluating**
2. Propose a new school rule and debate it in class as follows:
   a. Brainstorm as a class five rules you think would be good for your school. Using a show of hands, vote to decide on a rule to debate. Call this your Bill.
   b. Divide the class in two, with government members on the right and the Opposition on the left. As part of the first reading of your Bill, debate the issues associated with introducing this proposed new law. Those on the government side should argue for the Bill and those on the Opposition side should argue against it. Appoint a Speaker to ensure that the debate is orderly. When debating, stand to speak, and obey any instructions given to you by the Speaker.
   c. At the end of the discussion, take a class vote on whether or not you think this proposed new law should be introduced. If you disagree with the decision of your side, you can 'cross the floor', moving from where you are to the right (yes) or the left (no) side of the classroom to register your vote. Did your proposed Bill pass its first reading? **HASS skills: Evaluating**

4.2 EXERCISE

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

Learning pathways

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

Check your understanding

1. What is statute law?
2. What is the difference between a Bill and an Act of Parliament?
3. What is meant by the term 'royal assent'?
4. Explain what is meant by the term 'executive law'.
5. Who is normally responsible for the development of executive laws?

Apply your understanding

6. Use a flowchart to explain how a law is made in parliament. Draw your flowchart using eight boxes joined by arrows. Number each box from step 1 to 8. In each box describe what happens to the proposed law in that step, using no more than ten words. For example: Step 1 – government (in Cabinet) discusses the idea of a new law.
7. How can a piece of executive law be overruled? What does this tell us about the power of parliament compared with the powers of the executive?
8. In your view, is the process of law making in Australia fair? Does law making by parliament give ordinary people enough opportunity to have their say when new laws are being made? Explain your answer.
9. Since 1981, no party has had a majority in the Senate except for three years from 2005 to 2008. This means that a government may have to negotiate with non-government senators to have legislation passed. Identify one advantage and one disadvantage of this situation.
10. Queensland, the Northern Territory and the Australian Capital Territory only have one house of parliament, rather than a lower and upper house. This means there is no upper house review of legislation. Is this a good thing or a bad thing? Give reasons for your answer.

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

4.3 How courts make laws

LEARNING INTENTION

By the end of this subtopic, you will be able to identify the courts and their position in the Western Australian Court hierarchy and explain how precedent creates laws.

4.3.1 Common law

The main role of courts is to settle disputes, but courts also make laws. They do this as they interpret existing laws and make decisions to resolve the case they are hearing. This type of law is known as case law, judge-made law or **common law**.

Common law originated in England as judges travelled from village to village making decisions based on tradition, custom and **precedent**. The judges began to apply a law that was common to all people across the country, rather than using the customary law of each region. Common law is applied today when cases come to court where there is no legislation regulating that case. The judge needs to make a decision about the law on this type of matter. This process is illustrated in the following case study, 'Finders keepers'.

4.3.2 CASE STUDY: Finders keepers

The law relating to who has the right to own things that are found has changed over the years as judges have made new decisions. The judges in the following cases made decisions that became part of the common law because there was no existing law about possession that specifically applied to the cases.

Money found buried on private property

In 1964, a woman sold her New South Wales house to a couple. The couple hired a building company to work on the house. While digging, one of the owners of the building business found a tin with £8500 inside.

- The original owner claimed that she had buried the tin and therefore the money belonged to her.
- The couple who had bought the house claimed that the money was theirs because it was found on their land.
- The owner of the building business claimed the money belonged to him because he had found it.

No laws covered this dispute, so the judge hearing the case was required to make a decision that would create a new law. The judge decided that the couple who now owned the house were allowed to keep the money because they owned the land.

common law law developed by judges through the decisions of courts

precedent a legal principle developed by a court in the process of resolving a dispute

Gold found by the side of the road

In 1965, a Queensland police officer was walking to the place where he was going to direct traffic leaving a drive-in theatre. On the side of the road, on land belonging to the theatre, he found a gold ingot. The owner of the gold could not be found.

- The owner of the land claimed ownership.
- The police officer claimed ownership because he had found the ingot.
- The police officer's employer (the state) claimed ownership because the policeman worked for the state.

The judge hearing the case decided that the land was regularly accessed by the public and that the police officer could keep the gold ingot because his job was to direct traffic, not to find lost things. Any other member of the public might have found the ingot, and the fact that the officer was on duty was just a coincidence.

FIGURE 1 Does a gold ingot found on someone's property belong to the property owner or to the person finding it?

Bracelet found at the airport

In 1982 a traveller waiting in an airline lounge found a valuable gold bracelet. He handed it in to the manager of the lounge, and was told that the airline would attempt to locate the owner. If this attempt was unsuccessful, it would be handed over to the finder of the bracelet, who could then keep it. The finder left his contact details with the airline. After a period of time, when the bracelet had not been claimed, the airline sold it for a considerable sum of money, which it kept. The finder of the bracelet sued the airline, and the judge ruled that the proceeds of the sale of the bracelet should be handed over to the original finder, with an additional amount paid as interest on the money. The judge found the plaintiff in the case had 'finder's rights' that could not be removed by the fact that the bracelet was found on the airline's premises.

4.3.3 Precedent

Common law is developed through the legal principle of precedent. If your sister was given a car for her eighteenth birthday, you might expect your parents to do the same for you because your parents have set a precedent. Courts use the same idea. When a judge makes a decision in a court case, this decision will be recorded in a law report. Other judges hearing cases with similar facts will refer to these decisions. Just as you would expect your parents to follow their precedent, the people involved in legal cases expect the judge to follow the precedent of similar cases and therefore come to the same decision.

Precedent works because of our court hierarchy.

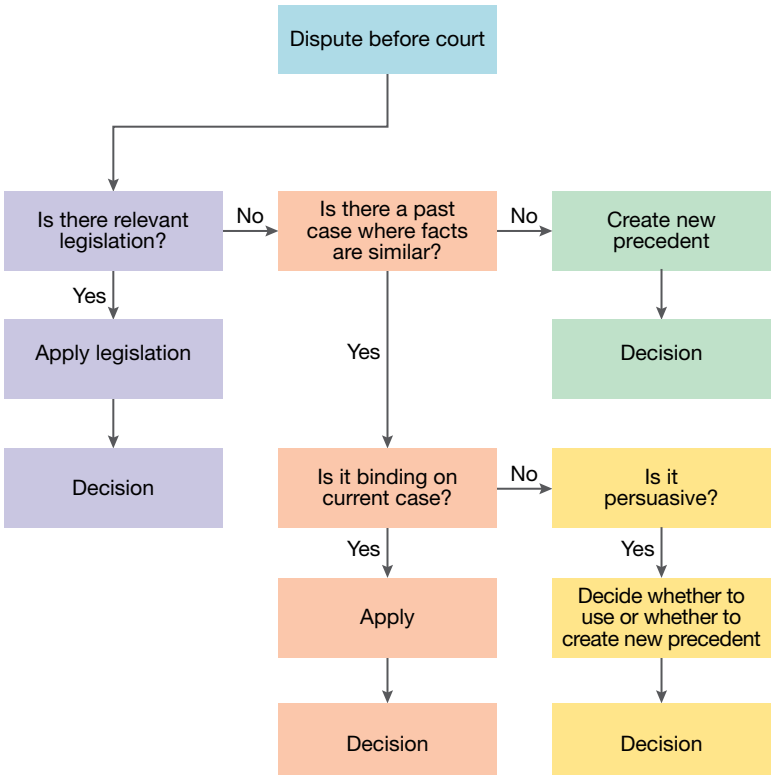
4.3.4 Australia's court hierarchy

Australia's court system is made up of many different courts, which are arranged in levels in order of importance (a hierarchy). The higher courts, which hear the most serious matters, are at the top of the hierarchy. The lower courts, which hear less serious matters, are at the bottom of the hierarchy.

At the bottom of the court hierarchy is the Magistrates Court (called the Local Court in New South Wales, the Magistrates' Court in Victoria and the Magistrates Court elsewhere). These courts hear more than 90 per cent of the cases that go to court, and they have a large number of courthouses. There is probably one in your local area. The District Court (called the County Court in Victoria) exists in most states and sits only in the main cities. There is only one Supreme Court in the capital city of each state, and only one High Court in Australia (in Canberra).

int-5753

FIGURE 2 The decision-making process for settling disputes in court



When superior courts (such as the High Court and each state's Supreme Court) settle disputes, they can create new legal principles that must be followed by the lower courts in their own hierarchy. Judges in each state have to follow only those decisions made in the higher courts in their state, and those made in the High Court. For example, a decision made by a judge in the Supreme Court of Western Australia does not have to be followed by judges in the District Court of New South Wales. However, the New South Wales judges could use the decision as a guide.

FIGURE 3 The Australian court system

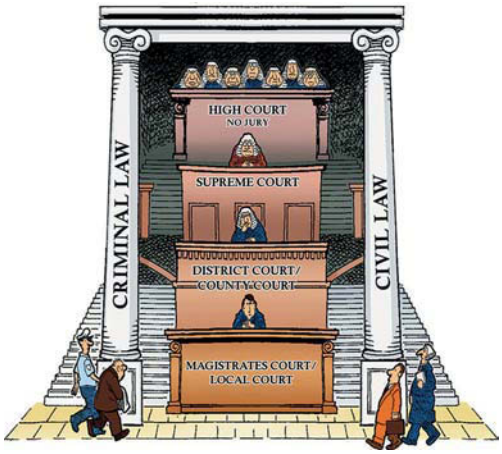


FIGURE 4 If there is no existing relevant law, judges can create a new rule to settle a dispute.

on Resources

Interactivities The decision-making process for settling disputes in court (int-5753)
The courtroom (int-1206)

DISCUSS

'Judges use common law processes to bring greater fairness and consistency to the law by adapting decisions to suit the new facts before them.' Discuss arguments supporting this case and then counterarguments to represent an opposing point of view. Which point of view do you support?

General capability: Critical and creative thinking

4.3 ACTIVITY

Using the internet or newspapers, find an article that reports on a new principle of law being made through a landmark court case in Western Australia. Investigate how this case proceeded through the courts.

HASS skills: Analysing

4.3 EXERCISE

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

Learning pathways

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

Check your understanding

1. What is common law?
2. What is precedent?
3. List the courts in your state's court hierarchy, from highest to lowest.
4. From where did common law originate?
5. Outline the similarities and differences between the cases in the case study, 'Finders keepers'.

Apply your understanding

6. Explain how the judges in the case study 'Finders keepers' made changes to the law.
7. What would happen if a judge decided to ignore a precedent and make a completely new decision?
8. Consider the following cases:
   - Case 1 – a former barmaid sues the hotel where she used to work. She contracted throat cancer caused by breathing environmental tobacco smoke during the course of her employment. The court awards her compensation of more than $400 000.
   - Case 2 – a former pie-seller sues the sports stadium where he used to work. He contracted throat cancer caused by breathing environmental tobacco smoke during the course of his employment. The court uses case 1 as a precedent.
   - Case 3 – a waitress sues the restaurant where she works. She contracted throat cancer caused by smoking cigarettes for 30 years.
   - Case 4 – a former miner sues the mining company he used to work for. He was injured in a fall.
     a. In case 2, should the former pie-seller receive compensation? Explain your answer.
     b. In case 3, should the court use the first two cases as precedents and provide compensation? Explain your answer.
     c. In case 4, are any of the first three cases a precedent for this situation? Should the court provide compensation? Explain your answer.
9. Many people argue that judges should not make laws because they are not democratically elected, as members of parliament are. Identify and explain one positive and one negative effect of judges making law through precedent.
10. The doctrine of precedent states that judges must apply a precedent established in a higher court in the same court hierarchy, but occasionally judges apply a precedent from a court in a different state or different country. Explain when and why this might occur.

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

4.4 Criminal law and civil law

LEARNING INTENTION

By the end of this subtopic, you will be able to explain the difference between criminal and civil law and the difference between a summary and indictable offence.

4.4.1 Criminal vs. civil

There are two main types of law in Australia:

- criminal law, which protects us and punishes offenders
- civil law, which protects our rights and property.

We have no choice over the use of criminal law because the state controls it, but individual citizens and groups decide how they will use civil law. The 'state' means society or the whole community, which is represented by Parliament, the judiciary and the police.

4.4.2 Criminal law

Criminal law protects innocent individuals from wrongdoers. It outlines the way people should act – what they can and cannot do. Some of the most common crimes are robbery, **homicide** (**manslaughter** and murder), rape, assault, theft and drug offences.

If a person commits a crime, this is treated very differently from other legal issues. For example, if you rob a bank, it does not remain a **dispute** between the bank and yourself. The bank does not have to try to catch you. Instead, your action is regarded as an offence against the state. It is the state that organises its police to catch offenders.

homicide the killing of one person by another person

manslaughter the accidental or unintentional killing of one person by another person

dispute an argument

In criminal law, the bank does not take you to court – the police or representatives of the government do. They will also be the ones who **prosecute** you. It is up to the prosecution to take legal action against an accused person in order to establish the guilt of the accused because the prosecution has the **burden of proof**. This means that the prosecution must prove that the accused is guilty of the crime. It is not up to the accused person to prove his or her innocence.

During the court case, you as the accused will have the opportunity to tell your side of the story. If you are found guilty, you will be punished with a fine, imprisonment, some form of community service order or a combination of these punishments.

FIGURE 1 A criminal act is treated as an offence against the state, which deploys the police and courts to apprehend, prosecute and imprison the wrongdoer.

In criminal cases

...the police prosecute

...and the courts impose a penalty on a guilty party.

Indictable offences

Serious crimes, such as homicide, child abuse and rape, are called indictable offences. These offences are usually heard in a higher court, such as the District or County Court, or the Supreme Court. For these offences, the guilt of the **accused** is determined by a **jury**.

In a criminal case, the jury must be satisfied of the guilt of the accused 'beyond reasonable doubt'. This means that the jury cannot have any reasonable doubt that the person accused of the crime is guilty. The level of certainty that must be established before a legal case can be won is known as the **standard of proof**. It is up to the prosecution in criminal cases to prove that the accused is guilty beyond reasonable doubt. If a magistrate or jury is not convinced beyond reasonable doubt of the accused's guilt, the accused should be given the benefit of the doubt and found not guilty.

Summary offences

Less serious crimes, such as minor assaults, petty theft and traffic infringements, are called summary offences. These are dealt with relatively quickly and cheaply by a **magistrate** in a magistrates court.

4.4.3 Civil law

Civil law deals with non-criminal matters. It allows a person to bring actions against other people for a civil wrong done to him or her. Civil law involves such matters as disputes between friends, business partners, consumers and retailers, neighbours, or an individual and a government department. Examples of civil wrongs include

prosecute to take legal action against another person for a criminal offence

burden of proof the legal principle describing who has to prove a case in court. In a criminal trial, this burden is on the prosecution.

accused the party in a criminal trial against whom an action has been brought

jury in a criminal trial, a randomly selected group of people who decide the guilt or innocence of an accused person

standard of proof the level of proof required to establish a case. In criminal law, the prosecution must prove that the accused is guilty beyond reasonable doubt.

magistrate a court official who hears cases in the lowest court in the legal system

negligence, **trespass**, **defamation**, **nuisance** and **breach of contract**. Where a civil wrong is successfully proven in court, the wronged party will usually seek damages (money) as compensation. In such a case, the **defendant** will be found to have been **liable**.

For example, imagine you discover half a decomposed snail at the bottom of a soft-drink bottle from which you have just drunk. You are then violently sick and suffer a serious stomach illness. You decide to sue the manufacturer for negligence, meaning that the manufacturer did not take enough care to prevent an injury. You, the **plaintiff**, go to court to prove your case. You ask a judge to order the soft-drink manufacturer, the defendant, to pay you compensation. The plaintiff does not always win such cases. Sometimes the judge decides that the plaintiff's rights were not breached and can order him or her to pay the defendant's legal costs. As the following case study 'Civil v. criminal law' illustrates, sometimes civil law is required to deal with a wide range of unusual circumstances.

FIGURE 2 A civil wrongdoing is treated as a private matter between the disputing parties, and the losing side is ordered by the judge to pay compensation or rectify the wrong done.

There is a lower standard of proof in civil cases. The plaintiff has to show that the defendant was 'more likely than not' to have committed the breach. This is known as the 'balance of probabilities'.

4.4.4 CASE STUDY: Civil v. criminal law

Case 1

A grape grower was awarded $7 million in damages by the Supreme Court of Victoria in August 2017, after his neighbour's spraying of chemicals destroyed his vineyard. The grape grower had spent four years fighting for compensation after he had noticed damage to the leaves of his vines in 2013. At first he thought the vines had been affected by frost, but later discovered that his neighbour had been attempting to rid his own property of pests by spraying the chemicals 2,4-D, glyphosate and metsulfuron-methyl. The Supreme Court heard that these chemicals are all deadly to grapevines and should never be used anywhere near vineyards. The court found the neighbour negligent in his use of the chemicals and awarded damages of over $7 million. This included the cost of rehabilitating the land, the grower's loss of grape sales, costs involved in re-establishing the vineyard, and future loss of sales during the time the vines take to re-grow.

Case 2

In November 2018, a man was found guilty of manslaughter after killing a heart surgeon in a one-punch attack at Box Hill Hospital in Melbourne's eastern suburbs.

negligence a situation where a person breaches a duty to exercise reasonable care to avoid a foreseeable risk, resulting in another person being injured or suffering a risk of injury

trespass a tort (civil wrong) involving direct and intentional interference with a person, or a person's land or goods

defamation unlawful damage to a person's good reputation through written or verbal statements

nuisance interference with someone's enjoyment of public or private property

breach of contract a situation where a legally binding agreement is not honoured by one or more of the parties to the contract

defendant the party in a civil trial against whom an action has been brought

liable legally responsible for a civil wrong

plaintiff the person who commences a legal action in civil law

Joseph Esmaili had punched the surgeon, Patrick Pritzwald-Stegmann, in the head after the doctor had asked him and his friends to stop smoking in a non-smoking area outside the hospital doors. The surgeon fell backwards and hit his head on the floor, knocking him unconscious. He spent the next month in a coma and died after his family agreed to have his life-support system switched off.

During the trial, Esmaili's defence barrister argued that Esmaili had believed that the surgeon was about to hit him and acted in self-defence when he punched the surgeon. The defence also argued that Mr Pritzwald-Stegmann's death was actually caused by the family's decision to turn off the life support system, not by the punch. The jury did not appear to accept either of these lines of defence and found Esmaili guilty of manslaughter.

on Resources

Interactivity Time out – civil and criminal law (int-1402)

4.4 ACTIVITY

In pairs, cut out three newspaper articles describing civil law cases and three describing criminal law cases. Paste these on a large sheet, then discuss and list the laws being broken in each case.

HASS skills: Analysing

4.4 EXERCISE

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

Learning pathways

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

Check your understanding.

1. Define civil law and criminal law.
2. List four common crimes.
3. List four civil wrongs.
4. What is the difference between:
   a. the plaintiff and the defendant (or accused)?
   b. indictable offences and summary offences?
   c. burden of proof and standard of proof?
5. Outline the differences between civil law and criminal law.

Apply your understanding.

6. Use the case study 'Civil v. criminal law' in section 4.4.4 to outline the differences between criminal law and civil law.
7. Do the following cases involve criminal law, civil law, or both?
   a. You are held up at knifepoint and your purse or wallet is stolen.
   b. A woman slips on a wet supermarket floor and breaks an ankle.
   c. A man is convicted of driving with a blood alcohol content of 0.08.
   d. You find maggots in a tuna sandwich you just bought from a café.
   e. A neighbour's loud music at 3 am is disturbing you.

8. Think of a case that might involve both criminal law and civil law. What part of the case is criminal law? What part of the case is civil law?
9. In a civil case the victim can sue for compensation, but in criminal cases the wrongdoer is punished and the victim is frequently not compensated for the harm done to them. Limited victim compensation is available in some cases but not in every case. Should the law be changed to provide for compensation in every criminal case? Identify one advantage and one disadvantage of such a change.
10. Criminal cases are dealt with by the courts because the state prosecutes the wrongdoer. Only around 20 per cent of civil cases come before the courts because they are resolved out of court by negotiation between the parties, or because one party does not have the money to fight the case. This can mean that the wealthiest or most powerful party wins. Suggest a reform to the law that could help resolve this situation.

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

4.5 Customary law in Aboriginal and Torres Strait Islander communities

Aboriginal and Torres Strait Islander readers are advised that this topic may contain photos of or references to people who have died.

LEARNING INTENTION

By the end of this subtopic, you will be able to describe some of the ways in which the customary laws of Aboriginal and Torres Strait Islander peoples are significant to First Nations cultures, and outline examples of how customary law is practiced within the legal system today.

4.5.1 What is customary law?

Customary law refers to the guidelines for behaviour that have been developed by Aboriginal and Torres Strait Islander peoples. These laws are passed on by word of mouth and have not been written down. In what way is customary law significant to Aboriginal and Torres Strait Islander peoples? We will explore the answer to this question throughout the rest of this subtopic.

The Dreaming

Aboriginal and Torres Strait Islander peoples believe that their customary laws originated in the Dreaming. The Dreaming is an English term that refers to the origins and practice of Aboriginal and Torres Strait Islander peoples beliefs and cultural systems. Aboriginal and Torres Strait Islander peoples have a very strong relationship with the Australian land. They believe that they do not own the land – the land owns them, so it is their responsibility to take care of it. The stories, songs and dances told about the Dreaming reveal the many ways in which Aboriginal and Torres Strait Islander peoples are connected to the land.

FIGURE 1 Fern Pool, Karijini National Park. Aboriginal and Torres Strait Islander peoples believe that the Australian landscape and all its features were created by their ancestors.

Dreaming stories

Elders passed on customary laws by telling Dreaming stories to other members of their community or language group. The stories provide guidance or instructions about how to behave and the right way to live. Aboriginal and Torres Strait Islander people expect that the younger ones will listen to the older people, be obedient,

customary law rules for behaviour developed by and for Aboriginal and Torres Strait Islander peoples

and not be greedy or steal. Other customary laws concern what foods can be eaten, what rules apply to families, requirements for marriage, and spiritual responsibilities. Songs and dances are also used to pass down customary law.

Dispute resolution

Aboriginal and Torres Strait Island societies did not have governments, police or courts in the same way that the modern Australia does. Disputes were resolved by the elders, who would meet to discuss the incident or dispute and then agree on an appropriate solution or consequence. Punishments might include shaming or public ridicule for less serious offences, or exile or spearing for more serious cases. Spearing involved stabbing a spear into the thigh of a person who had committed an offence. The scar left behind would always remind the offender of the wrong act they had carried out.

4.5.2 Recording customary law

Customary law has not been **codified**. It is not easy to record. This is because it is not always the same throughout Australia. Different language groups and communities have their own customary laws, languages, beliefs and traditions. The laws that apply to one group do not necessarily apply to another group.

4.5.3 Customary laws and Australian law

Some state and territory laws have been amended to specifically refer to customary law – the Northern Territory's Sentencing Act recognises customary law. Many courts have also taken customary law into account when considering sentences. Refer to the case study 'Court imposes customary punishment' in section 4.5.4 for an example.

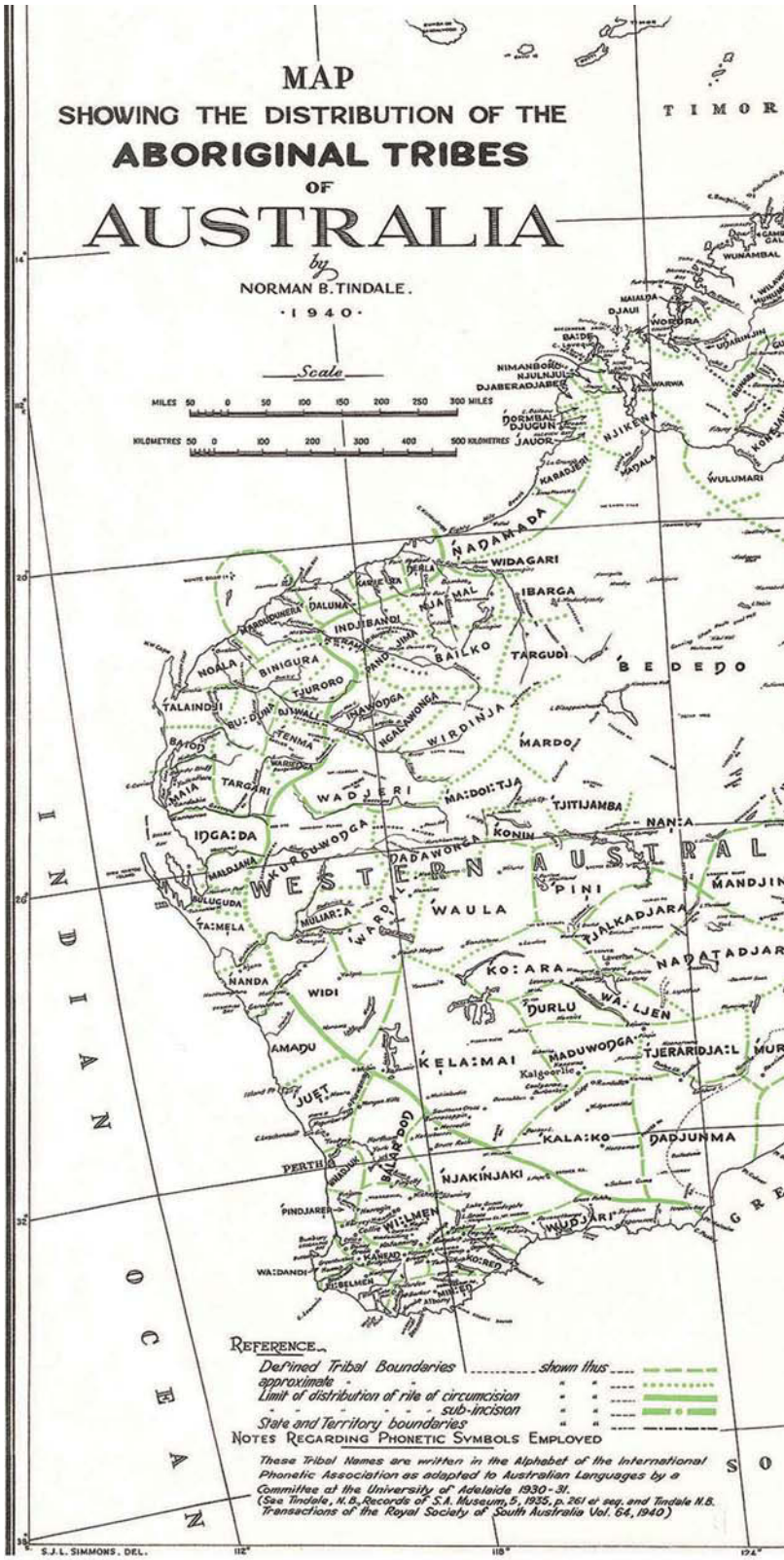
DISCUSS

Look at **FIGURE 2** and discuss the ways that perspectives have changed over time. Why do you think maps such as this one are highly contestable? Which aspects of this map would now be considered inappropriate or incorrect?

General capability: Intercultural understanding

codified refers to laws that have been collected and organised, usually in written form

FIGURE 2 Map showing the distribution of the Aboriginal Tribes of Austr
may be considered inappropriate today, but may have reflected the crea



Map Showing the Distribution of the Aboriginal Tribes of Australia, Norman B Tindale, 1940
Mitchell Library M3 804eca/1788/1 A

The Tindale Map is a historical map illustrating the div
of Aboriginal languages groups across Australia.

alia, Norman B. Tindale, 1940. Users of this map should be aware that certain words, terms or descriptions may be culturally sensitive and tor's attitude or the period in which they were written. Borders and terminology used may be contested in contemporary contexts.

Please note that this map is being made available for general reading and use. The map illustrates language groups according to anthropologist Norman Tindale in 1940. It is not the only Aboriginal language map available, and borders and terminology used may be contested in contemporary contexts.

The map is not suitable for use in native title, or other legal claims.

Users of this map should also be aware that certain words, terms or descriptions may be culturally sensitive and may be considered inappropriate today, but may have reflected the creator's attitude or the period in which they were written.

STATE LIBRARY
NEW SOUTH WALES

4.5.4 CASE STUDY: Court imposes customary punishment

The 1993 case of Wilson Jagamara Walker was the first in Australia to include a customary punishment as part of a sentence. Walker was a 23-year-old Aboriginal man from central Australia who pleaded guilty to manslaughter. He had been walking home when he heard a cry for help from a person being attacked by a group. Walker went to assist and ended up killing one of the attackers by stabbing him near the neck. The judge, Chief Justice Martin, initially sentenced Walker to three years' imprisonment. The sentence was then suspended and Walker was released on a two-year good behaviour bond with conditions, including that he was to be speared in the thigh by relatives of the victim.

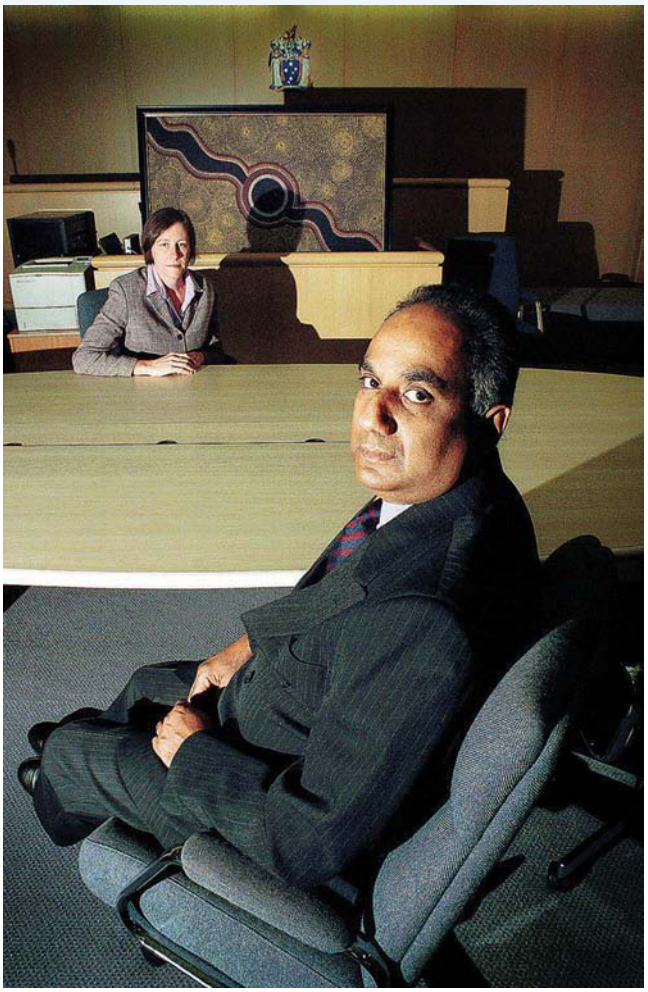
In describing the customary punishment, Chief Justice Martin said that:

> When you return to Yuendumu, you will be called upon to face tribal punishment ... by getting speared in each of your legs a couple of times in such a way that you will be pained for at least a couple of weeks ... A hunting spear would be used. The punishment would be administered by the brother of the dead man.

Martin ordered police officers to witness the spearing so that they could verify that the sentence had been carried out. Walker was told to return to the court to have the sentence reviewed if this did not occur.

FIGURE 3 Wilson Jagamara Walker's case was the first in Australia to include a customary punishment as part of a sentence.

FIGURE 4 The Koori Court in Victoria provides a more informal environment for Aboriginal offenders, who must plead guilty if they wish to be sentenced here.



4.5.5 Alternative sentencing for Aboriginal and Torres Strait Islander offenders

If found guilty of an offence, Aboriginal and Torres Strait Islander defendants may be offered alternatives to having a sentence imposed by the court. These options differ from state to state. One initiative is circle sentencing, a scheme operating in New South Wales that tries to avoid imprisonment for Aboriginal offenders. This is where a circle of people – including the offender's Elders, the victim, the offender, the offender's lawyer, the prosecutor or police and a magistrate – will sit together to attempt to decide an appropriate sentence. The offender must have pleaded guilty or have been found guilty of the offence.

The offence is considered first, and then the offender and his or her background is discussed as well as the effect of the wrongdoing on the victim and the community. The elders decide the sentence, which must be approved by the magistrate. The circle will often hand down a good behaviour bond with conditions attached, such as counselling or community service.

Other states have different names for similar programs. Western Australia has Aboriginal Community Courts, Victoria has Koori Courts, and South Australia has Nunga Courts. The territories also have circle or community courts. All of these courts involve Aboriginal and Torres Strait Islander community members in the sentencing process and the proceedings are less formal than in a traditional courtroom.

4.5 ACTIVITIES

1. Use the internet or a newspaper to find a recent case where a court has recognised customary law when sentencing an Aboriginal or Torres Strait Islander person. **HASS skills: Analysing**
2. Work in groups to investigate one of the ways in which Aboriginal and Torres Strait Islander peoples' cultures are taken into account in the Western Australian legal system. (For example, you could consider The Aboriginal Benchbook for Western Australian Courts or Aboriginal Alternative Dispute Resolution Services.)
   a. How does the process work and what sort of cases does it apply to?
   b. Identify one case that has been resolved by a different resolution process. Prepare a summary of the facts of the case and the judgement made by the court. **HASS skills: Analysing**

4.5 EXERCISE

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

Learning pathways

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

Check your understanding

1. What is meant by the term 'customary law'?
2. Explain why it is difficult to codify customary law.
3. Why did many politicians and law makers in the early years of colonisation and federation fail to understand that Aboriginal and Torres Strait Islander peoples had very detailed customary laws that governed their societies?
4. Explain how Aboriginal elders have been involved in the administration of justice in cases involving young Aboriginal offenders.
5. Give an example of legislation that recognises customary law in Australia.

Apply your understanding

6. Read the case study 'Court imposes customary punishment'. Outline the way in which the judge incorporated customary law into the sentence imposed on Mr Walker.
7. Create a list of pros and cons for recognising customary law as part of Australia's legal system. Do you think that customary law should be recognised?
8. Consider whether new courts should be established to reflect the traditional laws of other ethnic or religious groups in Australia. For example, should an Islamic court be established so that Muslim offenders could be sentenced according to Sharia law?
9. List as many reasons as you can to explain why Aboriginal and Torres Strait Islander peoples find customary laws significant.
10. If there is a conflict between traditional Aboriginal and Torres Strait Islander law and laws legislated by Parliament, which should apply? Give reasons for your response.

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

4.6 Thinking Big research project: Western Australian court case investigation

Scenario

The Western Australian Judicial System was established in 1829 shortly after the settlement of the colony. The system originally consisted of a sole arbiter, Captain James Stirling, enforcing British law because Australia did not have its own law at this time.

Nearly 200 years later, the system has grown to a hierarchy of seven courts that operate at more than 32 locations across the state. Courts operate in a hierarchical system, meaning that courts must follow the decisions of a higher courts in the hierarchy. This ensures consistency in the application of the law across Western Australia.

1829	1832	1861	1907	1970	1975	1978	1988	2005
Western Australian judicial system established with the Courts of Petty Session and Courts of Quarter Session.	Civil Court established	Court of Quarter Sessions and Civil Court amalgamated to form the Supreme Court.	Perth Children's Court created under the *State Children's Act* 1907	The District Court established to deal with mid-level criminal and civil matters	Family Court of WA established	The Warden's Court is created under the *Mining Act 1978*	Perth Children's Court becomes the Children's Court of WA	Magistrate's Court of WA established after the amalgamation of three courts, including the Courts of Petty Sessions

The court system hears a wide range of criminal and civil cases. Criminal law regulates peoples' behaviour and includes the punishment of people who violate these laws. Criminal cases range from minor offences such as speeding to serious offences such as murder. Civil cases involve disputes between individuals and groups such as negligence, defamation and contract law.

Criminal offences are outlined in a range of statues, including:

- *Criminal Code (WA)*
- *Misuse of Drugs Act 1981 (WA)*
- *Animal Welfare Act 2002 (WA)*
- *Firearms Act 1973 (WA)*
- *Road Traffic Act 1974 (WA)*
- *Graffiti Vandalism Act 2016 (WA).*

Example

In the Media Centre you will find a weblink to the article "Perth man fined for using metal-jawed traps on magpies". Read this article and see the annotations below.

Terminology
Fined, plead, guilty, animal cruelty, sentenced, Magistrates' Court, criminal offence

Court
This case was heard in the Magistrates' Court of WA

Jurisdiction
The Magistrates' Court has the power to hear criminal offences involving adults (aged 18 or over) The court deals with 'simple offences 'and some 'either way offences'. More serious offences commence proceedings in the Magistrates' Court, but must be heard in the District or Supreme courts. Fined, plead, guilty, animal cruelty, sentenced, Magistrates' Court, criminal offence

Criminal offence
Cruelty to animals as outlined in the *Animal Welfare Act 2002 (WA)*

Extract from legislation:
19. Cruelty to animals

(1) A person must not be cruel to an animal.
Penalty: Minimum – $2000. Maximum – $50 000 and imprisonment for 5 years.

(b) uses a prescribed inhumane device on the animal;

Participants in the case:

Offender: Man from Perth's southern suburbs
Witness: Community member who saw magpies caught in traps in the man's garden. Provided an eyewitness account to the court.
RSPCA WA Chief Inspector: Prosecuting offenders who breach the Animal Welfare Act 2002 (WA)
Magistrate: Presided over the case, enforced rules of evidence and procedure and handed down sentence to accused.

Outcome
The accused was found guilty and was fined $4000.

Appeal
If the accused wished to appeal his conviction or sentence he would need to apply to the Supreme Court of WA within 28 days of receiving the Magistrates' Court 's decision.

Task

To help you better understand the Western Australian court system, you are to investigate a recent Western Australian criminal case. In order to do this, you will need to develop a good understanding of a specific criminal offence, the criminal jurisdictions of the WA courts and your legal vocabulary. You are to present your research as an annotated visual display.

Follow the steps detailed in the **Process** section to complete this task.

Process

- Open the ProjectsPLUS application in the Resources for this topic. Open the Project set-up tab to enter the project due date. Save your settings and the project will be launched.
- In the **Media Centre** you will find an assessment rubric to guide your work and some weblinks that will provide a starting point for your research.

- Find a newspaper article that relates to a Western Australian criminal case.
  1. Make a list of the legal terminology used in the article. Create a glossary by defining each of these terms.

Legal term	Definition
e.g. prosecution	

  2. Identify the main participants in this case (e.g. the victim, prosecution, accused, police, etc.) and explain each of their roles in this case.
  3. Identify the crime or simple offence that has allegedly been committed.
  4. Which court presided over this case? Outline the jurisdiction of this court (the cases this court has the power to hear) The Which Court? weblink in the Media Centre will assist you to answer this question.
  5. Was the accused found guilty or not guilty in this case? If they were found guilty, what sentence (punishment) did they receive?
  6. If a party to your case wishes to appeal the decision, outline which court has the power to hear the appeal.
- To present your research, paste a copy of your article in the centre of a poster and annotate the article with your information. Use appropriate images or diagrams to add interest to your information. Use the template in the Media centre to help you present your research.

on Resources

ProjectsPLUS Western Australian court case investigation (pro-0252)

4.7 Review

4.7.1 Key knowledge summary

4.2 How parliaments make laws

- Statute law (or an Act or legislation) must be passed through both houses of parliament in the form of a Bill, which must then be approved by the Crown.

4.3 How courts make laws

- Courts make laws because they interpret laws and make decisions to resolve the cases they are hearing, and in doing so create precedents that will be followed by other courts.

4.4 Criminal law and civil law

- Criminal law protects the community as a whole. It incorporates crimes including robbery, manslaughter and murder. The police or a representative of the government (the prosecution) takes the accused (the defendant) to court. There, a consequence, such as a fine or imprisonment, may be imposed.
- Civil law protects the private rights of individuals. It incorporates civil wrongs including negligence, defamation and breach of contract. A person who feels that a civil wrong has been done to him or herself (the plaintiff) will sue the other party (the defendant) in court to repair the harm caused, often seeking damages.

4.5 Customary law in Aboriginal and Torres Strait Islander communities

- Aboriginal and Torres Strait Islander customary law provides guidance for how to behave and live. Disputes or incidents are resolved by the Elders, who agree on an appropriate solution or consequence.

4.7.2 Key terms

accused the party in a criminal trial against whom an action has been brought
Act a law passed by Parliament
Bill a proposed law that has not yet been agreed to by Parliament or received royal assent
breach of contract a situation where a legally binding agreement is not honoured by one or more of the parties to the contract
burden of proof the legal principle describing who has to prove a case in court. In a criminal trial, this burden is on the prosecution.
Cabinet the main group of parliamentary members from the governing party
codified refers to laws that have been collected and organised, usually in written form
common law law developed by judges through the decisions of courts
Crown the Queen's authority in the Australian parliament, represented by the Governor-General at the federal level and a Governor at the state level
customary law rules for behaviour developed by and for Aboriginal and Torres Strait Islander peoples
defamation unlawful damage to a person's good reputation through written or verbal statements
defendant the party in a civil trial against whom an action has been brought
dispute an argument
homicide the killing of one person by another person
jury in a criminal trial, a randomly selected group of people who decide the guilt or innocence of an accused person
legislation a law made by Parliament
liable legally responsible for a civil wrong
magistrate a court official who hears cases in the lowest court in the legal system
manslaughter the accidental or unintentional killing of one person by another person
negligence a situation where a person breaches a duty to exercise reasonable care to avoid a foreseeable risk, resulting in another person being injured or suffering a risk of injury
nuisance interference with someone's enjoyment of public or private property
Opposition the main political party in the lower house of parliament not in power
plaintiff the person who commences a legal action in civil law

precedent a legal principle developed by a court in the process of resolving a dispute
prosecute to take legal action against another person for a criminal offence
standard of proof the level of proof required to establish a case. In criminal law, the prosecution must prove that the accused is guilty beyond reasonable doubt.
statute laws laws made by Parliament
trespass a tort (civil wrong) involving direct and intentional interference with a person, or a person's land or goods

4.7.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

How does the law say Australians should behave? Who made those rules and why should we follow them?

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

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5416)
Reflection (ewbk-5415)
Crossword (ewbk-5414)
Student learning matrix (ewbk-2704)

Interactivity Where do our laws come from? crossword (int-8236)

4.7 Review exercise

Multiple choice

1. What must happen to a Bill before it becomes a law?
   A. Pass the lower house, pass the upper house and receive royal assent
   B. Be passed by the Labor Party, be passed by the Liberal Party and be approved by the Governor-General
   C. Be passed by a lower court, be passed by a higher court and receive the approval of the High Court
   D. Be agreed to by all of the elders
2. In the lower house of parliament, what is the main political body not in power called?
   A. Backbenchers
   B. Government
   C. Opposition
   D. Independents
3. What is a law made by courts referred to as?
   A. Legislation
   B. A Bill
   C. An Act
   D. Common law
4. Which of the following cases involves a precedent?
   A. Parliament passing new laws banning smoking
   B. A court finding that the accused is guilty of manslaughter because a decision about a similar case was made in a higher court
   C. A court deciding that a speeding fine was correct
   D. Parliament blocking a new law around immigration

5. What is the highest court in Australia?
   A. Magistrates' or Local Court
   B. High Court
   C. District or County Court
   D. Supreme Court

6. Criminal laws are the laws made to:
   A. be passed by both houses of parliament and approved by the Crown.
   B. protect the community from harm.
   C. develop legal principles in the process of courts resolving disputes.
   D. protect the private rights of individuals.

7. Suing another person for negligence is an example of which law?
   A. Criminal law
   B. Statute law
   C. Contract law
   D. Civil law

8. In a criminal trial, the prosecution must prove that the accused is guilty:
   A. on the balance of probabilities.
   B. with room for some doubt.
   C. beyond reasonable doubt.
   D. when the jury does not like the person.

9. Under Aboriginal and Torres Strait Islander customary law, how are disputes or incidents resolved?
   A. Police who will charge you and take you to court
   B. Courts that examine all the evidence before them
   C. Elders agree on an appropriate solution or consequence
   D. Parliament that passes laws through both houses

10. Which best describes Aboriginal and Torres Strait Islander customary law?
    A. Laws passed through parliament that only apply to Aboriginal and Torres Strait Islander peoples.
    B. Civil law that only applies to Aboriginal and Torres Strait Islander peoples.
    C. The rules and guidelines in Aboriginal and Torres Strait Islander cultures for how to behave.
    D. One set of rules for behaviour that applied in all Aboriginal and Torres Strait Islander cultures before colonisation.

Short answer

11. What are laws and why are they important?

12. Who makes statute law?

13. Briefly outline the seven steps that a Bill must go through on its way to becoming law in Western Australia.

14. Outline the difference between criminal and civil law.

15. Murder, manslaughter and robbery are all examples of what type of law?

16. Give one example of civil law.

17. Define the term 'precedent' in your own words.

18. Outline the difference between statute law and common law.

19. Outline what is meant by the term 'customary law'.

20. Where did Aboriginal and Torres Strait Islander customary laws originate?

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 4 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

4.1 Overview

Video eLessons
- What if we had no laws (eles-2264)

4.2 How parliaments make laws

eWorkbook
- How laws are made (ewbk-5411)

Interactivity
- How laws are made in parliament (int-5703)

Weblink
- Commonwealth Parliament

4.3 How courts make laws

eWorkbook
- Court hierarchy (ewbk-5409)
- Precedent (ewbk-5410)

Interactivities
- The decision-making process for settling disputes in court (int-5753)
- The courtroom (int-1206)

4.4 Criminal law and civil law

eWorkbook
- Legal disputes (5412)
- Criminal law (ewbk-5413)

Interactivity
- Time out – civil and criminal law (int-1402)

4.6 Thinking Big research project: Western Australian court case investigation

ProjectsPLUS
- Western Australian court case (pro-0252)

4.7 Review

eWorkbook
- Reflection (ewbk-5415)
- Crossword (ewbk-5414)
- Student learning matrix (ewbk-2704)

Interactivity
- Where do our laws come from? (int-8236)

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

5 Influences on Australian society and national identity

5.1 Overview

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

What does Australian society look like to the rest of the world? What events, people and beliefs shape our identity?

5.1.1 A diverse culture

Casual clothes day is always an interesting event at a school. Given a day of freedom from their uniforms, students take the opportunity to demonstrate their identity through fashion. While many students simply choose their clothes for comfort or style, for others fashion is a deliberate statement. For these students, fashion indicates they are members of a particular social group. These groups provide students with a sense of belonging – a feeling that they are part of a larger community with shared values. A group's identity is how the members of that group present themselves to the rest of the world. In our casual clothes day example, this representation occurs through fashion. If we extend this example of a group identity to an entire country, we will see many different representations of national identity.

In Australia, our national identity has always been complex. Our country is a diverse collection of nationalities and cultures. Because of this, isolating individual aspects of an Australian national identity is a challenging task. In this topic, we investigate Australia's national identity, how it was formed, how it continues to evolve and how it creates a sense of belonging for the people who call this country home. The diversity of religion, culture, values and traditions that people have brought to Australia has created a fascinating and intricate tapestry of identity.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5427)

Video eLesson What is national identity? (eles-2291)

5.2 Traditional and changing views of Australian identity

LEARNING INTENTION

By the end of this subtopic, you should be able to explain how Australia's national identity has changed over time and what influenced these changes.

5.2.1 What has influenced our national identity?

A singular Australian identity is hard to define. Australia was already a place of diversity before European colonisation. There were hundreds of languages spoken across the country and the traditions of each Aboriginal and Torres Strait Islander people reflected their own special understanding of Country and culture. Since European colonisation began in the late 1700s, different countries have contributed aspects of their culture to form the multicultural identity we see in Australia today. Changes in Australian identity have been, and continue to be, reflected in our relationship with other countries. In colonial times, Australian identity closely mirrored that of Britain. When Australia moved away from British influence and towards the United States of America (directly after World War II), aspects of our national identity changed as well. Our identity now faces an interesting stage in its development as our focus turns towards our Asian neighbours. Australia's national identity continues to evolve as people from a vast array of nations make their contributions to our diverse multicultural nation.

5.2.2 'We don't like cricket, we love it'

Love it or hate it, cricket is big part of Australian culture. Every weekend in summer, thousands of men, women and children around Australia hone their skills with the bat and ball. But how did this strange game find its way into our country?

Like many other aspects of Australian identity, our country's love of cricket is a legacy of our British roots. This connection was forged by early British settlers who introduced elements of their existing identity and traditions to their new Australian home. The British failed to understand or recognise the long-standing cultures of Aboriginal and Torres Strait Islander peoples. They simply ignored Aboriginal and Torres Strait Islander identities and replaced them with their own. The British did so because they felt no connection to Aboriginal and Torres Strait Islander cultures. Introducing their own culture made them feel more comfortable in the new surroundings and increased their sense of belonging.

FIGURE 1 Children playing cricket in 1925 (left) and 2019 (right)

5.2.3 The 'mother country'

The close relationship between Britain and Australia continued well into the twentieth century, despite **federation** in 1901. Evidence of the British influence on Australian identity can be seen in the culture, fashion and even foods that were popular at the time. Perhaps the clearest piece of evidence, however, was Australia's willingness to follow the 'mother country' into World War I (WWI). When that war began in 1914, British Australia was still a relatively young country. Without an official **foreign policy** of its own, Australia adopted the policies of Great Britain and also declared war on Germany.

Australia's involvement in WWI had an enormous influence on our national identity. This conflict saw the birth of the Anzac legend with its values of determination, sacrifice and mateship. These values are now cornerstones of Australian national identity. The British influences on Australia can also been seen in our adoption of the British Westminster system of parliament, and in the simple fact that the Queen is Australia's official head of state.

FIGURE 2 A World War I enlistment poster

5.2.4 Diversity in Australia

After World War II (1939–1945), Australia's relationship with foreign countries changed as we lessened our political connections with Britain. Though formal ties with the 'mother country' were maintained, Australia sought to strengthen its alliance with the United States of America. This new direction was shown in Australia's willingness to support the US in a number of global conflicts, including the Korean and Vietnam wars, which ran through the 1950s, 60s and 70s. American popular culture also began replacing that of the British, with new genres of music, fashion and cinema introduced into Australian society.

Changes in Australian identity are reflected in changes to our government's foreign policy. Australia's foreign policy has recently changed again, this time with a focus on closer relationships with China, Japan and other Asian countries. An example of this policy change was the removal of the **White Australia** policy in 1958, formally known as The Immigration Restriction Act of 1901. This policy blocked all non-European immigration to Australia. It was gradually phased out in the second half of the twentieth century. The gradual removal of Australia's White Australia policy has enabled these new relationships to develop. These changes might be seen in schools such as your own.

federation the process through which the six separate Australian colonies joined to form one united nation

foreign policy decisions made by governments concerning their relationships with other nations

White Australia an immigration policy discriminating against non-white people that existed for much of the twentieth century

The option to study Asian languages in school is much more common now than it was in your grandparents' era. In their time, the study of languages still had a significant **Eurocentric** focus. You may study a language to allow you to communicate with people if you ever visit that country. However, knowing a language will also help you to communicate with people within your own country. In this way, the languages taught in schools say a lot about a country's identity and where it is heading. You may be learning Chinese at school, like many thousands of Australian students do today. Refer to **FIGURE 3** to learn or review some Chinese words.

int-5664

FIGURE 3 Chinese characters

一 one	二 two	三 three	春 spring	夏 summer
秋 autumn	冬 winter	龍 dragon	虎 tiger	馬 horse
獅 lion	木 wood	水 water	火 fire	土 soil
雨 rain	吃 eat	喝 drink	父 father	母 mother

Eurocentric a point of view that has a strong European focus

FIGURE 4 Australian soldiers fighting in the Vietnam War in 1967

5.2 EXERCISE

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

Learning pathways

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

Check your understanding

1. Why did the British feel the need to introduce their national identity to Australia?
2. Why is it so difficult to define Australian national identity?
3. During both the Korean and Vietnam wars, the people of Australia were under no direct threat or danger. Explain how Australia became involved in these conflicts.
4. List some aspects of Australian national identity that have British origins.
5. What was the White Australia policy?

Apply your understanding

6. Look at **FIGURE 2**. Who do the lions in this poster represent?
7. How do you think Australian national identity will change in the next 50 years? For example, where do you think the next wave of immigration will come from?
8. Describe what being Australian means to you.
9. Do you think it is important for Australians to have one version of national identity?
10. Describe the ways that you demonstrate your own identity.

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

5.3 Aboriginal and Torres Strait Islander cultures' influences on Australian national identity

Aboriginal and Torres Strait Islander readers are advised that this topic may contain photos of or references to people who have died.

LEARNING INTENTION

By the end of this subtopic, you should be able to:

- explain the historical context of Aboriginal and Torres Strait Islander peoples in relation to national identity and the path to reconciliation
- define key terminology
- provide a balanced perspective on Aboriginal and Torres Strait Islander issues.

5.3.1 Making amends

The original inhabitants of Australia suffered greatly from the British colonisation of their country. Years of conflict, oppression, and injustice have caused ongoing pain and suffering for Aboriginal and Torres Strait Islander peoples. In recent years, efforts have been made to mend the damage caused by previous governments. The **reconciliation** movement can be seen as an attempt to restore the importance of Aboriginal and Torres Strait Islander cultures in Australian society. Before we discuss how reconciliation contributes to Australian identity, we need to learn what reconciliation is and why it is necessary.

reconciliation the process of restoring and encouraging respect for Aboriginal and Torres Strait Islander culture and identity

5.3.2 What went wrong?

Reports following the arrival of the British in Australia in 1788 suggest that there were positive interactions between the British and Aboriginal and Torres Strait Islander peoples. However, conflict often erupted when the British expanded their settlements without consideration for or compromise with the people who already lived there. Acts of aggression from the British went beyond the taking of land. Many people from Aboriginal and Torres Strait Islander communities were killed or captured by the British, and many sacred places were destroyed or desecrated (disrespected and damaged) – sometimes unknowingly, sometimes intentionally. Any attempts to reclaim or protect Country were met with further, often much more severe, actions by the British.

FIGURE 1 A representation of a first interaction between Aboriginal people and the British from the perspective of an artist from a European background. How might someone from another culture have shown this scene?

The Stolen Generations

Can you imagine being forcibly taken from your parents as a young child, put into strange clothing, given strange food and told to never speak your language again? From the 1860s to as recently as 1969, children from Aboriginal and Torres Strait Islander cultures were forcibly removed from their homes and families by various Australian governments. Some historians argue that this program of removal had good intentions, and that the governments involved were motivated by the welfare of the children. On the other side of the debate, historians claim child removal was a deliberate policy intended to weaken Aboriginal and Torres Strait Islander communities and cultures. Removed from their families, these children were also removed from their Country, language and cultural identity. Children removed during this period of time have become known as the Stolen Generations.

Despite the reluctance of previous leaders, an official apology for this policy was eventually provided in 2008 by then-prime minster, Kevin Rudd. It symbolised a major step in the journey towards reconciliation.

FIGURE 2 Homes were sought for these Aboriginal children after they were forcibly removed from their families. Can you read the note on the clipping in response to the article? Why do you think the person who wrote it might have been concerned that the child was 'strong'? What do the words 'any of the others would do' suggest?

Homes Are Sought For These Children

A GROUP OF TINY HALF-CASTE AND QUADROON CHILDREN at the Darwin half-caste home. The Minister for the Interior (Mr Perkins) recently appealed to charitable organisations in Melbourne and Sydney to find homes for the children and rescue them from becoming outcasts.

I like the little girl in centre of group, but if taken by anyone else, any of the others would do, as long as they are strong

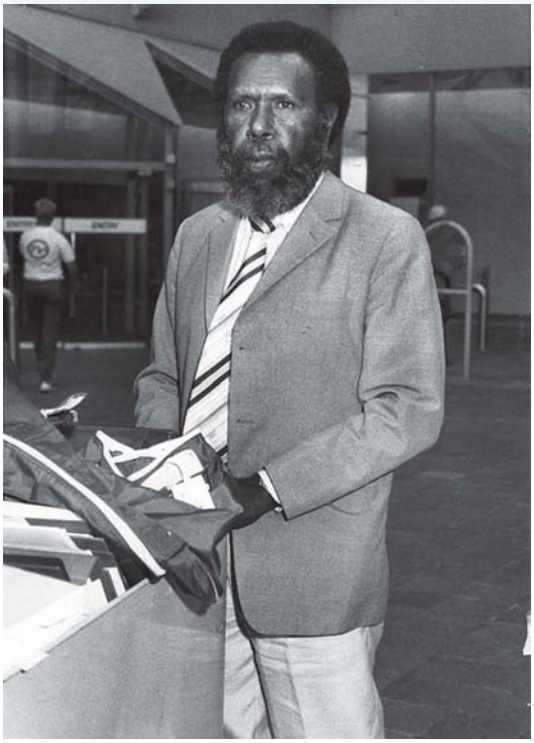
'Ownership' of land

One important aspect of Aboriginal and Torres Strait Islander culture and identity is connection to Country. This relationship with the land connects an individual with their community and culture – past, present and future.

Upon arriving in Australia, the British did not recognise Aboriginal or Torres Strait Islander peoples' right to their land, their relationship with the land or the evidence of their occupation and management of the land over tens of thousands of years. The British claimed the land as theirs based on the legal concept of ***terra nullius***.

Many legal actions have been launched by Aboriginal and Torres Strait Islander peoples with the goal of having their rights to legally own, occupy and manage traditional lands restored. In 1992, the High Court of Australia officially rejected the concept of *terra nullius*, paving the way for land rights to be returned in some circumstances. The fight to regain **land rights** continues in many places around Australia today.

FIGURE 3 Aboriginal and Torres Strait Islander land rights campaigner Eddie Mabo. In 1982, Mabo and four other Torres Strait Islander people took legal action, claiming customary ownership of their lands on Murray Island.



5.3.3 The path of reconciliation

As recently as the mid twentieth century, people from Aboriginal and Torres Strait Islander cultures were not considered citizens of Australia. They could not vote in elections, and were not even counted in the population of the country when the census was taken. In 1948, they officially became British subjects and Australian citizens, but were not granted voting rights until 1962.

Perhaps the most famous Australian civil rights victory was the 1967 **referendum**, after which people from Aboriginal and Torres Strait Islander cultures were legally recognised as being Australians with the same rights as the rest of the population. The referendum was a formal statement that Aboriginal and Torres Strait Islander cultures and Australian culture were one and the same. This event had a significant impact on Australian identity.

Reconciliation began as an official movement in 1991 with the formation of the Council for Aboriginal Reconciliation. The term 'reconciliation' refers to repairing the damage of past events through better understanding of, and respect for, Aboriginal and Torres Strait Islander cultures. The inclusion of 'Welcome to Country' speeches, smoking ceremonies or acknowledgments of Country before public events are small-scale examples of what reconciliation looks like. Larger-scale examples include placing a higher priority on health and education programs for Aboriginal and Torres Strait Islander communities, often with a specific focus on the welfare of children. Symbolic acts such as the Sorry Day march in 2000, and the official apology to the Stolen Generations offered by former Prime Minister Kevin Rudd, are other significant steps along the path to reconciliation.

terra nullius a Latin phrase that translates as 'land belonging to no-one'

land rights the rights of people (in this case Aboriginal and Torres Strait Islander groups) to own use and protect the land their ancestors have lived on for generations

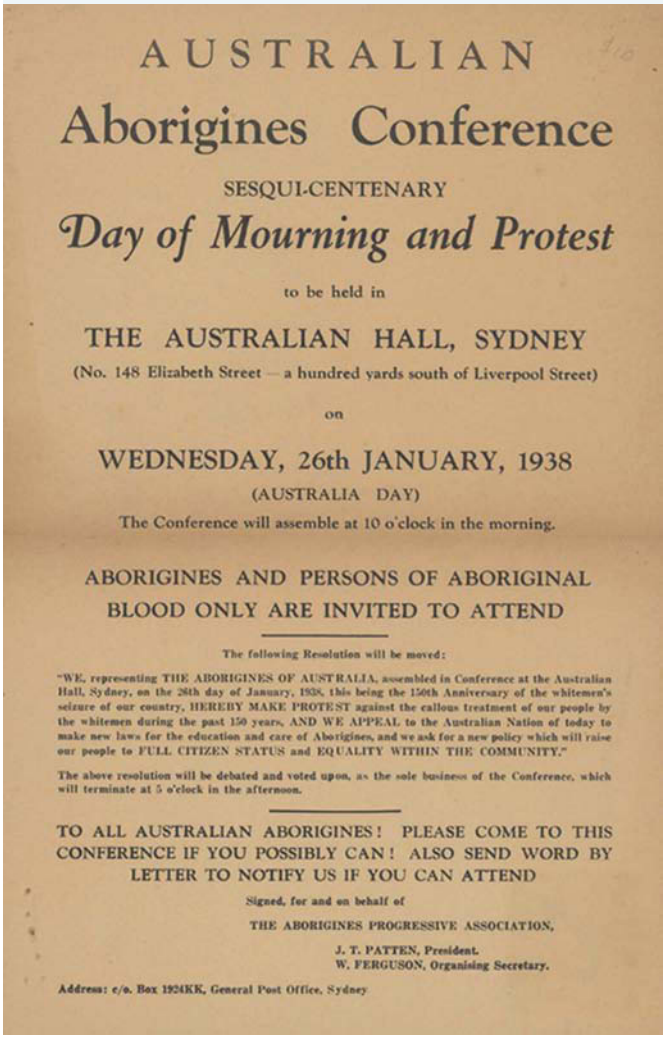
referendum a process of allowing the people to vote on an important issue, such as a proposed change to the Constitution

5.3.4 Australia Day

The debate that surrounds the celebration of Australia Day provides another example of the complex nature of Australian national identity. Australia Day (currently celebrated on 26 January) is the official national day of Australia. This date commemorates the arrival of the ships of the First Fleet at Port Jackson, New South Wales in 1788. The first evidence of Australia Day celebrations comes from colonial New South Wales. Referred to as 'Foundation Day', Governor Lachlan Macquarie issued the first official observance of the date in 1818 – the thirtieth anniversary of the founding of the colony. Prior to 1888, the individual colonies celebrated their respective commemorative events on separate days. It was not until 1935 that all Australian states and territories officially adopted the term 'Australia Day' and it was only in 1994 that the date was marked by a national public holiday. The celebration of this day is far from straightforward – even before we start to discuss what a national day to celebrate the arrival of the British signifies (suggests) to Aboriginal and Torres Strait Islander peoples.

In modern Australia, our national day is celebrated in many different ways. Barbeques, concerts, community events and citizenship ceremonies are held on Australia Day across the country. Some people argue that Australia Day is an opportunity to reflect on what makes our country unique and what it means to be Australian. But to many other Australians, there is nothing about 26 January that warrants celebration. To many Australians, this date is a reminder of the beginning of a brutal invasion.

FIGURE 4 On the sesquicentenary (150th anniversary) of British colonisation in 1938, the Australian Aboriginal Conference declared a 'national day of mourning'.



AUSTRALIAN

Aborigines Conference

SESQUI-CENTENARY

Day of Mourning and Protest

to be held in

THE AUSTRALIAN HALL, SYDNEY

(No. 148 Elizabeth Street — a hundred yards south of Liverpool Street)

on

WEDNESDAY, 26th JANUARY, 1938

(AUSTRALIA DAY)

The Conference will assemble at 10 o'clock in the morning.

ABORIGINES AND PERSONS OF ABORIGINAL BLOOD ONLY ARE INVITED TO ATTEND

The following Resolution will be moved:

"WE, representing THE ABORIGINES OF AUSTRALIA, assembled in Conference at the Australian Hall, Sydney, on the 26th day of January, 1938, this being the 150th Anniversary of the whitemen's seizure of our country, HEREBY MAKE PROTEST against the callous treatment of our people by the whitemen during the past 150 years, AND WE APPEAL to the Australian Nation of today to make new laws for the education and care of Aborigines, and we ask for a new policy which will raise our people to FULL CITIZEN STATUS and EQUALITY WITHIN THE COMMUNITY."

The above resolution will be debated and voted upon, as the sole business of the Conference, which will terminate at 5 o'clock in the afternoon.

TO ALL AUSTRALIAN ABORIGINES! PLEASE COME TO THIS CONFERENCE IF YOU POSSIBLY CAN! ALSO SEND WORD BY LETTER TO NOTIFY US IF YOU CAN ATTEND

Signed, for and on behalf of

THE ABORIGINES PROGRESSIVE ASSOCIATION,

J. T. PATTEN, President.
W. FERGUSON, Organising Secretary.

Address: c/o. Box 1924KK, General Post Office, Sydney

As we have just learned, the impacts of European settlement on the First Peoples of this country have been severe and are long-lasting. For this reason, celebrating Australia's official national day on the anniversary of European colonisation is seen by many as deeply disrespectful to Aboriginal and Torres Strait Islander peoples and their cultural heritage. The first official protests against Australia Day celebrations occurred in 1938 with the National Day of Mourning (see **FIGURE 4**). This event was heavily publicised and is seen by many historians as the beginnings of the Aboriginal and Torres Strait Islander peoples' civil rights movement. Day of Mourning protests have been held ever since, with more recent events using the names Invasion Day or Survival Day.

In recent years, there have been calls to change the date of Australia Day. People calling for this change are not against celebrating an Australian national day. Instead, they want to celebrate Australian culture and identity on a date that has a more positive meaning for all Australians.

DISCUSS

As a class, discuss the issue of celebrating Australia Day on a different day of the year. How might different people around the country react? What would be any positives and negatives of making this change?

General capability: Intercultural understanding

on Resources

Weblinks Aboriginal and Torres Strait Islander rights movement timeline
National apology

5.3 ACTIVITIES

1. Use the **Aboriginal and Torres Strait Islander rights movement timeline** weblink in the Resources tab or your own internet research to create a timeline of the major events that have occurred so far in the process of reconciliation. **HASS skills: Reasoning, creating, proposing**
2. Use the **National apology** weblink in the Resources tab to watch the video of former Prime Minister Kevin Rudd's apology to the Stolen Generations. Imagine you are the relative of a member of the Stolen Generations and write a brief response to this speech. **HASS skills: Communicating and reflecting**

5.3 EXERCISE

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

Learning pathways

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

Check your understanding

1. Give an example of how the early British settlers showed a lack of respect for Aboriginal and Torres Strait Islander cultures.
2. Who were the Stolen Generations?
3. How did declaring *terra nullius* allow the British to claim the land of Australia?
4. What is reconciliation?
5. Explain the origins and different opinions about of Australia Day.

Apply your understanding

6. Explain why someone might disagree with Australia Day being celebrated on 26 January.
7. Which of the following do you believe was most significant step in the process of reconciliation? Explain why.
   a. Legal recognition of citizenship in 1948
   b. Gaining federal voting rights in 1962
   c. The 1967 referendum
8. Suggest an alternative date for Australia Day. Explain why you chose that date and what significance it has in Australian history.
9. Compare the intentions of the government's child removal policy with the impacts that it caused.
10. Why was the High Court's rejection of *terra nullius* such a significant event for Aboriginal and Torres Strait Islander peoples?

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

5.4 Belonging to a new country – migrant experiences

LEARNING INTENTION

By the end of this subtopic, you should be able to:

- explain the push and pull factors that have resulted in people migrating to Australia
- engage with case studies to get a better understanding of the migrant experience.

5.4.1 Seeking a better life

Consider what you would do for the sake of your family. Now, consider what you *wouldn't* do for the sake of your family. It is a sad truth that, every day around the world, families encounter terrible problems. Some are faced with hunger, poverty and disease; others must deal with violence, brutality and fear; and some are confronted with all of these challenges. Many families in these situations choose to leave their countries or traditional homelands in favour of the peace and freedom offered in Australia. Throughout Australian history, people from nearly every nation in the world have relocated to this country in search of new opportunities. The experiences of these **migrants** is discussed in this subtopic.

FIGURE 1 A Vietnamese brother and sister arriving in Australia, 1974

5.4.2 Migrant identity

Migrants are forced to adapt to the national identity of their new homes quickly. This is something they need to do without losing their connection to their own identity. In this way, their sense of **belonging** is split in two. Migrant groups cannot live separately from the new laws, customs and language of their adopted country, but neither can they forget the elements of their original culture and identity. Australia's well-established tradition of acceptance and diversity makes balancing these identities easier for new migrants. As they celebrate their existing identity, migrant groups also reinforce Australia's multicultural identity. This helps new migrants to feel a sense of belonging to both their old and new communities.

FIGURE 2 Migrants must balance two cultures: their own and that of their adopted country.

As well as feeling emotionally connected to their old and new countries, migrants can officially be part of both countries through dual citizenship, which is offered in Australia as well as in many other countries. Holders of dual citizenship have legal and moral responsibilities in both countries. These responsibilities include voting in elections. For example, a person who lives in Australia can be both a citizen of Australia and Greece. This person is required to vote in both Australian and Greek elections.

migrants people who leave one country to reside in another

belonging the feeling of being part of a group or community with shared values

The federal government does not have statistics regarding the number of dual citizens, although it estimates the figure to be around 4 million Australians. Dual citizenship is another way in which people can maintain a sense of belonging to two separate nations and cultures.

5.4 ACTIVITY

The best way to learn about the challenges faced by Australian migrants is to read and listen to their experiences. Many fascinating stories from a diverse range of migrants can be found online. Read articles and watch video clips to get a more complete understanding of the challenges migrants have faced. Have a pen and paper handy while looking at this material to note down any information you find interesting or any areas you want to investigate further.

General capability: Intercultural understanding

5.4 EXERCISE

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

Learning pathways

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

Check your understanding

1. What is a migrant?
2. What is dual citizenship?
3. How can dual citizenship influence a person's sense of national identity?
4. Why is it important for people to feel a sense of belonging to their country?
5. What general responsibilities do citizens of a country have?

Apply your understanding

6. 'New migrants should abandon their existing national identity and adopt that of their new country.' Do you agree or disagree with this statement? Why?
7. Do you believe all people should be allowed to migrate to Australia, regardless of the reason? Justify your answer.
8. Imagine you had migrated to Australia from another country and had dual citizenship. If you were forced to renounce your citizenship of one country, which one might you choose? List some of the factors you would have to consider for both sides.
9. What are the main reasons why people migrate to Australia?
10. What advice would you give to new Australian migrants?

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

5.5 Religion in Australia

LEARNING INTENTION

By the end of this subtopic, you should be able to:

- explain the role of religion in Australia Identify key religions in Australia
- explain why religious identity has changed over time.

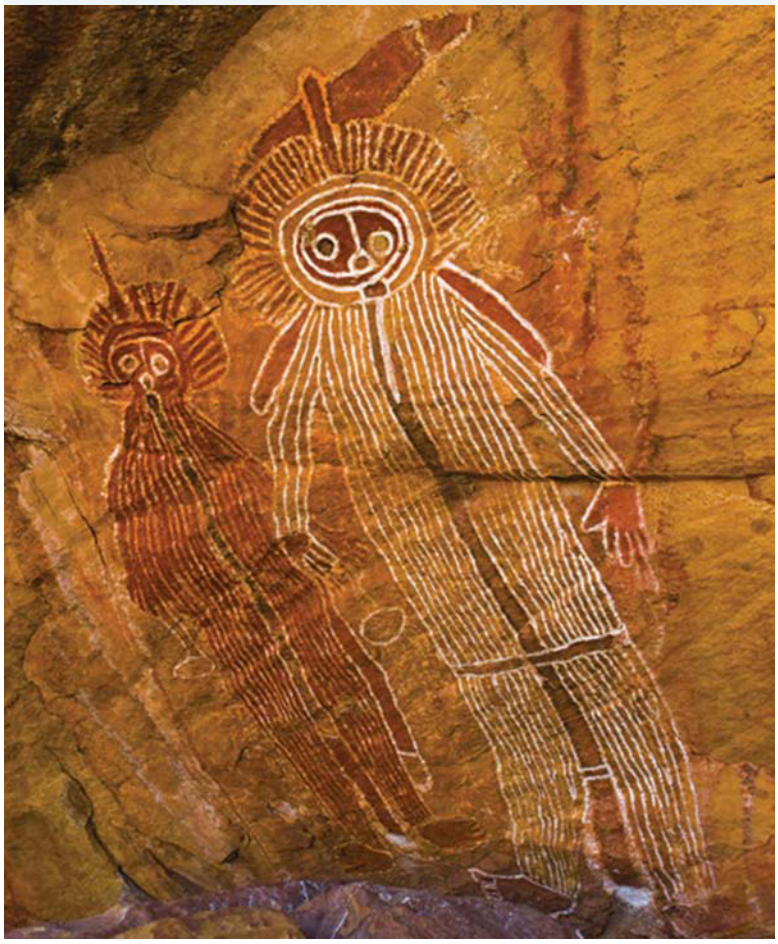
5.5.1 Religious influences in Australia

The place of religion in Australian society is complex. Our country is secular and by law, there is a distinction between religion and government and freedom of religion is protected in our Constitution. No government is allowed to actively promote a particular religion over another. Yet the influence of religion in Australian society is significant. Religion has had, and continues to have, an influence on our culture, traditions and values.

Since European settlement of Australia, Christianity has been the dominant religion of our country. Before this time, Aboriginal and Torres Strait Islander peoples worshipped various deities and had a deep spiritual connection to the natural world through their teachings from the **Dreaming**. As the European influence over Australia spread, so too did that of religion. In this subtopic, we will take a closer look at religion in Australia and how religious observance influences various aspects of our society and culture.

Dreaming the time when the world and all its creatures were formed

FIGURE 1 Aboriginal rock paintings for the *Lightning Brothers*, who are gods sacred to the Wardaman people near Katherine, Northern Territory



5.5.2 Origins of Christianity in Australia

Unfortunately for historians, convict records did not document their religion. The information we do have about the religious **affiliations** of convicts and colonial Australians comes mainly from secondary sources. Despite this limitation, we can still use the information we have to discuss the origins of Judeo-Christian religion in Australia.

The vast majority of convicts and official members of the First Fleet identified themselves as Christian. Specifically, they were Anglican and therefore aligned with the Church of England. So strong was their connection to the Church that all public servants swore an oath to follow its **doctrines**. There was also a small number of Irish-Catholic convicts on the First Fleet and this **denomination** provided the main alternative to the Church of England. The popularity of Catholicism increased as **transportation** to the colonies continued. The First Fleet also contained **practitioners** of other religions such as Judaism.

FIGURE 2 St James' Church, Sydney (1856), was an Anglican Church built with convict labour.

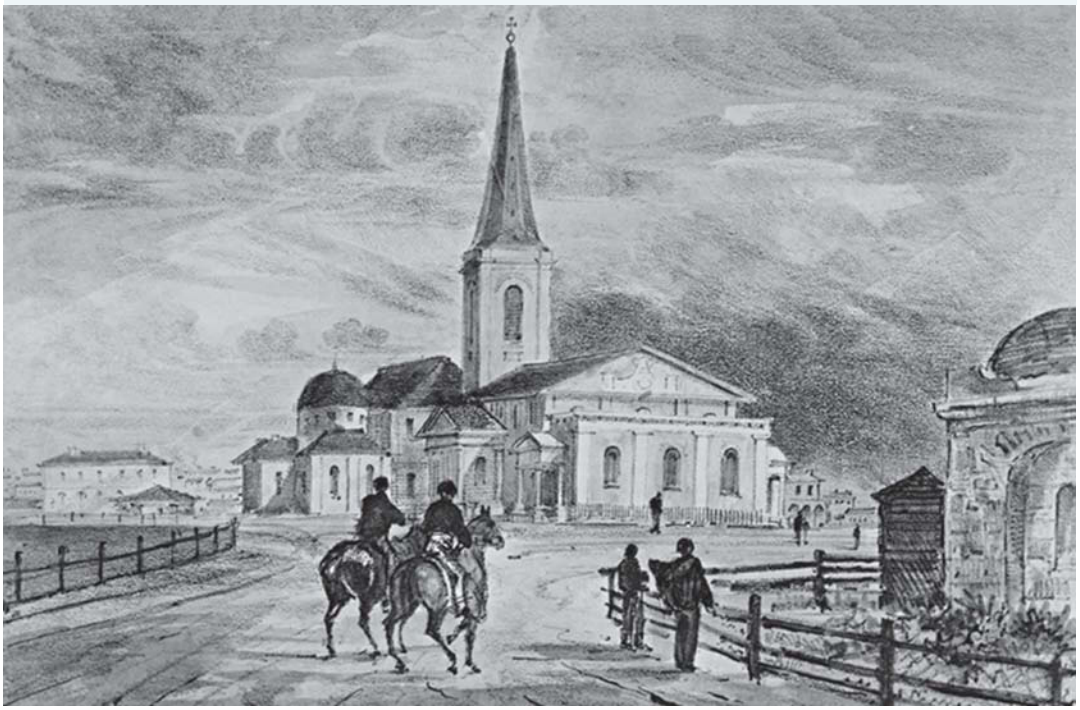


FIGURE 3 *A government jail gang* (1830), by Augustus Earle. The vast majority of convicts were Christian.

affiliations close connections with a group or organisation

doctrine a set of beliefs held and taught, usually by a religious group or political party

denomination a separate branch of a religion. For example, Catholicism is a denomination of Christianity.

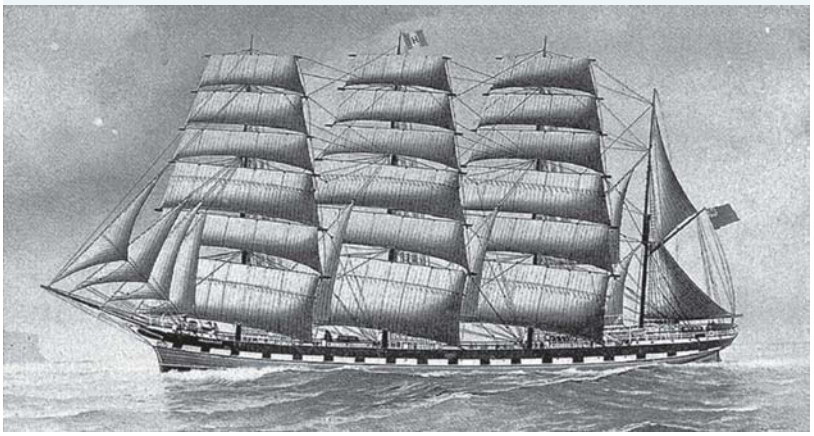
transportation the process of sending convicts to a penal colony

practitioner in a religious sense, someone who actively participates in a religion

5.5.3 Immigration and religion

Many changes in Australian society and culture can be linked to immigration patterns. These may be superficial changes such as the rise in popularity of a particular cuisine, or they can be more meaningful such as the rise in popularity of a religion. Throughout Australia's immigration history, new migrants have brought the culture and religion of their homelands with them.

FIGURE 4 The *Hougoumont* was the last convict ship to land in Australia.



The intertwined relationship between immigration and religion can be seen throughout Australia's history. Since the first European occupation in 1788, new migrant groups have influenced religious observance in Australia. As we have already learned, Christianity and its many denominations were first introduced to Australia by convicts and colonial settlers. Today, 52.1 per cent of Australians identify as Christian. The introduction of other religions to Australia has followed various immigration trends, which we will now examine.

Judaism

Together with Christianity, Judaism was one of the first religions practised in colonial Australia. Between eight and 16 convicts on the First Fleet were Jewish, and the first Jewish free settlers arrived in the early nineteenth century. The number of Jewish immigrants continued to increase, with the majority initially coming from Britain and later from Germany. In 1844, the first Australian synagogue was built in Sydney (see **FIGURE 5**), with places of worship in Hobart, Melbourne and Adelaide soon to follow. As with many migrant groups, the Jewish population in Australia increased during the gold rush in the 1850s. However, the biggest period of Jewish immigration occurred during and directly after WWII. Australia was one of the main destinations for Jews fleeing the atrocities of Nazi Germany. In fact, outside of Israel, Melbourne has the largest per capita population of **Holocaust** survivors in the world. Today, Australian Jewish communities are small yet vibrant; 0.4 per cent of all Australians identify themselves as Jewish.

FIGURE 5 The first synagogue in Australia, York Street, New South Wales (1844). It is shown in the far left of the painting.

Holocaust the destruction or loss of life on a large scale, usually referring to the death of 6 million Jews in Europe during WWII

Buddhism

The first Buddhists in Australia were Chinese immigrants who arrived during the gold rush. Although many of these people returned home after the mines were exhausted, some remained in Australia and continued to actively practise Buddhism. A second wave of early Buddhist immigration occurred in the 1870s with Sri Lankan nationals arriving to work in the sugar plantations of northern Queensland. Permanent Buddhist communities were established during this time, but it was not until nearly a hundred years later that the popularity of Buddhism began to explode. From the 1970s, Australia witnessed huge increases in Asian immigration and many of these new immigrants practised Buddhism. In contemporary Australia, Buddhism is our country's fastest-growing religion with 2.4 per cent of Australians practising this religion.

FIGURE 6 The Fo Guang Shan Buddhist temple in Perth

Islam

It is likely that Australia has been known to the Islamic world for hundreds of years. There is evidence to suggest that Islamic scholars knew about Australia as early as 820 CE! We know that Aboriginal and Torres Strait Islander peoples traded with the Macassans (from what is now Indonesia), who had converted to Islam in the seventeenth century. While there are records of a small number of Islamic convicts, the main period of Islamic immigration occurred with the arrival of the Afghan cameleers in the 1860s. With their expert knowledge of desert conditions, the cameleers were heavily involved in major construction projects across rural Australia. Despite its early success, Muslim immigration was severely restricted by the White Australia policy of the twentieth century. Since the official removal of this policy in 1973, Muslim immigration and the practice of Islam have steadily increased in Australia. Today, approximately 2.6 per cent of Australia's population is Muslim.

FIGURE 7 A camel being lifted off a boat in Port Augusta, South Australia, in 1920

Hinduism

Hinduism is the oldest major religion in the world and has been practised for more than 5000 years. However, Hinduism only came to Australia in the mid-nineteenth century. Although there is evidence of Hindu crews trading with the First Fleet, the first major period of Hindu immigration occurred well after the Australian colony was established. Hindu immigrants undertook several roles in early Australian society – as labourers,

camel drivers, domestic staff and merchants. By 1911, there were more than 1000 people in Australia who were affiliated with the Hindu faith. However, as with Islam, the growth of Hinduism in Australia was stalled by the White Australia policy. Today, Hinduism is a popular religion especially among Indian, Sri Lanka, Fijian and South African immigrants. According to the 2016 Australian census, Hindu practitioners account for 1.9 per cent of the population.

Atheism

Religion is not a significant part of life for all Australians. An atheist is someone who does not believe in the existence of god and, therefore, believes there is no need for religion. Accordng to the 2016 census, approximately 30.1 per cent of Australians describe themselves as being atheists or as having no religion. It is interesting to note that this figure has nearly doubled since the Australian census of 2011. This suggests that for many Australians, the importance of religion in everyday life is changing.

5.5 EXERCISE

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

Learning pathways

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

Check your understanding

1. Before European settlement, what religion did Aboriginal and Torres Strait Islander peoples follow?
2. We know a lot about each individual convict from records that were kept. What piece of relevant information was not recorded?
3. When did the largest period of Jewish immigration take place?
4. There were two early waves of Buddhist immigration. During the first, Chinese migrants came to seek their fortune in the goldfields. Where did Sri Lankan Buddhists work upon their arrival?
5. How has the percentage of people who identify as atheist changed over time?

Apply your understanding

6. Explain how the White Australia policy influenced the expansion of Islam and Hinduism in Australia.
7. In this subtopic you will find the percentage of Australians who follow the religion being discussed. (For example, 2.6 per cent of Australians identify as Muslim.) Use these percentages to create a graph of your choice showing the main religions followed by Australians today.
8. The number of Australians who call themselves atheists is increasing. Why do you think this is occurring?
9. Should there be any restrictions placed on the practice of religions in Australia? Explain your answer.
10. Using the information in this subtopic, predict which religions will have the largest followings in 50 years' time. Justify your prediction.

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

5.6 The influence of religion on Australian society

LEARNING INTENTION

By the end of this subtopic, you should be able to explain how religion has influenced both our values and our laws.

5.6.1 Religious values

According to our **Constitution**, Australia is a secular country (section 116 guarantees freedom of religion in Australia). This means that our governments are not allowed to officially promote religious observance or affiliations. Despite this, religion has had (and continues to have) a major influence on Australian people and culture. Unfortunately, this influence has not always been positive. In this subtopic, we will investigate the influence of Christian traditions, and religions in general, on our society.

Values and religion can play a similar role in society. Both provide a set of moral and ethical guidelines for people to follow. Therefore it is not surprising that strong links exist between Australia's Christian traditions and our shared values. The value of **compassion** is just one example of this relationship. Judaism and Christianity both contain strong references to compassion. For Jews, the 'thirteen attributes of compassion' are the ways in which God controls the world. According to Christianity, Jesus Christ was 'the father of compassion' and lived his life by demonstrating this value. Understanding the religious origins of compassion allows us to see how Judeo-Christian traditions have influenced modern Australian society.

5.6.2 Religion and the law

Religion and Australian law have always been closely linked, according to former High Court Judge Michael Kirby. He argues that 'our law … was influenced by notions which were shared by Christian churches and belief' (interview on ABC Radio, 16 May 2012). Although there are no direct references to Christianity or its religious customs in Australian law, our legal system has been shaped by Christian values. For example, our criminal law forbids murder and theft, crimes that are condemned in the Ten Commandments of Christianity. Australia's legal system attempts to provide all its citizens with fair and equal access to human rights. Caring for people in this way is also an element of the Christian tradition. More recently and controversially, these traditions have influenced the debate surrounding same-sex marriage. Although there is no official reference to Christianity in the documentation of the Australian Liberal Party, the party remained opposed to same-sex marriage until it was finally legalised in 2018, due to a perceived belief that same-sex marriage is forbidden in the Christian Bible. This is further evidence of the power that Australia's religious traditions can have over our laws.

5.6.3 Religion in daily life

Australia's Christian traditions are represented in many elements of daily life. One of the best examples of these influences can be seen in the opening hours of shops and businesses. It was not too long ago that Sunday trading was completely banned in Australia. As Sunday was the traditional day of rest for Christians, most businesses were not officially allowed to open. Only relatively recently has the ban on Sunday trading been lifted in most Australian states and territories. Tight restrictions, however, remain in place for Christian public holidays such as Good Friday, Easter Monday and Christmas Day. The way in which these holidays are celebrated also shows the influence of religion on Australian society. Christmas decorations begin appearing in supermarkets and shopping centres as early as October. As soon as Christmas is over, these are replaced by Easter eggs and hot cross buns. These cultural items are further evidence of how religious traditions influence Australian life.

Constitution a set of rules that determines the structure of government and its law-making powers

compassion feeling empathy towards someone in a less fortunate position

5.6.4 In the name of religion

It is an unfortunate truth that Australia's Christian traditions are also responsible for some darker moments in our history. In 1837, the British Parliament launched an inquiry into the treatment of Aboriginal and Torres Strait Islander peoples in the colonies. The result of this inquiry was the establishment of 'protectors' whose role it was to manage the welfare of Aboriginal people and communities. These protectors were usually Christian missionaries who attempted to 'civilise' Aboriginal and Torres Strait Islander cultures. This was done directly by introducing religious education or indirectly by imposing European ways of life. Though the intentions of these missionaries may have been good, their actions sometimes proved otherwise. Christian missionaries were responsible for separating many Aboriginal and Torres Strait Islander people from their land, culture and families. This example illustrates how the impacts of Australia's Christian traditions have not always been positive.

FIGURE 1 Some shops and businesses still close on Sundays, a tradition that originates from the Jewish observance of the Sabbath on the seventh day of the week. Christian religions adopted this concept, but Sunday rather than Saturday became their day of rest and worship.

DISCUSS

The influence of Australia's Judeo-Christian tradition is still present in many aspects of our society today. For example, it can be seen in our legal system, trading hours and religious public holidays such as Christmas Day. Discuss how these traditions or cultural practices influence your life. Has the influence of any of these traditions changed over time? **General capability: Intercultural understanding**

5.6 EXERCISE

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

Learning pathways

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

Check your understanding

1. How are religion and values similar?
2. Describe how Judeo-Christian traditions have influenced the Australian legal system.
3. Why is Sunday trading only a recent addition to Australian life?
4. 'Australia is a secular country.' Explain what is meant by this statement.
5. What was the intention of Christian missionaries who were active in nineteenth-century Australia?

Apply your understanding

6. What if our Constitution did not protect our right to freedom of religion? Do you think this would have a good or bad effect? Explain your answer in detail.
7. Do you think that the government should be secular? Provide a justification for your point of view.
8. Identify and explain two positive impacts that religion has had on Australian society.
9. There are several restrictions placed on businesses on religious holidays such as Easter. Since not everyone in Australia observes these holidays, do you think these restrictions are fair? Why or why not?
10. How are religious freedoms protected by the law?

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

5.7 Thinking Big research project: My family's identity

Scenario

Modern Australia is characterised by multicultural composition of our population. According to the Australian Bureau of Statistics, our nation is now home to people from more than 190 countries and 300 different ancestries. Migrants from other countries enrich Australian society by sharing their customs, traditions and beliefs. Australian identity is a complex combination of existing cultural practices and these new ways of life. In this way, migration is arguably the single most significant factor in the formation of the Australian nation and identity.

Task

Your task is to research your family's migration history. Unless your family has Aboriginal or Torres Strait Islander heritage, all Australians have been migrants to this country at some stage of their history (*Note:* if you do have Aboriginal or Torres Strait Islander heritage, you will still be able to complete this project). By developing interview questions and then conducting an interview with an older family member, you will gain a better understanding of your family's heritage and what their identity means to them and to your family.

Follow the steps detailed in the **Process** section to complete this task.

Process

- Open the ProjectsPLUS application for this topic. Click the **Start new project** button to enter the project due date and set up your project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered.
- Your first step is to develop your interview questions. The best way to write an interview question is to think carefully about what you want to discover. A basic list of questions could include:
  - Where does our family come from?
  - Who were the first people in our family to migrate to Australia and why did they come here?
  - When did our family arrive in Australia and how did they get here?
  - What was life like when you (they) first arrived in Australia?
  - How did you (they) demonstrate their identity then and how do you (they) demonstrate your identity now?
- If your family has Aboriginal and Torres Strait Islander heritage, you could ask questions such as:
  - What language group does our family belong to?
  - Where are the traditional lands of our family?
  - Does anyone from our family still live there? Why/why not?
- You can also add your own questions to these lists.
- Once you have written your questions, organise a time to conduct your interview (this will have to be after school or on a weekend).
- Conduct your interview. Make sure you either record your interview or write comprehensive notes during the interview.
- Once you have completed your interview, you will need to present your findings to the class. The format you choose for this presentation is up to you. You can create a poster, Google Slide/PowerPoint or another form of multimedia presentation. Your presentation should provide a summary of your interview and should focus on the topic of Australian identity.
- As well as presenting the findings of your interview to the class, you will also need to submit your interview questions and notes to your teacher for feedback and assessment.

on Resources

ProjectsPLUS My family's identity (pro-0177)

5.8 Review

5.8.1 Key knowledge summary

5.2 Traditional and changing views of Australian identity

- The diversity of Australian identity can be used to unify communities and create a sense of belonging.
- Religious traditions have influenced the society in which we live.

5.3 Aboriginal and Torres Strait Islander influences on Australian national identity

- Proper understanding and respect for the cultures and traditions of Aboriginal and Torres Strait Islander peoples are important parts of modern Australian society.
- There is ongoing debate about the appropriateness of celebrating Australia's official national day on 26 January, the anniversary of European settlement.

5.4 Belonging to a new country – migrant experiences

- Immigration has profoundly influenced the religious beliefs practised in Australia. Christianity, Judaism, Buddhism, Islam, Hinduism and atheism are all practised in modern Australia.

5.5 Religion in Australia

- Australian society has been significantly shaped by Christian traditions.
- Immigration plays a large role in shaping Australian culture and society.

5.6 The influence of religion on Australian society

- Although section 116 of our Constitution prohibits the government from promoting or prohibiting religious activity, religious beliefs have shaped our laws and continue to do so.
- Religion in Australia continues to evolve and reflects demographic changes in Australian society.

5.8.2 Key terms

affiliations close connections with a group or organisation
belonging the feeling of being part of a group or community with shared values
compassion feeling empathy towards someone in a less fortunate position
Constitution a set of rules that determines the structure of government and its law-making powers
denomination a separate branch of a religion. For example, Catholicism is a denomination of Christianity.
doctrine a set of beliefs held and taught, usually by a religious group or political party
Dreaming the time when the world and all its creatures were formed
Eurocentric a point of view that has a strong European focus
federation the process through which the six separate Australian colonies joined to form one united nation
foreign policy decisions made by governments concerning their relationships with other nations
Holocaust the destruction or loss of life on a large scale, usually referring to the death of 6 million Jews in Europe during WWII
land rights the rights of people (in this case Aboriginal and Torres Strait groups) to own the land their ancestors have lived on for generations
migrants people who leave one country to reside in another
practitioner in a religious sense, someone who actively participates in a religion
reconciliation the process of restoring and encouraging respect for Aboriginal and Torres Strait Islander culture and identity
referendum a process of allowing the people to vote on an important issue, such as a proposed change to the Constitution
terra nullius a Latin phrase that translates as 'land belonging to no-one'
transportation the process of sending convicts to a penal colony
White Australia an immigration policy discriminating against non-white people that existed for much of the twentieth century

5.8.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

What does Australian society look like to the rest of the world? What events, people and beliefs shape our identity?

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

on Resources

eWorkbook	Customisable worksheets for this topic (ewbk-5427) Reflection (ewbk-5426) Crossword (ewbk-5425) Student Learning Matrix (ewbk-5419)
Interactivity	Influences on Australian society and national identity crossword (int-7604)

5.8 Review exercise

Multiple choice

1. Australia's national identity:
   - **A.** is diverse in nature.
   - **B.** does not exist.
   - **C.** is the same as British national identity.
   - **D.** is the same as American national identity.
2. Changes in Australia's national identity have mirrored what?
   - **A.** Changes in governments
   - **B.** Changes in the people
   - **C.** Changes in foreign policy
   - **D.** Changes in prime ministers
3. Australia became involved in World War I because of its close relationship with which country?
   - **A.** United States of America
   - **B.** France
   - **C.** Germany
   - **D.** Great Britain
4. Why are Asian languages taught in Australian schools?
   - **A.** Because they bring together different cultures
   - **B.** Because they are easier than other languages
   - **C.** Because Asian governments pay schools to teach their languages
   - **D.** Because the Australian government wants its future leaders to know Asian languages
5. What were the first interactions between Aboriginal and Torres Strait Islander people and the British like?
   - **A.** Hostile
   - **B.** Positive
   - **C.** Comical
   - **D.** Deadly

6. Aboriginal children forcibly removed from their families by the Australian government have become known as:
   A. the Stolen Children.
   B. the Stolen Families.
   C. the Stolen Ones.
   D. the Stolen Generations.
7. The prime minster who apologised to the Stolen Generations was:
   A. Julia Gillard
   B. John Howard
   C. Kevin Rudd
   D. Paul Keating
8. What right was awarded to Aboriginal and Torres Strait Islander peoples in the 1967 referendum?
   A. The right to serve in the Australian army
   B. The right to vote
   C. The right to be citizens of Australia
   D. The right to be counted in the official population of Australia
9. The journey to repair the damage inflicted upon Aboriginal and Torres Strait Islander peoples is known as:
   A. Sorry Day.
   B. belonging.
   C. reconciliation.
   D. compensation.
10. Dual citizenship is available in:
   A. all countries.
   B. some countries.
   C. no countries.
   D. Australia only.

Short answer

11. How can a country's national identity change over time?
12. Which country was known as Australia's 'mother country'?
13. Which war saw the birth of the Anzac legend?
14. How would you describe the initial meetings between Aboriginal and Torre Strait Islander people and the British?
15. What does terra nullius mean?
16. With reference to Aboriginal and Torres Strait Islander peoples, what does the term 'reconciliation' mean?
17. What was the outcome of the 1967 referendum?

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 5 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

5.1 Overview

Video eLesson
- What is national identity? (eles-2291)

5.2 Traditional and changing views of Australian identity

eWorkbook
- Australian values (ewbk-5420)
- Australian society and identity (ewbk-5421)
- Australian identity (ewbk-5422)

5.3 Aboriginal and Torres Strait Islander influences on Australian national identity

eWorkbook
- Aboriginal and Torres Strait Islander influences on national identity (ewbk-5423)

Weblinks
- Aboriginal and Torres Strait Islander rights movement timeline
- National apology

5.6 The influence of religion on Australian society

eWorkbook
- Religion in Australia (ewbk-5424)

5.7 Thinking Big research project: My family's identity

ProjectsPLUS
- My family's identity (pro-0177)

5.8 Review

eWorkbook
- Reflection (ewbk-5426)
- Crossword (ewbk-5425)
- Student Learning Matrix (ewbk-5419)

Interactivity
- Influences on Australian society and national identity crossword (int-7604)

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

ECONOMICS AND BUSINESS

ECONOMICS AND BUSINESS CONCEPTS AND SKILLS

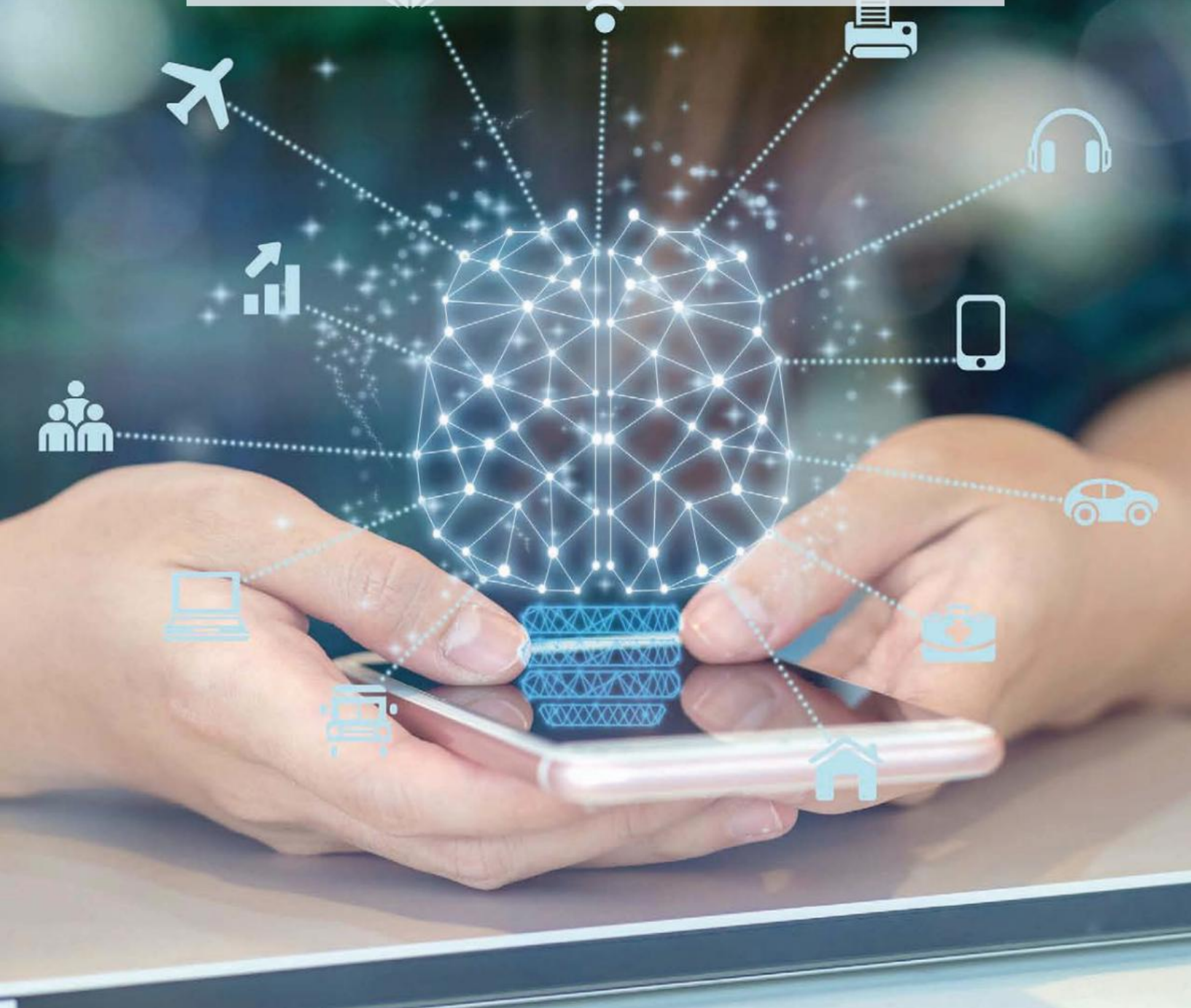
6 Economics and Business concepts and skills 172

PARTICIPATION AND INFLUENCES IN THE MARKETPLACE

7 Markets - Consumers, businesses and government 194

8 Business decisions 236

9 The changing work environment 259



6 Economics and Business concepts and skills

6.1 Overview

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

6.1.1 Introduction to the world of Economics and Business

The **economy** can seem like a big concept, but we are all involved in it every day. 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 even 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 job, we are all contributing to the economy.

This topic looks at economics and business concepts, starting with the basic economic problem of **scarcity**. It also looks at how we make choices to satisfy our needs and wants, how we **allocate** resources in our market-based system, specialisation and trade, the interdependent nature of our economy, and economic performance and living standards. Studying economics and business provides you with valuable knowledge for making decisions in everyday life and understanding the world around you. You will develop skills including questioning and researching, analysing, evaluating, communicating and reflecting.

economy a system established to determine what to produce, how to produce and to whom production will be distributed

scarcity the economic problem of having unlimited needs and wants, but limited resources to satisfy them

allocate assigning resources to different uses within the economy

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5438)

FIGURE 1 The world of Economics and Business affects many everyday decisions we make.

6.2 Concepts in Economics and Business

LEARNING INTENTION

By the end of this subtopic, you will be able to explain the Economics and Business key concepts: *scarcity, making choices, specialisation and trade, interdependence, allocation and markets,* and *economic performance and living standards.*

The world of Economics

Economics studies people and the choices they make. It investigates how limited resources are used to satisfy our unlimited needs and wants. Economists consider how to improve the living conditions of people in their everyday lives. The world of economics is everywhere: it is occurring right now all around you, happening day and night, going on today and continuing tomorrow. The economic environment is always changing. This means that it is an exciting world, full of surprises and opportunities.

The world of Business

Businesses are a very common part of our society. You probably know someone who owns a business or works for a business and you will have bought something from a business in your life. Perhaps you have even operated your own 'business' – mowing neighbours' lawns, babysitting, washing windows or setting up a stall at a local market. A business is any activity that is conducted by people to produce and sell goods and services that people are willing to buy, with the goal of making a profit. As well as making profit for owners, businesses make important contributions to the economy.

The Economics and Business concepts can help us to make sense of the world. By using these concepts you can identify questions, guide your investigations or assist decision-making about the world you live in. You can also use them to try to imagine a different world. The six key concepts are: *scarcity, making choices, specialisation and trade, interdependence, allocation and markets,* and *economic performance and living standards.*

economics a social science (study of human behaviour) that analyses the decisions made by individuals, businesses and governments about how limited resources are used to satisfy society's unlimited needs and wants

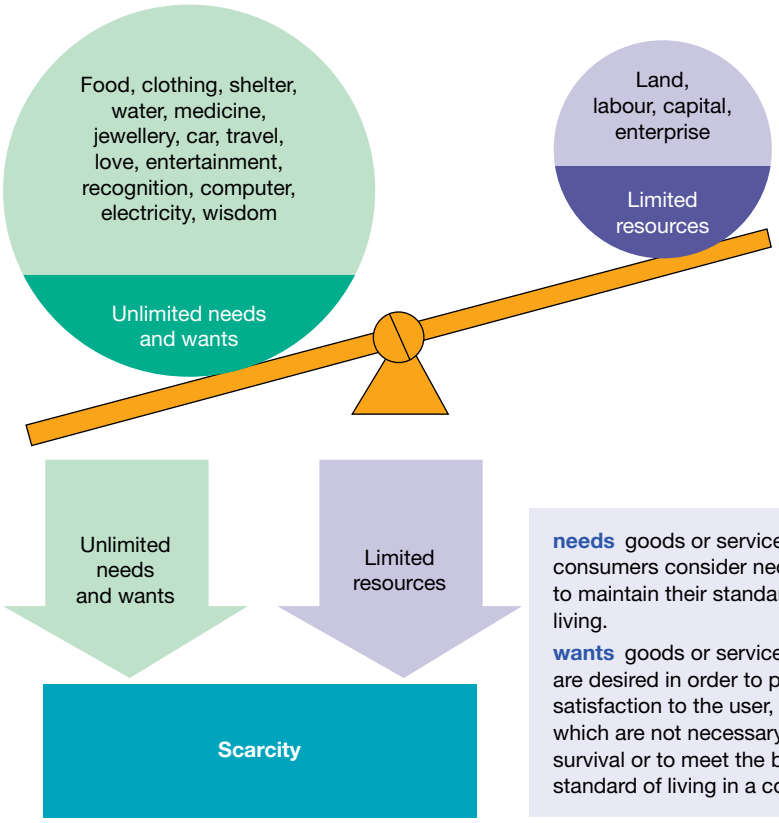
business any activity conducted by an individual or individuals to produce and sell goods and services to make a profit

FIGURE 1 The six key concepts in Economics and Business help make sense of the world.

6.2.1 Scarcity

As you learned in Year 7, scarcity is the concept of people having unlimited **needs** and **wants**, but only having limited resources available to satisfy them. As individuals, countries and even our planet, we only have a certain amount of resources available to us. We call this the basic economic problem because it always exists, and it exists in all economies.

FIGURE 2 The basic economic problem is scarcity, where we have unlimited needs and wants, but limited resources to satisfy them – an unbalance between wants and resources.



needs goods or services that consumers consider necessary to maintain their standard of living.

wants goods or services that are desired in order to provide satisfaction to the user, but which are not necessary for survival or to meet the basic standard of living in a community

Needs are items that people must have in order to survive, such as food, water and clothing. Wants are a wish or desire for something that will make life more enjoyable for a person and are not necessary for survival. In order to make good choices with their available resources, people must know the difference between needs and wants. However, the difference between a need and a want is sometimes not clear. For example, you need shoes but you might want a designer pair of sneakers. In this situation, clothing can be both a need and a want. Generally, most of us would say that needs include shelter, health care and sanitation. You might say that a car, computer, internet and mobile phone are wants. However, many people in today's society would suggest that these are needs.

To satisfy our needs and wants, businesses use resources to produce goods and services. There are four main types of economic resources: land, labour, capital and enterprise. These types of resources can be seen in **FIGURE 3**.

FIGURE 3 There are four main types of economic resources: land, labour, capital and enterprise.

Types of resources

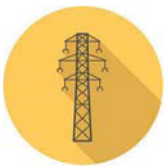
Land

- Resources found in nature
- Examples include rainfall and climatic conditions, mineral deposits and forests

Labour

- Includes all the people who are employed by businesses and government
- Examples include doctors, builders and businesspeople

Capital



- These resources have been created by combining land and labour
- Examples include the electricity grid system, commercial buildings, highways, schools, factories and machinery

Enterprise

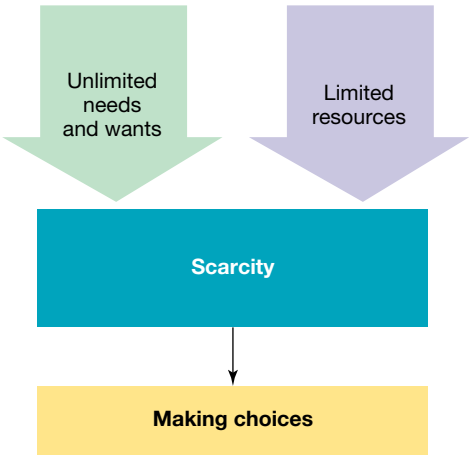
- Individuals who organise and combine the other three resources to create value
- Enterpreneurs take on risk by starting businesses in the hope of making a profit

To produce goods and services, resources usually need to be combined. For example, to bake a loaf of sourdough bread, we need flour, water and salt (land resources), an oven (capital resource) and a baker (labour resource). Unfortunately, as we have seen, the resources available to us are limited. We can only produce a certain amount of goods and services from these resources. We are not able to satisfy the unlimited needs and wants of society. Because of scarcity, we must choose some things but give up others.

FIGURE 4 Businesses use economic resources to produce the goods and services that society wants and needs.

6.2.2 Making choices

The basic economic problem of scarcity means that we need to make choices. We need to decide how to best use our scarce resources in order to satisfy our needs and wants. We cannot produce an unlimited amount of goods and services because we do not have unlimited resources to make them with. Making choices is a key part of economics.



In economics, **opportunity cost** describes the relationship between scarcity and making choices. This is the alternative that is given up when making a choice. It is the sacrifice you make when you choose one thing over another. Every choice we make involves an opportunity cost.

For example, say Ayesha finds herself with enough money to buy either a new book or a pair of earrings. She does not have the money for both. After much thought, she decides to put the money towards the book. The opportunity cost of doing this were the earrings that she did not buy. Another example is Cyril, who has a casual job at a local supermarket. With his first pay

opportunity cost the next best alternative given up whenever a choice is made

cheque of a $100, he had to decide whether to purchase a new video game or to put the money towards buying a phone. Thinking it through, he decided to put the money towards a phone. His opportunity cost of doing this was the purchase of the video game.

Note that there can only be one opportunity cost. Opportunity cost is the best alternative given up when making a choice. Consumers, business and the government all need to consider opportunity cost when they make choices. Consumers constantly have to make choices when they purchase goods and services. They must also make choices about how they will work and how they will spend their leisure time. Businesses need to make choices about what goods to produce and how to satisfy the needs of their customers. Governments make choices about how to best manage society and the economy.

FIGURE 5 Economists know that the cost of purchasing a video game is not just the price paid. The opportunity cost of this decision is the alternative given up – the trade-offs in decision-making.

PS4
PS4
PS4

For example, a farmer must decide what to grow on her available land. Does she grow apples or avocados? Then she must decide how to produce the crops. Does she grow organic crops, use hi-tech machinery or hire workers to harvest the fruit? And who will she sell her fruit to? A supermarket chain, direct to consumers at a farmers' market or to cafes and restaurants?

These questions are summarised in **FIGURE 7**.

FIGURE 7 Australia's economic system answers the three economic questions through the market.

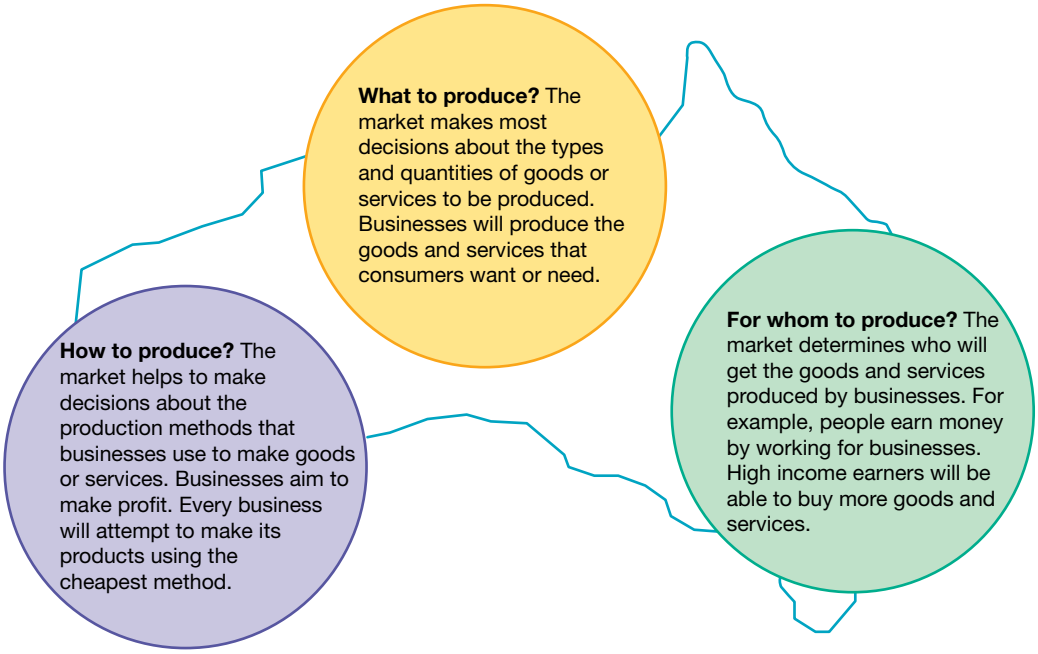


FIGURE 8 In traditional marketplaces, such as the Subiaco Farmers' Market, buyers and sellers negotiate prices for goods.

The economic system used in Australia is called a **market capitalist economy**. This means that the **market** – the exchange of goods and services between buyers and sellers – answers most of the economic questions. The market decides what will be produced based on buyers' demand and what the sellers are willing to supply, and the price of goods and services is negotiated between the parties. Markets aren't always in physical places. There are lots of different types of markets. For example, the Subiaco Farmers' Market is in a physical place. eBay and Amazon are both virtual markets. Other examples of markets include the labour market, property and stock markets.

Sometimes the market allocates resources inefficiently. For example, lower income earners may not be able to afford the goods or services that they need. As a result, sometimes governments need to intervene in the economy to reduce these problems. They can do this by providing services such as health care, housing and education to lower income earners.

market capitalist economy an economic system that relies on the market to allocate resources based on the actions of consumers and producers, and where resources are generally owned by private individuals and businesses

market the place where goods, services or resources are exchanged between buyers and sellers

6.2.4 Specialisation and trade

As you learned in Year 7, **specialisation** occurs when workers, businesses or nations focus on one task or on making one product. This means that the workers, businesses or nations can use their resources more efficiently. You can see specialisation occurring on an factory.

For example, when a t-shirt is made, each worker will complete one distinct task. This is specialisation. It means that the business making the t-shirt will be able to make lots of t-shirts. If one person was responsible for the whole process it would take a long time for the business to produce one t-shirt. One person may only be able to make a few t-shirts in one day, whereas with specialisation the business can produce may more t-shirts in the same amount of time.

FIGURE 9 Specialisation can be seen in a textiles factory. Production is organised to maximise efficiency. Employees will work on different sections and complete specific tasks rather than producing an entire product at one workstation.

Countries also utilise specialisation due to their available resources. A country that has an abundance of farmland will be better at growing food, whereas a country with a large workforce will be better at manufacturing products. In this case, it makes sense for the two countries to **trade**. Countries trade when they buy and sell products from each other. For example, Australia **exports** iron ore, coal, gold, natural gas

FIGURE 10 Individuals, businesses and nations trade with other individuals, businesses or nations to get something that they could not provide or produce for themselves

specialisation a method of production where a worker, business or nation focuses on the production of a limited range of goods or services in order to increase production and make the most efficient use of resources

trade the activity of buying, selling or exchanging goods and services between producers and consumers and/or countries

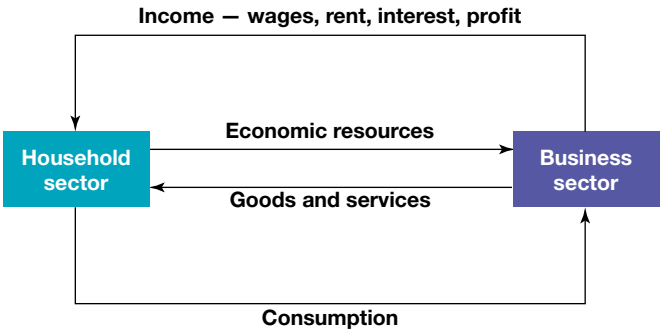
exports goods or services that are produced in one country and sold in a different country

and wheat. We **import** many products, such as processed fuels, cars and electrical equipment, from other countries. We trade with other countries because they can produce these goods more efficiently than we can. Businesses and consumers also trade goods and services. For example, you trade money for a haircut when you go to the hairdresser.

6.2.5 Interdependence

In economics, **interdependence** is used to describe the way that all parts of an economy affect and rely on each other. Consumers, workers, businesses and governments all affect and are dependent on each other. For example, a shop will not be able to make money without customers. To buy things from a shop, a customer needs to earn an income. People earn an income by working for a business or the government. The shop will stock the things that customers need and want by buying goods from other businesses. All elements of our economic system are dependent on each other to ensure a well performing economy and business sector, and a high standard of living for individuals.

FIGURE 11 A simple two-sector circular flow model of income demonstrating the interdependence between consumers and businesses



6.2.6 Economic performance and living standards

Economies measure their **economic performance** to determine how well the economy is providing for its citizens. The performance of our economy can be measured using economic indicators. Some key economic indicators are:

- gross domestic product (GDP) – this measures economic growth (the increase in the value of goods and services produced by our economy)
- the unemployment rate – this tells us about how many individuals seeking work are without a job
- the inflation rate – this measures the change in the prices of goods and services

The information we get from measuring economic performance influences the decisions that governments make. Australia's government is responsible for managing the performance of the economy. It aims to improve economic growth in order to create jobs and wealth, and improve the **standard of living** for its citizens and nation overall.

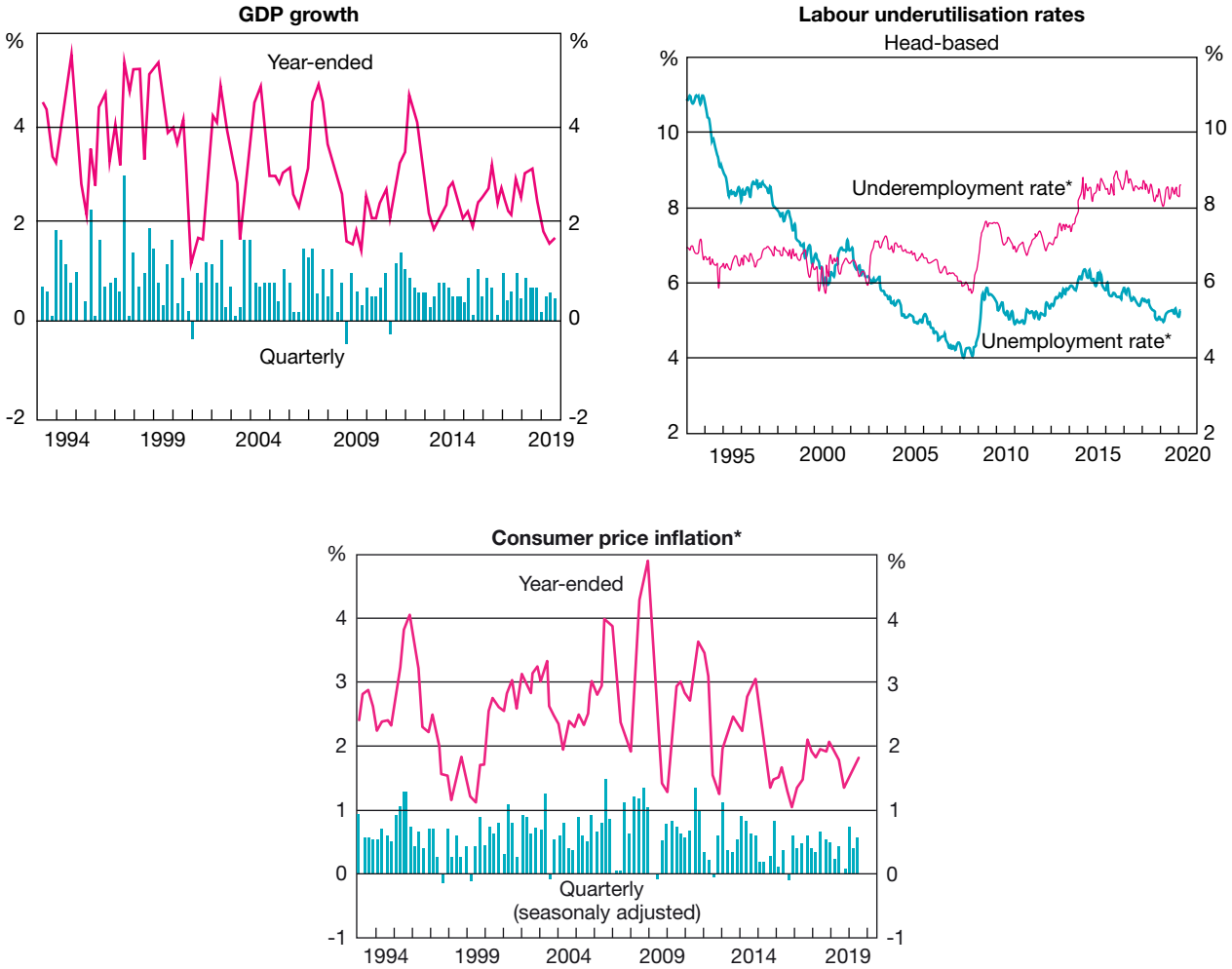
import the process of bringing in goods and services from another country

interdependence the mutual dependence between participants in an economy; that is, the reliance of consumers, workers, businesses and governments on each other

economic performance the measure of how well an economy is performing based on whether it is achieving its economic objectives

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)

FIGURE 12 Graphs summarising trends in (a) GDP, (b) unemployment and (c) inflation in Australia over 20 years



6.3 Skills in Economics and Business

6.3.1 What skills will you build this year?

This year, you will continue to build your ability to use the four broad categories of skills in the Humanities and Social Sciences. The summaries below are to remind you of these four key skills.

1. **Questioning** and researching involves locating relevant and detailed information and/or data from a range of appropriate sources. In Year 8 Economics and Business, this includes conducting research on prices and markets in the Australian economy.
2. **Analysing** involves interpreting information to identify the main features or ideas, then examining the information closely to determine how the parts relate to the whole. In Year 8 Economics and Business, this includes interpreting supply and demand graphs to explain how the price of certain goods is determined.
3. **Evaluating** means examining you interpretations of information to draw evidence-based conclusions. It requires taking into account ambiguities and multiple perspectives in a source and proposing potential responses to contemporary challenges or issues. In Year 8 Economics and Business, this includes evaluating a business opportunity with a cost–benefit analysis.
4. **Communicating** your ideas means presenting information in a range of formats to suit the intended audience and purpose. This includes essays, oral presentations, debates, tables and cartoons.

Reflecting on your skills is also an important part of the process. In Year 8 Economics and Business, this includes learning how to write a business pitch for a new product or a new business idea.

6.3.2 SkillBuilders in the topic

In addition to these broad HASS skills, there is a range of essential practical skills that you will learn as you study Economics and Business. The SkillBuilder topics will tell you about the skill, show you how to apply the skill and let you practise the skill with tasks related to the topics covered in this subject.

The SkillBuilders you will use in Year 8 are:

- SkillBuilder: Conducting research into prices and markets
- SkillBuilder: Interpreting and explaining supply and demand graphs
- SkillBuilder: Evaluating an opportunity with a cost-benefit analysis
- SkillBuilder: Writing a pitch for a new product/business idea

6.4 SkillBuilder: Conducting research into prices and markets

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to approach researching prices and markets. Conducting research is an integral part of the questioning and researching HASS skill.

6.4.1 Tell me

While studying economics and business you will develop the skill of asking questions. Asking questions will help you to complete research (discovering or verifying knowledge about something). Questioning relates to posing statements that require answers. You usually ask questions about what is known and what is not known in order to improve your knowledge. Research is important because it allows us to find out what is unknown and contributes to filling in gaps in our knowledge.

FIGURE 1 Asking questions helps you to learn about the world around you.

The following steps are a useful guide to the process of writing questions and carrying out research:

- Develop a series of specific questions that will help guide your research in the appropriate direction, and help you determine the information you need.
- Locate appropriate sources of that information.
- Record relevant information from a range of sources.
- Present the information in an appropriate form.

6.4.2 Show me

Imagine you have been asked to investigate ethical and socially responsible behaviour in a market of your choice in Australia.

Your first step is to clearly identify the key task. This could be expressed as:

Prepare a report on how two businesses in an Australian market of your choice utilise ethical and socially responsible practices.

You should choose a market and then two businesses within this market. There are many markets you could choose from, including retail markets, labour markets, financial markets and stock markets. Let's assume that you choose the retail market. You might choose two supermarkets from Aldi, Coles, Woolworths and IGA.

It is now necessary to break the task down into a series of more specific questions. These could include:

1. What ethical practices has the business adopted?
2. What policies does the business have in relation to ethical and socially responsible practices?
3. Where does the business source its products from?
4. How does the business treat its employees and customers?
5. What does the business do to protect the environment?
6. How does the business involve itself in the community?
7. How can the business improve in its ethical and socially responsible practices?

The next step is to locate your sources. Most well-known businesses today have websites that include information on corporate responsibility and sustainability. For example, Coles' website includes information on how it provides an inclusive work environment for staff, how it works with suppliers, its community involvement, and how it protects the environment. By entering the name of the business you are researching, and the search term 'sustainability' in a search engine, you will be presented with useful sources. It would be a good idea to search for Australian sources.

FIGURE 2 Some people won't buy a certain product, even if the price has been lowered. Can you think of any reasons for this?

Keep your questions beside you as you navigate through the sites and conduct your research, and note the location of material that provides answers. You can select and print some text, and then highlight those sentences or paragraphs that provide answers to your questions. Sometimes a complete answer to a question may be found in several places in a piece of text. Be sure to highlight all relevant text, and indicate with a number which question the information answers.

When you are satisfied you have found the answers to all the questions, you need to write the answers in order, making sure you use your own words as much as possible. You can then use the answers to present your information in the required form. This may be an oral report to the rest of the class, an essay to be marked by your teacher, a PowerPoint presentation, or any other format that is appropriate.

6.4.3 Let me do it

6.4 ACTIVITY

Using the process in section 6.4.2 as a model, devise a series of questions and carry out the research to produce a report on the following key question:

Prepare a report on why some consumers are prepared to pay a higher price for a product while other consumers would not buy the product even if the price was low. Explain what this tells you about the relationship between price and customer tastes and preferences.

6.5 SkillBuilder: Interpreting and explaining supply and demand graphs

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to accurately interpret and explain the data displayed in supply and demand graphs. Interpreting and explaining graphs is an integral part of the analysing HASS skill.

6.5.1 Tell me

Analysing is another skill that you will develop while studying economics and business. This skill involves interpreting information to identify the main features or ideas. You then examine the information closely to determine how the parts relate to the whole. One way in which you might analyse in economics and business is by interpreting and explaining information in tables and graphs.

In section 6.2.3 we explored the idea that the market answers most of the economic questions. Prices in a market are usually determined through interaction between buyers and sellers. Typically, the buyers want to pay as low a price as possible while the sellers want to charge as high a price as possible. From these different preferences, the market will usually arrive at a price that is acceptable to both buyers and sellers. We can interpret and explain how this works through the use of simple tables and graphs.

6.5.2 Show me

Imagine a fruit and vegetable market such as the Fremantle Markets. These markets have a number of different businesses all competing against each other, allowing buyers to browse the different stalls and compare prices and quality. Assume that all the stalls sell potatoes and that most sellers agree on the following:

- If they could charge $10/kg, they would happily supply 200 kg of potatoes for sale each day.
- If they could only charge $7/kg, they would provide 150 kg for sale a day.
- If they could only charge $5/kg, they would only provide 100 kg for sale a day.
- If they could only charge $2/kg, they would only supply 30 kg of potatoes for sale a day and concentrate on selling other fruit and vegetables that would make a bigger profit.

FIGURE 1 There are multiple fruit and vegetable shops at the Fremantle Markets. Can you think of any factors that could influence a customer's decision on where to shop?

Buyers have a different point of view – they want to buy at the cheapest price possible. They agree on the following:

- If potatoes cost $10/kg, only a small number would buy potatoes and then only in small quantities: a total of 10 kg in any given day.
- If the price dropped to $8/kg, buyers might purchase 40 kg a day.
- If the price fell to $6/kg, buyers might purchase 80 kg a day.
- If the price fell to $4/kg, buyers might purchase 120 kg a day.
- If the price fell to $2/kg, buyers might purchase 160 kg a day.

We can see that as the price rises, suppliers will supply more but consumers will demand less. As the price falls, consumers will demand more but suppliers will supply less. What is the likely price that will be acceptable to both buyers and sellers?

We can start to answer this by putting the above data into tables. **TABLES 1** and **2** show the sellers' preferences and the buyers' preferences.

TABLE 1 Seller's preferences

Price per kg	Quantity supplied
$2	30 kg
$5	100 kg
$7	150 kg
$10	200 kg

TABLE 2 Buyer's preferences

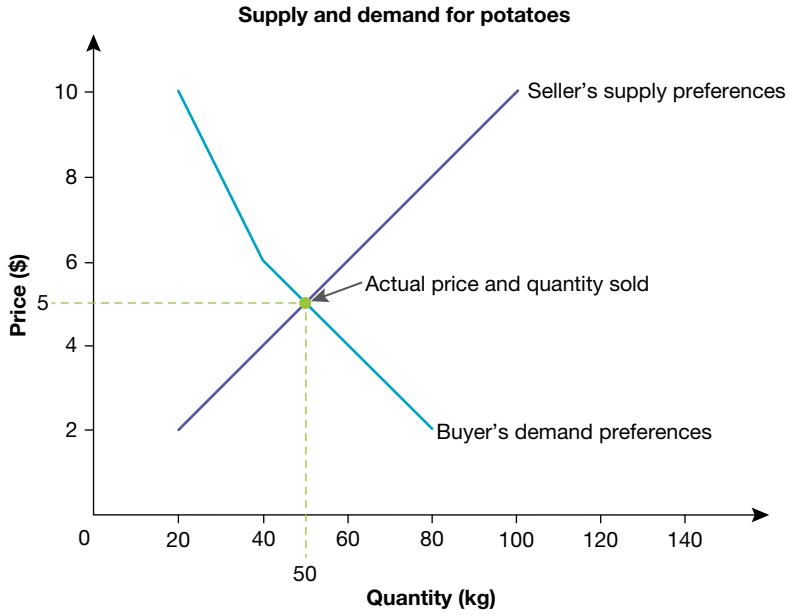
Price per kg	Quantity purchased
$10	10 kg
$8	40 kg
$6	80 kg
$4	120 kg
$2	160 kg

These tables show that as the price rises from $2/kg, the supply of potatoes increases from 30 kg when the price is $2, to 200 kg when the price is a high $10/kg. Notice also that as the price falls from $10/kg, the demand for potatoes increases from 10 kg when the price is $10, to 160 kg when the price is a low $2/kg.

The data from these tables can now be entered into a graph, as shown in **FIGURE 2**. If we place the different prices along the vertical axis and the different quantities along the horizontal axis, we can plot the preferences of both buyers and sellers on the graph. The sellers' preferences are shown with the purple line, while the buyers' preferences are shown with the blue line. The point at which the two lines intersect will be the price that the market will bear. In economics, we refer to this price as the 'equilibrium price'. The amount of potatoes sold when the price is at equilibrium is called the 'equilibrium quantity'.

The market for potatoes will settle at a point where 50 kg of potatoes will be sold each day at a price of $5/kg. Sellers know that if they have 50 kg of potatoes in stock on any given day, they will be able to sell them all at this price.

FIGURE 2 Supply and demand graph for potatoes



6.5.3 Let me do it

6.5 ACTIVITY

Practise your skills by completing the following activity.

In the same fruit and vegetable market, tomatoes are also subject to similar buyer and seller preferences.

Sellers agree on the following:

- If they could charge $14/kg, they would happily supply 200 kg of tomatoes for sale each day.
- If they could only charge $8/kg, they would only provide 100 kg for sale a day.
- If they could only charge $3/kg, they would only supply 10 kg for sale a day.

Buyers generally agree on the following:

- If tomatoes cost $14/kg, buyers would demand a total of 20 kg on any given day.
- If the price dropped to $10/kg, buyers might be prepared to purchase 70 kg a day.
- If the price fell to $8/kg, buyers might purchase 100 kg a day.
- If the price fell to $2/kg, buyers might purchase 180 kg a day.

1. Construct a table showing the different quantities sellers would be prepared to supply at each price level.
2. Construct a table showing the quantities that consumers would demand at each price level.
3. Comment on what you see occurring in regard to prices, demand and supply in the tables. Explain what you think will be the equilibrium price and quantity for tomatoes.
4. Enter the data from these tables onto a graph that shows both sellers' supply preferences and buyers' demand preferences.
5. What is the equilibrium price and quantity for tomatoes (in other words, what is the price per kilogram at which buyers and sellers preferences would be matched, and what quantity would be sold at that price)?

6.6 SkillBuilder: Evaluating an opportunity with a cost–benefit analysis

LEARNING INTENTION

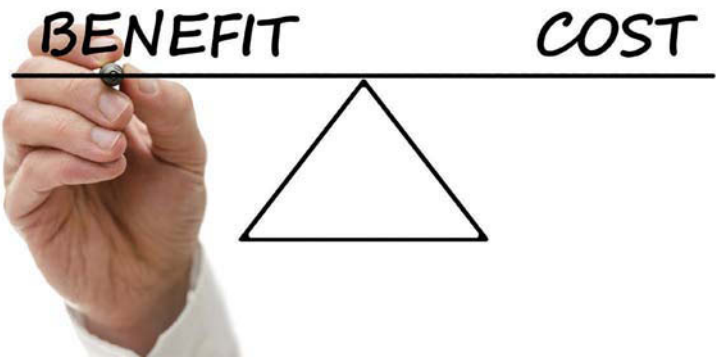
By the end of this SkillBuilder, you will be able to use a cost–benefit analysis to effectively evaluate a business opportunity. Evaluating a business opportunity is part of the evaluating HASS skill.

6.6.1 Tell me

Evaluating means to propose explanations for events or issues and to make overall judgements based on the evidence. This is a skill that you might develop in economics and business by looking at the benefits or advantages of something and then examining the costs or disadvantages of something.

A cost–benefit analysis is a detailed examination of the strengths and weaknesses of different alternatives in order to see whether the benefits outweigh the costs. The principle behind a cost–benefit analysis is that you should only decide to act on an alternative if the benefit from taking it is greater than the cost.

FIGURE 1 A cost–benefit analysis involves weighing up the pros and cons of a decision. You are doing it everyday without even realising. Can you think of any examples?



A cost–benefit analysis helps to determine if an option will be a good decision or investment. It is also useful for comparing alternatives or projects, as well as estimating the resources needed to complete the alternative or project.

A good cost–benefit analysis:

- identifies opportunities
- proposes alternative ways to take advantage of these opportunities
- calculates the costs and benefits
- compares the costs and benefits to determine if the benefits outweigh the costs
- makes a decision about the best alternative to recommend.

6.6.2 Show me

We can apply the five elements of a good cost–benefit analysis to a case study, to see how this works in practice.

CASE STUDY: Olando's opportunity

Step 1: ***Identify opportunities in the market***

Olando is the general manager of a large soft-drink manufacturer. He and his team are looking at the market to identify opportunities.

The manufacturer has spent a great deal of time looking closely at its business and the local market it sells to. By asking a wide range of questions they have determined there are two business strategies that could meet the changing needs of the soft-drink market.

Olando's team believes that there is an unmet need in the Australian market for low-sugar alternatives to cola flavours. There are currently some products available, but customer feedback suggests some frustration with the lack of widespread access to these options. These options also suffer from poor quality.

Step 2: ***Propose alternative ways to take advantage of these opportunities***

The company thinks that there are two possible alternatives. One alternative is that they can introduce a new range of low-sugar soft drinks based on the unmet need. The other alternative is to select suitable products that other companies are selling overseas and offer these, or copies of these, to local customers. This would involve buying the rights to distribute these soft drinks.

Step 3: ***Calculate the costs and benefits of each alternative***

Olando's team conducts a cost–benefit analysis of the alternatives proposed. This means that they add up all the costs and all the benefits of each alternative, and then they compare them to decide if the benefits outweigh the costs. A summary of the costs and benefits of each alternative can be seen in **TABLES 1** and **2**.

TABLE 1 A summary of costs and benefits for a new range of low-sugar soft drinks

	Costs	Benefits
Monetary	Total (including raw materials, factory overheads, transportation, packaging, research and development, salaries): $20 million	Total (including sales): $30 million
Non-monetary	Extra workload for staff	New research and development that could benefit the business in the future A positive image built up among existing and potential customers

TABLE 2 Summary of costs and benefits for selling or imitating overseas products

	Costs	Benefits
Monetary	Total (including raw materials, factory overheads, transportation, packaging, salaries): $15 million	Total (including sales): $20 million
Non-monetary	Staff dissatisfaction with using ideas from overseas Customer dissatisfaction with using products designed for overseas markets	Research and development team will be free to look at other products

Step 4: *Compare the costs and benefits to determine if the benefits outweigh the costs*

The team calculates that the benefits outweigh the costs when analysing the first alternative, introducing a new range of low-sugar soft drinks. The monetary costs are $20 million, while the monetary benefits are $30 million. This means that the monetary benefits outweigh the monetary costs by $10 million. They also consider that the non-monetary benefits considerably outweigh the non-monetary costs.

When analysing the second alternative, selecting or imitating overseas products and selling these to local customers, Olando's team calculates that the monetary benefits outweigh the monetary costs by $5 million. The team feels that, even though the non-monetary costs of this alternative are high, the non-monetary benefits still outweigh the non-monetary costs.

Step 5: *Choose the best alternative*

Olando's team determines that the best alternative is the first one, introducing a new range of low-sugar soft drinks. This is because they believe that the benefits of this alternative far outweigh the costs when compared with the second alternative.

6.6.3 Let me do it

6.6 ACTIVITY

You can now carry out this five step process to complete a cost–benefit analysis using the Uncle Bill's case study. Complete the activities that follow to practise this skill.

CASE STUDY: Uncle Bill's

Uncle Bill's is a global manufacturer of cereal products and snacks. Its marketing department has recommended that the business should respond to opportunities in the Australian market to produce products that meet different dietary needs, including low-salt, yeast-free and gluten-free products. It has proposed two alternatives.

The first alternative is to introduce a new range of gluten-free cereals. The second alternative is to modify existing products already being used in other markets and sell these in the Australian market.

Bridie is the Australian regional manager for Uncle Bill's. She has asked you to be part of the team that will undertake a cost–benefit analysis of the alternatives proposed. Bridie has provided the team with a breakdown of the costs and benefits of each alternative (see **TABLES 3** and **4**).

TABLE 3 A breakdown of costs and benefits for Uncle Bill's: Alternative 1 – new gluten-free products

	Costs	Benefits
Monetary	Raw materials (ingredients): $12 million Factory overheads – salaries, insurance, power, repairs and maintenance: $8 million Transportation: $1 million Packaging/labelling: $2 million Selling/distribution: $3 million Research and development – salaries, other overheads: $4 million	Improve market share by 5% Sales of $50 million
Non-monetary	Extra workload for staff	New research and development that could benefit the business in the future Building a positive image among existing and potential customers Empower staff (as they are involved in the development of the new product) and improve corporate culture

TABLE 4 A breakdown of costs and benefits for Uncle Bill's: Alternative 2 – modification of existing products

	Costs	Benefits
Monetary	Raw materials (ingredients): $12 million Factory overheads – Salaries, insurance, power, repairs and maintenance: $8 million Transportation: $1 million Packaging/labelling: $2 million Selling/distribution: $3 million	Improve market share by 4% Sales of $40 million
Non-monetary	Some staff may be dissatisfied with using ideas from other countries when local ideas could have been used Loss of customers who may be dissatisfied with products that are designed for overseas markets	Research and development team will be free to look at other products

Construct your cost–benefit analysis by completing the following steps:

Step 1: Identify the opportunities for Uncle Bill's.

Step 2: Identify the alternatives that have been proposed to take advantage of these opportunities.

Step 3: Add up the costs and benefits of each alternative. Write down the total costs and benefits for alternative 1 and the total costs and benefits for alternative 2.

Step 4: Compare the costs and benefits for each alternative. Do the benefits outweigh the costs for one alternative or both? In your opinion, which alternative has more benefits than costs?

Step 5: Make a decision about which alternative to recommend.

Complete the following questions.

1. How did you decide which alternative to recommend?
2. Compare your decisions to the decisions made by other people in your class. How do the decisions differ? Can you explain the variation in decisions?
3. What aspect of completing a cost–benefit analysis did you find relatively easy and what did you find more challenging?
4. Reading the Olando's opportunity case study, identify the opportunities in the market for Olando's soft-drink manufacturer.
5. How did Olando's company respond to opportunities in the Australian market?

6.7 SkillBuilder: Writing a pitch for a new product/ business idea

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to prepare, research, structure and write a pitch for a new product or business idea. Creating a new product or business pitch is part of the communicating and reflecting HASS skill.

6.7.1 Tell me

When you use the skill of communicating and reflecting in economics and business, you will be presenting your findings or representing information using an appropriate format to suit a particular audience. You will also need to use terminology that is used by economists and businesspeople. For example, when writing a case study on a business, you would be expected to use business terminology and write as if your audience are people who are interested in studying businesses.

A pitch is a speech or presentation given by a prospective business owner where they attempt to persuade an audience (often a group of investors) to see that their idea for a product or a business is a good one. With a good pitch, the business owner would hope that the investors would choose to invest in the new product or business idea.

FIGURE 1 A business pitch is sometimes called an 'elevator pitch' because the listener should be able to understand the idea or concept in a short amount of time.

6.7.2 Show me

Elements of a good business pitch

A good business pitch has the following features:

- an introductory statement that will grab attention
- a clearly defined problem the business owner is solving
- an explanation about what the new product is or what the business idea is about
- an outline about why the new product/business idea is unique and/or better than the competition
- it is easy to understand
- it is well-presented.

CASE STUDY: Inventing self-service machines

The man who invented the self-service checkout system, Dr Howard Schneider, was laughed at when he first pitched his machine to a supermarket chain in the 1980s. Back then, the idea of replacing humans with an object seemed ridiculous. Today, we can see how much the world has changed.

The rollout of self-checkout systems is steadily increasing in Australia, even though some shoppers find them frustrating and difficult to use. Messages about unexpected items in the bagging area or the inability to locate pomegranates in the fruit category can lead to frustration and irritability and thus also customer dissatisfaction. Other people love the new invention because it provides convenience when they just 'pop in' for a few items. However, the machines are yet to provide a complete win for the stores, because they must still 'staff' the self-checkout areas to provide help with working the systems and in an attempt to combat theft. Nevertheless, newer modules are already being built with increased scanning accuracy.

6.7.3 Let me do it

6.7 ACTIVITY

Have a go at writing your own pitch for a new product or business idea. Your task is to plan a unique business using the parameters provided below and then prepare a business pitch. You will be able to work by yourself or with a group. Your teacher will determine the maximum and minimum group sizes.

Your first step is to develop a new product or business idea. Some suggestions are:

- a new style of shoe incorporating state-of-the-art technology
- a healthy snack-food option
- a new technology for creating energy
- a new type of home service
- a unique social media website or app.

Use the following points to guide your preparation for your pitch:

- the name of the new product or the name of the business and what products it will sell
- business logo
- description of what the business will do
- type of business ownership
- location of business
- target market information – who your customer is and why they need your new product or business
- a list and explanation of the qualities you possess and that your partner/s may possess that will make your new product or business a success
- what your competitive advantage is.

The pitch should be delivered as a written report but could also be given as an oral presentation.

6.8 Review

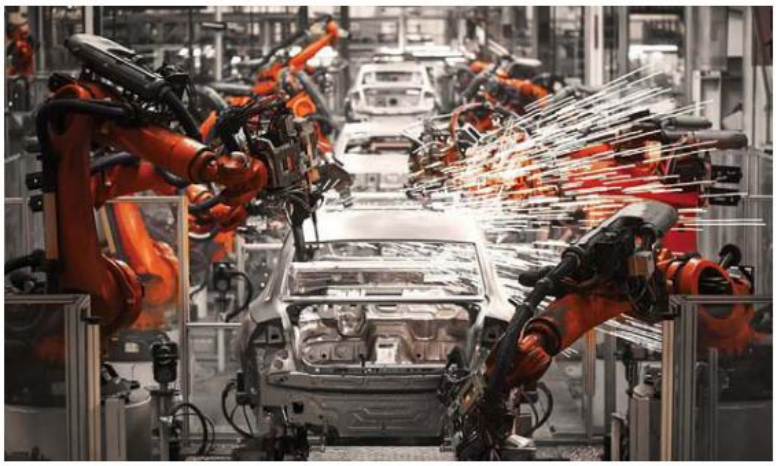
6.8.1 Key knowledge summary

6.2 Concepts in Economics and Business

- Scarcity is the 'basic economic problem' – this involves society having limited resources available to satisfy unlimited needs and wants.
- There are four main types of economic resources: land, labour, capital and enterprise.
- Every choice made involves an opportunity cost – this is the next best alternative given up whenever a choice is made.
- All economies must make decisions about how resources will be allocated among producers and what types of goods and services will be produced.Economies must answer the three economic questions: What to produce?, How to produce? and For whom to produce?
- Australia is a market capitalist economy – this means that most answers to the three economic questions are made by the market (where buyers and sellers negotiate prices for goods and services).
- Governments may need to intervene in the economy to reduce inefficiencies.
- Modern economies have developed a method of production called specialisation (where a worker, business or nation focuses on the production of a limited range of goods or services) to increase production and provide a surplus which can be used to trade.
- Participants in an economy are mutually dependent (or interdependent); that is, consumers, workers, businesses and governments are reliant on each other.
- Our economy and our government have a number of economic objectives, including satisfying the needs and wants of citizens by efficiently producing as many goods and services as possible, achieving low inflation, economic growth and full employment. Economic performance can be measure through key economic indicators including gross domestic product, the unemployment rate and the inflation rate.
- Standard of living refers to the quality of life of individuals or countries – this is influenced by the level of economic activity.

6.3 Skills in Economics and Business

- Questioning involves posing statements that require answers, particularly in regards to what is known and what is not known in order to improve your knowledge. Research is important because it allows us to find out what is unknown and contributes to filling in gaps in our knowledge.
- Analysing involves interpreting information to identify the main features or ideas, then examining the information closely to determine how the parts relate to the whole.
- Evaluating involves proposing explanations for events or issues and making overall judgements based on the evidence.
- Communicating and reflecting involves presenting findings or representing information using an appropriate format to suit a particular audience. The appropriate use of economics terminology and business terminology is very important.



6.8.2 Key terms

allocate assigning resources to different uses within the economy

business any activity conducted by an individual or individuals to produce and sell goods and services to make a profit

economic performance the measure of how well an economy is performing based on whether it is achieving its economic objectives

economic system a way of organising the production and distribution of the nation's goods, services and incomes

economics a social science (study of human behaviour) that analyses the decisions made by individuals, businesses and governments about how limited resources are used to satisfy society's unlimited needs and wants

economy a system established to determine what to produce, how to produce and to whom production will be distributed

exports goods or services that are produced in one country and sold in a different country

import the process of bringing in goods and services from another country

interdependence the mutual dependence between participants in an economy; that is, the reliance of consumers, workers, businesses and governments on each other

market the place where goods, services or resources are exchanged between buyers and sellers

market capitalist economy an economic system that relies on the market to allocate resources based on the actions of consumers and producers, and where resources are generally owned by private individuals and businesses

needs goods or services that consumers consider necessary to maintain their standard of living.

opportunity cost the next best alternative given up whenever a choice is made

resource allocation relates to decisions about how scarce resources are distributed among producers, and which types of goods and services will be produced to satisfy wants and needs

scarcity the economic problem of having unlimited needs and wants, but limited resources to satisfy them

specialisation a method of production where a worker, business or nation focuses on the production of a limited range of goods or services in order to increase production and make the most efficient use of resources

standard of living quality of life as measured by the amount of money made by an individual or household (using income per capita or income per household)

trade the activity of buying, selling or exchanging goods and services between producers and consumers and/or countries

wants goods or services that are desired in order to provide satisfaction to the user, but which are not necessary for survival or to meet the basic standard of living in a community

on Resources

eWorkooks Customisable worksheets for this topic (ewbk-5438)
Reflection (ewbk-5437)
Student Learning Matrix (ewbk-5432)

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 6 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

6.4 SkillBuilder: Conducting research into prices and markets

eWorkbook

- SkillBuilder: Conducting research into prices and markets (ewbk-5433)

6.5 SkillBuilder: Interpreting and explaining supply and demand graphs

eWorkbook

- SkillBuilder: Interpreting and explaining supply and demand graphs (ewbk-5434)

6.6 SkillBuilder: Evaluating an opportunity with a cost–benefit analysis

eWorkbook

- SkillBuilder: Evaluating an opportunity with a cost–benefit analysis (ewbk-5435)

6.7 SkillBuilder: Writing a pitch for a new product/business idea

eWorkbook

- SkillBuilder: Writing a pitch for a new product/business idea (ewbk-5436)

6.8 Review

eWorkbook

- Reflection (ewbk-5437)
- Student Learning Matrix (ewbk-5432)

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

7 Markets: Consumers, businesses and government

7.1 Overview

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

We all play a part in the Australian economy. How do we ensure that everyone involved is getting a fair deal?

7.1.1 The Australian economy

The Australian economy is the total of all activities undertaken for the purpose of producing, distributing and consuming the goods and services we require to satisfy our needs and wants.

As consumers, we all hope to earn the income necessary to purchase our needs and many of our wants. We would like a fair go when dealing with businesses and we would like to know our rights, but we should recognise that some business owners and employees fail the fairness test when it comes to serving their customers. This is where we need the government to provide a legal and justice system so that buying and selling occurs within a set of rules that is fair to all participants.

In this topic, we will examine Australia's economic system, the activities of producing, distributing and consuming the goods and services we require to satisfy our needs and wants, and the protections available to consumers in their dealings with businesses.

on Resources

eWorkbook	Customisable worksheets for this topic (ewbk-5476)
Video eLesson	Development of the market economy (eles-1811)

FIGURE 1 In Australia we live in a market economy. This means that the quantity and price of goods and services is determined by supply and demand.

7.2 Participants in the market system

LEARNING INTENTION

By the end of this subtopic, you will be able to explain the identities and roles of the different people/groups that operate within our market economy.

7.2.1 Buyers and sellers

Markets refer to places where buyers (consumers) and sellers (producers) meet and exchange goods and services. Producers provide the goods and services and consumers purchase them. Markets need not have a physical location – online shopping has created markets in cyberspace but for most of us, the exchange of money for goods and services takes place in a physical setting – a shop or supermarket or market stall.

FIGURE 1 People who are employed are considered to be producers (sellers).

Consumers and producers are at the centre of Australia's market system. All of us are consumers, and those of us who are employed are also producers. We satisfy our needs and wants by working to earn money, and then buying goods and services from businesses that produce those goods and services. When we are working, we are providing our **labour** to contribute to the process of producing goods or services for other consumers to buy. When we are spending our money, we are consumers, purchasing goods and services that others have produced, in order to satisfy our needs and wants.

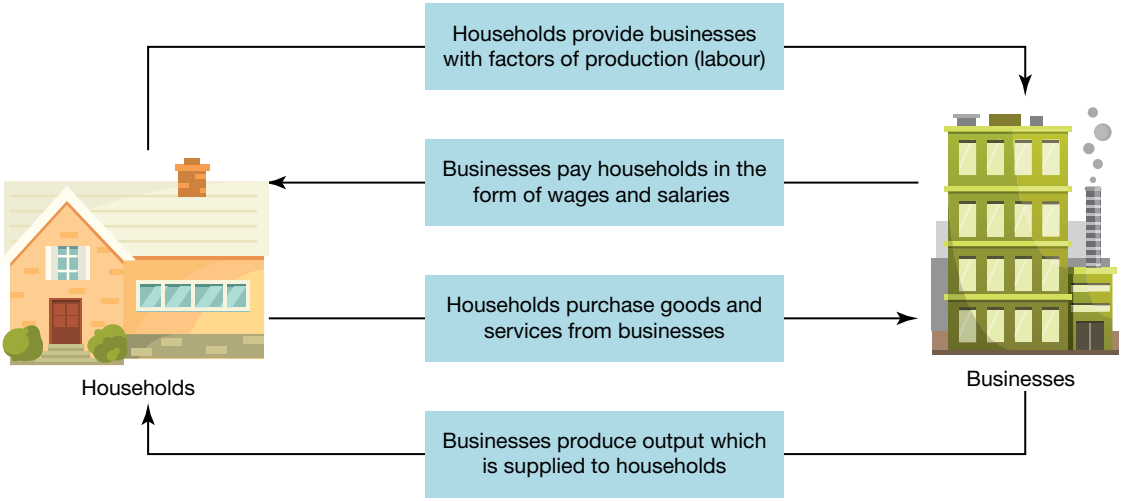
The total of all consumers in the economy is sometimes called the **household sector**. The total of all producers is sometimes known as the *business sector*.

We can examine the relationship between the business sector and the household sector by looking at **FIGURE 2** . It shows the flow of goods and services, and the flow of money between households and businesses. It also demonstrates how labour is exchanged for money, and how that money is used to purchase goods and services. This tells us about the financial relationship between consumers and producers in our market system.

labour the human skills and effort required to produce goods and services

household sector a term used by economists to refer to the total of all consumers in the economy

FIGURE 2 Model showing the flow of money, goods and services between households and businesses



7.2.2 The financial sector

Do you spend every cent you receive in pocket money or in return for any work you do, or do you set some aside as savings? While most people of your age don't save much, many others in the economy do put aside some of their income as savings. This money is usually deposited in a bank or similar **financial institution**.

Banks and other financial institutions receive deposits, and use this money to lend out to others who need to borrow money. Most businesses will borrow money, particularly when they need to expand the business. This may involve buying new equipment, or even moving to bigger premises. Money spent in this way is known as **investment**. Financial institutions collect the savings of thousands of depositors, and then have large sums available for businesses to invest in growth.

These financial institutions make up what we sometimes call the *financial sector* of the economy. They perform an important role in our market system because they enable accumulated savings to be directed towards business growth. As businesses grow, they are able to employ more people, who in turn have more money to spend on goods and services.

FIGURE 3 Financial institutions are able to direct savings into investment in the growth of businesses.

DISCUSS

Are you a saver or are you a spender? Would you like to be able to save more money? What advantages do people who save their money have over those who spend their money? **General capability: Personal and social**

Banks and other financial institutions also play an important role in providing credit for households. When consumers make large purchases, such as a house or a car, it is usually easier to borrow the money to pay for these than to save up for years to pay cash for them. When purchasing a house or land, most people take out a **mortgage loan**. This enables them to borrow to pay for the property, and pay back the loan over a relatively long period of time. The housing market depends on the amount of money available for mortgage loans. If more people are able to buy houses, more new houses are built, creating more jobs in the construction industry.

financial institution any organisation that takes deposits from those with surplus funds, and makes those funds available to borrowers

investment the direction of money into the purchase of equipment or premises for the establishment of a new business, or the expansion of an existing business

mortgage loan a loan advanced to allow a person to buy a house or other property, with the property itself as security for the loan. This means the bank or other lender can take possession of the property if the borrower fails to make the regular payments.

7.2.3 The government sector

Another element involved in the market system is the government. In Australia this refers to the federal government based in Canberra, state and territory governments based in capital cities, and local councils. As well as spending money on consumption and investing in savings, households and businesses pay money to the government in the form of taxes and rates, and receive particular types of goods and services back from the government. A detailed examination of the role of government can be found

in subtopic 7.6. Government plays an important role in the market system for a number of reasons:

- The level of taxation taken by government can affect the amount of money consumers have available to spend on goods and services. High levels of taxation can mean that consumers spend less, businesses cannot grow as quickly, and cannot employ as many people.
- Money collected in taxes can be spent on providing welfare payments. These payments, in the form of pensions and unemployment benefits, allow many people to purchase more as consumers, providing more income to businesses and creating more jobs as businesses grow.
- Government also provides services such as schools and hospitals, which are paid for from taxes collected from both households and businesses.
- When the government spends money on building roads, schools and hospitals, it is providing money to the businesses that do the actual building, helping those businesses to grow and employ more people.

FIGURE 4 When a government pays businesses to construct roads it helps those businesses to grow and employ more people.

7.2.4 The overseas sector

Australia is an open economy, which means we trade goods and services with other countries. Australian businesses **export** goods and services to both consumers and producers in other countries. Australian consumers buy many products that have been manufactured in other parts of the world and **imported** into this country.

International trade can affect our market system in a number of ways:

- Australia has a relatively small population, so if overseas consumers are willing to buy the goods and services we produce, this can help our local businesses to grow and employ more people.
- There are some products that we are unable to produce with the same efficiency as can be achieved in other countries. A lot of the highly sophisticated machinery used in factories is imported, helping the factory to produce goods more cheaply.
- Imported goods are sometimes cheaper than locally produced goods, which can make it difficult for local producers to compete with the imported products. This can lead to local producers going out of business. The motor vehicle manufacturing industry is an example of an industry that has closed its Australian operations due to lower priced imported products. While local jobs are lost, consumers benefit from cheaper priced cars.

FIGURE 5 Australia imports many goods from overseas and exports goods and services to many other countries.

export goods and services sold by local businesses to overseas consumers

imports goods and services purchased by local consumers from overseas businesses

7.2 EXERCISE

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

Learning pathways

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

Check your understanding

1. Define the following and provide an example of each:
   a. market
   b. labour
   c. household sector
   d. business sector
   e. financial sector
   f. government sector
   g. overseas sector.
2. Why is it possible for a person to be both a producer and a consumer?
3. How do financial institutions help markets to operate?
4. What is the difference between imports and exports?
5. Explain why taxes are considered a 'leakage' from our economic system.
6. Explain one way in which a government can influence markets.

Apply your understanding

7. Predict the impact that each of the following might have on the level of goods and services sold by Australian businesses.
   a. Households decide to save a larger proportion of their income.
   b. Financial institutions make it easier for consumers to acquire credit cards.
   c. Governments decide to increase the level of taxation for households.
   d. Governments increase the level of welfare payments.
   e. There is a large increase in the availability of cheaper imported goods.
8. Taxes and government spending are linked. Explain this relationship.
9. Exports and imports involve the overseas sector and trade. Explain why Australia needs to trade.
10. In 2019, interest rates were reduced to their lowest ever level. Analyse the impact this may have on investment by businesses and spending by consumers.

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

7.3 How markets operate

LEARNING INTENTION

By the end of this subtopic, you will be able to explain how each good, service or employee is part of a specific market as well as the broader market economy.

7.3.1 What is a market?

A market exists in any situation where buyers and sellers come together to exchange goods and services for money. A market can exist in a single physical location, it can be spread across a number of locations, or can have no physical trading location at all, such as online retailing. It is the act of buying and selling, not the actual location, that creates the market. We will now look at a number of different markets that exist within the Australian economy: retail markets, labour markets, financial markets and stock markets.

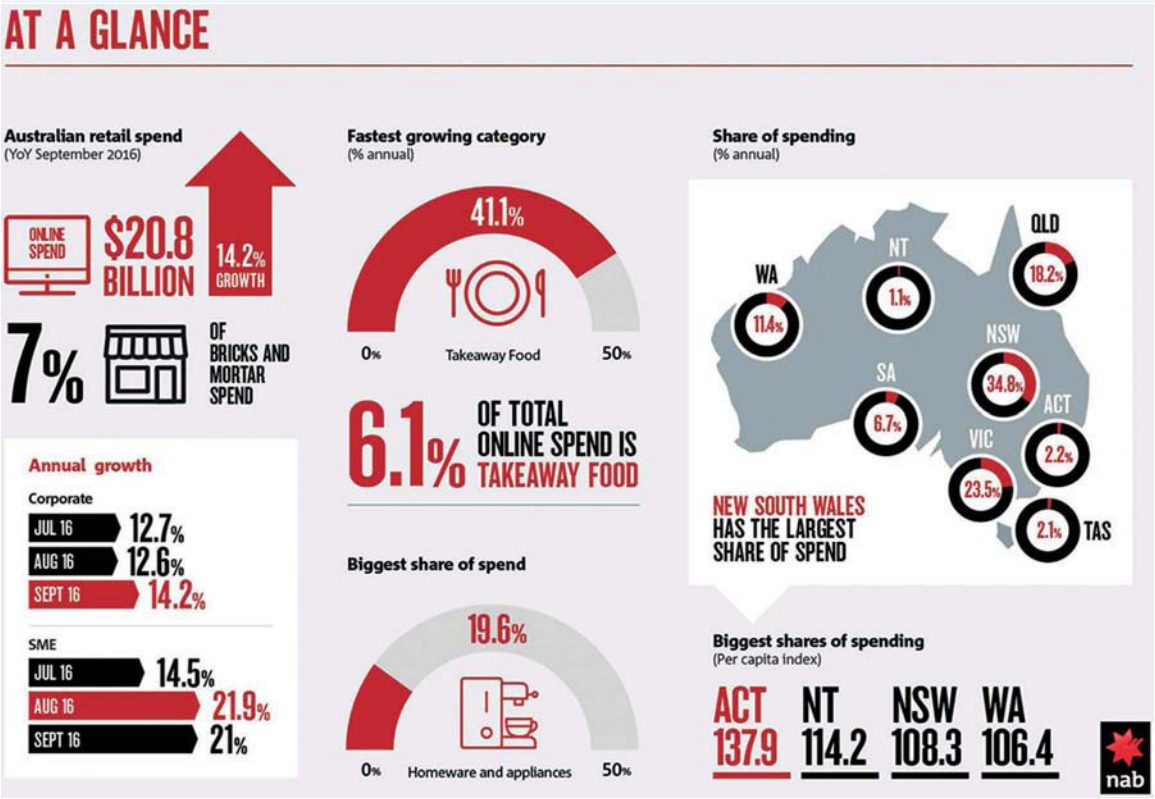
7.3.2 Different types of markets

Retail markets

We are all very familiar with retail markets. These are the markets that allow us to buy most of our goods and services. They include:

- shopping areas in the central business districts (CBDs) of our large capital cities
- huge suburban shopping malls such as Carillon City in Perth, Westfield Parramatta in western Sydney and Chadstone in Melbourne
- local shopping centres with a supermarket and a number of specialty stores

FIGURE 1 Online shopping continues to grow each year.



- shopping strips located along major roads and near public transport hubs
- the groups of shops gathered in the main streets of country towns and regional centres
- online shopping websites.

Online shopping has become so popular that in 2016 it accounted for 7 per cent of all household spending. It was valued at $20.8 billion – a 14.2 per cent increase on the previous year.

Labour markets

At any given time, there are people looking for a job. Some of them are unemployed and want to find work, while some of them already have a job but want to work for a new company or do different work. At the same time, many businesses are looking to employ people to work for them. Prospective employees are hoping to sell their labour to employers. Those employers wish to buy the skills and effort of suitable employees. This combination of buyers and sellers of labour constitutes the labour market.

FIGURE 2 Online job boards such as SEEK are the fastest growing source of job advertisements.

Like many other markets, the labour market does not operate in a particular physical location. The labour market relies on a variety of means of communication between the sellers of labour (potential employees) and the buyers of labour (employers). These allow employers to advertise vacancies in their businesses, and potential employees to find out about job opportunities. The operation of the labour market can involve the following:

- The simple placement of a sign in a shop or café window indicating that the owner has a job vacancy
- Newspaper advertisements for job vacancies. This method has declined significantly in recent years, with relatively few vacancies advertised this way today.
- Online 'jobs boards' such as SEEK, Indeed and Australian JobSearch. These are the fastest growing source of job advertisements, updated every day. Employers pay a fee to advertise their vacancies, and jobseekers can apply online for the vacancies advertised.
- Any person receiving **unemployment benefits** from the government is usually required to take an active role in looking for work. The government pays independent agencies to assist unemployed people to find work. Many of these are run by community organisations and a list of these, including Matchworks and the Salvation Army, can be found on the Australian JobSearch website.

The price the employer pays as a buyer of labour is known as a wage or salary. Wages and salaries are quite highly regulated in Australia. There is a **minimum wage** that must be paid to all employees over the age of 21 years. It is adjusted every year to account for rises in the **cost of living**. At 30 June 2019 this was set at $18.93 per hour, or $719.20 (before tax) for a standard working week. This figure is expected to be revised.

unemployment benefits welfare payments by government to people who are unemployed and looking for work. Such payments in Australia are generally known as the Newstart Allowance.

minimum wage the legally binding minimum that must be paid to any employee over the age of 21 years

cost of living the level of prices paid by consumers for goods and services

Financial markets

Just as there are a number of markets for goods and services throughout the economy, there is also an important market for money. While households earn money in the form of wages and salaries, they will often choose to borrow money to buy larger items such as cars or houses. Businesses make money from selling goods and services to consumers, and generally try to make a **profit** by doing so. Sometimes part of that profit will be invested in expanding the business, but if the profits are not large enough to do this, the business may also want to borrow money to help it grow.

The functions of money

Money performs four very important functions in our market system:

1. *Medium of exchange* – Money allows us to exchange goods and services using a common means of exchange we all accept. Employees exchange their labour for money, and all businesses accept money in exchange for the goods and services they supply.
2. *Measure of value* – We use money to put a price on the goods and services we exchange. The price is a measure of what we believe the goods or services to be worth, when compared with other goods and services.
3. *Store of value* – We are able to save our money to spend at a later date.
4. *Standard of deferred payments* – Using money allows us to purchase goods and services on credit, with both buyer and seller knowing how much has to be paid at a later date.

FIGURE 3 Money performs important functions in our economy.

FIGURE 4 Stockbrokers buy and sell shares on behalf of their clients.

The working of financial markets

Just as all goods and services have a price, so too does money. The price of having access to money that actually belongs to someone else is known as **interest**. When you deposit your money in a bank account, the bank will pay you interest on your savings. This is usually based on a percentage figure. If you deposit $100 in your account and the bank is paying 3 per cent per annum (per year), the bank will pay you three dollars in interest after a year. Interest is often calculated monthly or even daily, so that if you withdraw your money before the year is up, you will be paid a lesser amount to cover the time the bank had the use of your money. Banks then lend out the money that they have deposited with them to other consumers or to businesses. They will usually charge a higher rate of interest to borrowers than they pay to their depositors. This is how they make a profit.

profit what remains after all business expenses have been deducted from the money that has been collected from selling goods or services

interest a charge made for the use of money that has been deposited or borrowed

If you have money to deposit, it is often worth shopping around to get the best rate of interest. Sometimes it is possible to earn a higher rate of interest if you agree to leave the money in the bank for a fixed period of time. This is known as a term deposit, because the money is deposited for a fixed term, or period of time. If you borrow money, you want to pay the lowest possible rate of interest, so it is worthwhile to shop around a number of lenders to get the best deal.

Financial markets operate like any other market, with sellers wanting to charge the highest price they can for their goods and services, and buyers wanting to pay the lowest price they can. If you are selling the use of your money (i.e. you are a depositor), you want to get the best price (interest earnings) you can for allowing someone else to use that money. If you are buying the use of someone else's money (i.e. you are a borrower), you want to pay the lowest price (interest payments) you can.

Stock market

Like other markets, the stock market (also called the share market) is simply a relationship between buyers and sellers. In this case it is shares in companies that are bought and sold. A share is a unit of ownership in a company. Large companies divide their ownership into millions of shares, which can be bought and sold through the stock market, known in Australia as the Australian Securities Exchange (ASX). The ASX was formed in 1987 by amalgamating the six capital-city stock exchanges. Today the ASX is based in Sydney, but also has offices in Perth and Melbourne.

There are more than 2000 companies listed on the ASX. These include large retailers such as Woolworths and Wesfarmers (owners of Coles), the four big banks (ANZ, CBA, NAB and Westpac) and large mining companies such as BHP Group Limited and Rio Tinto. The value of shares can go up and down, depending on the demand for those shares. When a company reports that it has had a successful year, many people may want to buy shares in that company. If there are more people wanting to buy than to sell, the price tends to rise. If the company appears to not be performing well, there may be more shareholders wanting to sell their shares than there are buyers, so the price is likely to go down.

As the price of a company's shares goes up or down, so too does the value of a shareholder's investment. The value of most shares tends to rise over time, even though the prices can fluctuate daily. People who hold shares for long periods (generally more than 10 years) benefit from **capital growth**. Owning shares means you can also benefit when the company makes a profit, as profits can be distributed to shareholders as **dividends** or in extra shares.

FIGURE 5 Buying shares listed on the ASX enables you to become a shareholder in a variety of different businesses.

The buying and selling of shares is usually handled by stockbrokers. These are licensed agents who have access to the ASX, and who conduct share transactions on behalf of the general public in exchange for a small fee. Most stockbrokers will recommend that their clients buy shares in a variety of different companies. If you only buy shares in one company and that company experiences problems, the value of your shares can drop and you lose money. Buying shares in a number of different companies reduces your risk, as you have a better chance of having some shares that will perform well. You have probably heard the saying 'don't put all your eggs in one basket', which means you should spread your risks among a number of ventures.

capital growth an increase in the value of shares or property over time

dividends company profits paid to shareholders, either in cash or as more shares

However, as with retail, it is possible for individuals to buy shares in companies themselves, online, by creating their own account, usually through their bank. Commsec and ANZ Etrade are examples of online trading platforms that allow consumers to buy shares if they have an account with that bank and have a minimum amount of money available – usually $600.

on Resources

Video eLesson Share market basics (eles-0256)

Weblinks Australian JobSearch
Fair Work
ASX

7.3 ACTIVITIES

1. Watch the **Share market basics** video eLesson in the Resources tab and then answer the following questions.
   a. What are you buying when you buy shares?
   b. What would be the situation if you owned 100 per cent of the shares in a company?
   c. What is the role of a stockbroker?
   d. When is the stock market report published?
   e. Copy the following table into your workbook and explain the meaning of each term as found in the stock market report.

Stock		
Close		
Move		
Turnover (100s)		
Quotation	Buy	
	Sell	
52-week	High	
	Low	

Economics and Business concept: Allocation and markets

2. Examine the stock market report in a daily newspaper or use the **ASX** weblink in the Resources tab, and answer the following questions.
   a. Identify two companies that experienced an increase in share price in the previous day's trading.
   b. By how much did each increase in price?
   c. How many shares were bought and sold for each company?
   d. What is the highest and lowest price each company's shares reached during the last year?
   e. Is the current price closer to the highest or lowest experienced during the past year?
   f. From what you can see of the shares in these two companies, do you think they would be good value to buy right now? Explain your answer. **Economics and Business concept: Allocation and markets**
3. Use online resources to investigate a 'job board' website and search for each of the following jobs in your local area: nurse, bricklayer, hairdresser, taxi driver.
   a. How many vacancies were available for each type of job?
   b. What sort of information is provided about each job?
   c. Explain the process for applying for one of these jobs online. **HASS skills: Questioning and researching**
4. Use online resources (such as the **Fair Work** weblink in the Resources tab) to answer the following questions.
   a. What is the current rate of the minimum wage for workers over the age of 21?
   b. By how much has the minimum wage increased from the previous year?

HASS skills: Questioning and researching

7.3 EXERCISE

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

Learning pathways

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

Check your understanding

1. Describe three examples of retail markets.
2. What is the ASX?
3. Define each of the following in your own words:
   a. unemployment benefits
   b. interest
   c. award
   d. capital growth
   e. enterprise bargaining
   f. dividend.
4. What is being bought and sold on the labour market?
5. What is being bought and sold on financial markets?
6. Explain each of the four functions of money.
7. Distinguish between money as a measure of value and a store of value.

Apply your understanding

8. Explain what is meant by a 'market' and provide reasons why markets don't need to have a physical presence.
9. All markets are affected by specific factors. Explain a common factor that impacts the retail market and the financial market.
10. Explain the relationship between the labour market and the retail market.

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

7.4 How price is set

LEARNING INTENTION

By the end of this subtopic, you will be able to describe how prices are set and explain the interaction between supply and demand.

Have you ever wondered why the price of some goods and services, such as fruit and vegetables or holiday accommodation, always seems to be changing?

The answer is economics and the interaction of demand and supply.

Through the interaction of demand and supply, markets attempt to solve the economic problem of scarcity and the efficient allocation of resources. By looking at supply and demand we can understand how price is determined.

7.4.1 Demand

Demand is the quantity of a product that consumers are willing to purchase at a particular price at a given point in time. As prices increase, demand for that good or service decreases. If the price decreases, the demand for that good or service increases. This is known as the **law of demand**.

So, if we think of blueberries, the cheaper they are, the more people will want to buy them. However, the more expensive they are, the fewer blueberries people will want to buy.

This relationship can be illustrated using a demand schedule or table. Plotting the information on a graph gives us the demand curve for blueberries (see **FIGURE 1**).

FIGURE 1 Demand curve for blueberries

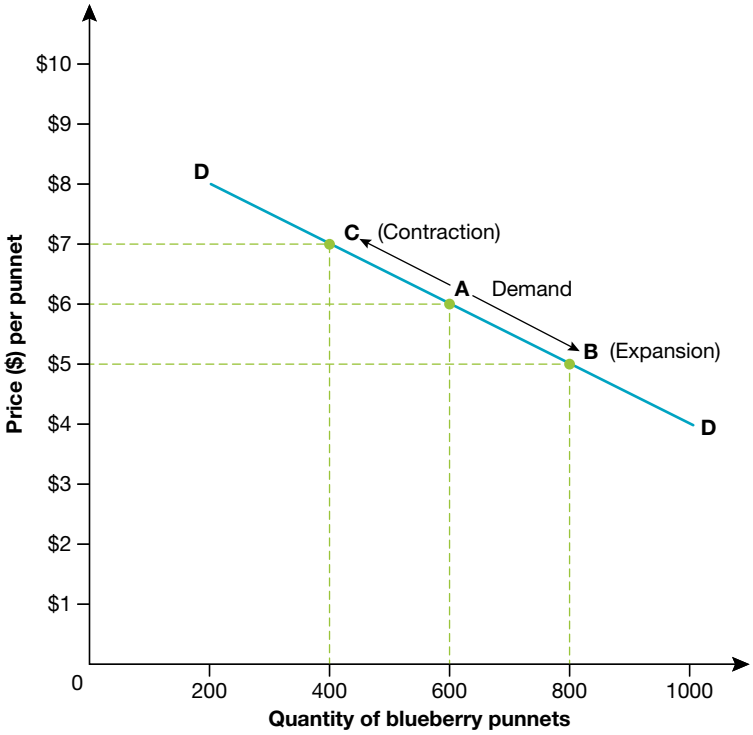


TABLE 1 Demand for blueberries

Price of blueberries	$4	$5	$6	$7	$8
Quantity of blueberries demanded	1000	800	600	400	200

This demand curve shows that when the price of blueberries changes, the amount of blueberries people want to buy also changes. For example, when the price of blueberries is $6 per punnet, the quantity demanded is 600 punnets. This is shown at point A on the graph. However, if the price of blueberries falls to $5 a punnet, the amount of blueberries people are willing to buy expands to 800 punnets. This is shown at point B on the graph. This increase in the demand for blueberries is called an expansion in demand.

law of demand states that the quantity of a good or service demanded varies inversely to price

However, if the price of blueberries increases from $6 to $7 per punnet, the quantity demanded will contract from 600 punnets to 400 punnets. This is shown by a movement from point A to point C on the graph. The decrease in the demand for blueberries is called a contraction in demand.

7.4.2 Supply

Supply refers to the quantity of a good or service that businesses are willing and able to offer for sale at a given price, at a given point in time. For blueberries, businesses are the farmers who are growing the blueberries. As prices for a good or service increase, the quantity supplied will increase. If the price decreases, the supply of that good or service will decrease. This is known as the **law of supply**.

This relationship can be illustrated using a supply schedule or table. Plotting this information on a graph gives us the supply curve for blueberries (see **FIGURE 2**).

FIGURE 2 Supply curve for blurberris

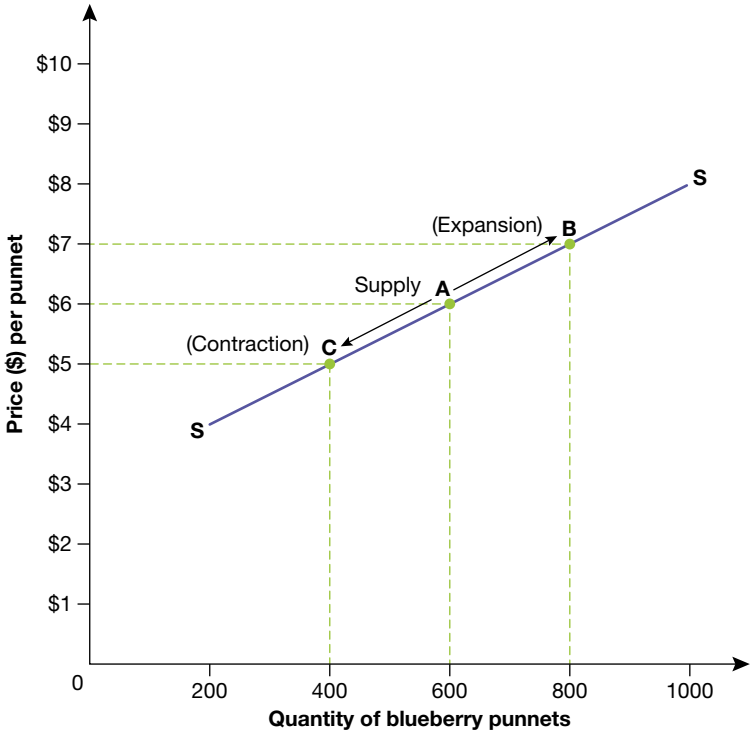


TABLE 2 Supply of blueberries

Price of blueberries	$4	$5	$6	$7	$8
Quantity of blueberries supplied	200	400	600	800	1000

This supply curve shows that when the price of blueberries changes, the amount of blueberries farmers are willing to sell also changes.

For example, when the price of blueberries is $6 per punnet, the quantity farmers are willing to supply is 600 punnets. This is shown at point A on the graph. However, if the price of blueberries increases to $7 a punnet, the amount of blueberries farmers are willing to sell increases to 800 punnets. This is shown at point B on the graph. The increase in the supply of blueberries is called an expansion in supply.

law of supply states that the quantity of a good or service supplied varies directly with price

However, if the price of blueberries falls from $6 to $5 per punnet, the quantity supplied by farmers will contract from 600 punnets to 400 punnets. This is shown by a movement from point A to point C on the graph. The decrease in the demand for blueberries is called a contraction in demand.

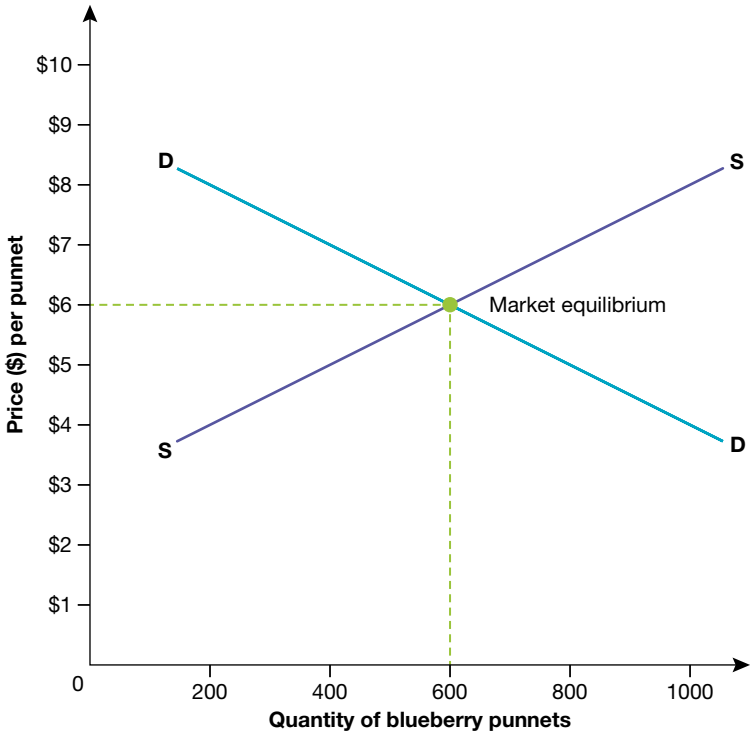
7.4.3 The price mechanism

Once the supply and demand for a good or service has been established, it is possible to plot them both on a graph. The point at which the demand and supply curve intersect is called **market equilibrium**. This is the point at which buyers and sellers agree on a price and exchange the good or service for money.

The **price mechanism** refers to the forces of demand and supply in determining the price and quantity of a good or service.

We can see on the graph that the equilibrium price for blueberries is $6 a punnet and the equilibrium quantity for blueberries is 600 punnets (see **FIGURE 3**).

FIGURE 3 Graph showing the market equilibrium for blueberries



Why are the prices of some products always changing?

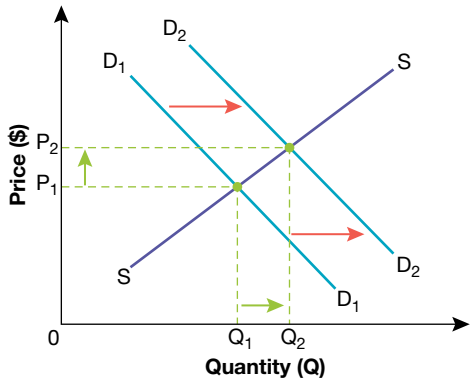
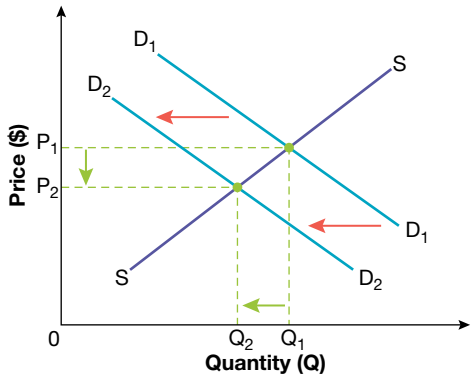
You have probably noticed that the prices for goods such as blueberries are always changing. This is due to changes in the demand and supply of blueberries.

Changes in demand

A change in any factor other than price will cause a shift in the entire demand curve and change the equilibrium price and quantity. The following table outlines the effects of these shifts on the demand curve (see **FIGURE 1**).

market equilibrium the point at which the demand and supply curves intersect

price mechanism the interaction of the forces of demand and supply that determines the price of a good or service

Increases in demand shift the demand curve to the right, moving the equilibrium point. This results in an: • increase in price • increase in quantity.	
Decreases in demand shift the demand curve to the left, moving the equilibrium point. This results in a: • decrease in price • decrease in quantity.	

What could cause a change in demand?

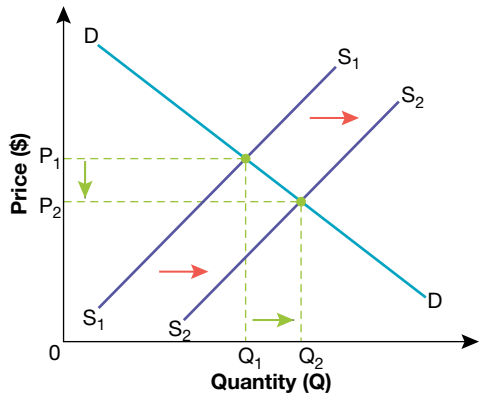
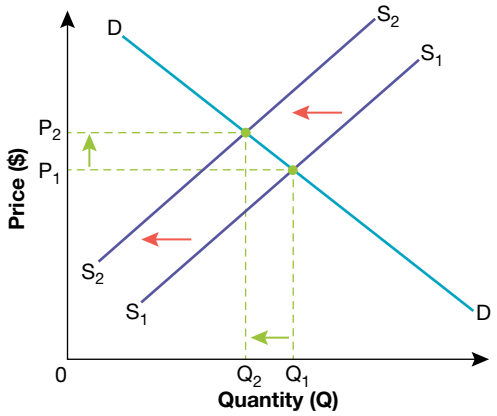
Let's continue looking at blueberries. The following table shows the factors that cause a shift in the demand for blueberries.

TABLE 3 Factors that cause a shift in the **demand** for blueberries

Reasons for increases in demand	Reasons for decreases in demand
• *A rise in consumer income:* if consumers have higher incomes, they are able to buy more blueberries. This causes an increase in demand. • *Changes in consumer tastes and preferences:* recently, blueberries have become known as a superfood. This has increased the demand for blueberries. • *An increase in the size of the population:* the number of people who may buy blueberries has increased. • *A substitute good becomes more expensive:* if strawberries increase in price, consumers could buy fewer strawberries and more blueberries. • *A complementary good becomes cheaper:* as milk prices fall, the price of blueberry smoothies also falls. This increases the demand for blueberries • *Prices are expected to rise in the future:* if people think the prices of blueberries will be higher in the future, they will buy more blueberries now.	• *A fall in consumer income:* if consumers have lower incomes, this will reduce the amount of blueberries they can afford to buy. This decreases the demand for blueberries. • *Changes in consumer tastes and preferences:* blueberries may fall out of fashion if consumers realise they are not the superfood they once believed they were. • *A decrease in the size of the population:* a fall in the population can lead to a decrease in the demand for blueberries. • *A substitute good becomes cheaper:* if strawberries become cheaper, consumers may stop buying blueberries and switch to strawberries. • *A complementary good becomes more expensive:* if milk becomes more expensive, people may no longer be able to afford blueberry smoothies. The demand for blueberries will fall. • *Prices are expected to fall in the future:* if people think the prices of blueberries will be lower in the future, they may put off their purchase of blueberries and wait until the price drops.

Changes in supply

A change in any factor other than price will cause a shift in the entire supply curve. Increases in supply cause the supply curve to shift to the right and decreases in supply will cause the supply curve to shift to the left. The following table outlines the effects of these shifts in the supply curve (see **FIGURE 2**).

Increases in supply shift the supply curve to the right. This results in: • a decrease in price • an increase in quantity.	
Decreases in supply shift the supply curve to the left. This results in: • an increase in price • a decrease in quantity.	

Would could cause a change in the supply?

Let's look at what could cause the supply for blueberries to change.

TABLE 4 Factors that cause a shift in the **supply** for blueberries

Factors that cause an increase in supply	Factors that cause a decrease in supply
• *Increased efficiency:* if blueberry farmers develop new technology, this may allow them to increase the amount of blueberries grown. • *A fall in the cost of production:* if the wages of blueberry pickers falls, farmers can employ more people and increase output. • *Improved climatic conditions:* increased rainfall would increase the harvests of blueberry farms. • *An increase in the number of suppliers:* more people may start blueberry farms because they hear that blueberries are a superfood.	• *Decreased efficiency:* a new bug found to be eating blueberries would reduce crops. • *An increase in the cost of production:* if the cost of fertilisers used by farmers increases, they may not be able to produce as many blueberries. • *Unfavourable climatic conditions:* a drought may reduce the amount of blueberries farmers can grow. • *A decrease in the number of suppliers:* ongoing drought may force many blueberry farmers out of business.

on Resources

Weblink Jindabyne Holiday Park

7.4 ACTIVITIES

1. In small groups, brainstorm some real-world examples where price is significantly affected by the forces of demand and supply. **Economics and Business concepts: Scarcity, Making choices**
2. Investigate the changes in holiday accommodation due to demand and supply.
   Use the **Jindabyne Holiday Park** weblink in the Resources tab to complete the following table for prices for different times of the year. (Remember to compare the prices of the same accommodation/room type!) Try to account for the differences in price throughout the year.

Date	Room type	Price

HASS skills: Questioning and researching
Economics and Business concept: Making choices

7.4 EXERCISE

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

Learning pathways

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

Check your understanding

1. What does the demand for a good refer to?
2. Define the law of demand.
3. Outline what is meant by the supply of a good.
4. Define the law of supply.
5. What is the point called where the demand and supply intersect?

Apply your understanding

6. Construct the following demand and supply curves.
   a. Construct a demand curve for the following product.

Price	Quantity
$100	300
$80	350
$60	400
$40	450
$20	500

b. On the same graph, construct a supply curve for the same product.

Price	Quantity
$100	500
$80	450
$60	400
$40	350
$20	300

c. What is the equilibrium price and quantity for this product?

7. Outline two factors that can cause an increase in demand for apples. Explain the effect of the increase in demand for apples on the equilibrium price and quantity.
8. Outline two factors that can cause a decrease in supply of apples. Explain the effect of the decrease in supply of apples on the equilibrium price and quantity.

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

7.5 Key economic questions for businesses

LEARNING INTENTION

By the end of this subtopic, you will be able to describe the role and importance of prices in an economy and identify the three key questions an economy tries to answer.

7.5.1 Market forces

A key factor in any market is the price charged for the goods and services sold in that market. Sellers will generally decide how much they wish to charge for the goods or services they are supplying, but they cannot do this in isolation. They must take into account the price that consumers are willing to pay. If there are a large number of sellers in any market, prices will tend to be lower because these sellers have to compete with each other to attract customers. When prices are influenced by the interaction between buyers and sellers, they are said to be influenced by market forces. These market forces can also affect what goods and services producers choose to supply and the methods they choose to produce them. Market forces can also determine who the ultimate buyers of these goods and services will be.

FIGURE 1 Sellers must set a price that will not turn customers away.

7.5.2 Influencing prices

The prices paid for goods and services can be influenced by both sellers and buyers. Sellers can adopt a number of strategies to determine prices, including:

- applying a retail price recommended by the manufacturer of the goods being sold. Although it is illegal for a manufacturer to enforce such a price, it can provide a useful guide for the seller.

- following the prices set by other sellers in the same market. This may involve matching those prices, or setting a slightly lower price to attempt to attract more customers.
- adding a **percentage mark-up** to the cost of the goods to the business. The seller may calculate a sale price by adding a fixed percentage to the price that they paid for the goods.

The selling price needs to be enough to help cover all the business expenses, and also provide a profit.

Whatever method a seller uses, it is a general rule in all markets that sellers will attempt to charge as high a price as possible, while buyers will look for the lowest price they can find. A seller who attempts to charge too high a price will find that buyers will not buy from their business. The seller must cover the business's expenses and make a reasonable profit, but cannot afford to charge too high a price if competitors are selling the same product at a lower price. A buyer who expects to pay too low a price may find that there are no sellers willing to sell at that rate, so has to be realistic about what constitutes a fair price.

7.5.3 The key economic questions

The aim of any economy is to provide goods and services to consumers in as efficient a manner as possible. We would expect consumers to buy goods and services that will satisfy their needs and wants, and that producers will want to make a profit by selling them those goods and services. In order for both consumers and producers to be satisfied, the economy has to answer three basic questions:

1. What to produce? – What goods and services should be produced, and in what quantities?
2. How to produce? – What methods should be used to provide those goods and services?
3. For whom to produce? – To whom should those goods and services be distributed?

Because the Australian economy operates largely as a market system, we would expect the interaction between buyers and sellers in a variety of different markets to answer these questions.

What to produce?

How does our market system help producers to decide exactly what goods and services to supply, and in what quantities to supply them? Up to a point, the market system operates largely by trial and error. A producer may make certain goods or services available to consumers and hope that these will satisfy the needs and wants of those consumers. If the goods or services fail to sell, the producer will probably go out of business. In Australia more than 60 per cent of small businesses close within their first three years, while one in three fail in their first year. This means that a lot of potential producers are entering the marketplace, but not selling the goods or services necessary to satisfy the needs and wants of consumers.

The market largely determines which businesses are likely to be successful. Some factors that can influence markets include:

- *Established habits and experience* – Producers know from people's existing behaviour that there will always be a demand for certain types of goods or services. Families need to buy food on a regular basis, so a supermarket in a new suburb may well be successful. In any new shopping centre, businesses such as cafés and hairdressers will probably meet a demand from consumers if there are no similar businesses nearby. If a second or third café or hairdressing salon is established in the same shopping centre, the success of these businesses will depend on whether the level of demand from consumers is sufficient for all of them to survive. If not, one or more will close. The operation of the market for those goods and services will determine how many similar businesses can survive in the same marketplace.
- *Changing tastes and preferences* – An example of this is the market for Australian-made cars. For many years, family sedans and wagons such as the Holden Commodore and Ford Falcon were Australia's best-selling cars. Car manufacturing was so successful that other manufacturers such as Toyota also set up factories in Australia. Over time, consumers' preferences have changed, and smaller imported cars and larger SUVs have become more popular. This led to a decline in car manufacturing in Australia. As a result, Holden, Toyota and Ford all ceased motor vehicle production in Australia in 2017.

percentage mark-up a fixed percentage increase to the price paid by a business for goods, to determine the selling price of those goods

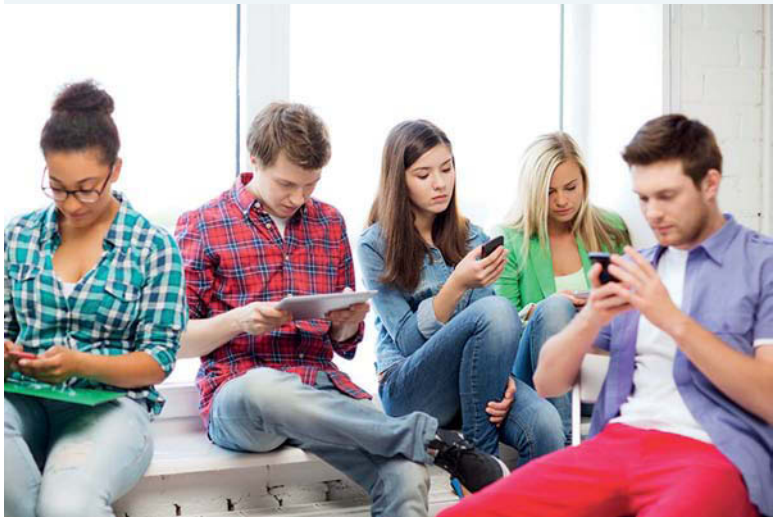
- *Marketing and advertising* – Any business introducing a new product or service into the market needs to ensure that consumers are aware of its availability. For many years, businesses have used television, newspaper and radio advertising to persuade consumers to buy their goods and services. In addition, online advertising has increased dramatically, and today an online presence is essential for almost all businesses.
- *Technological change* – As a society we have become very enthusiastic about new technology. Whenever a new model iPhone is released, consumers queue up outside their nearest Apple store to be one of the first to buy it. Consumers monitor new developments in technology, and many will quickly replace outdated products with newer models. Producers can be quite confident that improvements in technology will quickly attract buyers to new goods and services.

FIGURE 2 Changes in the market saw the closure of Holden, Toyota and Ford car manufacturing plants.

How to produce?

Producing goods and services generally involves a combination of labour, equipment and raw materials. These are known as **inputs**, and any production process will involve different types and combinations of these three inputs. A factory producing frozen vegetables will be set up with different types of equipment, such as freezers to keep the vegetables cold, machines to chop them, and machines to pack and seal them in plastic packaging. The same factory will employ workers to control those machines, and perhaps carry out some other tasks, such as managing the whole process. The raw materials are the vegetables that are processed.

FIGURE 3 Improvements in technology soon attract consumers.



At different times, the managers of the factory will have to make decisions about the best methods to produce their final product, and the operation of the market can influence these decisions. Competition from rival frozen food companies will mean that the business will wish to keep its costs as low as possible. If efficient new equipment becomes available, it may be worth changing the methods of production to take advantage of this new machinery.

inputs those things that contribute to the production process

Automated production lines and robotics-based equipment are technologies that have improved factory production. In most cases, automation enables a factory to employ fewer workers, saving wage costs and allowing the prices of products to be kept at a level where they can compete in the marketplace. When one business in a particular market is able to cut costs by changing its methods of production, other businesses in the same market will usually make changes also, to remain competitive.

FIGURE 4 The use of robotics has changed the way manufacturers produce goods.

For whom to produce?

A business owner will make some decisions about who he or she intends to supply with goods and services. The market can also influence who receives these goods and services because purchasing will be affected by the level of prices when compared with the income of consumers. Household income can consist of wages and some government welfare payments. Households can also gain access to credit to purchase some goods and services. Taxes and desired levels of savings result in a reduced amount available for spending.

FIGURE 5 Luxury motor vehicles cost much more to produce, but the manufacturers are not attempting to sell to the mass market.

The amount actually available for households to spend is known as **disposable income** (income less tax). All consumers make decisions about what to buy by comparing their disposable income with the prices they will have to pay for the goods and services they want. The prices of different products can influence who buys them. Luxury motor vehicles cost much more to produce, but the manufacturers are not attempting to sell to the mass market. Their product is aimed at those with a high enough level of disposable income to be able to afford such a vehicle. On the other hand, fast-food restaurants such as McDonald's and KFC provide relatively cheap meals designed to appeal to large numbers of consumers. Other, more exclusive restaurants, charging $100 or $200 per meal, are providing a service for a completely different market.

disposable income the amount of money that households have available for spending and saving after income taxes have been accounted for

7.5 ACTIVITY

In a fruit and vegetable market, bananas are subject to the following buyer and seller preferences.

- Sellers agree that if they could charge $14 per kg, they would happily supply 140 kg of bananas for sale each day. If they could only charge $7 per kg, they would only provide 70 kg a day. If they could only charge $3 per kg, they would only supply 30 kg for sale.
- If bananas cost $14 per kg, buyers would demand a total of 30 kg in any given day. If the price dropped to $10 per kg, buyers might be prepared to buy 40 kg a day. If the price fell to $8, buyers might purchase 60 kg, at $6 they would buy 80 kg, and at $4 they would buy 100 kg.

Based on this information, complete the following tasks.

a. Create a table showing the different quantities of bananas that sellers would be prepared to supply at each price level.
b. Create a table showing the quantities of bananas that consumers would demand at each price level.
c. Use the data from these tables to construct a graph that shows both the sellers' supply preferences and consumers' demand preferences.
d. State the price per kilogram at which buyers' and sellers' preferences would be matched. What quantity would be sold at that price?

Economics and Business concepts: Making choices, Allocation and markets

7.5 EXERCISE

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

Learning pathways

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

Check your understanding

1. Define each of the following in your own words:
   a. percentage mark-up
   b. disposable income.
2. Outline two methods a business might use to determine the prices for the goods or services it sells.
3. What are the three different types of inputs that go into any production process?
4. Explain two factors that could influence which goods and services businesses decide to produce.
5. How do businesses aim to keep their production costs as low as possible?

Apply your understanding

6. Explain how markets can influence to whom different goods and services are distributed.
7. Explain the three economic questions.
8. Explain two methods that can impact how businesses produce goods.
9. Explain why luxury goods, such as expensive cars, are still popular despite there being many other cheaper options available.
10. Imagine you own a homemade ice-cream shop in a coastal town. Predict what will happen to buyer preferences in the following scenarios:
    a. The market price of cream rises, raising the cost of producing ice cream.
    b. A new ice cream shop opens a couple of doors down.
    c. Your town experiences an unusually cold summer.

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

7.6 Government involvement in the market

LEARNING INTENTION

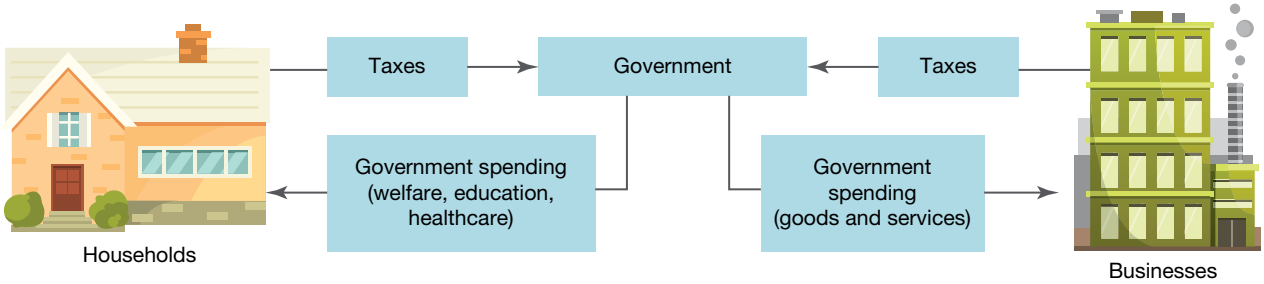
By the end of this subtopic, you will be able to describe the different roles played by the government in the economy.

7.6.1 Role of the government

The involvement of government in our market system can be illustrated by **FIGURE 1**. We can see that both households and businesses pay taxes to government.

Some of this money comes back to households in the form of welfare payments such as pensions, or as services such as education and healthcare. Some of it is spent on buying goods and services from businesses, or paying businesses to build roads, schools or hospitals.

FIGURE 1 Model showing the role of the government in the flow of money, goods and services between households and businesses



7.6.2 Welfare

The government provides financial and other support to disadvantaged members of the community. The aged pension supports those who are beyond retirement age and no longer working. Unemployment benefits are designed to support those who cannot find work. The National Disability Insurance Scheme (NDIS) provides people with a permanent and significant disability with money to access support and services.

FIGURE 2 Welfare payments help those who are not able to earn an income.

Not only are welfare payments designed to provide fairness and support to those who need help, but the payments can also have a positive economic effect on markets. Those receiving welfare are likely to spend most of their money and so their spending adds to the circular flow of income throughout the economy. Businesses gain revenue from selling additional goods and services. This, in turn, allows them to employ more people, who also spend their money buying goods and services.

7.6.3 Provision of infrastructure

Government has a major responsibility for providing the **infrastructure** for the country. This includes roads, railways and ports, and has traditionally included other means of communication, as well as energy supplies. Roads and railways are essential if goods are to be transported from place of manufacture to the shops where they are sold. Ports are not only required to allow for the import and export of goods in and out of Australia, but also for the transport of goods within Australia. Tasmania relies on shipping across Bass Strait to bring goods from mainland Australia, and to transport goods produced within the state to consumers in other states.

FIGURE 3 Government provides infrastructure to enable markets to function more efficiently.

The government provides a postal service that supports correspondence between businesses, as well as the delivery of goods through a parcel delivery service. The telephone service was originally provided by government before Telstra was **privatised** and other providers were permitted to enter the market for telephone services. Even today, the national broadband network is an important infrastructure project being funded by the government. Markets cannot operate without efficient systems of communication between consumers and businesses.

Traditionally, energy supplies such as electricity and gas have also been provided by government. These are not only essential for the domestic uses we are all accustomed to, but also for the functioning of businesses. In some states of Australia, electricity and gas supplies have been privatised and are now run by businesses rather than by the government. Even where this has occurred, the original infrastructure was usually built by the government before being sold to the business sector.

DISCUSS

Privatisation of essential industries, such as electricity and gas supplies, can lead to increased prices as the companies that provide these services seek to make larger profits. Do you think these essentials should be sold for profit?

General capability: Ethical understanding

7.6.4 Economic management

Government has a responsibility to ensure that Australia experiences a sustainable level of economic growth from year to year. Growth is important because, as the population increases, it is necessary to ensure there are sufficient goods and services for all consumers to buy. There also needs to be an increase in the number of jobs available to provide employment for a growing population.

FIGURE 4 Governments will use a variety of statistics to assist with decision- making.

infrastructure the facilities, services and installations needed for a society to function, such as transportation and communications systems, water and power lines

privatise to sell a government-owned provider of goods or services to private investors

Governments can encourage economic growth by spending money, which increases funds into the circular flow. This can provide more for consumers to spend, encouraging business to increase the supply of goods and services, and thus provide more job opportunities. However, if too much money is injected into the economy there may not be enough goods and services readily available to meet the increased demand. This is likely to force prices up, leading to **inflation**.

When excess inflation occurs, governments will usually cut back on spending, which removes money from the economy, which hopefully slows down the rise in prices. Governments use their annual **budgets** to influence the flow of money in the economy. They will aim to encourage growth, while trying to avoid the risk of too much inflation. Governments can use statistics gathered by the **Australian Bureau of Statistics** to assist them in their decision-making. These statistics can include figures relating to the levels of employment in the economy, as well as those tracking price rises.

7.6.5 Wages and employee relations

As we have discussed, there is a market for labour in which workers offer their skills and experience for sale to businesses and businesses buy that labour by paying wages and salaries. In order to ensure that the labour market functions fairly, it is regulated by laws passed by governments. The major law dealing with wages and working conditions in Australia is the Fair Work Act, a federal government law.

State governments provide regulations to ensure safe workplaces through Occupational Health and Safety laws. Both federal and state governments have also sought to prevent discrimination in the workplace by passing laws supporting equal employment opportunity. These make it illegal to discriminate against someone in any workplace on the basis of gender, race, age or ethnicity. Victoria also has laws to deal with bullying in the workplace.

FIGURE 5 Occupational Health and Safety laws are designed to prevent injuries at work.

7.6.6 Provision of goods and services

Governments can also become involved in the marketplace as actual suppliers of goods and services. For example, every state and territory government provides an education system. In addition, state governments provide hospitals and other health services. Although other organisations also provide many of these services,

FIGURE 6 It is a responsibility of governments to provide hospitals and health services.

inflation a general rise in prices across all sectors of the economy

budget estimates of all government income to be raised by taxes and other charges, and the planned spending of that income, within any given year

Australian Bureau of Statistics a government-owned agency that gathers and publishes a range of statistics to assist government, business and the community with decision- making

such as private schools and private hospitals, most people consider it a responsibility of government to ensure that everyone has access to education and health services. Ambulance services and firefighting and emergency services are similarly considered to be the responsibility of state governments.

Public transport systems also are mostly provided by state governments, and those public transport systems that are provided by non-government businesses usually receive large amounts of money from the government to assist in their running. Public transport does not make a profit, so no business would want to run it without such funding. Further, without this government assistance, for public transport to be profitable fares would have to be so expensive that many people could not afford to use it. Public transport is recognised as an essential service, so governments either provide it themselves or pay businesses to provide it at a reasonable price.

7.6.7 Planning and the environment

State governments and local councils have powers to control the type of buildings and other developments that are built within their borders. Governments establish building standards to ensure that all buildings are structurally sound, and not likely to fall down or cause a hazard in any other way. Anyone wishing to build a house or other structure on vacant land must gain a building approval. This is to ensure that the building conforms with certain standards. Councils and the state government can also determine whether or not a particular type of building is appropriate in a particular area. For example, it would usually be considered inappropriate to build a large factory in the middle of a residential area.

FIGURE 7 Governments have introduced laws to prevent businesses from polluting the environment.

Since the early 1970s, state governments have also introduced laws to protect the environment. These place restrictions on both businesses and individuals in relation to what they can release into the atmosphere and waterways. These laws can affect markets because they can increase costs for some businesses. For example, businesses that may once have released waste material into a creek, river or drain now have to dispose of it in an environmentally responsible manner. Smoke and fumes have to be properly filtered before being released into the atmosphere. Motor vehicles have emission controls to limit the levels of harmful chemicals in exhaust fumes.

Environmental laws have also created new business opportunities, with waste management and recycling businesses providing services for a variety of different customers. As with most government involvement in the economy, while some businesses may appear to be disadvantaged, opportunities are often created for new and different businesses to grow.

7.6.8 International trade policies

Governments have the power to regulate what comes into and goes out of the country. Customs and quarantine laws can have an influence on the markets for a number of products. Until 2011, Australia banned apples from New Zealand because of fears the apples may spread a disease known as fire blight. Such a regulation would obviously have an impact on the market for apples throughout Australia.

Traditionally governments have also attempted to protect goods produced by local industries by imposing special taxes on similar goods imported from other countries. These taxes are known as **tariffs**. The clothing and textile industries were once

tariffa tax on goods imported from a foreign country

protected in this way. In the early 1980s, there was a 28 per cent tariff on all imported clothing. This made these imported goods more expensive than locally produced clothing, thus encouraging consumers to buy the Australian-manufactured product. Over the next thirty years this tariff was reduced, making imported clothing much cheaper than the local product.

As a result of reduced tariffs, many local clothing manufacturers have been unable to compete with cheaper imported clothing and consequently have had to close. A similar program of tariff reduction occurred in the motor vehicle industry. While this has been a negative for the Australian clothing and motor vehicle industries, the positive impact for Australian consumers is clothing and motor vehicles being much cheaper. Since the 1980s, Australian governments have also negotiated trade agreements with other countries. We agree to reduce tariffs on imports from those countries, and in return they agree to reduce tariffs on goods they import from us. Although this can make it difficult for some local manufacturers who have to compete against cheaper imported products, it can be good for our export industries and for consumers, who pay lower prices.

FIGURE 8 A reduction in tariffs has increased the quantity of imported clothing sold in Australia.

7.6.9 Immigration policies

As well as controlling the goods that come into and go out of Australia, governments can regulate the movement of people. This particularly applies to immigration into the country. Immigration allows the population to rise faster than would occur through natural increases in the birth rate. Rapid population increases can provide more consumers for businesses to supply with goods and services. Further, new arrivals add to the workforce, providing businesses with new employees who may have new skills to help the business grow.

FIGURE 9 Australia has become a major provider of tertiary education for fee-paying students from Asian countries.

Governments can also affect the market for particular goods and services through decisions made about who is encouraged to migrate here. If particular skills are required in certain industries and not enough people in Australia have the required qualifications, governments can allow employers to bring in migrants with the necessary skills. This can affect the labour market in that industry. Australia has also become a major provider of tertiary education for our region. Encouraging international students to come here provides additional income for our universities, as these students pay fees to study here.

on Resources

Weblinks Australian Bureau of Statistics
Fair Work

7.6 ACTIVITY

Use the **Australian Bureau of Statistics** weblink in the Resources tab to complete the following tasks.

a. Find out the current estimated population of Australia.
b. Explain how this estimate is calculated.
c. Select two headlines or media releases, and for each one, describe:
   i. three significant facts or figures included in the report
   ii. the trends or changes that have occurred in recent years in the facts or figures reported.

HASS skills: Questioning and researching

7.6 EXERCISE

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

Learning pathways

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

Check your understanding

1. Define each of the following in your own words:
   a. infrastructure
   b. inflation
   c. government budget.
2. Why does the government usually have to provide funding for public transport to operate?
3. How can government welfare payments have an impact on the market for goods and services?
4. Explain what happens when a service provided by the government is privatised.
5. What are tariffs?
6. How can a government budget influence economic growth?

Apply your understanding

7. Why might it be important for the government to be involved in the regulation of wages and working conditions for employees?
8. What effect might environmental laws have on the costs experienced by businesses in managing waste from their production processes?
9. Explain two ways in which government immigration policies can have an influence on markets.
10. Explain why it is important for the government to regulate trade.

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

7.7 Legal protection of consumer rights

LEARNING INTENTION

By the end of this subtopic, you will be able to identify that one role of the government is to pass laws and describe one specific area where laws have been made – the area of consumer protection.

7.7.1 Law and justice

Governments at all levels involve themselves in the market in a variety of ways. Politicians, commentators and the media often refer to the issue of 'economic management' as a responsibility of government. People expect the government to take action to encourage growth in the economy and to avoid high unemployment. Government activity within a market economy goes well beyond these aims. The successful operation of markets often depends on the level of government involvement.

The government provides a legal framework that allows buying and selling in the marketplace to occur within a set of rules that should be fair to all participants. Australian Consumer Law protects consumers from unscrupulous businesses that could try to cheat them. Laws relating to the enforcement of legal contracts ensure that all buyers and sellers will be able to enforce their rights before the courts. The criminal law aims to provide protection from threats and intimidation in any business dealings.

FIGURE 1 Australian Consumer Law protects consumers from unscrupulous businesses that could try to cheat them.

7.7.2 Fair transactions

As a consumer, you can often be at a disadvantage when it comes to buying goods and services. Even though you may have a good idea of what you wish to buy, you will often rely on the advice of a salesperson to help you with your purchase. You want to be assured that this person will be showing appropriate respect for your interests, not trying to 'con' you. The Australian Consumer Law aims to make sure that every transaction between buyers and sellers is fair to both parties.

7.7.3 Honesty is the best policy

The Australian Consumer Law makes it clear that sellers are expected to advertise and promote their products honestly. It is illegal to do anything that might mislead the customer, or trick them into buying something they might not have bought if they had known all the facts. The following are some examples of behaviour that is illegal under this law.

FIGURE 2 Any discounts, special offers or specials offered by sellers must be genuine.

- *Misleading or deceptive conduct* – Advertisements must not use words that make claims about a product that are not true. This includes claims about low prices or goods being '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* – For example, using a brand name similar to a well-known brand, or using an Australian-made logo when the product was made overseas.
- *Bait advertising* – This refers to a business attempting to attract customers by advertising some products at lower prices, but stocking very few of those products. When the advertised products quickly run out, customers are then directed to higher-priced items.
- *Referral selling* – This occurs when a business offers a customer a special deal or special price if the customer refers other potential customers to the seller and those customers make a purchase.

7.7.4 Treating consumers fairly

Consumers wish to satisfy their needs and wants, and when they go looking for goods and services they are usually eager to make a purchase. This means that an unscrupulous seller could take advantage of them. Consumer law makes it compulsory for sellers to provide all available information to consumers, and to ensure that buyers and sellers have equal rights in any purchase. Some of these rights are:

- Any contract or agreement that a consumer enters into must be fair and balanced. It must be written in clear language that is easy to understand. It should not contain any provisions that allow the seller to change the conditions of the agreement without informing the buyer. For example, it would be illegal for a mobile phone contract to allow the service provider to make changes to their prices and charges without notifying the customer. However, the consumer is responsible for reading the contract carefully to make sure they understand it.
- 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.
- Anyone attempting to sell goods or services door-to-door or over the phone can only do so between 9 am and 6 pm on weekdays, and from 9 am to 5 pm on Saturdays. These types of sales are not permitted on Sundays or public holidays. This rule does not apply when consumers have agreed in advance to an appointment time for the seller to visit their home. A salesperson must leave immediately if requested and must not contact the consumer again for at least thirty days (with that same product). If a consumer

agrees to purchase goods or services from a door-to-door salesperson, or over the phone, the Australian Consumer Law allows for a ten-day 'cooling off period'. This means that the consumer has the right to cancel the agreement within ten days, without having to pay anything.

- Lay-by agreements must be in writing and must be expressed in plain language that is clear and easy to understand. The agreement must include all terms and conditions.
- Businesses that display 'No refunds' signs are breaking the law. If a product is faulty or is unfit for its usual purpose a refund must be offered to the buyer. However, a business may refuse to provide a refund if consumers simply change their minds and there is nothing wrong with the product.

FIGURE 3 A door-to-door salesperson must leave immediately if requested.

7.7.5 Guarantees for consumers

You may have heard of manufacturers or sellers offering guarantees or warranties. These are promises that if anything goes wrong with the product, it will be replaced or repaired free of charge. Even if a manufacturer or seller does not provide such a written warranty, the Australian Consumer Law makes it compulsory for all suppliers and manufacturers to automatically provide a basic set of guarantees on all products they sell to consumers. A business cannot remove consumer rights under these guarantees, but they can improve these basic rights if they wish to do so. The Australian Consumer Law provides the following guaranteed rights:

- The consumer will gain clear legal ownership of goods; that is, the seller actually owns the goods being sold and can legally transfer ownership to the buyer.
- Goods must match any sample, demonstration model or description provided to the buyer.
- Goods must be of acceptable quality; that is, they must be safe, long-lasting, free from defects, acceptable in appearance and finish, and do all the things that the goods are normally used for. For example, if a consumer purchased a pair of jeans and found some of the stitching was coming apart after a week, the jeans would not be considered of acceptable quality.
- Products must be fit for a particular purpose. Fitness of purpose means the product will perform as the instructions or advertisements imply. A bottle of shampoo that failed to properly wash hair would be a breach of this condition.
- Repairs and spare parts must be available for a reasonable time after manufacture and sale.
- Any necessary servicing must be carried out with reasonable care and skill and must be completed within a reasonable time.

FIGURE 4 Goods must be of acceptable quality; if a shoe heel broke after only a couple of wears, the shoes would not be considered of acceptable quality.

7.7.6 When the law is broken

Although the Australian Consumer Law is a law of the Commonwealth parliament, enforcement of the laws protecting consumers is usually carried out by the relevant state or territory Office of Fair Trading or Consumer Affairs Office. When a consumer has a complaint against a seller, these offices will usually recommend that the consumer attempt to sort out the problem directly with the seller. If direct contact with the business does not produce a result, the Fair Trading or Consumer Affairs Office may contact the business on the consumer's behalf and attempt to resolve the matter.

If the business fails to resolve the problem, Fair Trading or Consumer Affairs Offices can take legal action on behalf of the consumer. If the legal action is successful, the seller may be required to compensate the consumer or to replace or repair any faulty goods. The business can also be fined for failing to comply with the Australian Consumer Law.

FIGURE 5 These steps may help a consumer resolve an issue when they feel a business has breached consumer laws.

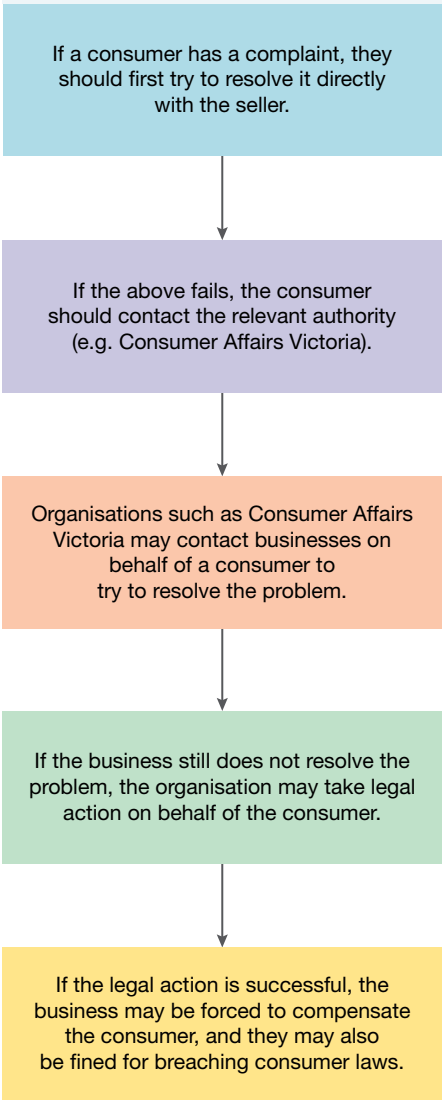


FIGURE 6 Fair Trading and Consumer Protection offices will usually recommend that the consumer attempt to sort out a problem directly with the seller.

7.7.7 Responsibilities as well as rights!

What is an ethical consumer or producer?

While the Australian Consumer Law contains a strong emphasis on protecting the rights of consumers and enforcing the responsibilities of sellers, consumers also have responsibilities in the marketplace. Some of these responsibilities are:

- Whenever you buy goods or services, you are entering into a legally binding contract. You might believe that a contract is a written document that you sign, but this is not always the case. If you are buying a house or a car, there are particular types of written documents that are required by law, but any agreement between a buyer and a seller is a legally binding contract, even if you don't sign anything. As a buyer you have a responsibility to pay the required amount for the goods or services you purchase. This is

particularly relevant if you purchase goods or services on credit, with an expectation that you will pay by instalments, such as the purchase of a mobile phone with an accompanying payment plan.

- Consumers who borrow money or who use a credit card to make purchases have a responsibility to make repayments. Failure to do so can leave the consumer with a poor credit rating. This remains active for five years, and if you need to apply for a loan during that time, you may have that loan refused.
- A consumer cannot return goods and claim a refund if the goods have been used other than for the purposes for which they were intended. If you damage a product by using it inappropriately, or even injure yourself while doing so, you have very little chance of being compensated. Consumers have a responsibility to use goods in the way the manufacturer intended.

FIGURE 7 Consumers who borrow money must repay it in full. Failure to do so can leave the consumer with a poor credit rating.

on Resources

Video eLessons Consumer rights – services (eles-2529)
What is an ethical consumer or producer? (eles-0255)

7.7 EXERCISE

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

Learning pathways

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

Check your understanding

1. What is the purpose of Australian Consumer Law?
2. Provide a brief description of each of the following:
   a. misleading conduct
   b. bait advertising
   c. referral selling.
3. Outline one responsibility that consumers have in relation to goods or services they purchase.
4. Explain the rules that apply to phone sales and door-to-door selling.
5. In what circumstances is a seller allowed to refuse a refund?

Apply your understanding

6. Explain two guaranteed rights that consumers have in relation to goods they purchase.
7. What powers does a Consumer Protection or Fair Trading authority have to enforce Australian Consumer Law?

8. In each of the following examples, explain why there has been a breach of the *Competition and Consumer Act*.
   a. An electrical goods business advertises a particular brand of television and states that it is at a cheaper price than that offered by a competitor. This statement is false.
   b. A clothing store advertises t-shirts and claims that they are made in Australia when in fact they are made in Hong Kong.
   c. A take-away food outlet advertises that a special deal is only for one week when in fact it plans to extend it for two months.
   d. A garden maintenance business offers some its customers a 10 per cent discount if they provide the names and addresses of five potential customers for the business.
9. Explain what is meant by a 'lay-by' and why consumers may use this method of purchasing goods.
10. 'Most businesses are concerned about maximising their profits and so we need consumer protection laws to regulate their behaviour.' Discuss this statement.

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

7.8 Keeping consumers safe

LEARNING INTENTION

By the end of this subtopic, you will be able to describe the mechanisms and bodies created by various levels of government that are designed to protect consumers.

7.8.1 When purchases go wrong

Every now and again we hear stories in the news of a particular model of car being 'recalled' to have a fault fixed. Other stories come to light of people suffering from food poisoning after visiting a certain restaurant or café. We hope that every purchase we make will be safe, but this is not always the case. Just as it is important to protect consumers from dishonest behaviour, it is even more important to ensure that the products we buy will not harm us.

7.8.2 Who keeps us safe?

A number of different bodies are responsible for ensuring that the goods and services we buy are not going to cause us harm. These bodies include government regulators, as well as other groups, such as Choice. The roles of these different entities are discussed briefly below.

Government regulators

Governments at federal, state, territory and local level have established a number of bodies to ensure product safety. These include:

- The Australian Competition and Consumer Commission (the ACCC) includes issues of 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 bodies are able to monitor goods coming in from overseas, and can identify any products that might be dangerous.

FIGURE 1 Customs officers check containers of goods from overseas to prevent dangerous goods from entering the Australian market.

- Specific industry regulators are organisations that have particular powers in relation to certain types of products. For example, the Therapeutic Goods Administration has a role in regulating medicines, as well as devices such as wheelchairs.
- Local government health authorities carry out inspections on food premises such as restaurants, cafés and school canteens to make sure cleanliness and hygiene regulations are followed.

Other groups

Responsibility for product safety is spread broadly across the community, with a number of organisations involved, including:

- Businesses – manufacturers and sellers take responsibility to ensure their products are safe. A business selling a product that causes harm to one or more consumers can be sued by those affected. It makes sense to avoid legal action by closely controlling the production process to keep products safe.
- Technical bodies – worldwide organisations such as the International Organisation for Standardisation (ISO) set acceptable standards for all types of products. Any product that conforms to those standards is entitled to display an ISO number, so consumers know it conforms to the highest quality.
- Consumers – buyers and their representatives also have a responsibility for safety. Choice, formerly the Australian Consumers' Association, publishes a magazine and a website called *Choice*, which examines and tests all types of products. Individual consumers also have a responsibility to maintain items to keep them safe, such as checking electrical cords and enabling safety features on motor vehicles.

FIGURE 2 Consumers can be assured that any product carrying ISO certification will be safe and will conform to the highest standards of quality.

7.8.3 What do the government regulators do?

Federal, state and territory bodies have wide-ranging powers and responsibilities to ensure product safety. They carry out a variety of different activities in exercising these responsibilities.

General market monitoring

Government regulatory bodies examine all areas of all markets to detect possibly unsafe products. They monitor the media for any death or injury reports that may suggest a particular product could be dangerous. They examine and arrange testing of new types of products coming onto the market. They also respond to consumer complaints and monitor information on new products from around the world.

Encouraging safe practices

Regulatory bodies encourage safe practices through various measures. These include:

- *Negotiating product removal* – This involves gaining agreement from suppliers to remove dangerous goods from sale in their stores or outlets, including online outlets.
- *Removing unsafe goods* – This can often involve a product recall. Anyone who may have bought a product that is found to be dangerous is expected to return it to the place of purchase. If the fault can be repaired, it will be returned to the manufacturer to be fixed. If the product cannot be made safe, the purchaser will be entitled to a refund. Product recalls must be widely publicised through the media. In newspapers, recall notices appear with a special striped border. When suppliers have records of who their purchasers are, they also will contact them directly to arrange a recall. This often happens when identified faults need to be repaired in motor vehicles. A current example is the ongoing government recall on Takata airbags, which were installed in a variety of makes and models of cars. These airbags are potentially fatal if they activate at the wrong time.
- *Promotion of safety management* – Government regulators encourage manufacturers and other suppliers to comply with sets of standards. These can include mandatory standards or voluntary standards. Mandatory standards are compulsory and must be observed by suppliers. For example, there are very strict standards for electrical goods, and consumers must be supplied with instructions and warnings about their appropriate use and any possible hazards. All packaged food must list ingredients and nutritional information on packaging,

and clothing items must have washing and care instructions provided. Voluntary standards are those that have been agreed to by groups of suppliers or other organisations. They are not compulsory, but any supplier that complies with them can use this fact when promoting its products. Voluntary standards do not usually relate to issues of safety; they are more likely to deal with issues of quality.

FIGURE 3 Manufacturers that discover a fault in any of their products are expected to recall these products for repair, replacement or refund.

Product Safety Recall

NOTICE OF RECALL TO CONSUMERS

FUN 4 KIDS ROBOT

Defect: Fun 4 Kids has identified a batch of battery operated robots that do not comply with mandatory standard for toys for children up to and including 36 months of age because the batteries are accessible without the use of a tool. In addition, the product may also break into small parts during normal use.

Hazard: Children may gain access to the batteries, which are small parts, presenting a potential choking hazard.

What to do: Fun 4 Kids robots are available from SOME major retailers etc. This batch has been available since August 2014. If you have purchased a toy with this device number (206HW) during this period you should:
1.Immediately discontinue use of the product
2.Return the device to the following Reply Paid address for replacement at Fun 4 Kids' expense:
Fun 4 Kids
Reply Paid 7845
Locked bag 101, Rushmore, NSW 1879
3.Include your return address and contact details

Contact details: For further information please contact Fun 4 Kids Freecall on: 1800 34569218

See www.recalls.gov.au for Australian Product Recall Information

FIGURE 4 All packaged food must provide nutritional information on the packaging.

Nutrition Facts

Amount Per Serving
Calories 85 Calories from fat 4
% Daily Value
Total Fat 0g 0%
Saturated Fat 0g 0%
Trans Fat 0%
Cholesterol 0mg 0%
Sodium 2mg 0%
Total Carbohydrate 20g 5%
Protein 0g
Vitamin A 5% Vitamin C 15%
Calcium 5% 5%

	Calories:	2,000	2,500
Total Fat	Less than	60g	80g
Sat Fat	Less than	30g	80g
Cholesterol	Less than	210mg	210mg
Sodium	Less than	2,500mg	2,500mg
Total Carbohydrate		300g	380g
Fiber	Sat Fat	30g	30g

Calories per gram:
Fat 10 Carbohydrate 5 Protein 5

- *Publicity and education* – Government regulators aim to make sure that all necessary information relating to product safety in general, and particular hazards when they occur, is circulated as widely as possible throughout the community. They often issue statements to the media about particular safety issues. These are sometimes reported in the media. The ACCC administers a product safety website, which provides regular updates on safety hazards. State and territory Consumer Affairs and Fair Trading authorities regularly conduct education and publicity programs to inform the public on broad product safety issues.

Solving safety problems and enforcing standards

Government regulators usually try to support businesses to do the right thing, rather than simply punishing them for doing the wrong thing. Where possible, they will work with industry, support technical investigation and concentrate on educating suppliers and consumers about product safety. New regulations can be created where necessary and warning notices will be issued when dangerous products are identified.

FIGURE 5 This toy wooden alphabet train was removed from sale because it contained dangerous small parts.

Sometimes a product is clearly so risky that it has to be banned. This has happened on numerous occasions with toys sold to young children. If a toy contains small parts that could come loose and be swallowed by a small child, the toy may be banned from sale. Many other toys carry clear indications of the age group for which they are designed and possible risks to younger children.

If a manufacturer or other supplier fails to comply with safety standards or bans, government regulators can take legal action. Fines of more than $1 million can be applied to any business

failing to meet mandatory standards, or continuing to sell a product after it has been banned. A court can also order businesses to provide compensation to any customers harmed by products the business has sold. A business that becomes aware of any harm caused by a product or service that it has sold must inform the appropriate government regulator within two days. Failure to do so can also result in a fine.

DISCUSS

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?

General capability: Ethical understanding

on Resources

Weblink ACCC Product Safety Recalls

7.8 ACTIVITY

Using the **ACCC Product Safety Recalls** weblink in the Resources tab, select three 'Recall categories'. From each of these three categories, select one product that has been recalled and answer the following:

a. What was the name of the product?
b. What was the defect in the product?
c. Why was that defect dangerous?
d. What advice is given to consumers?

HASS skills: Evaluating

7.8 EXERCISE

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

Learning pathways

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

Check your understanding

1. Describe the role of each of the following in ensuring product safety:
   a. industry regulators
   b. customs and quarantine
   c. local government authorities.
2. What action can government regulators take if a person is injured after a supplier fails to remove a banned product from sale?
3. Identify two bodies established to maintain product safety.
4. Explain how consumers can play a role in product safety.
5. Explain the role of education in product safety.

Apply your understanding

6. What responsibilities do consumers have in relation to product safety?
7. Explain the difference between mandatory standards and voluntary standards.
8. Give details of two of the methods used by government regulators to encourage safe practices.
9. Explain two practices encouraged by regulatory bodies.
10. Explain what is meant by ISO and how this body contributes to product safety.

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

7.9 Thinking Big research project: Please stop calling

Scenario

Australia is a market economy and businesses and consumers should be free to pursue their goals without too much interference. However, we can't always rely on businesses to operate ethically, so the government assists with the protection of consumers. Call centres are one way that businesses get in touch with current and potential customers, but they can sometimes irritate people. The government has called for the creation of new guidelines to help regulate the call centre industry.

Task

Your task is to assist the government in developing a set of guidelines for how call centres should conduct themselves in their dealings with consumers.

This set of guidelines should consider:

- the rights of consumers
- the rights of call centre operators
- the responsibilities of consumers
- the responsibilities of call centre operators.

Follow the steps detailed in the Process section to complete this task.

Process

- Open the ProjectsPLUS application for this topic. Click the **Start new project** button to set up your project group. Working in pairs will enable you to share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered.
- One student will develop the guidelines for call centre operators and the other student will develop the guidelines for consumers.
- In the **Media centre** you will find an assessment rubric to guide your work.
- Research how call centres operate and the reasons why they operate as they do. Use the weblink in the Media centre to watch a video about a call centre.
- Identify some Australian businesses that use call centres and some of the issues people have with the way they operate.
- Using your research, develop your set of guidelines with clear and direct language.
- Submit your completed guidelines to your teacher for assessment and feedback.

on Resources

ProjectsPLUS Please stop calling (pro-0178)

7.10 Review

7.10.1 Key knowledge summary

7.2 Participants in the market system

- Consumers satisfy their needs and wants by working to earn money, and then buying goods and services from businesses that produce those goods and services.
- The basic circular flow of money is between the household sector and the business sector.
- Financial intermediaries, the government and the overseas sector are all involved in the operation of the market system in Australia.

7.3 How markets operate

- There are a large number of different types of markets that make up the Australian economy. These include the retail market, the labour market, financial markets and the stock market.

7.4 How price is set

- The price of some goods or services is always changing due to the interaction of supply and demand.
- Supply refers to the quantity of a good or service that businesses are willing and able to offer for sale at a given price, at a given point in time.
- Demand is the quantity of a product that consumers are willing to purchase at a particular price at a given point in time.

7.5 Key economic questions for business

- The interaction between buyers and sellers in the marketplace can influence prices charged for goods and services.
- Markets can also help determine what goods should be produced and in what quantities, how those goods and services are produced, and to whom they are distributed.

7.6 Government involvement in the market

- The g overnment performs a number of roles in the Australian market system including:
  - the provision of welfare and infrastructure
  - economic management
  - regulation of wages and employment conditions
  - provision of some goods and services
  - management of planning and the environment
  - regulation of international trade
  - setting of immigration policies and targets.

7.7 Legal protection of consumer rights

- The 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.
- Consumer Law also provides a number of basic guarantees in relation to the quality of goods purchased.

7.8 Keeping consumers safe

- 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.

7.10.2 Key terms

Australian Bureau of Statistics a government-owned agency that gathers and publishes a range of statistics to assist government, business and the community with decision- making

budget estimates of all government income to be raised by taxes and other charges, and the planned spending of that income, within any given year

capital growth an increase in the value of shares or property over time

cost of living the level of prices paid by consumers for goods and services

disposable income the amount of money that households have available for spending and saving after income taxes have been accounted for

dividends company profits paid to shareholders, either in cash or as more shares

export goods and services sold by local businesses to overseas consumers

financial institution any organisation that takes deposits from those with surplus funds, and makes those funds available to borrowers

household sector a term used by economists to refer to the total of all consumers in the economy

imports goods and services purchased by local consumers from overseas businesses

inflation a general rise in prices across all sectors of the economy

infrastructure the facilities, services and installations needed for a society to function, such as transportation and communications systems, water and power lines

inputs those things that contribute to the production process

interest a charge made for the use of money that has been deposited or borrowed

investment the direction of money into the purchase of equipment or premises for the establishment of a new business, or the expansion of an existing business

labour the human skills and effort required to produce goods and services

law of demand states that the quantity of a good or service demanded varies inversely to price

law of supply states that the quantity of a good or service supplied varies directly with price

market equilibrium the point at which the demand and supply curves intersect

minimum wage the legally binding minimum that must be paid to any employee over the age of 21 years

mortgage loan a loan advanced to allow a person to buy a house or other property, with the property itself as security for the loan. This means the bank or other lender can take possession of the property if the borrower fails to make the regular payments.

percentage mark-up a fixed percentage increase to the price paid by a business for goods, to determine the selling price of those goods

price mechanism the interaction of the forces of demand and supply that determines the price of a good or service

privatise to sell a government-owned provider of goods or services to private investors

profit what remains after all business expenses have been deducted from the money that has been collected from selling goods or services

tariff a tax on goods imported from a foreign country

unemployment benefits welfare payments by government to people who are unemployed and looking for work. Such payments in Australia are generally known as the Newstart Allowance.

7.10.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

We all play a part in the Australian economy. How do we ensure that everyone involved is getting a fair deal?

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

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5476)
Reflection (ewbk-5475)
Crossword (ewbk-5474)
Student Learning Matrix (ewbk-5468)

Interactivity Markets: consumers, businesses and governments crossword (int-8237)

7.10 Review exercise

Multiple choice

1. Economists identify the household sector as:
   - **A.** all people living in houses.
   - **B.** all consumers in the economy.
   - **C.** businesses that operate from private homes.
   - **D.** consumers that have taken out a mortgage loan.
2. A business can determine the prices it charges for its goods and services by:
   - **A.** applying a percentage mark-up.
   - **B.** calculating consumers' disposable income.
   - **C.** paying lower dividends to shareholders.
   - **D.** negotiating an enterprise agreement.
3. The g overnment in Australia has an impact on markets by:
   - **A.** determining prices in the retail market.
   - **B.** controlling interest rates in the financial market.
   - **C.** regulating minimum wages in the labour market.
   - **D.** promoting capital growth on the stock market.
4. When the government enters into trade agreements with other countries:
   - **A.** both countries may agree to lower tariffs for each other's goods and services.
   - **B.** both countries may agree to increase tariffs for each other's goods and services.
   - **C.** the exporting country may agree to increase tariffs.
   - **D.** the importing country may agree to increase tariffs.
5. Referral selling occurs when:
   - **A.** a seller refers a customer to another business when they run out of stock.
   - **B.** a seller offers a discount if a customer provides names of other potential customers who make a purchase.
   - **C.** a customer refers his or her friends to the business.
   - **D.** a customer refers to lower prices that he or she has found at other stores.
6. A customer has the right to return goods and demand a refund when:
   - **A.** the product is found to be unfit for its usual purpose.
   - **B.** the customer drops and damages the product in the car park outside the shop.
   - **C.** the customer finds a cheaper product in another shop.
   - **D.** the customer changes his or her mind the same day as the purchase took place.
7. Which of the following is not a guaranteed right of consumers in relation to goods purchased?
   - **A.** Goods must be of an acceptable quality.
   - **B.** Goods must be fit for the purpose for which they are intended.
   - **C.** Goods must be provided at the lowest price possible.
   - **D.** Goods must match any sample that has been shown to the customer.

Short answer

8. Give one way in which financial intermediaries can help markets to operate.
9. What are the four functions of money?
10. Explain what is meant by exclusive dealing.
11. What should a business do if it becomes aware that a product it has sold has harmed someone?
12. Explain the role of producers and consumers in an economy.
13. Why would a business need to borrow money from a bank?
14. Which Act did the Competition and Consumer Act replace when it was passed?
15. Explain how a business can be found guilty of misleading or deceptive conduct.

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 7 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

7.1 Overview

Video eLesson
- Development of the market economy (eles-1811)

7.2 Participants in the market system

eWorkbook
- How the economy works (ewbk-5489)

7.3 How markets operate

eWorkbook
- The functions of money (ewbk-5470)
- Investing in shares (ewbk-5471)

Video eLesson
- Share market basics (eles-0256)

Weblinks
- Australian JobSearch
- Fair Work
- ASX

7.4 How price is set

eWorkbook
- Supply and demand (ewbk-5472)

Weblink
- Jindabyne Holiday Park

7.5 Key economic questions for business

eWorkbook
- Going shopping – concept map (ewbk-5473)

7.6 Government involvement in the market

Weblinks
- Australian Bureau of Statistics
- Fair Work

7.7 Legal protection of consumer rights

Video eLesson
- Consumer rights – services (eles-2529)
- What is an ethical consumer or producer? (eles-0255)

7.8 Keeping consumers safe

Weblink
- ACCC Product Safety Recalls

7.9 Thinking Big research project: Please stop calling

ProjectsPLUS
- Please stop calling (pro-0178)

7.10 Review

eWorkbook
- Reflection (ewbk-5475)
- Crossword (ewbk-5474)
- Student Learning Matrix (ewbk-5468)

Interactivity
- Markets: consumers, businesses and governments crossword (int-8237)

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

8 Business decisions

8.1 Overview

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

Awesome name. Check. Cool website. Check. Is there more to running a successful business?

8.1.1 Introduction

Jellaine Ross started her business Cherry Blooms at the age of 24. The Brisbane-based company sells cosmetic products, particularly brush-on eyelash extensions. Ms Ross started selling the brush-on eyelash extensions after seeing them used when she was on holiday in Korea. She thought the idea would work in Australia so she repackaged and remarketed the product and created her own brand. Her business earned $100 000 in its first year and now sells close to $10 million worth of product a year both online and in retail stores across the world.

In this topic we will look at the different ways to own and run a business and how to recognise and respond to opportunities.

on Resources

- **eWorkbook** Customisable worksheets available for this topic (ewbk-5489)
- **Video eLesson** Different forms of business ownership (eles-1813)

FIGURE 1 Founder and Chief Executive Officer of Cherry Blooms, Jellaine Ross

8.2 The three main ways to own a business

LEARNING INTENTION

By the end of this subtopic, you will be able to describe the different business ownership structures that business owners need to choose from when commencing operations.

8.2.1 Structures of business ownership

There are a number of structures, or forms of ownership, that a business owner can choose from when starting a business. The three most common forms of ownership are **sole proprietorship**, where an individual runs a business on their own, a **partnership**, where a group of people will run a business together, and a **corporation**, which is owned by shareholders. Each form is discussed in this subtopic.

8.2.2 Sole proprietorship

A sole proprietorship, or sole trader, is a business that is owned and operated by one person. A sole proprietor business can operate in almost any field. However, they are usually small businesses such as cafés, newsagents and hairdressers, and trades such as plumbers and electricians. A sole proprietor may employ other people to work for the business, or to operate and manage the business.

FIGURE 1 A sole trader is a business that is owned by one person, even though it may employ other people to operate and manage the business.

The sole proprietor receives all the **profit** that the business makes, but is also responsible for any losses. He or she has **unlimited liability**. This means he or she can be forced to sell personal assets such as a house or car to pay off business debts. A sole proprietor business usually has only one person's name in the business name, for example, *Maria's Café*.

Individuals who establish a sole proprietor business are often referred to as entrepreneurs. Entrepreneurs are those people who assume the financial and personal risk of establishing a business with the hope of making a profit. These people normally exhibit enterprising behaviours.

You may know somebody or you yourself may be the kind of person who demonstrates enterprising behaviours. Some of these enterprising behaviours and characteristics include:

- demonstrating initiative
- having good problem-solving abilities
- being creative and innovative
- being able to plan and complete complex tasks
- being a reflective thinker
- being willing to take measured risks

sole proprietorship a business that is owned and operated by one person

partnership a business owned and operated by two or more people

corporation a business owned by shareholders

profit what remains after all business expenses have been deducted from the money that has been collected from selling goods or services

unlimited liability where a business owner is personally responsible for all the debts of their business

- predicting the consequences of a decision
- communicating clearly and effectively with different types of people
- analysing alternatives and selecting appropriate courses of action.

Advantages and disadvantages of sole proprietorship

A sole proprietorship is a good form of ownership for a person who is just starting a business because it is a simple and low-cost way to start. It allows the owner to maintain full control of the business, make all the decisions, set the tone for the business and keep all the profits. There will be no disputes with any partners and there are minimal government regulations. However, the owner does have unlimited liability. It can be difficult for the sole trader to find finances to start or expand the business and the owner must perform a wider variety of tasks. The owner also often works long hours, because they may have no-one else working for them.

8.2.3 Partnership

A partnership is a business usually owned and operated by two or more people, called partners. The partners share their profits and losses, usually equally. Together they decide how best to operate the business. It is common for people with similar skills, such as doctors, accountants, solicitors and dentists, to form a partnership. Partnerships tend to have the names of the partners in the business name, for example, *Kennedy & Lee Lawyers*. As with sole proprietors, partnerships also have unlimited liability.

A partnership can be formed with a verbal agreement, but using a formal written partnership agreement is worthwhile. This usually outlines who is in the partnership, how profits will be shared, how decisions will be made, how disputes will be settled and what will happen if the partnership ends.

FIGURE 2 A partnership is a business usually owned and operated by two or more people, called partners.

Advantages and disadvantages of partnership

A partnership is an inexpensive and simple form of ownership. It allows the partners to share the responsibility for decision-making, the risks and the workload. The partners can pool their finances and their expertise and there is minimal government regulation. However, a partnership has unlimited liability. It can be difficult to find suitable partners, and disputes between the partners can arise. If one partner decides to leave the business, the future of the business can become complicated.

8.2.4 Corporation

A corporation, or company, is owned by **shareholders**. In Australia, all corporations undergo a process known as incorporation. This involves creating a business as a legal entity in its own right and treating it as a separate entity from its shareholders. In other words, the corporation (rather than individual shareholders) is liable for the debts created through its operation.

Corporations have **limited liability**. This means that if the business cannot pay its debts, a shareholder loses only the money she or he has invested in the business. A shareholder cannot be forced to sell personal assets to pay the corporation's debts.

However, there are some exceptions to this situation. In some instances, the directors of the corporation will be asked to give a personal guarantee when seeking a loan from a financial institution. In such cases, the person who offered the personal guarantee might lose their own assets to pay the debts of the business.

If directors of the corporation engage in misleading behaviour or recklessly borrow money, they can be held personally responsible. Criminal charges may follow, and lawsuits may also be brought under the code of civil law.

Corporations can be organised as either public or private. The general public may buy and sell shares in public corporations and these corporations may be listed on the Australian Securities Exchange (ASX). Private corporations cannot be listed on the stock exchange and tend to be family-owned businesses. They have restrictions on who can buy their shares. A public corporation must have the word 'Limited', or the abbreviation 'Ltd', after its name. A private corporation must have the words 'Proprietary Limited', or the abbreviation 'Pty Ltd', after its name.

FIGURE 3 A corporation is owned by shareholders and can be structured as either a public or private company.

Advantages and disadvantages of a corporation

A corporation is a good form of ownership to attract finances, also known as capital. Corporations can obtain capital by selling shares. The life of a corporation can continue if an owner of the business sells their shares. However, corporations are very complex and expensive to set up. There are very strict laws regulating corporations, including how they are registered, how they need to report their financial results and how they are closed down. Corporations can grow very large, resulting in inefficiencies.

shareholders the part-owners of a corporation

limited liability where shareholders cannot lose more than their investment in the event of the failure of the business

DISCUSS

In the aftermath of the Global Financial Crisis (GFC) of 2008, many large corporations in the banking industry were 'bailed out' by their governments, with large amounts of taxpayers' money helping them to stay afloat. Some people have argued that these companies should not be 'too big to fail', and that by bailing them out it could encourage more reckless behaviour in the future. What do you think?

General capability: Ethical understanding

8.2 ACTIVITIES

1. Working with a partner or by yourself, visit a shopping centre. Record information about the businesses you find there in a table like the following.

Name of business	Nature of business activity	Form of business ownership
Carol's Café	Meals, tea, coffee, snacks	Sole proprietorship

   Collect data for at least ten different businesses. Analyse your results to find out the most common form of business ownership. Use a bar graph or a pie chart to present your results. Suggest reasons why this form of ownership is the most popular. **HASS skills: Analysing**
2. In groups, choose a business that interests you – it may be a local, national or international business. Use research techniques to find out as much as you can about it on the internet and through other means. While researching, ask yourself questions such as those below. Share your findings with your group.
   - What type of business is it, and how is it structured?
   - What are some of the business's key products or services?
   - What else about this business is of particular interest? **HASS skills: Questioning and research**

8.2 EXERCISE

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

Learning pathways

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

Check your understanding

1. Define the following terms in your own words:
   a. unlimited liability
   b. limited liability
   c. shareholder.
2. Identify the correct form of business ownership for the following businesses:
   a. National Australia Bank Ltd
   b. Dinah's Mobile Dog-washing
   c. McCartney and Daughters
   d. Visy Industries Australia Pty Ltd.
3. Outline the difference between a sole proprietorship and a partnership.
4. In what ways does a private corporation differ from a public corporation?
5. If someone wants to buy out a corporation, what will they need to do?

Apply your understanding

6. List the possible consequences of the partners of a business having a dispute.
7. Summarise the advantages and disadvantages of each form of business ownership using a table such as the following.

Form of ownership	Advantages	Disadvantages
Sole proprietor		
Partnership		
Corporation		

8. Suggest an appropriate form of business ownership for the following people. Explain why you made your suggestion.
   a. Brynn is very interested in setting up a manufacturing business to sell coffee to supermarkets around Australia, and possibly internationally.
   b. Gemma wants to start a new pet shop business where she is responsible for making all of the decisions.
   c. Muhamed is considering whether he should open a fish-and-chip shop. He is worried that he has very little finance, and would like to invite other people to help him start the business.
9. 'Public corporations allow access to greater finance but can lead to a loss of control of a business.' Discuss this statement.
10. Operating as a sole trader allows a business owner to set the tone for the business. Explain what this means.

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

8.3 Alternative ways to own a business

LEARNING INTENTION

By the end of this subtopic, you will be able to identify different forms of business ownership, describe them and provide examples and reasons for why they are used.

8.3.1 Are there other ways to own or operate a business?

Sole proprietorship, partnership or corporation are not the only forms available to create a business. A business can also be structured as a **cooperative** (a business owned and controlled by the group of people it serves, and a **trust**), where another person or company holds property or carries out business on behalf of the members of the trust. Additionally, after choosing a form of ownership, a business owner may decide to run their business as a **franchise**.

8.3.2 Cooperative

In a cooperative, a number of people combine resources for a particular purpose. Typical cooperatives involve farmers, community education centres and credit unions.

The benefit of a cooperative is that people who work in one industry can join together to manage their own affairs, drawing on their combined expert knowledge of the specialist aspects of their work. They also reduce costs by streamlining their operations to ensure maximum efficiency in delivering goods and services.

An example of a cooperative is the Best Western International hotel chain, whose members are hotel operators. The members own and operate their own businesses but work together and pool funds and resources through Best Western, which operates as a non-profit organisation. Pooled funds are used to advertise their businesses and the Best Western brand, and to generate greater buying power.

Many different types of cooperatives can be used for many purposes, including cooperatives for housing, building, consumers, workers and credit unions. Retailers' cooperatives buy in bulk on behalf of their members to obtain discounts from manufacturers and to pool marketing. This type of cooperative is common for locally owned grocery stores, hardware stores and pharmacies. However, their members are businesses rather than individuals.

cooperative a business that is owned and operated by the group of people that it serves

trust a business created to hold property or assets for the benefit of another person or a group of people

franchise the situation where a business sells the rights to distribute its products under its name to other individuals or businesses

FIGURE 1 The Best Western hotel chain is an example of a cooperative.

8.3.3 Trust

A trust is a form of business ownership where a **trustee** holds property or assets for the benefit of another person or a group of people. These other people are known as **beneficiaries** and are often members of a family. Setting up a trust can be expensive and complex because a formal deed needs to be created and there are administrative tasks that the trustee is required to complete annually. Trusts are often used to preserve family assets and reduce tax. Family businesses can be set up as trusts so that every family member can be made a beneficiary without having direct involvement in the running of the business.

FIGURE 2 A family business can be set up as a trust so that family members can be made beneficiaries.

8.3.4 Franchise

While it is not actually a form of business ownership, operating a business as a franchise is becoming increasingly popular. A **franchisor** is the individual or organisation that grants, under certain conditions, the right to use a business name and the right to produce or distribute the franchisor's product. The **franchisee** is the person who purchases the franchise, usually by paying a fee to the franchisor. Franchisees can operate their business as a sole proprietorship, partnership, corporation or trust.

The benefit to the franchisee is that he or she is granted an instantly recognisable business name, for example, Subway or Hungry Jack's. The business owner can immediately start to benefit from the reputation of the franchise. The franchisee also receives training in the technical aspects of operating the business from the franchisor, as well as assistance with business management principles. In return, the franchisee provides the start-up fees and labour, and agrees to uphold the terms and conditions of the franchise agreement. This can mean that a franchisee is obliged to market and sell

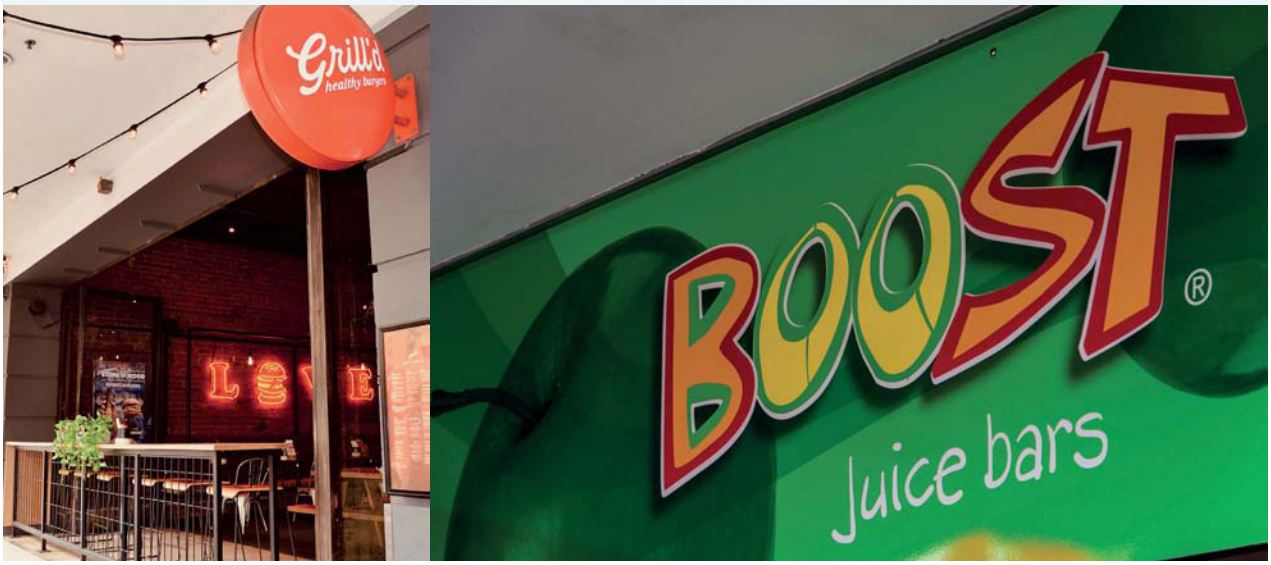
trustee a person or company that holds property or assets for the benefit of another.

beneficiaries the people who are entitled to the benefit of any trust arrangement

franchisor an individual or organisation that grants the right to use a franchise

franchisee the individual or organisation that purchases a franchise

FIGURE 3 Some franchise operations in Australia include Grill'd, a food chain specialising in healthy burgers, and Boost Juice, which sells smoothies and juices.



the products specified under the franchise agreement. The franchisee may also need to conform with any required production and distribution processes and requirements.

Just as there are many advantages for businesses operating as franchises, there are also disadvantages for both the franchisee and franchisor.

Operating a business as a franchise limits the freedom of the franchisee. The franchisor controls the operations, the product and the marketing. For example, when you enter a McDonald's restaurant, the décor looks the same, the staff wear the same uniform and the food tastes the same as in any other McDonald's anywhere in Australia. Operating a franchise limits the owner's ability to innovate and individualise their stores.

All advertising and promotional campaigns are determined by a centralised office and must be run in all franchise stores in exactly the same way. An owner of a franchise may not agree with a particular advertisement or a 'Scratch and Win' promotion, but they must do what the franchisor tells them.

The responsibility is on the franchisee to follow the instructions set by the franchisor or they may be reprimanded, receive a fine or even lose the rights to their business.

DISCUSS

In 2016 Nando's Australia Pty Ltd used security guards to take over two of the company's largest franchise stores. A Supreme Court battle has followed with the franchisor arguing franchisees are breaking their franchise agreement by not refurbishing their stores as required by head office.

The company wants the franchisees to spend almost $1.2 million to refurbish the Narre Warren, Wareca and Braeside businesses, to keep them in line with current company standards.

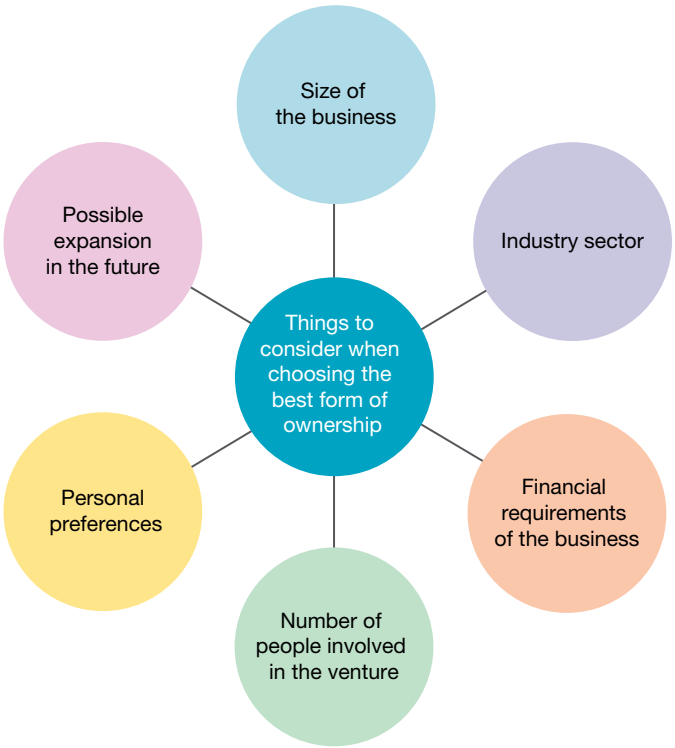
The case has become a key test in head office's ability to force franchisees to invest in their business. As yet this case has not been resolved. Who do you think is doing the right thing here?

General capability: Ethical understanding

8.3.5 Choosing the best form of ownership

As we have seen, a business owner can choose from several structures, or forms of ownership, when starting a business. When choosing the most suitable structure, the business owner needs to consider their personal preferences, as well as the advantages and disadvantages of each type of business. For example, someone who prefers to work alone and is wishing to start a business that is easy to set up might choose a sole proprietorship. A person who wants to raise the finances to grow a business selling products around Australia, and perhaps overseas, might consider a company structure. A person wishing to preserve the assets of their family and reduce tax might choose a trust. The form of ownership used by the business can change over time. It is quite possible that after a business is started, it will grow. As the business grows, its goals might change, which means the owner might need to review the most appropriate structure as well.

FIGURE 4 Business owners must consider a range of factors when deciding which form of ownership best suits their business.



on Resources

Weblink Business structures

8.3 ACTIVITY

Use the **Business structures** weblink in the Resources tab to find out more about different types of business ownership. Choose two business structures and write down two new things that you did not already know about these structures. **HASS skills: Evaluating**

8.3 EXERCISE

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

Learning pathways

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

Check your understanding

1. In what ways is a cooperative different to other forms of business ownership?
2. Why do people create trusts?
3. List five different franchises that operate in your area.
4. a. What do the franchisor and the franchisee receive under a franchise agreement?
   b. What is each party required to provide?
5. What are the benefits to farmers of joining a cooperative?

Apply your understanding

6. Outline the main advantages and disadvantages of establishing a business through a franchise agreement.
7. Consider the following businesses that are just starting up. For each case, determine what form of business ownership would be the most appropriate and explain why a person or group of people would choose to establish that form of ownership rather than another.
   a. An accounting practice providing financial and taxation services
   b. A café offering freshly baked breads and cakes, and specialty coffee
   c. A milk processing plant owned and operated by a group of one hundred dairy farmers
   d. A fashion retailer aiming to expand nationally within twelve months
   e. A family that has property held in trust by another person
   f. A business selling phone and internet connections hoping to raise $250 million in capital to commence trading
8. Outline two key factors to consider when choosing the best form of business ownership.
9. Suggest whether any groups (other than farmers, community education centres and credit unions) could benefit from operating as a cooperative.
10. Provide one benefit and one disadvantage of operating as a trust.

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

8.4 Opportunities for businesses

LEARNING INTENTION

By the end of this subtopic, you will be able to describe the different opportunities that may arise for businesses, including demographics, competition, location and target market, and explain how business owners can take advantage of these to start to grow.

8.4.1 Factors influencing opportunities

Businesses are always searching for opportunities, including ideas for new products, ways to attract new customers and more efficient methods of running the business. Many factors influence opportunities for businesses, including demographics, competition, location and target market. Successful businesses seize opportunities quickly.

8.4.2 Demographics

Being aware of **demographics** can create opportunities for businesses. Demographics are characteristics or statistics relating to the population, including age, gender, ethnicity, employment, income and education. Businesses can use this information to work out what products consumers prefer or to determine their buying behaviours. Let's have a closer look at some of these characteristics.

Age

The age of a country's population can influence business opportunities. The products that a business sells will usually appeal to a certain age group. The Australian population is ageing, which means that there is more demand for health services, further education and training, and travel. Some businesses may choose to focus on these opportunities or to target their products at younger consumers. People aged under 35 are more likely to be the first to purchase the latest versions of technologies such as mobile phones, games consoles and televisions.

Gender

Men and women demand different products. Businesses sell different hygiene and clothing products based on the gender of consumers. Women make the majority of the buying decisions in Australian households. This presents an opportunity for businesses. For example, businesses might target women with new home-improvement products.

demographics characteristics relating to population, especially age, gender, ethnicity, employment, income and education

FIGURE 1 Demographics are the characteristics or statistics relating to population, including age and gender.

Income

Income can affect business opportunities. The products that a business sells will usually appeal to a certain income group. A premium product, such as designer clothing, will normally appeal to higher income groups. Lower income groups tend to purchase discount products. A business owner may decide to focus on higher income groups by starting a fashion boutique, or focus on lower income groups by opening a discount fashion store.

8.4.3 Target market

By focusing its efforts on the most appropriate demographic, the business can begin to determine its **target market**. This is a specific group of customers with similar characteristics, that a business will produce goods and services for. A business working out its target market will do so by 'segmenting the market'. People can be grouped according to demographic characteristics, geographical characteristics (where people live, such as in urban, rural or suburban areas, or the country they are located in), behavioural characteristics (the way that customers purchase products, for example, are they a regular user or a first-time user of a product, do they have loyalty to a brand?) and psychographic characteristics (people's personalities, values, attitudes, interests and lifestyles).

FIGURE 2 By identifying a target market, a business may be better able to satisfy the demands of its customers.

A business selling car products may determine that its target market is males, aged 30–50 and living in urban areas, who like cars and who have time and money to spend working on them. A business selling make-up may have a target market of customers who are female, aged 25–50, living in the city and who like to buy 'brand name' products. Defining a target market allows a business to decide who will demand their products, what products they want, and if there are actually enough potential customers to make the business profitable.

8.4.4 Competition

Competition can make life difficult for a business. Depending on the market the business is operating in, they may have several competitors or very few competitors. Competition can drive prices down and can restrict the opportunity to make profit.

However, competition can also create opportunities for businesses. It can force a business to improve the way they do things or to innovate, either through using technology, altering the product or by improving customer service. Competition can force a business to examine their target market closely to make sure that they are selling to the right consumers and perhaps to change the group of customers they are attempting to sell to.

8.4.5 Location

The location a business chooses can create opportunities or restrict them, according to the nature of the business. A business needs to consider how important passing trade will be, whether visibility is important, how important access to resources will be, or whether cost will be the most important factor. For example, a business that is hoping to sell to young people or young families would find limited opportunities if it was located in an area whose population has an average age of over 60, a boutique fashion store would struggle to find customers if it was located in an industrial area and a business that manufactures goods might encounter difficulties if it was in an area that its suppliers could not access easily.

target market a group of customers with similar characteristics towards which a business has decided to aim its marketing efforts and its products

competition the outcome of two or more businesses attempting to supply their products to the same group of customers

8.4.6 CASE STUDY: GameZone

Two friends, Jake and Ashley, decided to start a small business: GameZone. They didn't have much money of their own, but they managed to convince their parents to lend them enough to get started.

Their first problem was the location. Rents were very high in the local shopping centre. They opted for a disused shop in a local street. Next door was an abandoned warehouse, and on the other side was the Pensioner World shop. They thought they might do all right in the area because another computer games store, eGames, was located just around the corner.

Ashley thought it would be best to sell to anyone and everyone who would buy their games. He put a couple of advertisements in the local newspapers and left some leaflets in the Pensioner World shop.

On the opening day, the stock arrived and games were piled high on the shelves. One elderly customer walked up to the counter.

'Do you have any touch-typing programs please?' asked the customer.

'Dunno about that,' said Mez, the shop assistant. Jake emerged from the back office and stubbed out a cigarette on the counter. He told the customer that the store sold games, not computer programs.

'Well then, could you please order a copy for me?' asked the customer.

'Maybe, but until our internet is fixed, nothing's happening. Sorry,' replied Jake.

int-2542

FIGURE 3 GameZone in action – how not to play the business game!

on Resources

Interactivity GameZone in action – how not to play the business game! (int-2542)

8.4 ACTIVITY

In a magazine, newspaper or online, find images that show examples of target market characteristics. Paste the pictures onto a page under appropriate headings (demographic, geographic, behavioural and psychographic) and add labels explaining why each picture represents that characteristic. **HASS skills: Evaluating**

8.4 EXERCISE

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

Learning pathways

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

Check your understanding

1. Briefly outline the four characteristics of a target market.
2. List three examples of business opportunities.
3. Explain how the following factors influence business opportunities:
   a. target market
   b. competition
   c. location.
4. What would happen to a business that fails to seize opportunities?
5. Explain how a competitor can create opportunities for a business.

Apply your understanding

6. For each of the following target market groups, think of an opportunity (a product or a business idea) that would cater for their needs.
   a. High income earners
   b. New parents
   c. Diet-conscious consumers
   d. Well-educated people
   e. Young and active students
7. Select a business in your local area. Describe whether the business has an advantage or disadvantage in its location in regard to:
   a. how visible it is to potential customers
   b. cost (including the likely rent or costs of transportation)
   c. how close it is to suppliers and customers
   d. how close it is to competitors.
8. Answer these questions about the GameZone case study.
   a. What evidence is there that Jake and Ashley did not spend enough time carefully locating their business for its target market?
   b. How will competition affect GameZone? Did Jake and Ashley make the right decision in locating it close to a competitor? Why or why not?
   c. Give three examples of poor customer service at GameZone.
   d. The business has not enjoyed the start the owners wanted. If they called you in as a manager, what steps would you take to improve operations? Explain.
9. Explain what is meant by demographics and how they can create opportunities for a business.
10. 'Business location opportunities have changed due to the development of technology.' Explain this statement.

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

8.5 Responding to opportunities in the market

LEARNING INTENTION

By the end of this subtopic, you will be able to describe the types of decisions that businesses need to make when commencing operations and explain the process for new product development.

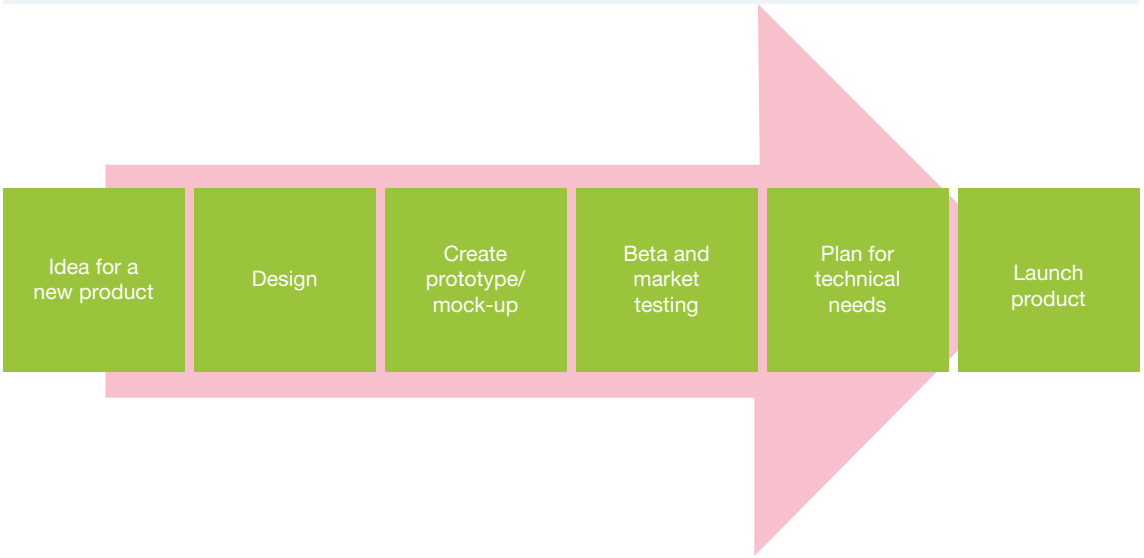
8.5.1 Developing a new product

After identifying opportunities in the market, a business owner will need to respond to those opportunities in some way. This may involve developing new products to satisfy demand or changing the way the business delivers its products or services to consumers.

A business might respond to opportunities in the market by developing a new product to satisfy demand. **Product development** can involve modifying an existing product or the way in which it is presented, or creating an entirely new product that meets the demands of a newly defined customer or market. Starting with an idea for a new product, or an idea to modify a product, a business will go through a series of steps to bring the product to market.

The product will need to undergo a design process and then a prototype or mock-up will need to be created. The product will then go through beta and market testing. The testing will confirm if the product is on the right track or if improvements need to be made. After the technical needs of the product are planned for, including materials needed, suppliers sourced, and final production requirements met, the product will be launched onto the market.

FIGURE 1 The process for new product development



8.5.2 Changing the way products are delivered to consumers

A business might respond to opportunities in the market by changing the way they deliver their products to customers. Products can be delivered in many ways, including by road, rail, ship, pipelines, power lines and computer networks. Most goods are produced at a point of production, for example a farm or factory. They are then distributed to warehouses and moved to points of sale, such as retail stores, where customers will then purchase them. A business can change the way it delivers products to customers by modifying this process.

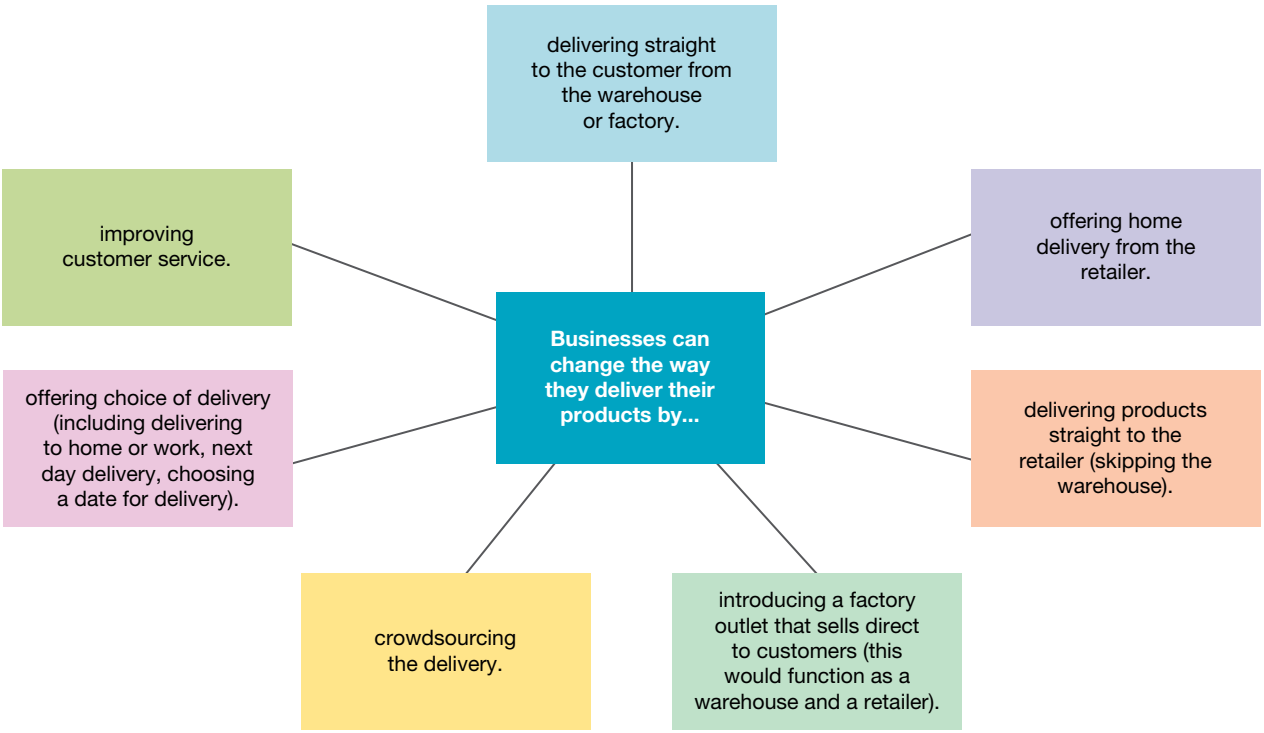
product development the creation of products with new or different characteristics that offer new or additional benefits to customers

FIGURE 2 Gelato Messina, a Sydney-based gelato maker, introduced a 'whitebait' flavour – a combination of salmon and white chocolate with lemon cream cheese, dill and caper jelly. Co-owner Donato Toce said that the business would not have introduced the flavour if they did not think it would work.

Online shops have drastically altered the way that products are delivered to customers. Instead of going to a physical store, millions of customers around the world visit businesses such as Amazon and eBay. After purchasing a product, customers can specify delivery, often direct to their home. Some of the ways in which a business can change the way in which it delivers its products can be seen in the **FIGURE 3**.

int-2543

FIGURE 3 How a business can change the way it delivers its products



Crowdsourced delivery

Online networks and marketplaces, including Zipments and Deliv in the USA and PluckNGo in Australia, connect couriers with customers who want to have goods delivered. A business owner wanting deliveries can make the request on the **crowdshipping** service's site or app. Those wanting to deliver products can browse available delivery orders, then pick up and make the delivery. Couriers range from professionals to students to people looking for some extra income.

FIGURE 4 Blake Davies, a barista employed by Casualties Espresso in Port Macquarie, delivers coffee and food to customers on his skateboard.

Improving customer service

A business can improve its customer service by seeking feedback from customers, such as via a survey, and responding to their suggestions. Another way businesses improve their service is to use customer loyalty programs, providing discounts and giveaways to reward loyal customers. Loyalty programs also allow businesses to build a database of their customers and to stay in contact with them. Another way that businesses can improve their service is by ensuring staff are trained to provide helpful and responsive customer service.

8.5.3 CASE STUDY: Apple responds to an opportunity

Apple pioneered a hands-on, immersive in-store technology experience when it first opened a retail store in 2001. When the first store opened, people were skeptical. The US economy was in recession and Apple had been reporting losses. But Apple saw an opportunity to improve its relationship with its customers and better present its brand. Led by then Chief Executive Officer (CEO) Steve Jobs, Apple took a risk in opening Apple Stores. It now has more than 400 retail stores located around the world, and rivals, including Microsoft and Samsung, have since emulated the retail stores.

FIGURE 5 Apple saw a business opportunity to improve its relationship with customers and build its brand by launching Apple Stores.

Apple's stores allow the company to connect with customers in ways that other technology companies cannot. Customers, both new and existing, can experiment with Mac and iOS products. Apple learns lessons from what customers do in their stores and applies these lessons to its product development, including its Apple and Mac OS applications stores, as well as its hardware. Having retail stores allows Apple to take further risks with its products. It knows that if its products break down, customers can simply pop into an Apple Store and have the fault repaired or replaced by a technician. This excellent customer service builds a positive relationship between the consumer and Apple so that customers keep coming back and tell other people about their products. Apple also uses its retail stores to support the launch of its new products, so that they become events. The launch of a new iPhone or iPad becomes a media frenzy because of the lines of people waiting outside Apple stores.

crowdshipping a method of delivery where couriers are obtained from a large group of people, especially from online communities, and connected with customers

Resources

Interactivity How a business can change the way it delivers its products (int-2543)

Weblink Business innovation

8.5 ACTIVITIES

1. Use the product development process to launch an imaginary new product. Complete a report by responding to the following questions.
   a. Outline your idea. What is your product and who do you think would be interested in buying it?
   b. Design your product. Draw or sketch rough plans for your new product.
   c. Create a prototype or mock-up. You could draw a final sketch, make a model or produce a video or animation showing what the product will look like.
   d. If you were to test the product on the market, what would be the results? Write a paragraph suggesting what beta and market testing might reveal about your product.
   e. What technical needs will your product have? Write a paragraph outlining what will be needed to manufacture your product, including materials, employees, factory, plant or warehouse, transport, packaging and any other needs.

   Launch your product by presenting your report to the class. You could do this in the form of a PowerPoint, Keynote, video or a combination of presentation technologies.

   HASS skills: Evaluating, Questioning and researching
2. Use the **Business innovation** weblink in the Resources tab to find out more about businesses that have responded to market opportunities. Choose one business case study and read it. Write down one innovation that the business has introduced in response to a business opportunity.

   Economics and Business concept: Allocation and markets

8.5 EXERCISE

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

Learning pathways

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

Check your understanding

1. Define the term ‘product development’.
2. List the steps in the product development process.
3. Suggest five ways that a business can change the way in which it delivers its products.
4. Read the case study ‘Apple responds to an opportunity’ and answer the following:
   a. What business opportunities was Apple responding to?
   b. In what ways did Apple respond to these opportunities in the market?
   c. How did the introduction of Apple stores improve Apple’s products and customer service?
5. Explain one stage of product development.

Apply your understanding

6. List the possible consequences of the decisions that the following small business owners are making:
   a. Charlie runs a plant nursery and has decided to sell his products online to expand locally and overseas. He intends using crowdsourced delivery to make sure that the products get to customers.
   b. Customer surveys at Bulete Ltd, a transport and logistics corporation, have revealed that customer satisfaction is very poor. The CEO, Murgon Conray, has decided that all staff will be trained in customer service.
   c. Karley is planning to introduce a new product line to her swimwear importing business. She has sent her designs to the manufacturer in Asia that produces her products and she has promoted the new fashions on her website.

7. Imagine that one of the shop spaces in your local shopping centre has become vacant. Recommend a new business idea that could be located in that space and explain the new product or products that it might sell. Draw the new shopfront and label the ways that the store has provided a new product to satisfy demand or changed the way that its products are delivered to consumers.
8. Explain what is meant by crowdsourcing.
9. 'Customer service is almost as important as price.' Discuss this statement.
10. 'Businesses that don't develop their products can get left behind.' Analyse this statement.

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

8.6 Thinking Big research project: Pitch a business idea

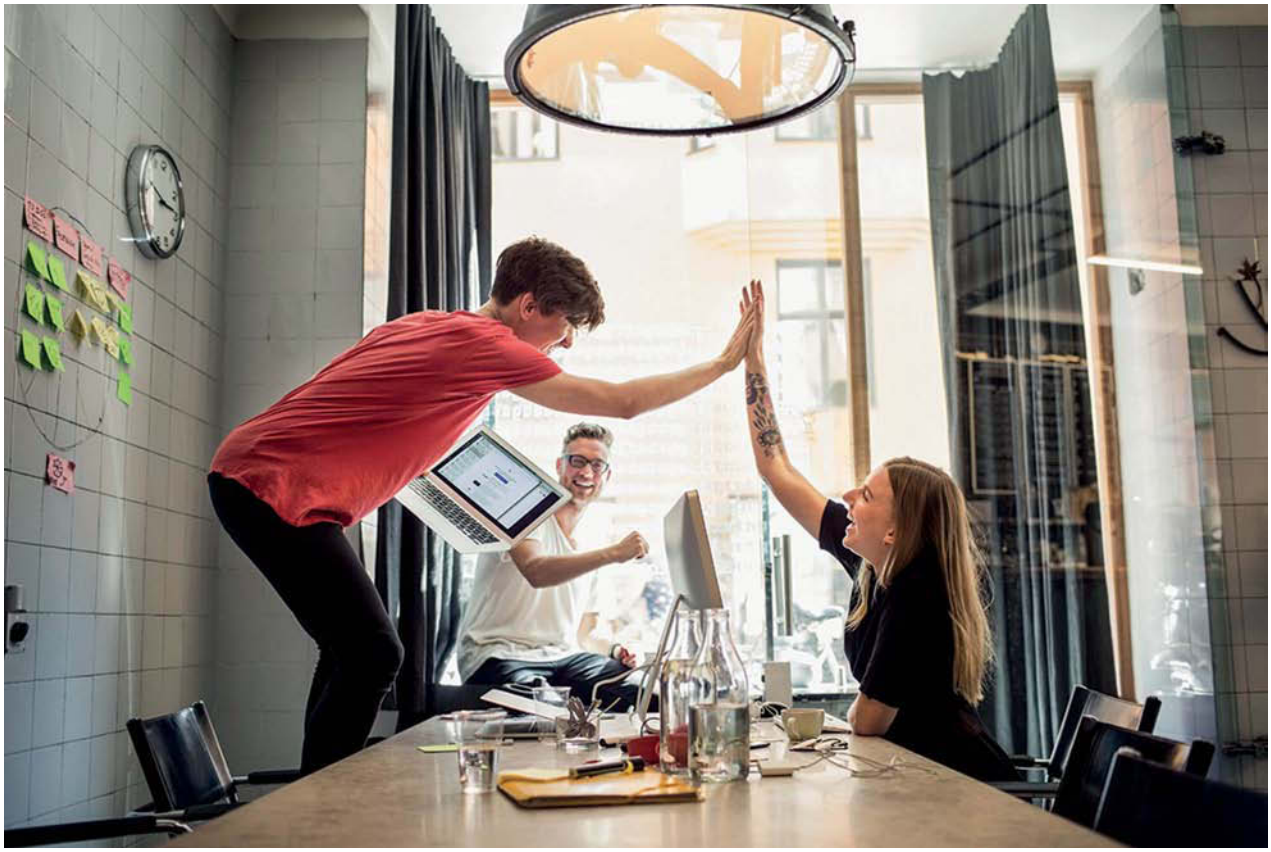
Scenario

New businesses start every day. Some of them end up being very successful while others don't fare quite as well. Many businesses fail within the first three years.

Often, businesses fail because poor decisions have been made in the initial planning stage. Careful planning can avoid mistakes, prepare a business for hard times and allow a business to take advantage of unexpected opportunities.

Task

Your task is to plan a unique business using the parameters provided below and then prepare a business pitch. You will be able to work by yourself or with a group. Your teacher will determine the maximum and minimum group sizes.



To determine the business you will run, consider the following people to work with:

- One of your friends or family members is a very good tennis player. They have always wanted to work in that area.
- One of your friends or family members has a passion for gardening.
- One of your friends or family members is a talented musician and currently is studying to be a teacher.
- One of your friends or family members is a talented artist and has undertaken courses in art, signwriting, spray painting and other similar types of courses.
- One of your friends is really good with computers and another friend is a very talented gamer.
- One of your friends is talented in some other area not shown on this list – the talent you choose must be approved by your teacher.

Process

- Open the ProjectsPLUS application for this topic. Click the **Start new project** button to enter the project due date and to set up your project group if you wish. Working in groups will enable you to share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered.
- In the **Media centre** you will find an assessment rubric to guide your work and some weblinks that will provide a starting point for your research.
- You are to prepare a 'pitch' to the friend and/or family member. The 'pitch' is to convince them to go into business with you, using your business knowledge and skills and their specific talent. The pitch should convince them to join you in a unique business venture – something that is new or innovative or needed in your area. Your pitch could include:
  - the name of the business
  - business logo
  - a description of what the business will do
  - the type of business ownership
  - the location of business
  - target market information.
- Provide a list and explanation of the qualities you and your partner possess that will make your business a success.
- In addition, you will provide explanations and justifications for each of the decisions you have made.
- Source any images that may help illustrate your points and make your pitch enticing.
- The pitch should be delivered as a written report but could also be given as an oral presentation.
- Submit your business pitch to your teacher for assessment and feedback.

on Resources

ProjectsPLUS Pitch a business idea (pro-0179)

8.7 Review

8.7.1 Summary

8.2 The three main ways to own a business

- A business owner can choose from a number of structures, or forms of ownership, when starting a business.
- A sole proprietorship is a business that is owned and operated by one person.
- A partnership is a business owned and operated by two or more people.
- A corporation is a business owned by shareholders.

8.3 Alternative ways to own a business

- A cooperative is a business that is owned and operated by the group of people that it serves.
- A trust is a business created to hold property or assets for the benefit of another person or a group of people.
- A franchise is when a business sells the right to distribute its products under its name to other individuals or businesses.

8.4 Opportunities for business

- Business opportunities are influenced by factors including demographics, target market, competition and location.

8.5 Responding to opportunities in the market

- A business can respond to opportunities by following a process to develop new products to satisfy demand or by changing the way products are delivered to consumers.

8.7.2 Key terms

beneficiaries the people who are entitled to the benefit of any trust arrangement

competition the outcome of two or more businesses attempting to supply their products to the same group of customers

cooperative a business that is owned and operated by the group of people that it serves

corporation a business owned by shareholders

crowdshipping a method of delivery where couriers are obtained from a large group of people, especially from online communities, and connected with customers

demographics characteristics relating to population, especially age, gender, ethnicity, employment, income and education

franchise the situation where a business sells the rights to distribute its products under its name to other individuals or businesses

franchisee the individual or organisation that purchases a franchise

franchisor an individual or organisation that grants the right to use a franchise

limited liability where shareholders cannot lose more than their investment in the event of the failure of the business

partnership a business owned and operated by two or more people

product development the creation of products with new or different characteristics that offer new or additional benefits to customers

profit what remains after all business expenses have been deducted from the money that has been collected from selling goods or services

shareholders the part-owners of a corporation

sole proprietorship a business that is owned and operated by one person

target market a group of customers with similar characteristics towards which a business has decided to aim its marketing efforts and its products

trust a business created to hold property or assets for the benefit of another person or a group of people

trustee a person or company that holds property or assets for the benefit of another.

unlimited liability where a business owner is personally responsible for all the debts of their business

8.7.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

Awesome name. Check. Cool website. Check. Is there more to running a successful business?

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

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5489)
Reflection (ewbk-5488)
Crossword (ewbk-5487)
Student Learning Matrix (ewbk-5481)

Interactivity Business decisions crossword (int-7606)

8.7 Review exercise

Multiple choice

1. What is a business that is owned and operated by one person called?
   - **A.** A cooperative
   - **B.** A sole proprietorship
   - **C.** A partnership
   - **D.** A corporation
2. What is a partnership?
   - **A.** A business that is owned and operated by one person
   - **B.** A business that is owned by shareholders
   - **C.** A business that is owned and operated by two or more people
   - **D.** A business that is created to hold property or assets for the benefit of another person or a group of people
3. Who is a sole proprietorship best suited to?
   - **A.** People who like to work with other people
   - **B.** People who like to work by themselves
   - **C.** People who wish to preserve their family assets
   - **D.** People who want to buy into a franchise
4. What is an advantage of a company as a form of ownership?
   - **A.** Limited liability and the potential to attract more finance
   - **B.** Low costs and unlimited liability
   - **C.** Shared workload and unlimited liability
   - **D.** Reduced costs and combined expert knowledge
5. An individual or organisation that grants the right to another individual or organisation to use a business name and to produce or distribute a product or service is called a:
   - **A.** franchisee
   - **B.** corporation
   - **C.** franchisor
   - **D.** competitor.

6. The characteristics relating to population, especially age, gender, ethnicity, employment, income and education are referred to as:
   A. prices
   B. opinions
   C. products
   D. demographics.

7. A target market for the latest fashions might be:
   A. females, aged 15 to 30 years, who live in the city and like brand names
   B. males, aged 18 to 50 years, who live in urban areas, like cars and have the time and money to work on their vehicles
   C. everyone in Australia
   D. males, aged 30 to 50 years, who live in country Australia and like to watch TV programs.

8. Why would a business that hopes to sell to young people locate in an area with an average age of 20 to 30 years?
   A. It will make it easier for customers to find the business
   B. Feedback from customers can be more easily received
   C. It is harder to find customers
   D. Suppliers can find the business more easily

Short answer

9. Outline the process in steps for the development of a new product.
10. How can businesses change the way they deliver their products to customers? Give two ways.
11. List two advantages of owning a franchise.
12. List two disadvantages of owning a franchise.
13. In terms of business, explain what the terms 'trust' and 'trustee' mean.
14. Define the term 'crowdshipping'.
15. Part-owners of a corporation are also known as what?

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 8 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

8.1 Overview

Video eLesson
- Different forms of business ownership (eles-1813)

8.2 The three main ways to own a business

eWorkbook
- What is a business? (ewbk-5482)
- Establishing a business (ewbk-5483)

8.3 Alternative ways to own a business

eWorkbook
- Alternative ways to own a business (ewbk-5484)

Weblink
- Business structures

8.4 Opportunities for businesses

eWorkbook
- Factors influencing business opportunities (ewbk-5485)

Interactivity
- GameZone in action - how not to play the business game! (int-2542)

8.5 Responding to opportunities in the market

eWorkbook
- Product development (ewbk-5486)

Interactivity
- How a business can change the way it delivers its products (int-2543)

Weblink
- Business innovation

8.6 Thinking Big research project: Pitch a business idea

ProjectsPLUS
- Pitch a business idea (pro-0179)

8.7 Review

eWorkbook
- Reflection (ewbk-5488)
- Crossword (ewbk-5487)
- Student Learning Matrix (ewbk-5481)

Interactivity
- Business decisions crossword (int-7606)

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

9 The changing work environment

9.1 Overview

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

Go to work. Go home. Get paid. Repeat. The way we work hasn't changed at all. Has it?

9.1.1 The rapidly changing world of work

In many **industries**, the routine of a working day starting at 9 am and finishing at 5 pm is long gone. This routine has been replaced with almost 24/7 access to everything and everyone. Computers, the internet and smartphones have made it possible for people to stay connected with their social and work networks no matter the time of day. With increased connectedness comes benefits such as greater flexibility to **work** the hours that suit individuals' lifestyles and the possibility of working remotely, such as from home or while travelling. However, it is also not uncommon for employers to expect workers to be available to deal with work matters outside of their normal working hours. In some fields there appears to be an **employer expectation** that employees will work harder and longer than they have done in the past.

For the Australian **labour force**, like many places throughout the world, **employment** for life is a thing of the past. Employment is becoming less secure, and low-skilled work is less common. The key factors that influence the world of work include technology, the economy, employer and employee expectations, consumer demands, and **globalisation**. In this topic, we will explore these influences on the way people work today and how they may work in the future.

on Resources

- **eWorkbook** Customisable worksheets for this topic (ewbk-5497)
- **Video eLesson** The changing work environment (eles-3496)

FIGURE 1 Globalisation has positive and negative impacts on the world of work.

industry the way that different parts of the economy are grouped; for example, manufacturing, mining etc.

work human labour that can be paid or unpaid including voluntary labour

employer expectation what the employer expects to receive from employees in return for the money that they pay them

labour force people aged 15 and over who are able to work and are either employed or unemployed

employment working in return for a wage or salary

globalisation the process of interacting with markets in other countries around the world, as part of an integrated global economic system

9.2 Influences on work today

LEARNING INTENTION

By the end of this subtopic, you will be able to identify factors that influence the world of work and classify these influences as past or present influences.

9.2.1 Modern technology

The Australian **labour market** has undergone significant change since your grandparents started working. In part, these changes may be attributed to the changing expectations of workers and **employers**: employers expect that employees will work harder and longer hours, while employees want a greater balance between their working and their non-working lives (**work–life balance**). Arguably the greatest influence on today's world of work has been the rapid development of technology, a development that has changed the way in which not only Australians, but the people of the entire world, work. We will explore the impact of modern technological advances in subtopic 9.3, but it is important to note that long before the age of computers, the silicon chip and the internet, another significant technological advance began the process of changing the way people work.

9.2.2 Past influences

Before the late eighteenth century, the type of available work was mainly in **primary production**, in areas such as farming crops, fishing or raising livestock. Life was very different to that of today's developed societies. People produced the bulk of their own food, clothes and other needs. Manufacturing was fairly small-scale and done in people's homes using hand tools or basic machines. From the late-1700s to the mid-1800s, technological advances associated with the Industrial Revolution – in particular the development of steam power and the steam engine, the mechanised cotton mill and loom, and the use of processed fuel to fire and heat the furnaces in iron ore production in England – changed the way that people lived and worked. People who previously worked in the **primary industries** outlined above moved to towns and cities to work in factories (**secondary industries**). The working conditions in these early factories were harsh. Men, women and children had few rights. They were forced to work long hours in noisy, dirty and dangerous workplaces. Accidents often happened around machinery, but there was no compensation or sick leave. If a person was injured, someone else took their job and there were no unemployment benefits provided to those who could not find work.

Substantial workplace reforms in the many decades since this time have greatly improved job conditions for most workers in industrialised, developed countries such as Australia. But in some countries, harsh and unsafe work environments still exist, with workers paid poorly for long hours of labour in difficult conditions. This is one of the ethical challenges of globalisation, discussed further in the following sections.

9.2.3 Present influences

In looking at the historical perspective of work, it is evident that the advancement of new ideas, the need for improvements in daily living conditions, new manufacturing processes, and the development of new ways of using resources such as coal, gas and oil, have all had major effects on how people live and work. In modern times, in addition to technological advances, numerous other factors

labour market the availability and the ability of employees to work and for employers to hire them

employer the person or business that pays workers for the work they do

work–life balance a feeling of having an appropriate balance between working and non-working time and activities

primary production the production of crops, livestock or other basic materials that may then be used by other branches of industry

primary industries the group involved in the production of raw materials; for example, farming, mining, forestry

secondary industry the group involved in the processing of primary resources to manufacture other goods

may influence the ways in which people work. These include:

- the health of the local economy and the level of unemployment
- government regulations and workers' unions
- the impact of globalisation, the decreasing cost of distance, and the **outsourcing** and **offshoring** of jobs
- the decline of employment opportunities in some industries and the growth of others.

The health of the economy

When an economy is healthy, business tends to thrive, which means work is generally more readily available and unemployment levels are low. Consumers feel more able to afford the products and services they require, and their spending, in turn, feeds business growth. However, during times of economic hardship this is not the case. Businesses that are struggling to keep afloat are less likely to hire staff and, in fact, may attempt to cut business costs through making particular positions **redundant** and **retrenching** some of their workers. Thus, when the economy is in a period of decline, it may be difficult for workers to find employment.

FIGURE 1 Children provided cheap labour in factories and mills. As this 1853 illustration shows, they were often badly treated.

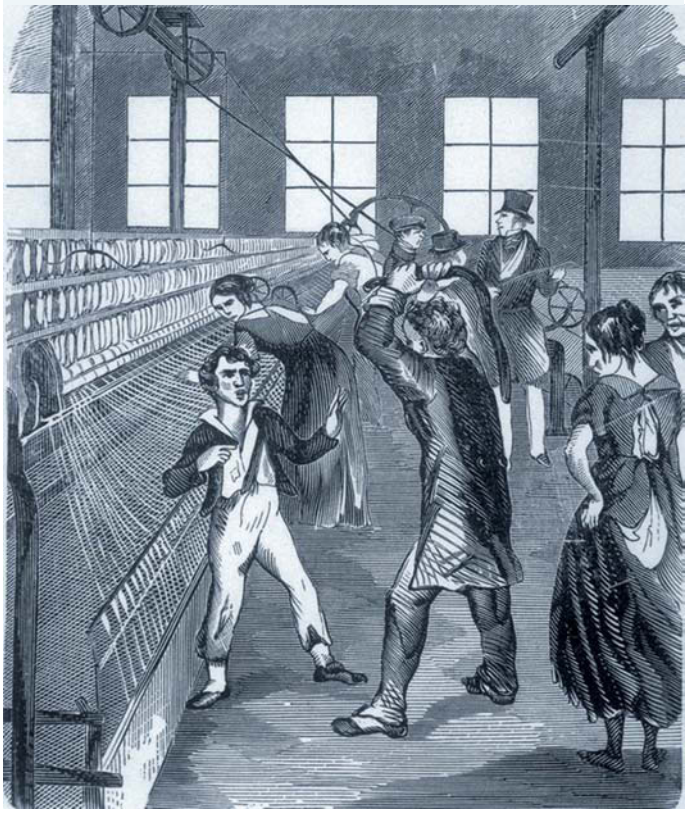


FIGURE 2 The health of the economy is an important influence on the world of work – a healthy economy generally means more available jobs and lower unemployment rates.

outsourcing contracting a person or people outside an organisation to perform certain work tasks (that previously might have been performed by workers within the organisation)

offshoring moving certain work processes to be performed overseas

redundant a situation in which a job is no longer required to be performed by anyone; this may be as a result of the reorganisation of a business, the introduction of new technology or a decline in business sales or production

retrenching losing one's job as a result of the position being made redundant

Sometimes employers will attempt to weather a period of economic downturn by reducing employees' work hours rather than retrenching their workers. This can be an effective way of maintaining jobs while allowing a business to continue to operate at a lower cost, but any such changes can only be made in consultation with employees, if they are on permanent work contracts.

Government and workers' union influences

Industrial relations laws govern the relationship between employers and employees and have a significant impact on the ways people work in Australia. These laws have undergone many changes since the inception of the industrial relations system in the early 1900s. Many of these changes have occurred as a result of different government policies over time, and also as a result of the work of *unions* – formal organisations that negotiate with employers and the government on behalf of the workers in a particular industry to ensure that their **conditions of employment** are fair and reasonable. Conditions of employment are the arrangements made between an employer and employee; that is, what the employer agrees to give an employee in return for their work. These conditions are usually outlined in a formal agreement, which covers issues such as the number of hours an employee is expected to work, annual leave and other entitlements such as sick leave and long service or maternity leave.

FIGURE 3 Conditions of employment are set out in a formal agreement. In Australia, there are three different types of agreement: awards, enterprise agreements and individual employment contracts.

Government also affects the world of work through decisions regarding taxation and import tariffs, which can affect the ability of certain industries to remain competitive (see subtopic 9.5), and through changes to laws in relation to issues such as retail trading hours and liquor licensing. For example, where it was once illegal for shops to trade on Sundays, this has now become the norm. In Victoria from the time of World War I until 1966, pubs had to close at 6 pm; in 1966 this was changed to 10 pm, and since changes to liquor licensing laws in the late 1980s, many venues that serve alcohol are now able to stay open until the early hours of the morning. Clearly, such changes have had a significant impact on the working hours of people employed in hospitality (hotels, clubs and restaurants) and in retail trade. Changes to work hours are discussed further in subtopic 9.4.

The impact of globalisation

Advances in technology, in particular communications technology; more effective, lower cost methods of transportation; and largely unrestricted trade between countries have allowed the whole world to become a single, integrated marketplace. The term 'globalisation' refers to this ever-increasing international cultural and economic interaction.

In Australia, globalisation has had, and continues to have, a significant effect on work opportunities and the way people work. One of the key ways in which this effect has been felt is through the increasing practice of outsourcing.

Outsourcing involves engaging individuals or businesses outside of an organisation to fulfil functions previously carried out within the organisation itself. In an attempt to improve productivity, cut costs and increase their ability to compete on a global scale, many Australian businesses now outsource some of their non-core functions. Some functions that are commonly outsourced include recruiting new staff, marketing

conditions of employment the arrangements made between an employer and the employee in terms of work requirements and employee benefits

and advertising, management of finances, and production of goods. Some businesses have taken this a step further and outsource various functions to workers and organisations overseas – some have even moved their entire production process overseas. This practice is known as offshoring.

Offshoring provides a business with the ability to cut labour costs, which can be as much as ten times cheaper in a developing country such as China, India or Sri Lanka, than in a developed country such as Australia. For example, many companies have outsourced their call centres to India or the Philippines. Similarly, an increasing number of companies are taking their legal or accounting needs offshore, having work completed in countries where labour costs are cheaper but skill levels remain high. Offshoring can also improve the ability of a business to stay competitive and to develop an overseas presence by entering new markets.

We can examine the impact of globalisation on the Australian working environment in relation to the consumer, the worker and the business owner in **TABLE 1**.

FIGURE 4 Rapid technological advances have facilitated the process of globalisation, allowing the interaction of economies throughout the world.

TABLE 1 Examining the impact of globalisation on Australian consumers, employers and employees

Impact on consumers	• Ability to choose from a wide range of goods, some of which are imported into the country, e.g. tinned tomatoes, electrical goods, clothing, wine • Access to goods at lower prices • Ability to browse and buy online and have purchases delivered to the door, eliminating the need to travel to stores
Impact on employers	• Ability to reduce the costs of manufacturing or providing a service by employing cheaper overseas-based labour • Access to new markets overseas • Increased ability to access new technologies from overseas • Ability to generate greater income through selling more products to a global market, allowing the potential to further build and develop the business through investment in improvements in technology, productivity and quality • Pressure to become more competitive and produce goods and services more cheaply than overseas competitors
Impact on employees	• Loss of jobs as some roles are moved to overseas providers • Potential for individuals to travel, work and/or study overseas, taking skills, knowledge and capabilities with them • Potential to work for international companies that bring their business to Australia • New jobs created as a result of business growth through exporting products such as wine, cars, gas and minerals to other countries

Decline and growth of industries

With many companies moving part or all of their operations overseas, the employment opportunities in some industries have decreased. For example, the closure of production plants of the three major car manufacturers in Australia (Ford, Holden and Toyota) meant that workers in this industry had to seek employment in other fields. While ongoing technological advances can lead to job losses in some cases, where tasks that were once carried out by people are now able to be done by machines, they can also present opportunities for new businesses to develop; for example, in areas such as telecommunications and digital technologies. In the 1980s, jobs such as website designers, social media managers, e-commerce consultants and app developers didn't exist. Thirty years later, they are a common part of the business world. Many of the jobs that will exist in the future may be roles that we cannot even imagine today.

FIGURE 5 Just as app development was unheard of in the 1980s, many of the jobs of the future may be in fields that are yet to be developed.

on Resources

Weblink Industrial Revolution

9.2 ACTIVITY

Use the **Industrial Revolution** weblink in the Resources tab to watch a video examining how the Industrial Revolution changed the nature of work. Take some notes while watching the video, then write one or two paragraphs explaining how working conditions have changed from the Industrial Revolution to today.

HASS skills: Evaluating

9.2 EXERCISE

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

Learning pathways

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

Check your understanding

1. Describe what work was like before the Industrial Revolution.
2. Explain the difference between primary and secondary industries.
3. What is outsourcing?
4. What is offshoring?
5. Explain what is meant by retrenchment.

Apply your understanding

6. Examine **FIGURE 1**. What do you think working conditions were like for young people then?
7. What impact do you think globalisation, outsourcing and offshoring will have on the Australian economy?
8. What might be some of the ethical challenges of globalisation and, in particular, the practice of offshoring?
9. Technology changes can impact jobs. With reference to Ford, Holden or Toyota, explain this statement.
10. Explain the concept of 'work–life balance' and why it is important for workers to seek this balance and for employers to encourage it.

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

9.3 The significance of technology

LEARNING INTENTION

By the end of this subtopic, you will be able to identify specific types of technology and explain how they have influenced the world of work.

9.3.1 Significant technological change

The Australian work environment has changed significantly over time. Much of this change can be attributed to rapid advances in technology and communications that have altered the way the world does business.

When the desktop computer was developed in the 1980s, the world of work changed dramatically, but it was arguably the widespread adoption of the internet in the 1990s that has brought the greatest change to the world of work since the Industrial Revolution. The internet, computers and devices such as smartphones and tablets are now part of our everyday life and, for most workers, are integrated into the way that they undertake and complete their work. The ability to communicate virtually instantaneously with anyone almost anywhere in the world has changed the way people do business and has been a major factor in the process of globalisation.

Types of new technology

Technological advances have changed many aspects of business, from administration tasks to internal and external communications and service provision and manufacturing processes. The list of technological advances that have changed the way we work is enormous. It includes:

- *video conferencing and webinars* – using technology to meet or conduct information and training sessions, rather than needing to have face-to-face interactions
- *smart technology (smartphones)* – enabling 24/7 communication through phone, email, SMS and MMS
- *e-commerce* – internet banking, online shopping, microchip credit cards, EFTPOS, PayPal, BPay, PayPass and PayWave
- *software developments* – word processing, spreadsheets, database, accounting and other software programs that streamline administrative tasks
- *robotics* – their use in manufacturing, especially in assembly lines
- *computer-aided design (CAD)* – using computers to design new products, buildings and so on
- *computer-aided manufacturing (CAM)* – using computers to assist with the manufacturing process of goods and services
- *cloud computing* – external data storage away from the organisation, allowing access to information from anywhere
- *communication* – discussion forums, blogs and social networking, creating new ways to reach potential customers.

How technology has changed working lives

The impact of technological advances has been felt significantly in the workplace. For example, where once it was necessary to post documents (taking several days or even weeks to be delivered, depending on the distances involved), email now makes it possible for correspondence to be sent and delivered within the same minute! Computer software enables once tedious administrative, accounting and other processes to be completed in a fraction of the time that they once required. Computer-operated machines now perform many manufacturing line tasks that once required meticulous human involvement. Similarly, in many cases where manual labour was once the norm, computers and robots now control the lifting and movement of heavy objects. Interestingly, the law has followed this process and various requirements have been introduced that seek to protect workers and ensure that employers provide a safe environment for them. Work (Occupational) Health and Safety laws cover issues such as manual handling, machine operation, safety guards and shut-off mechanisms, acceptable noise levels, and other hazard management of technology in the workplace.

FIGURE 1 Video conferencing allows workers to meet even though they may be in different countries.

Manufacturing

The use of computers in production has sped up the manufacturing process significantly and, in turn, productivity levels have increased. Assembly lines, computer-aided designs, and computer-driven manufacturing processes (in which computers control and direct the machinery and equipment) have meant that fewer workers are needed to undertake the manual aspects of production. However, the increase in production output, combined with access to new markets through globalised trade opportunities, has allowed the growth of some businesses and a need for increased numbers of workers to meet the demands of expansion. Furthermore, the nature of many roles in computer-assisted manufacturing operations has changed, with workers gaining higher level skills as they are trained to be able to monitor equipment and carry out any adjustments or even repairs that may be required.

FIGURE 2 The types of machinery used in manufacturing processes are constantly changing the way employees work as well as the work that they do.

Rapid communication changes

Technology has changed the concept of communication. For example, the growth of the internet has meant that news events can be instantly disseminated and shared through instant messaging, blogs, emails and websites. This change has had a huge impact on print media such as newspapers. Many people no longer buy the printed newspaper but will instead read the news online – and it is not just local newspapers that they can access, but also newspapers from around the world.

In the workplace, these rapid changes have led to enormous shifts in the way people communicate and work. No longer do people need face-to-face meetings to discuss business. As **FIGURE 1** depicts, workers can now use 'virtual meetings' instead. Smart devices allow for instant communication and access to workers, employers, suppliers and producers.

Similarly, where once distance may have been a prohibitive factor in applying for and obtaining a job, this is no longer the case. In many fields of work, employees increasingly have the opportunity to work remotely, based from their own homes. The use of technology, such as teleconferencing or video-conferencing, email, cloud computing and so on, effectively eliminates the distance between people, and creates opportunities for flexible work arrangements that are beneficial for the employee and the employer.

Staying connected or switching off?

The developments that have occurred in communications technology make it difficult to 'switch off'. For example, how many people in your class have a smartphone? Do you check your phone or device as soon as an instant message, email or Facebook post hits your inbox? If you do, you are not alone. Many of us are obsessed with our smartphones, tablets, laptops and other devices, along with the social media so easily accessed on them. And while such technologies allow us unprecedented opportunities for social connection and access to information, they also play a role in the gradual blurring of the boundaries between work and home life. It is now easy to stay connected with the office or work while at home, on holidays, or even while sleeping! Many people now work beyond traditional office hours, using laptops and other devices to access work networks remotely, checking work emails while they have breakfast or during their commute to work on the train, or perhaps, while at home, teleconferencing colleagues working in a different time zone.

FIGURE 3 You can have access to your working life no matter where you are.

DISCUSS

Having 24/7 access to work emails and being able to work in any location has led to many people feeling that they need to work more than the 38 hours a week (for a full-time job) that the federal government recommends. Should more be done to ensure that this 38-hour limit is adhered to?

General capability: Ethical understanding

9.3 ACTIVITY

Conduct research on the development of the internet. There are many interesting videos online that will provide you with this information. Examine them and then write a short story or cartoon about how the internet was developed.

HASS skills: Communicating and reflecting

9.3 EXERCISE

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

Learning pathways

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

Check your understanding

1. List three technological advances that have altered the way people work, and outline how they have changed the workplace.
2. The use of technology in work has a range of consequences. Discuss one positive and one negative consequence.
3. Discuss how technology can stop people from 'switching off' and the impact this may have on a person's wellbeing.
4. Distinguish between computer-aided design (CAD) and computer-aided manufacturing (CAM).
5. Explain what is meant by a virtual meeting.

Apply your understanding

6. What forms of technology do you use every day? What effect does this have on your life?
7. Technology in the workplace can help workers achieve a work–life balance by changing the way people work. Explain how this can occur.
8. 'Technology can cost jobs but it can also improve skills.' Explain both points made in the statement.
9. Social networking sites allow customers to provide feedback to businesses almost instantaneously. Do you think this is a good thing or a bad thing? Justify your answer.
10. 'Technology has made work easier and less complicated.' Discuss this statement.

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

9.4 Changes to the workforce

LEARNING INTENTION

By the end of this subtopic, you will be able to explain how work has changed over time.

9.4.1 The changing roles of women and men

When your grandparents worked, the majority of the Australian workforce was male. Most of these men were the 'breadwinners' – supporting their wives and families until retiring in their sixties. Women often 'retired' from the workforce when they married, and it was relatively uncommon for a woman to work if she had young children. Today, the two-income family is more common, with women continuing to work throughout the period of having dependent children. Employment is more likely to be part-time or casual and there have been significant changes in the types of jobs in which people are employed. People are less likely to do one job for their entire working lives, instead moving not just from one role to another in the same field, but also undertaking complete career changes, possibly several times, in a bid to find work that continues to provide a sense of purpose and satisfaction in their lives.

With this shift in the way people approach their careers, human resources management has become increasingly important within the business world, emphasising the value placed on finding the right person for a particular role. In this subtopic, we will explore these and other changes to the Australian workforce.

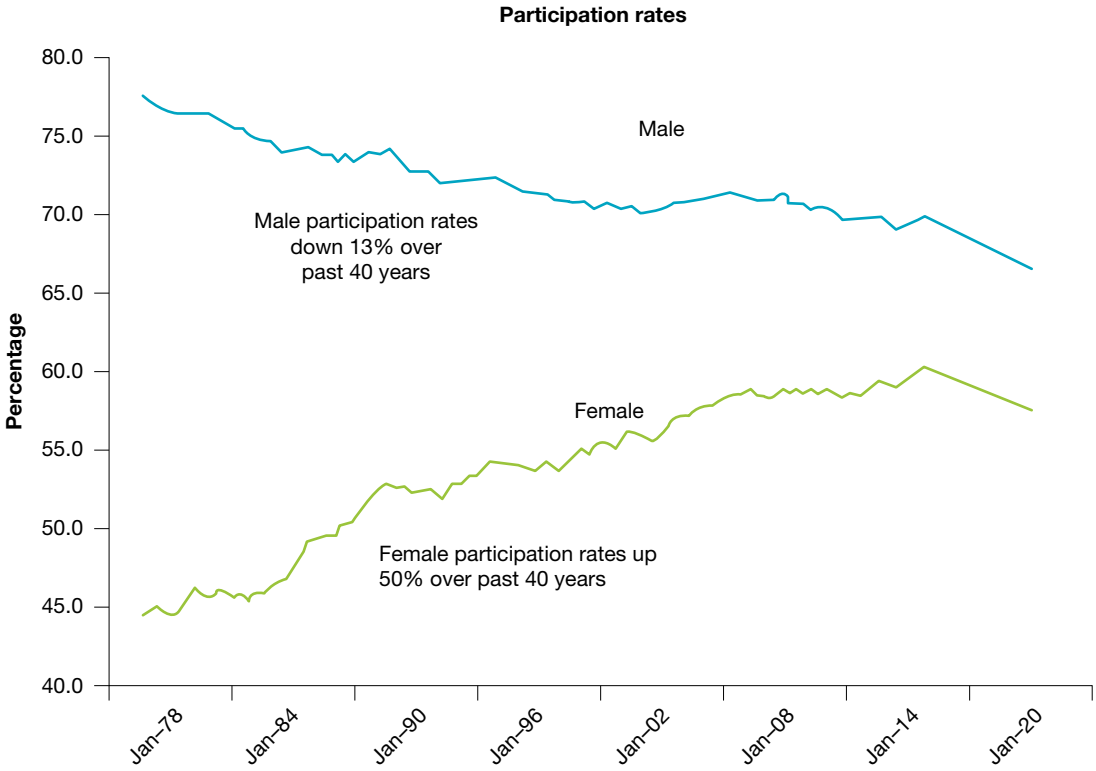
9.4.2 Participation rates

One of the most significant changes seen in the Australian workforce has been the increased participation of women. As mentioned in section 9.4.1, in the past it was common for women to leave the workforce when they had children, and often they never returned to paid work. This is no longer the case. **FIGURE 2** shows the change in workforce participation rates from 1978 to 2020.

On average, the labour force participation rate of women is still lower than that of males, but the gap has narrowed slightly between the years 2002 and 2012.

FIGURE 1 The increased participation of women in the workforce has created the need for formal childcare.

FIGURE 2 Labour force participation rates for men and women

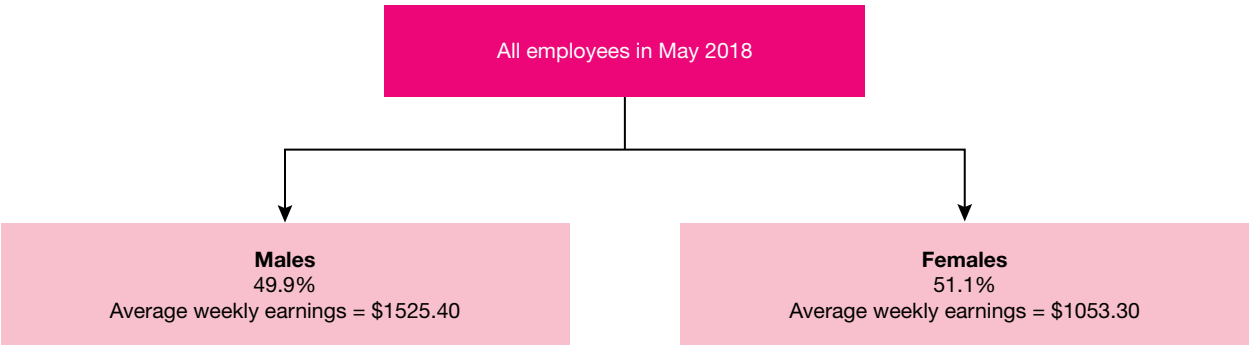


Source: CEICData.com © 2020

As women have entered the workforce in greater numbers and continued to work after having children, the need for formal childcare has increased. This has led to the growth of the childcare industry and has created significant new job opportunities in early childhood development and childcare. Another significant change has been an increase in flexible work options, offering benefits such as parental leave (for both women and men) and part-time work, which allows greater flexibility to juggle the demands of work and parenthood.

FIGURE 3 shows female employees actually slightly outnumber males; however, as can clearly be seen, women's average weekly earnings are significantly lower than that of men. This can be explained to some extent by looking at the differences in full-time and part-time participation rates.

FIGURE 3 Proportion of males and females in the paid workforce in 2018, and their average weekly earnings



Source: Australian Bureau of Statistics, www.abs.gov.au/ausstats/abs@.nsf/mf/6306.0

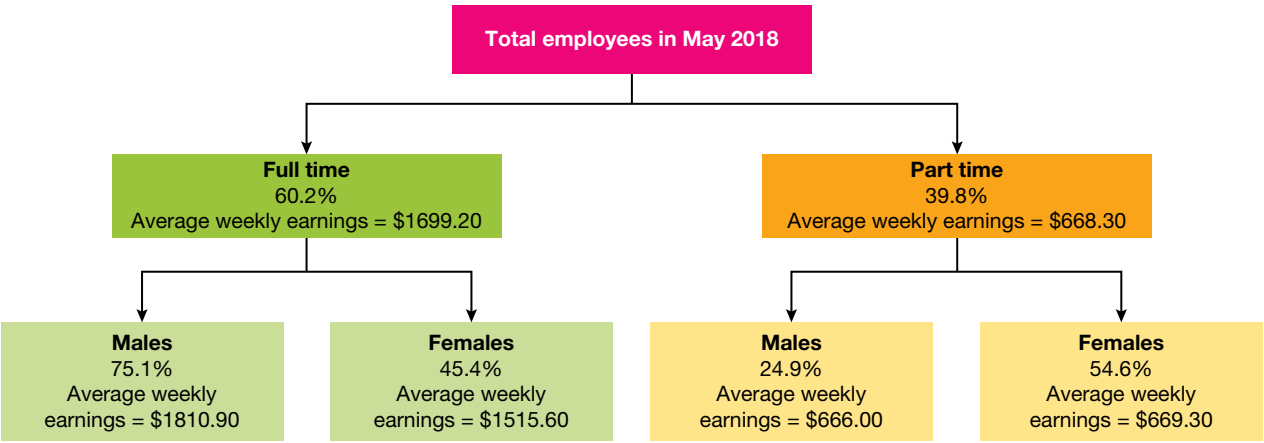
Full-time and part-time participation rates

An employee is considered to work full-time if their hours of work equate to 35 hours or more per week, or they work the agreed upon or award hours for a person in their occupation or industry, and the work is ongoing. An employee is considered to work part-time if they work less than 35 hours a week in ongoing employment, where the number of hours they work is either fixed or variable.

FIGURE 4 shows that in May 2018 there were more full-time employees (60.2 per cent) than part-time employees (39.8 per cent), and that, as would be expected, average full-time earnings ($1699.20/week) were significantly higher than average part-time earnings ($668.30/week). However, 54.6 per cent of females were employed on a part-time basis, compared with only 24.9 per cent of males; that is, the vast majority of male workers (75.1 per cent) were employed full-time, which accounts for much of the disparity in average weekly earnings between men and women.

int-7874

FIGURE 4 The proportion of full-time and part-time employees in May 2018, and their average weekly earnings

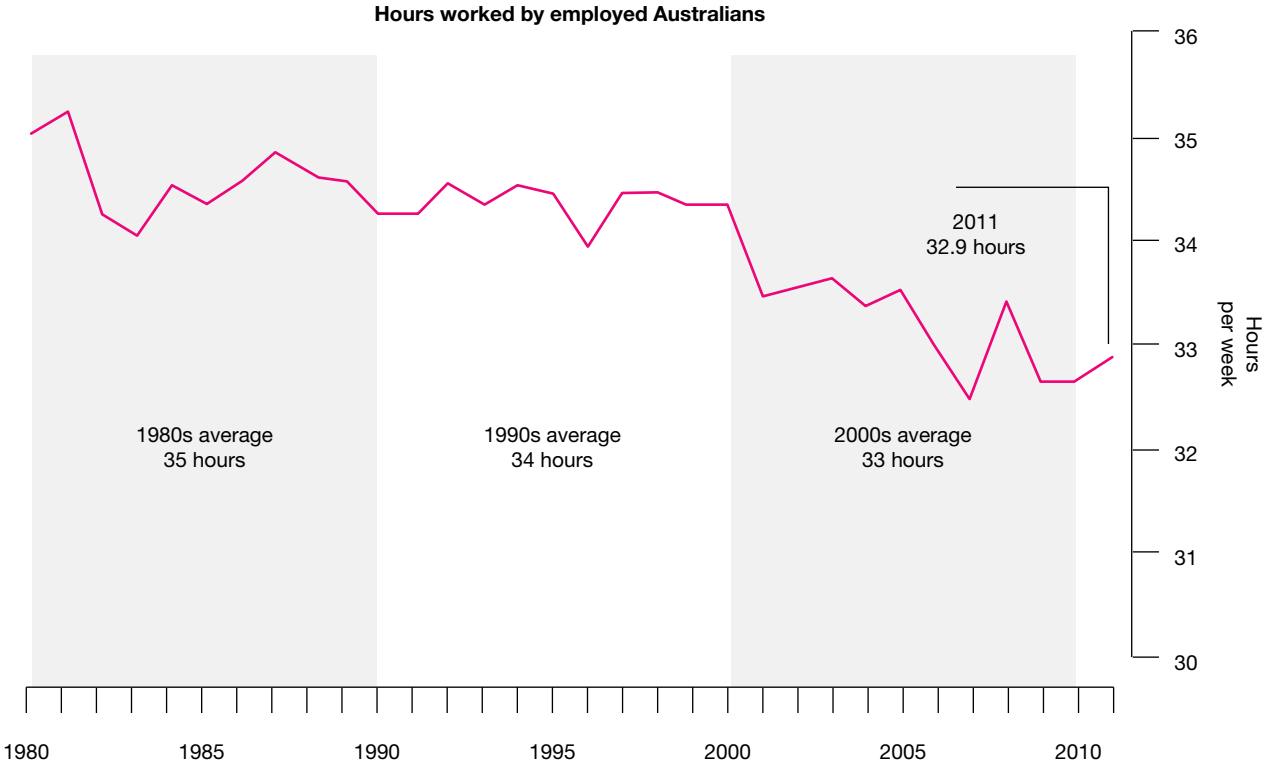


Source: Australian Bureau of Statistics, www.abs.gov.au/ausstats/abs@.nsf/mf/6306.0

9.4.3 Hours of work

In today's work environment, there is a perception that people will be available outside of traditional work hours due to technology-enabled connectivity, and that they are generally working longer hours than ever before. While in some industries this may indeed be the case, Australian Bureau of Statistics figures show that since the 1980s there has actually been a decline in the average hours worked by Australians – from 35 hours average in the 1980s, to 32.9 hours average in 2011. **FIGURE 5** depicts this change.

FIGURE 5 The average number of hours worked by employed Australians shows an overall decrease from 1980 through to 2011.



Source: Adapted from Australian Bureau of Statistics, *As a Matter of Fact, 2012* (cat. no. 1393.0); most recent data available at time of publishing

The change in average work hours can at least in part be attributed to the significant increase in part-time employment during this period. Part-time roles now exist in almost all industries and are particularly prevalent in the retail and hospitality sectors.

Apart from the change in the number of hours worked, there has also been a significant shift in the times that people work. Where once the world of work was largely framed around the 9-to-5 workday, this is no longer the case. For example, changes to retailing regulations have created a demand for employees to work vastly different hours to those of the past, with weekend and late-night trading now allowing businesses to operate well outside 9-to-5, Monday-to-Friday hours. Similarly, venues such as bars, restaurants and nightclubs are now able to stay open much later, creating a need for staff who are willing and able to work shifts into the early hours of the morning.

Consumer demand has also created a need to provide call centre staff in certain industries from early in the morning until late in the evening. Thus, employees working in such fields may work a range of hours that are significantly different to what was once the case.

9.4.4 Availability of jobs

In the late 1960s, almost half of Australia's labour force was employed in production industries such as mining, manufacturing, construction, electricity, gas and water, agriculture, forestry and fishing. In 1997, some thirty years later, that proportion had decreased to 28 per cent. During the same period, service industries grew substantially. These include property and business services, accommodation, cafés and restaurants, culture and recreational services, personal and other services, health and community services, retail, education, transport and communication, trade and finance, and insurance. This trend continues today and is a major factor in shaping the ongoing changes seen in the Australian workforce. We will look at the changes in Australian work industries in more detail in subtopic 9.5.

9.4.5 Career lengths

Recent studies in the United States of America, based on US labour statistics, indicate that the average US worker stays in a job for a period of 4.6 years. In Australia, the national average tenure in a job is 3.3 years.

Anecdotal evidence suggests that members of **Generation X** are likely to change jobs about 11 times during their working life. It is anticipated that this figure may double for **Generation Y** or **Generation Z** and increase even further for **Generation Alpha**.

Research has found that the reason for changing jobs varies from person to person, but may include:

- social reasons – response to life events, such as having children
- economic reasons – wanting to obtain better working arrangements
- career-related reasons – wanting to gain further career experience
- other personal reasons – a desire to gain new experiences.

It is interesting to note that for many workers, there is a reluctance to change. Possible reasons why some workers choose to stay in the same job may include:

- a lack of opportunity to change jobs
- security
- convenience
- feeling valued in a role
- they like the people they work with
- a fast commute (quick to get to and from work)
- the need to build/consolidate retirement (superannuation) funds.

Even for people who do not change jobs, the workplace continues to evolve. In the Career Experience Survey, which was last conducted in November 2002 by the Australian Bureau of Statistics, a number of significant issues regarding the changing nature of work were noted. Approximately 77 per cent of all employees surveyed had been with the same employer for a year or more. Of these, almost 57 per cent reported significant changes to their working life over the past year. The types of change reported are summarised in **TABLE 2**.

TABLE 2 shows that in the majority of cases, the changes did not mean that employees were actually changing their positions. More often, the change involved taking on additional tasks or more responsibility, perhaps as experience is gained in a role.

TABLE 1 Job tenure by age group in Australia

Age group	Average job tenure
Under 25	1 year, 8 months
25–34	2 years, 8 months
35–44	4 years
45+	6 years, 8 months
Average	3 years, 4 months

Source: The Household, Income and Labour Dynamics in Australia (HILDA) Survey, Department of Employment

FIGURE 6 Changes to trading hours have had a significant impact on the hours of work for many Australians.

FIGURE 7 Workers change jobs more often than they did in the past. This trend is expected to continue.

Generation X people born between 1965 and 1979
Generation Y people born between 1980 and 1994
Generation Z people born between 1995 and 2009
Generation Alpha people born from 2010 onwards

TABLE 2 Types of workplace change experienced

Type of change	Percentage of employees who experienced the change	Experienced by whom
Promotion: receiving an increase in wages or salary due to an increase in responsibility or the complexity of the work that is undertaken	8.7%	Permanent and full-time workers
Transfer: where a person is moved from their current position into another one without a change in wage, salary, level of responsibility or complexity of task	6.8%	Permanent and full-time workers
Change in hours: this can be either a reduction or an increase in the amount of hours to be worked in a week	31.7%	Part-time workers and casual workers
Changed location: movement involving a change in terms of either work building, or geographical location such as a suburb, state or even country	8.5%	Permanent and full-time workers
New, different or extra duties: where there has been a change in the scope (the range) of activities that need to be completed	40.2%	Permanent and full-time workers
More responsibility: an increase in the level of responsibility you have in terms of your experience and what is expected of you	42.7%	Permanent and full-time workers

Source: Adapted from Australian Bureau of Statistics, *Career experience, Australia, November 2002* (cat. no. 6254.0); most recent data available at time of publishing

9.4.6 Human resource management

The term **human resources** refers to the people who work within an organisation. In any business, the human resources are one of the most vital elements. With the world of work undergoing such rapid and ongoing changes, the effective management of a business's employees – **human resource management** – has become increasingly important. Human resource management involves many aspects, such as staff recruitment, negotiation of employment conditions, training, professional development, and carrying out staff performance reviews. The goal of successful human resource management is to ensure an organisation has the right people with the skills and knowledge necessary to meet the needs of the business.

FIGURE 8 A business's human resources are among its most important features.

Finding the best employees with the most appropriate skills and other attributes that will suit the organisation and its culture is an important part of the human resource manager's role. This recruitment process has changed significantly as a result of technological advances including software development and, of course, the internet.

human resources the people who work within an organisation

human resource management the process of managing the people who work within an organisation

Online sites that act as repositories of potential workers' résumés, such as SEEK.com.au, allow people in search of work to place their details online, enabling employers to find them more quickly and easily. Job ads are posted in these online forums and many employers require prospective employees to complete the application process online, which can significantly streamline the whole recruitment process compared to traditional paper-based job applications.

FIGURE 9 Through advances in technology, employers can now easily access potential employees from around the world.

A possible downside for potential employees is the way in which the online environment has also made it easier for employers to 'background check' job applicants. It has become increasingly common for an employer to look on social media sites to find information about the employee they are considering hiring. Therefore, applicants need to be mindful of their 'online presence' so that it does not potentially limit their employment opportunities.

The internet has provided a new way for people to advertise and search for work roles. Employers are now able to reach a whole world of potential employees easily and in a cost-effective manner; and job hunters are able to browse the thousands of jobs advertised around the world in their search for a role that fulfils their needs and ambitions.

FIGURE 10 Human resource managers have become very important to the success of a business. The tasks that they perform can be grouped into these four categories.

Acquisition	• The main tasks related to acquisition include advertising available jobs, interviewing people and selecting the best person for each job. • Human resource staff may keep a database of all employees and skills, qualifications and experience that they have.
Training	• Training involves providing employees with the skills needed to perform their job. It begins with an induction process when a person is employed. • Employees continue to receive training throughout their working life.
Maintenance	• Maintenance relates to all the processes/strategies undertaken to keep workers motivated and wanting to remain at the business. • It may include carrying out performance reviews, changing pay rates, offering promotions, flexible work arrangements, further training and providing challenging work.
Separation	• When employees leave (or separate) from a business, human resource managers need to gather information about why people leave. • This information may inform them about the changes they may need to make to their acquisition, training and maintenance of current staff.

9.4.7 The value of work

The value one places on work can be linked to one of the four reasons why people work. These include:

1. **To obtain self-satisfaction**
   It is not always easy to separate the work you do from who you are. Many workers try to complete their tasks to a very high standard and this reflects the attitude they have towards their work and their employers. These workers take pride in the work they do and this in turn raises their level of work satisfaction. When workers have ownership of their work and are proud of their achievements, they are more likely to work harder and longer to achieve the objectives of the organisation. For example, 200 employees of a factory were asked to write down the most important aspect of their work. Their responses revealed that it was not money that motivated them. Sixty-seven per cent of the employees said that knowing they had done the job well and received some praise from the supervisor were the most rewarding aspects. Thus recognition of a job well done increases the value of the work itself.
2. **To gain status and prestige**
   The type of work a person does is often used to measure that person's status and prestige within our society. In other words, their status comes from their occupation. The value we place on a person's job determines his or her income. For example, a heart surgeon's highly skilled work is valued more than a labourer's, so the surgeon receives a higher income. This is partly because of the education and training needed to become a surgeon as well as their high skill level and specialisation.
   Historically, society has tended to place a lower value on work in what are referred to as the 'caring professions', such as childcare, nursing and aged care. For this reason, salaries for people who work in these areas have generally been lower than in many other fields. These roles have traditionally been filled by women, and this provides another reason for the disparity that is often seen between the relative wages of men and women in Australia. This attitude is slowly changing, with wage rises being fought for and won in many of these areas. Interestingly, in a 2016 survey that asked Australians to rate professions in terms of their perceived ethics and honesty, nursing emerged as the number one ranked profession. This was the 22nd year in a row that nurses were recognised as number one in ethics and honesty. Doctors were ranked second in the survey and school teachers ranked fifth.
3. **To enjoy social interactions with others**
   The social aspects of work increase its value. On average, employees spend more time at work with their co-workers than they do at home with their families (not including sleep time). Work provides the opportunity to meet other people and make friends. Some workplaces have social clubs that employees can join, to participate in organised activities aimed at increasing the sense of staff connectedness and satisfaction.
4. **To help others**
   For many people the need to make a difference and contribute to society is an important part of why they work. This may be particularly so in the case of those who work in the 'caring professions', or who choose to work for not-for-profit organisations. Some people place such a high value on the desire to help others that they are prepared to offer their time and skills through volunteer work, seeking no payment for the work they do.

FIGURE 11 Social interaction is one of the key reasons that people work.

Resources

Interactivity The proportion of full-time and part-time employees (int-7874)

Weblink Hours of work

9.4 ACTIVITY

Use online resources (such as the **Hours of work** weblink in the Resources tab) to find and examine information on average hours worked by Australians. Describe the changes in working hours from the 1980s to today. Have they increased, decreased or remained the same? **HASS skills: Questioning and researching**

9.4 EXERCISE

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

Learning pathways

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

Check your understanding

1. Describe one significant change that has occurred in the Australian workforce in the last 50 years.
2. List three reasons why people value work.
3. Discuss the statement: 'The value of work is a personal thing'.
4. Define the phrase 'participation rate'.
5. Distinguish between full-time and part-time work.

Apply your understanding

6. Examine **FIGURE 2**. Discuss how participation rates of women have changed since 1978.
7. Review **FIGURES 3** and **4**. Consider the information shown in these figures with other factors discussed in this subtopic and explain why the average weekly earnings for women are lower than they are for men.
8. Explain why you think there has been a growth in people working part-time.
9. Analyse why you think women have a lower participation rate than men.
10. Analyse the role of human resource management in the modern workplace.

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

9.5 Work in the future

LEARNING INTENTION

By the end of this subtopic, you will be able to explain how technology will continue to change in the future.

9.5.1 Predicting future changes to work and possible outcomes

Can you imagine what work will be like in the year 2050? Will new jobs exist that are like the ones we see in sci-fi movies, or will they be much the same as they are now? Although it is very difficult to predict how work will change, what form it will take, what activities will need to be performed and what skills, knowledge and abilities workers will need to have, it is worth noting that one of the challenges of government is to do just that – to attempt to predict some of these changes and to make policies and economic plans that will support the future world of work in Australia.

FIGURE 1 Is this the future of work?

Work as we know it will slowly change. Exactly how it will change is unknown, but it is likely to depend on a range of factors, which in turn could have particular outcomes. **TABLE 1** summarises some of these potential factors and outcomes.

TABLE 1 Potential changes and outcomes in the future world of work

Factor	Outcome
Skills required in the future workplace	Future employees will require more education and higher skill development to participate in the workforce.
Changes in the gender segregation of the workforce	More equal representation of men and women in all types of work across all industries; the gender gap in average wages will continue to decrease
More employment in certain sectors of industry (service) and decreased employment opportunities in other sectors of industry (manufacturing)	More service-oriented roles; more focus on case work that follows a customer from start to finish, multi-skilling of the workforce, to enable the same employee to assist a customer throughout their entire customer experience
Further advances and increased use of technology in the workplace	Employees will need to continue to learn how to operate new equipment and software in order to perform their jobs. Some roles may become obsolete as new technology provides more efficient ways of completing particular tasks.
Changing employee attitudes and the desire for work–life balance	The provision of more flexible work arrangements to accommodate employees' needs, increase satisfaction and productivity, and retain staff
Changing workplace environments	Creation of more creative, ideas-driven environments that encourage workers to think independently and problem-solve creatively; greater focus on having healthy and happy employees who will work longer and stay with an organisation employees supported through benefits such as an onsite gym, café, childcare facilities, etc.

Increased education and skill levels

Two interrelated service areas that are experiencing distinct growth and an increase in employment opportunities are professional, scientific and technical services, and education and training. These areas will continue to grow into the future as the need for high-skilled workers increases. Workers need to be multi-skilled, educated and more technically-oriented to enable them to work with the newest technological advances.

Without appropriate, accessible training and education opportunities, it will be difficult to meet Australia's workplace requirements in the future. Therefore, the need to provide such opportunities is a constant focus for government.

Changing attitudes to gender segregation

Another possible change is in the area of gender segregation. This is where one gender, male or female, is more likely to be employed in a particular area than the other gender. Gender segregation is common in some industries. This is particularly evident in construction and mining. In 2018, only 17 per cent of employees in the mining industry and 16.7 per cent of employees in the construction industry were women. However, in more traditionally female-dominated occupations such as health care, social assistance, education and training, women continue to occupy the vast majority of roles. What might be the outcome if more men started to work in these typically female-dominated occupations and more women started working in typically male-dominated professions?

Certainly, it would have an impact on the gender gap that still exists in average wages of men and women. It might also lead to an increase in the perceived value (and the higher wages that go with it) of the traditionally lower paid female-dominated industries. Would it also change the way that we view the genders, or perhaps the industries? Or might it simply be a natural progression that comes as part of an ever-changing work environment?

Declining industries and growth industries

Over the past hundred years, the work people do has changed significantly. This is clearly demonstrated by looking at the industries in which they work. The three main employment industries are the primary, secondary and **tertiary industries**. In the past, much of the workforce was involved in the primary and secondary industries. However, in recent years there has been a shift towards greater participation in the tertiary industry, and in what have now been termed the **quaternary** and **quinary industries**. **FIGURE 2** outlines the various features of each of these industry types.

tertiary industries the group involved in the provision of services to others; for example, doctors, accountants, retailers

quaternary industries service industries involved in the processing and transfer of information and knowledge; for example, IT consultants, education services

quinary industries domestic service providers; for example, cleaning, childcare, home maintenance

int-7875

FIGURE 2 The five key industries of the Australian work environment

In Australia, there are numerous sub-industries into which people's work can be classified. These include agriculture, mining, manufacturing, retail, construction, accommodation and food services, transport, education, health and others. **TABLE 2** examines the four main employing industries and compares the proportion of people employed in 2000–01 with the proportion employed in those same industries for the period 2016–17.

TABLE 2 The proportion of people employed in 2000–01 compared to 2016–17, by industry, in Australia

Industry	Proportion of all employed, 2000–01	Proportion of all employed, 2016–17
Health care and social assistance	10%	13.4%
Retail trade	11%	10.4%
Construction	7%	9.4%
Manufacturing	12%	7.1%

Source: Adapted from Australian Bureau of Statistics, *Year Book Australia, 2012* (cat. no. 1301.0) and Department of Employment, *Australian Jobs 2016*.

As **TABLE 2** details, during this 16-year period, while retail trade remained relatively steady as the second-highest employing industry, the health care and social assistance industry and the construction industry saw strong increases in the percentage of people employed in those fields, while the manufacturing industry saw a decrease of 5 per cent. This is representative of the growth and decline of these particular fields of employment.

FIGURE 3 provides another view of the employment figures in certain industries from 2007 to 2014.

These graphs clearly show the significant growth in a number of industries, such as retail trade, construction and mining, and the distinct decline of the manufacturing industry in Australia during this period.

Further advances in technology

With ongoing technological developments comes the need for workers to continue to up-skill to be able to use new equipment and technology to its full potential. But in some instances, technological advances and automation may cause a decrease in the number of jobs available in particular fields. Many laborious tasks have been made simpler and quicker through the use of technology. Such increased efficiencies mean fewer people are required to complete the same amount of work, which results in fewer work positions.

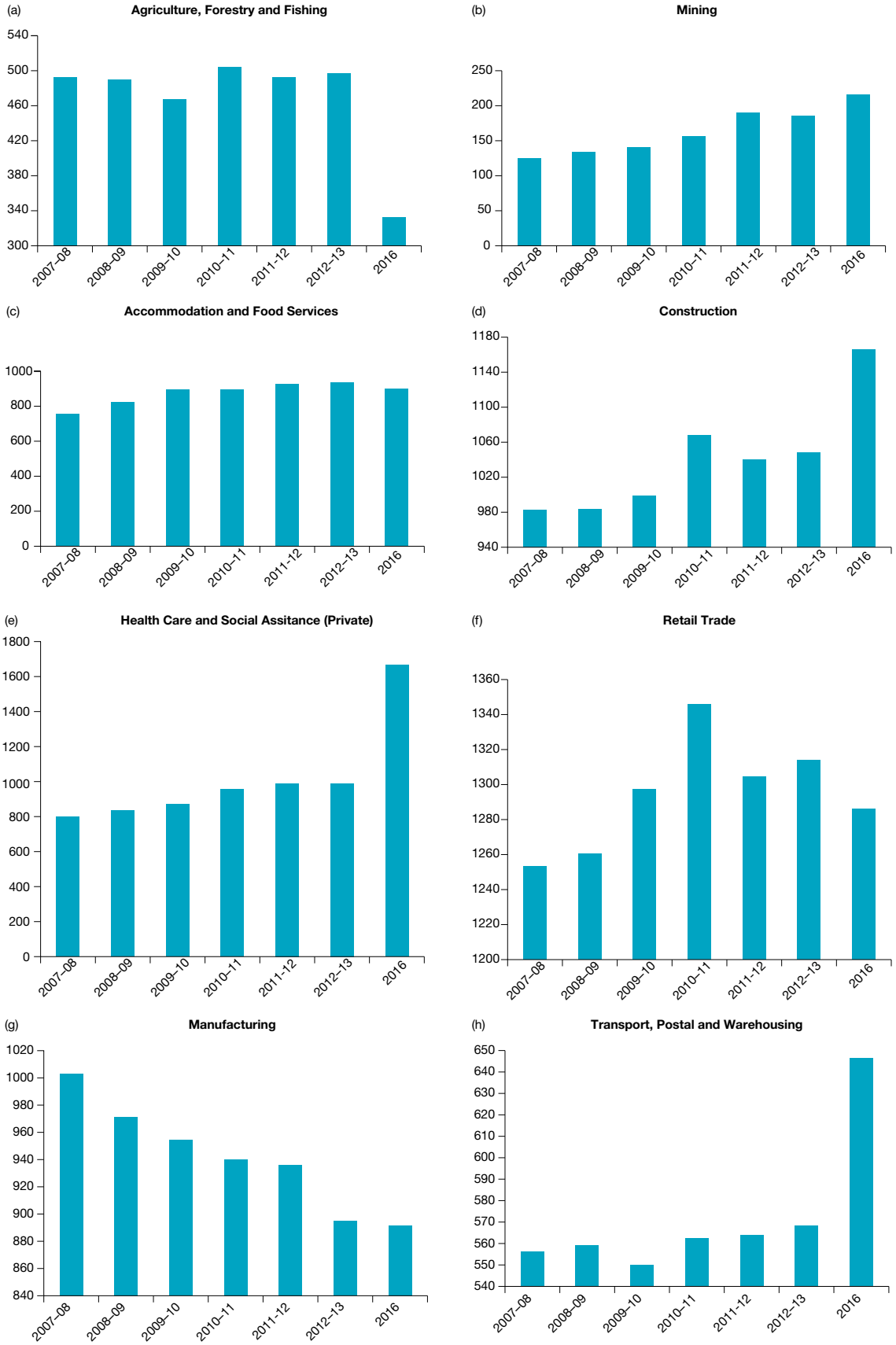
It is difficult to know how far the impact of technology will reach in the workplace and which jobs of today may become obsolete in the future as a result of new technological developments. But equally, the new areas of work that will emerge through technological development are largely unknown. It is hoped that these new fields will open up increasing opportunities that will be more than adequate to replace the roles that are lost.

Changing attitudes, the desire for work–life balance and changing workplace environments

As new generations fill the workforce, we may see a shift in the style of environments within which people work. Employers may need to create a new style of workplace, one that encourages workers to stay, rather than changing jobs on a regular basis, as is the tendency of younger generations. Flexible working arrangements and benefits that promote staff satisfaction and increase productivity may become an increasingly common feature of the future world of work. An example of this kind of workplace is provided by the American company Google, and is described in case study 9.5.2.

int-7876

FIGURE 3 A series of graphs showing changes in various industry sectors



Source: Adapted from Australian Bureau of Statistics, 6291.0.55.003 - Labour Force, Australia, Detailed, Quarterly, May 2014

9.5.2 CASE STUDY: Google work environment inspires creativity

Google is leading the way in terms of balancing life and work. The company offers its employees a wide range of extra activities such as volleyball, roller hockey, bicycles, yoga classes, sharing spaces (couches and comfy chairs where workers can discuss whatever topic they want), weights rooms, workout rooms, washers and dryers for workers to wash their clothes, massage rooms, ping pong and pool tables, outdoor seating for sunny days, and a wide variety of lunch and dinner places– all free or for only a small charge to its workers.

FIGURE 4 Google is often identified in surveys as the business that people would most like to work for.

Google provides its employees with a work environment that has interesting décor to encourage them to be more creative. Even sleeping pods are provided, so employees can catch up on sleep and feel refreshed to continue working. The company also encourages employees to take up to 20 per cent of their work time to develop their own ideas that they think might benefit the company. This promotes creativity and encourages new ideas, which can lead to new products, better solutions and a happier workplace.

FIGURE 5 Another reason the work environment is important!

"We feel it's important to provide our employees with an extremely comfortable work-place environment. Primarily because we don't allow them to ever go home."

on Resources

Interactivities The five key industries of the Australian work environment (int-7875)
A series of graphs showing changes in various industry sectors (int-7876)

Weblink GooglePlex

DISCUSS

Many of the jobs that you may hold in your career do not currently exist. How can you prepare for a job that does not exist? Are there transferable skills that are applicable to all jobs, regardless of how the future develops? Should we focus more on developing these skills than traditional skills?

General capability: Personal and social capability

9.5 ACTIVITY

Use the **GooglePlex** weblink in the Resources section to watch a clip that shows various features of the Google work environment. Then write a paragraph describing how Google treats its workers.

Economics and Business concept: Economic performance and living standards

9.5 EXERCISE

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

Learning pathways

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

Check your understanding

1. Identify the four main industries referred to in **TABLE 2**.
2. Which of the four main employing industries in Australia has experienced gradual decline over the past 25 years?
3. Explain what is meant by gender segregation and identify how this factor may change in the future.
4. Explain why work–life balance has become more important to workers.
5. Provide one reason why there is a growing need for improving workers' skills.

Apply your understanding

6. Examine **TABLE 2** and answer the following questions.
   a. What was the percentage change for the following industries?
      i. Health care and social assistance
      ii. Retail trade
      iii. Construction
      iv. Manufacturing
   b. Which industry had a negative change (decline) from 2000–01 to 2016–17?
7. Examine **FIGURE 3** and describe the trends you notice in the industries.
8. Examine **TABLE 3** and answer the following questions.
   a. Which industry employs the most people?
   b. Which industry employs the least people?
   c. Which industry had the biggest positive percentage change?
   d. Which industry had the biggest negative percentage change?

TABLE 3 Employment by industry, Victoria

Occupation	Employment Nov 2017	5-year change Nov 2017	
	'000	'000	%
Accounting, banking and financial services	771.9	23.4	3.1%
Administration and human resources	1194	26.8	2.3%
Advertising, public relations, media and arts	451.8	59.4	15.1%
Agriculture, animal and horticulture	411	24.5	6.3%
Automotive, transport and logistics	892.2	110.7	14.2%
Construction, architecture and design	985.8	138.2	16.3%
Education and training	687.9	39.1	6.0%
Electrical and electronics	256.1	7.0	2.8%
Engineers and engineering trades	367.4	–23.8	–6.1%
Executive and general management	115.3	–38.4	–25.0%
Government, defence and protective services	221.3	18.9	9.3%
Health and community services	1393.1	285.8	25.8%
Hospitality, food services and tourism	847.3	119.7	16.5%
Information and communication technology (ICT)	448.2	55.9	14.2%
Legal and insurance	138.1	15.1	12.3%
Manufacturing	365.6	–19.1	–5.0%
Mining and energy	91.6	6.3	7.4%
Personal services	472.5	15.5	3.4%
Sales, retail, wholesale and real estate	1699.6	93.7	5.8%
Science	114.7	1.9	1.7%
Sports and recreation	130.3	18.7	16.8%

Source: Australian Government, Department of Education, Employment and Workplace Relations, *Australian Jobs 2013*, p. 7 (last modified 14 May 2019)

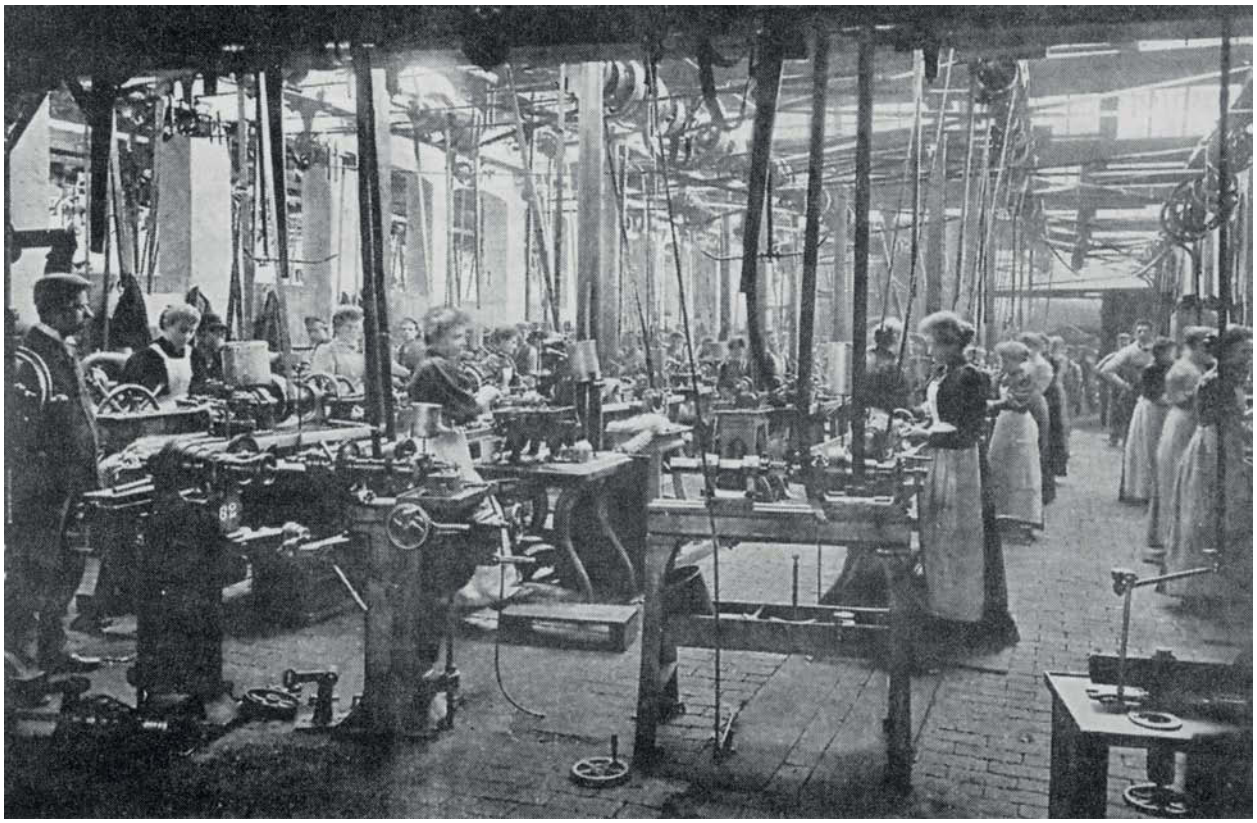
9. Examine the information relating to Google. Explain why encouraging creativity is beneficial for both workers and employers.
10. 'The work environment of the future is so hard to imagine it is not possible to train for it today.' Discuss this statement.

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

9.6 Thinking Big research project: Impacts of technology poster

Scenario

Technology has changed nearly every area of our lives. One key area where technological change has had an impact is in the area of work. Over the last 30 years some jobs have disappeared, some have changed, and some have been created as a result of technology.



Task

Your task is to investigate the changing nature of technology and its impact on jobs. There are three components to this task:

- Historical – develop a list of technological changes that have potentially impacted jobs. This list should include a minimum of 10 technological changes. Prepare a table such as the one below (the first technological change and job affected has been completed for you).

Technological change	Job affected
Automated teller machines (ATMs)	Bank teller

- Teaching – look around your classroom. Prepare a list of the technologies in your classroom and explain what other 'technology' they have replaced. Again, the table below is one means of presenting the information (the first technological change has been completed for you).

New technology	Old technology
Interactive whiteboard	Chalkboard/blackboard

- Future – consider a job that is currently undertaken by humans. Consider how that job may change or disappear in the future due to technology. Prepare a brief report describing the job you have selected and how technology might operate to change or remove that job.

  Follow the steps detailed in the **Process** section to complete this task.

Process

- Open the ProjectsPLUS application for this topic. Click the **Start new project** button to enter the project due date and set up your project group. Working in groups will enable you to share responsibility for the project but your teacher may want you to work individually. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered.
- Interview your parents, grandparents and teachers to fill in the tables.
- Conduct internet research on how technology affects jobs. Weblinks are provided in the **Media centre** to help you get started.
- Create a poster using catchy headings and relevant images. Be sure to list your sources.
- Submit your poster to your teacher for assessment and feedback.

on Resources

ProjectsPLUS Impacts of technology poster (pro-0180)

9.7 Review

9.7.1 Key knowledge summary

9.2 Influences on work today

- Globalisation, offshoring and outsourcing will continue to have an impact on the Australian labour market.

9.3 The significance of technology

- There will be further advances in technology and this will affect the type of work people do, when they do it and where they do it.
- Distance will not be a barrier to obtaining a job in the future.

9.4 Changes to the workforce

- Technology will significantly impact organisations' future human resources needs, and the way in which they find and retain employees.
- The need for training and development will only increase with time.

9.5 Work in the future

- The next generation of workers will need to be more highly skilled and educated, and more focused on technology.
- Employee relations and agreements will need to change even further to enable greater flexibility.
- Changing work environments and the need for work–life balance will be a key feature of the future world of work.

9.7.2 Key terms

conditions of employment the arrangements made between an employer and the employee in terms of work requirements and employee benefits
employer expectation what the employer expects to receive from employees in return for the money that they pay them
employer the person or business that pays workers for the work they do
employment working in return for a wage or salary
Generation Alpha people born from 2010 onwards
Generation X people born between 1965 and 1979
Generation Y people born between 1980 and 1994
Generation Z people born between 1995 and 2009
globalisation the process of interacting with markets in other countries around the world, as part of an integrated global economic system
human resource management the process of managing the people who work within an organisation
human resources the people who work within an organisation
industry the way that different parts of the economy are grouped; for example, manufacturing, mining etc.
labour force people aged 15 and over who are able to work and are either employed or unemployed
labour market the availability and the ability of employees to work and for employers to hire them
offshoring moving certain work processes to be performed overseas
outsourcing contracting a person or people outside an organisation to perform certain work tasks (that previously might have been performed by workers within the organisation)
primary industries the group involved in the production of raw materials; for example, farming, mining, forestry
primary production the production of crops, livestock or other basic materials that may then be used by other branches of industry
quaternary industries service industries involved in the processing and transfer of information and knowledge; for example, IT consultants, education services
quinary industries domestic service providers; for example, cleaning, childcare, home maintenance
redundant a situation in which a job is no longer required to be performed by anyone; this may be as a result of the reorganisation of a business, the introduction of new technology or a decline in business sales or production
retrenching losing one's job as a result of the position being made redundant
secondary industry the group involved in the processing of primary resources to manufacture other goods
tertiary industries the group involved in the provision of services to others; for example, doctors, accountants, retailers
work human labour that can be paid or unpaid including voluntary labour
work–life balance a feeling of having an appropriate balance between working and non-working time and activities

Resources

eWorkbook Customisable worksheets for this topic (ewbk-5497)
Reflection (ewbk-5496)
Crossword (ewbk-5495)
Student Learning Matrix (ewbk-5490)

Interactivity The changing work environment crossword (int-7607)

9.7.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

Go to work. Go home. Get paid. Repeat. The way we work hasn't changed at all. Has it?

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.

9.7 Review exercise

Multiple choice

1. The Australian labour market has been affected by which of the following factors?
   - **A.** Globalisation
   - **B.** Technological advances
   - **C.** The changing expectations of employees and employers
   - **D.** All of the above
2. Before the Industrial Revolution manufacturing was:
   - **A.** large-scale
   - **B.** non-existent
   - **C.** fairly small scale
   - **D.** all of the above.
3. Which of the following statements about the change in Australian workforce participation rates over the past 50 years is not correct?
   - **A.** Female participation has increased.
   - **B.** The proportion of people employed part-time has decreased.
   - **C.** The proportion of people employed part-time has increased.
   - **D.** The proportion of males employed part-time has increased.
4. In Australia, there are three major employment agreements. What are they?
   - **A.** Awards, registered collective agreements and individual employment contracts
   - **B.** Awards, registered collective agreements and union contracts
   - **C.** Awards, union collective agreements and individual arrangements
   - **D.** Work full-time, part-time or casual
5. Globalisation is the process of:
   - **A.** interacting with other people in Australia
   - **B.** interacting with markets in other countries around the world
   - **C.** visiting other countries
   - **D.** buying items from people who are in other countries.

6. In the past 30 years, the average number of hours worked by employed Australians has:
   A. increased significantly
   B. increased slightly
   C. decreased
   D. stayed the same.
7. Technological advances have made many business processes:
   A. less time consuming
   B. more time consuming
   C. unable to be completed without an IT qualification
   D. unaffordable.
8. Technological advances enable businesses to:
   A. create new markets
   B. communicate instantly
   C. produce better products
   D. do all of the above.
9. In the past decade, which of the following Australian industries has experienced a significant decrease in the proportion of the workforce that it employs?
   A. Retail trade
   B. Construction
   C. Manufacturing
   D. Health care and social assistance

Short answer

10. 'Standard work hours in the future are likely to still be 9 am to 5 pm.' Explain whether you agree or disagree with this statement.
11. Identify and explain one government policy that ensures that conditions of employment are fair and reasonable.
12. Name two technological advances that came about during the Industrial Revolution.
13. It was once illegal for shops to be open on Sundays in Australia. True or false?
14. Complete the following sentence. 'The proportion of Australians employed on a part-time basis has _____ in recent years.'
15. Define the term 'work–life-balance' in your own words.

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 9 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

9.1 Overview

Video eLesson
- The changing work environment (eles-3496)

9.2 Influences on work today

eWorkbook
- Life beyond school (ewbk-5491)

Weblink
- Industrial Revolution

9.3 The significance of technology

eWorkbook
- Training, education and work (ewbk-5494)

9.4 Changes to the workforce

eWorkbook
- Change and the world of work (ewbk-5493)

Interactivity
- The proportion of full-time and part-time employees (int-7874)

Weblink
- Hours of work

9.5 Work in the future

eWorkbook
- Where are the jobs? (ewbk-5492)

Interactivity
- The five key industries of the Australian work environment (int-7875)
- A series of graphs showing changes in various industry sectors (int-7876)

Weblink
- GooglePlex

9.6 Thinking Big research project: Impacts of technology poster

ProjectsPLUS
- Impacts of technology poster (pro-0180)

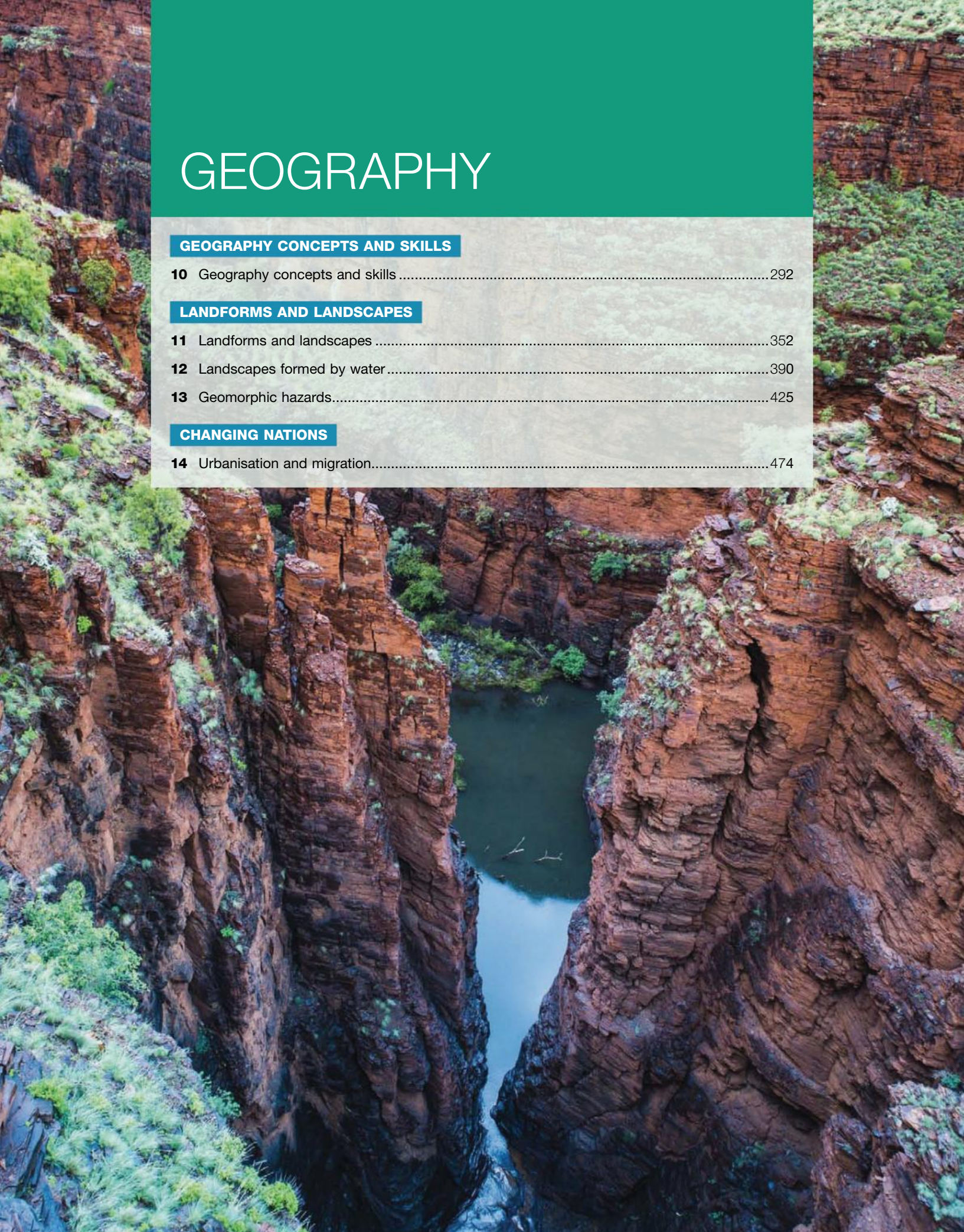
9.7 Review

eWorkbook
- Reflection (ewbk-5496)
- Crossword (ewbk-5495)
- Student Learning Matrix (ewbk-5490)

Interactivity
- The changing work environment crossword (int-7607)

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

GEOGRAPHY



GEOGRAPHY CONCEPTS AND SKILLS

10 Geography concepts and skills 292

LANDFORMS AND LANDSCAPES

11 Landforms and landscapes 352

12 Landscapes formed by water 390

13 Geomorphic hazards 425

CHANGING NATIONS

14 Urbanisation and migration 474

10 Geography concepts and skills

10.1 Overview

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

10.1.1 Introduction

When you study Geography in HASS, you are starting to build the knowledge and skills that will be needed by you and your community now and into the future. The concepts and skills that you will use will not only help you in Geography but they can also be applied to everyday situations, such as finding your way from one place to another. Studying Geography may even help you in a future career here in Australia or somewhere overseas.

Throughout your study of Geography you will cover topics that will give you a better understanding of the world around you – both the local and global environment. You will investigate issues that need to be addressed now and also options for the future.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6413)

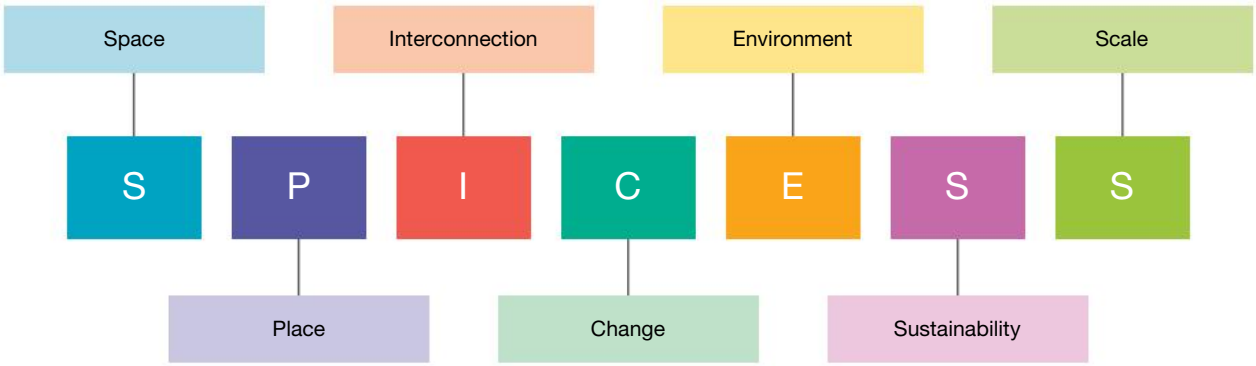
FIGURE 1 Geography is the study of the world around you

10.2 Concepts in Geography

10.2.1 Geographical concepts: SPICESS

Geographical concepts help you to make sense of your world. By using these concepts you can investigate and understand the world you live in, and try to imagine a different world. The concepts help you to think geographically. There are seven major concepts: *space, place, interconnection*, *change, environment*, *sustainability* and *scale*.

FIGURE 1 A way to remember these seven concepts is to think of the acronym SPICESS.

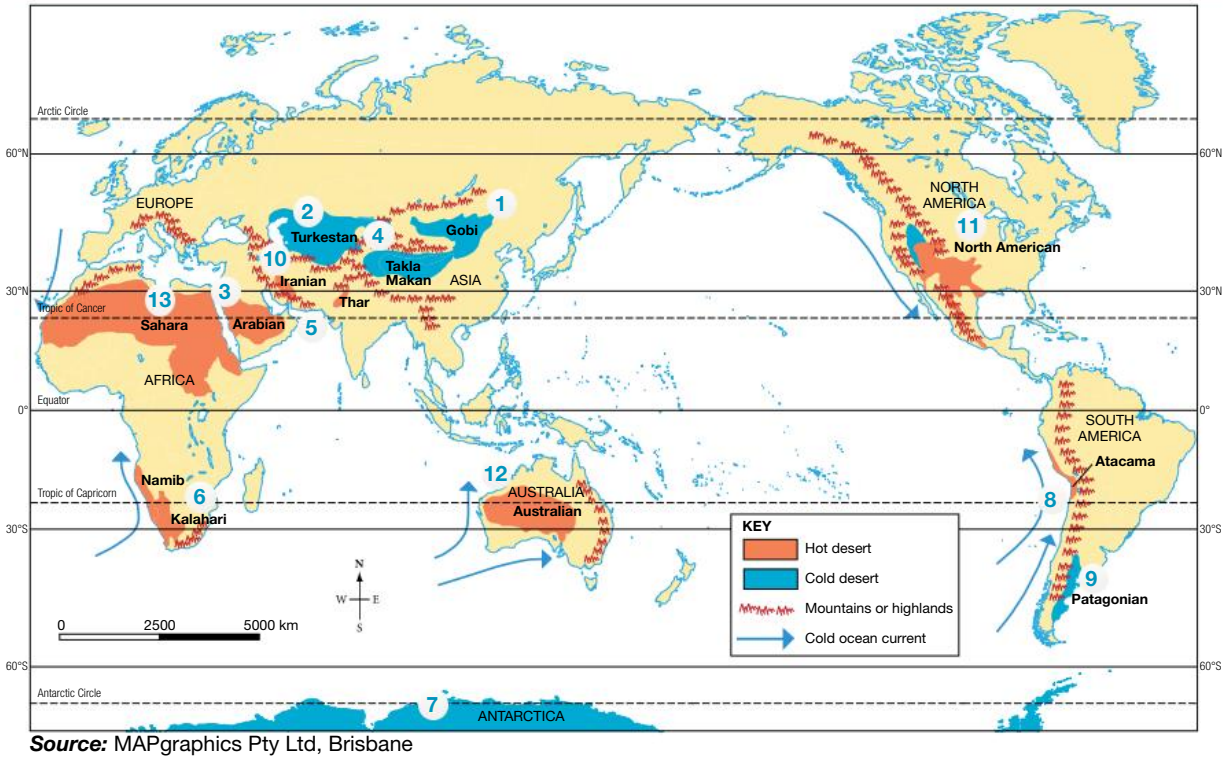


You will use the seven concepts to investigate two units: *Landforms and landscapes* and *Changing nations*.

10.2.2 What is space?

Everything has a location on the space that is the surface of the Earth, and studying the effects of location, the distribution of things across this space, and how the space is organised and managed by people, helps us to understand why the world is the way it is.

FIGURE 2 The distribution of the world's deserts



Source: MAPgraphics Pty Ltd, Brisbane

A place can be described by its absolute location (latitude and longitude) or its relative location (in what direction and how far it is from another place).

10.2.3 What is place?

The world is made up of places, so to understand our world we need to understand its places by studying their variety, how they influence our lives and how we create and change them.

You often have mental images and perceptions of places – rich and poor cities, suburbs, towns or neighbourhoods – but these may be very different from someone else's perceptions of the same places.

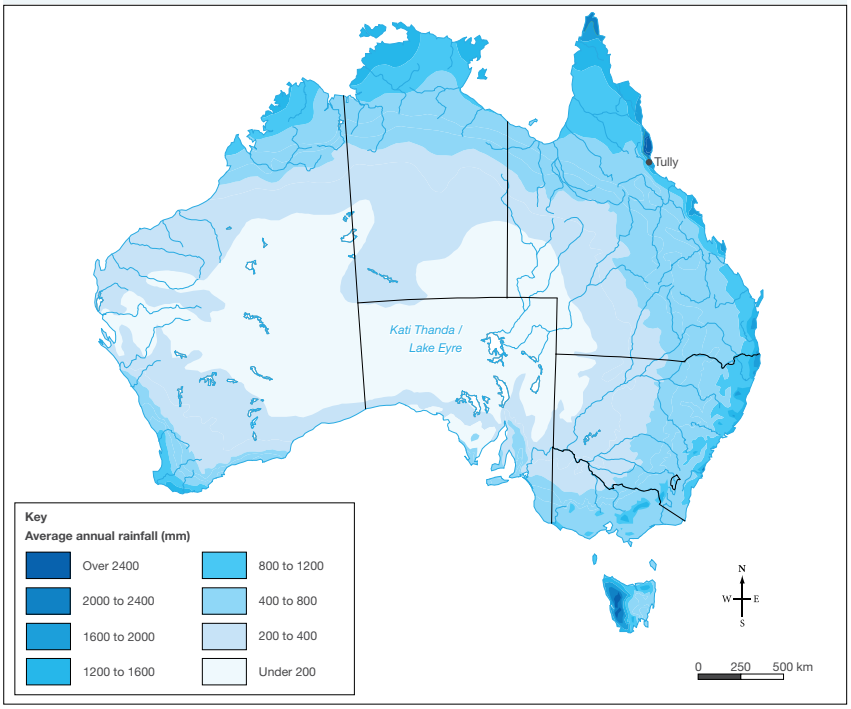
FIGURE 3 The Paraisópolis favela (slum), home to 60 000 people, is situated next to the gated complexes of the wealthy Morumbi district of São Paulo in Brazil.

10.2.4 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.

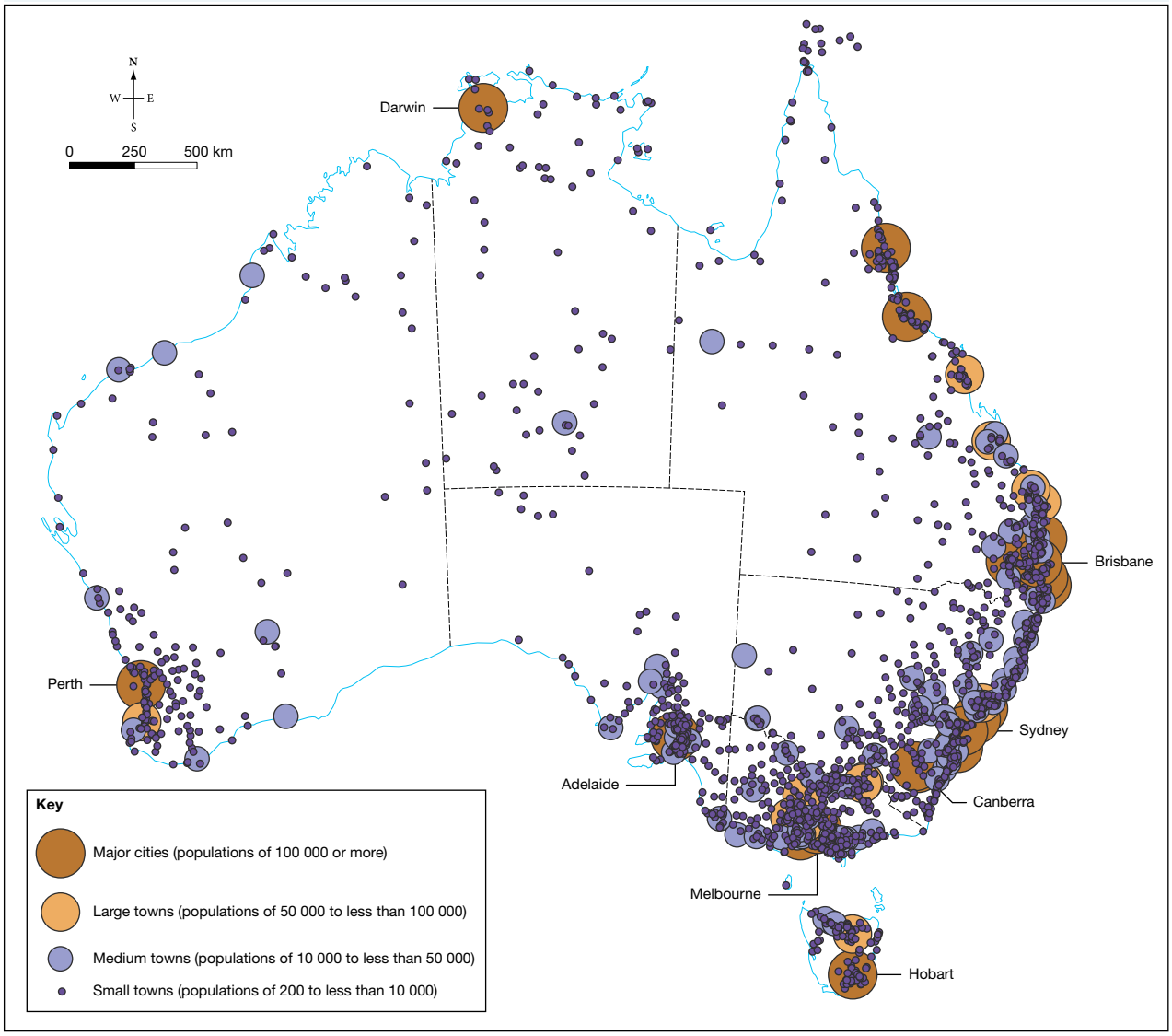
An event in one location can lead to change in a place some distance away.

FIGURE 4 Distribution of annual rainfall in Australia



Source: Bureau of Meteorology, 2003, on the Australian Water Map, Earth Systems Pty Ltd

FIGURE 5 Australia's population distribution and density



Source: Australian Bureau of Statistics

10.2.5 What is change?

The concept of change is about using time to better understand a place, an environment, a spatial pattern or a geographical problem.

Some changes can be fast and easily observed, but others are very slow. For example, cities can expand outwards over a number of years. Similarly, landforms generally change very slowly, as with the formation of mountains. But some landscape change can be very fast, as is the case with landslides, volcanic eruptions and deforestation.

FIGURE 6(A) Landscape before deforestation

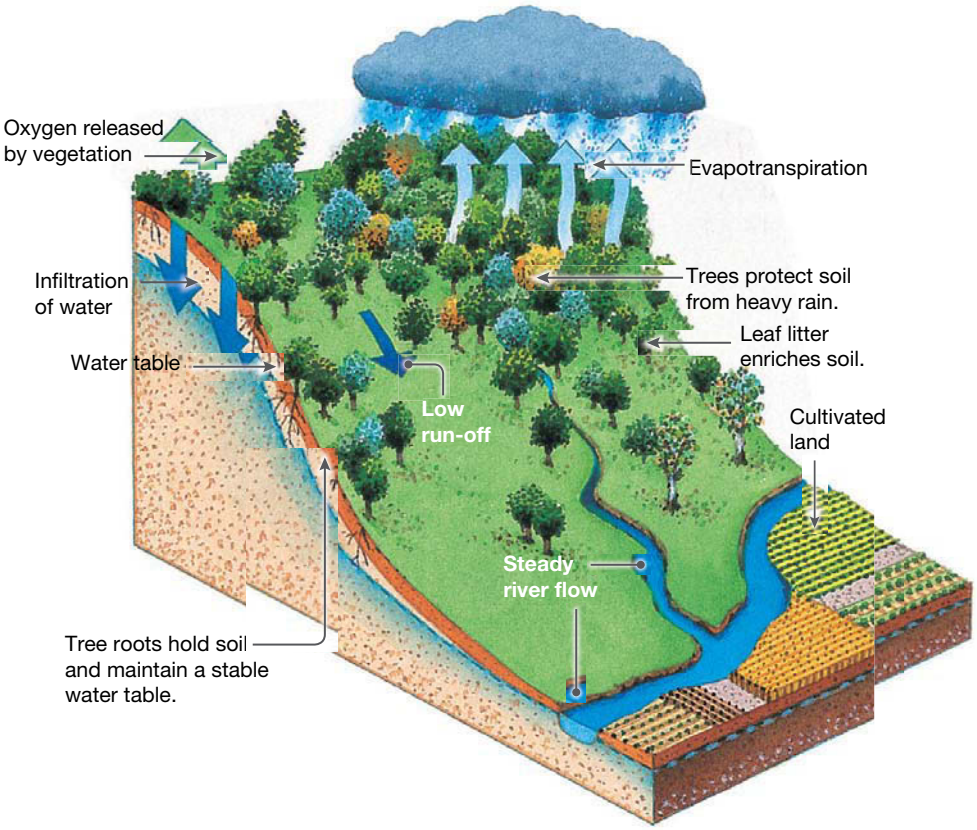


FIGURE 6(B) Landscape after deforestation

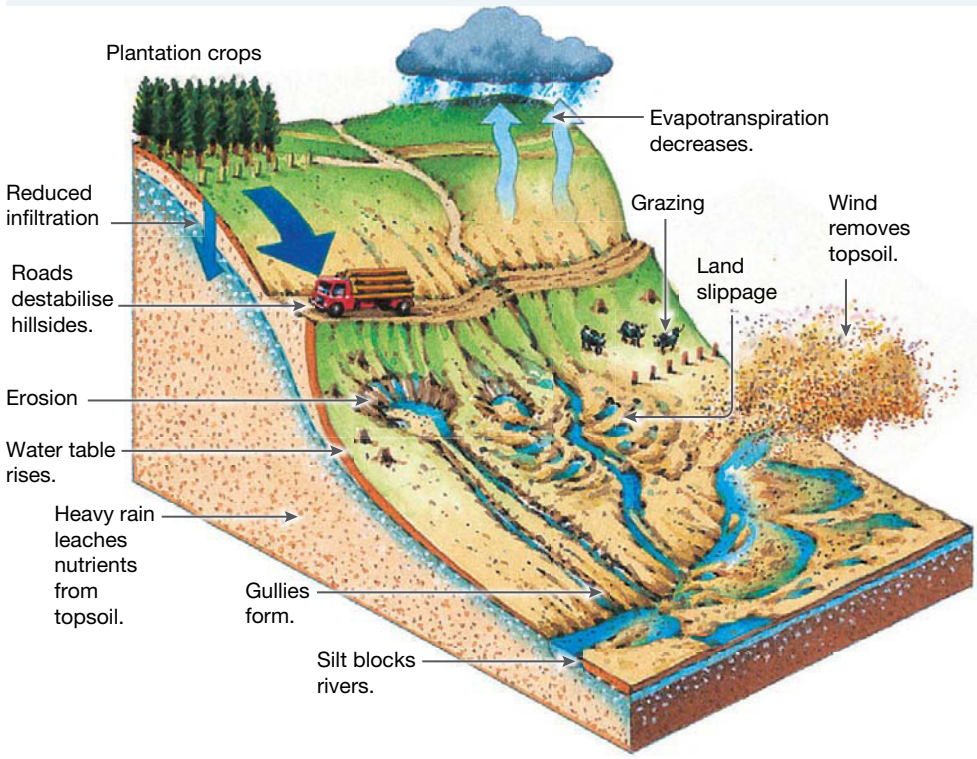
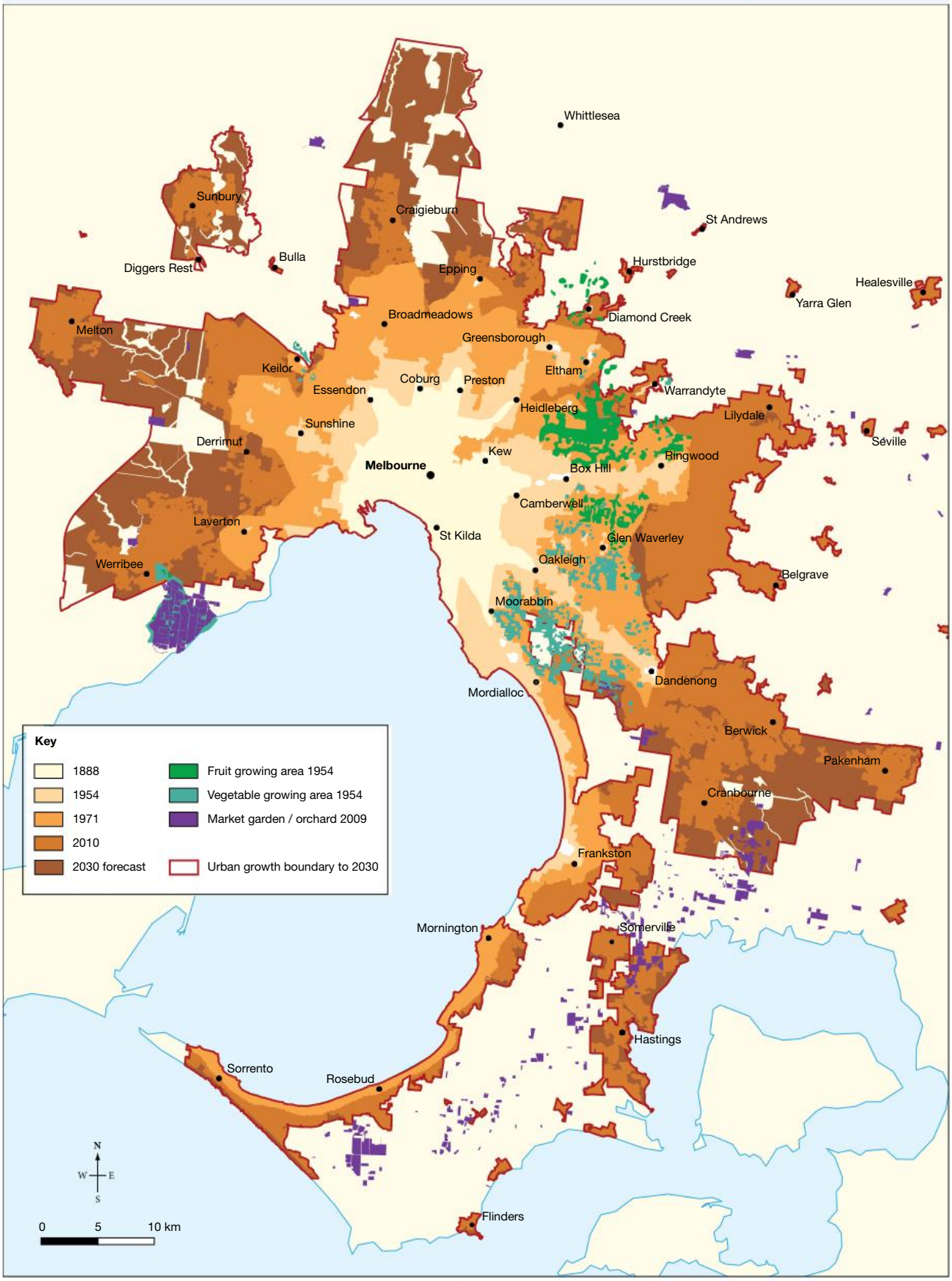


FIGURE 7 Perth's urban sprawl



Source: Various Victorian planning studies and current land use mapping. Map produced by Spatial Vision 2019.

10.2.6 What is environment?

People live in and depend on the environment, so it has an important influence on our lives.

The environment, defined as the physical and biological world around us, 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.

10.2.7 What is sustainability?

Sustainability is about maintaining the capacity of the environment to support our lives and those of other living creatures.

Sustainability is about the interconnection between the human and natural world and who gets which resources and where, in relation to conservation of these resources and prevention of environmental damage.

FIGURE 8 Uranium mining in Colorado, United States. Many deserts contain valuable mineral deposits.

FIGURE 9 The Vatican is the world's smallest independent state. In 2008 more than 2000 photovoltaic panels were fixed to the roof of one of the city state's main buildings – the roof of the Paul VI Hall – enabling the Vatican to cut its carbon dioxide emissions by about 225 tonnes per year. The 2400 panels heat, light and cool the hall and several surrounding buildings, producing 300 kilowatt hours (MWh) of clean energy per year.

10.2.8 What is scale?

When we examine geographical questions at different spatial levels we are using the concept of scale to find more complete answers.

Scale can be from personal and local to regional, national or global. Looking at things on a range of scales provides a deeper understanding of geographical issues.

FIGURE 10 Perth, Western Australia. Building sustainable communities means we have to work at various scales.

Source: © Commonwealth of Australia Geoscience Australia 2006.

FIGURE 11 Street art in Perth, Western Australia

Ways to improve sustainability at the local scale include:

- reducing the ecological footprint
- protecting the natural environment
- increasing community wellbeing and pride in the local area
- changing behaviour patterns by providing better local options
- encouraging compact or dense living
- providing easy access to work, play and schools.

Ways to improve sustainability at the city scale include:

- building strong central activities areas (either one major hub or a number of specified activity areas)
- reducing traffic congestion
- protecting natural systems
- avoiding suburban sprawl and reducing inefficient land use
- distributing infrastructure and transport networks equally and efficiently to provide accessible, cheap transportation options
- promoting inclusive planning and urban design
- providing better access to healthy lifestyles (e.g. cycle and walking paths)

- improving air quality and waste management
- using stormwater more efficiently
- increasing access to parks and green spaces
- reducing car dependency and increasing walkability
- promoting green space and recreational areas
- demonstrating a high mix of uses (e.g. commercial, residential and recreational).

FIGURE 12 The Perth skyline with Optus Stadium in the foreground

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Developing Australian Curriculum concepts > **Space**
  Place
  Interconnection
  Change
  Environment
  Sustainability
  Scale

10.3 Skills in Geography

10.3.1 Skills for work

Many questions come up during a typical Geography class, such as those in **TABLE 1.** These questions need to be answered in the real world by people in a wide variety of occupations. They all have links with Geography.

TABLE 1 Examples of occupations that use Geography

Question	Occupations/organisations that try to answer these questions
How high is Mount Everest? How do we know?	Surveyor, cartographer
How can we protect our parks and wildlife?	Park ranger, planner, environmental manager
Where should we establish a new suburb for our future population?	Urban planner, demographer
How can we prepare for future droughts and floods?	Civil engineer
Does our town really have enough water? Should we build a new dam? Where should we build a new dam?	Coastal engineer, hydrologist, cartographer
Should a boat marina be built at location X or at location Y?	Oceanographer
Do we have good quality drinking water?	Chemist, hydrologist
How do countries such as India and China deal with their air pollution problems?	Environmental scientist/manager
How do we provide aid to other countries?	Air Force, Navy, army officer; Red Cross, World Vision and other aid agencies
How do we build sustainable housing?	Architect, landscape architect, civil engineer/ construction manager, town planner, real estate salesperson

Do you know much about the occupations mentioned in **TABLE 1**? Are any of interest to you? The first step in thinking about your future is to consider questions such as:

- Who am I?
- What are my interests?
- What do I enjoy doing?
- What am I good at?
- What would I like to do when I leave school?

Geography careers on the move

A great part of studying Geography is being able to explore the many occupations and areas that it opens up. **TABLE 2** lists some occupations that you might not have thought studying Geography could lead you into.

TABLE 2 Would I enjoy

... working indoors?	... working outdoors?	... helping people?
• Land economist • Landscape designer • Real estate salesperson • Geoscience technician • Travel consultant	• Surveyor • Mining engineer • Geologist • Landscape architect • Cartographer	• Park ranger • Paramedic • Navy officer • Firefighter • Tour guide
... designing new places to live?	**... improving people's wellbeing?**	**... doing research?**
• Urban planner • Architect • Landscape architect • Horticulturist	• Natural resource manager • Demographer	• Meteorologist • Anthropologist • Geophysicist • Hydrographer • Environmental scientist

10.3.2 Skills used in studying Geography

In addition to the concepts you study in Geography (SPICESS) there is a range of essential practical skills that you will learn, practise and master as you study Geography. These can be categorised into the four core skills you already know from your study of HASS:

- Questioning and researching
- Analysing
- Evaluating
- Communicating and reflecting.

The specific Geographical skills you'll use in Year 8 are listed below. The steps for each of these skills are included in SkillBuilders in this topic. The skills marked with an asterisk are included online in your learnON Resources.

- Recognising land features
- Reading contour lines on a map
- Using latitude and longitude
- Calculating distance using scale
- Drawing simple cross-sections
- Interpreting an aerial photo
- Understanding thematic maps
- Comparing population profiles
- Creating and reading compound bar graphs
- Reading and describing basic choropleth
- Drawing a line graph using Excel*
- Using positional language*
- Constructing a field sketch*
- Creating and describing complex overlay maps*
- Drawing a precis map*
- Creating and reading pictographs*
- Describing photographs*
- Constructing a basic sketch map*

10.4 SkillBuilder: Recognising land features

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to recognise and describe the major land features on a topographic map.

10.4.1 Tell me

What are land features?

Land features are landforms with distinct shapes, such as hills, valleys and mountains. You recognise these as you look around your natural environment. On topographic maps you recognise land features from the patterns formed by the contour lines.

Why is it useful to recognise land features?
By recognising land features, we understand our natural environment. This is useful for a wide range of activities including:

- planning housing estates, freeway routes and reservoirs
- organising outdoor recreational pursuits such as orienteering, trail-biking and flying
- managing hazards such as flooding.

Recognising land features on a map involves identifying the shapes created by the pattern of contours.

10.4.2 Show me

How to recognise a land feature

By reading the contour lines on a map, an understanding of the shape of the land is obtained. Land features are identified from the contour lines.

You will need:

- a topographic map.

Procedure

Use the contour lines to identify land features.

Step 1

Look at the contour lines on **FIGURE 1.** You will see that sometimes the lines are close together and sometimes the lines are further apart. Identify two areas where this is the case.

Step 2

Using your hand, create the shape of a hill. For every 50 metres increase of the hill slope, move your hand higher and at each step visualise that this is the next contour line on a map.

Try this for some other landforms that you are familiar with, such as a valley or a beach cliff.

Did you recognise that if the contours are close together then the shape of the land is steep, and if the contours are further apart then the land is flatter?

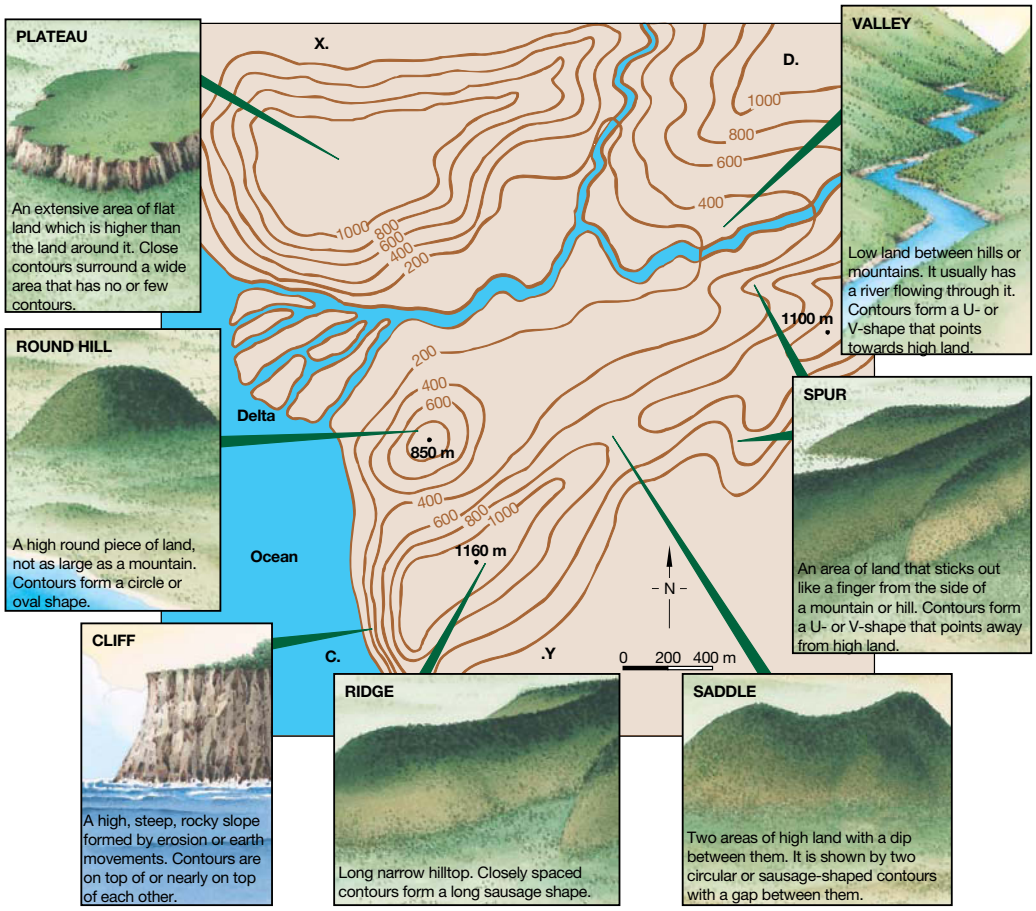
Step 3

Landforms have distinctive shapes with contours, which a geographer recognises on a topographic map as a particular land feature. Use **FIGURE 1** as a guide to understanding the shapes on maps as land features. Create your own hand models of the shape of each land features.

Model

FIGURE 1 shows a simple topographic map including a spur, cliff, valley and plateau. These land features are identified by the way the contour lines come together to create shapes on the map.

FIGURE 1 Landforms matched to a topographic map



on Resources

Digital doc	Topographic map of Yarra Yarra Creek Basin (doc-31343)
Video eLesson	SkillBuilder: How to recognise land features (eles-1648)
Interactivity	SkillBuilder: Recognising land features (int-3144)

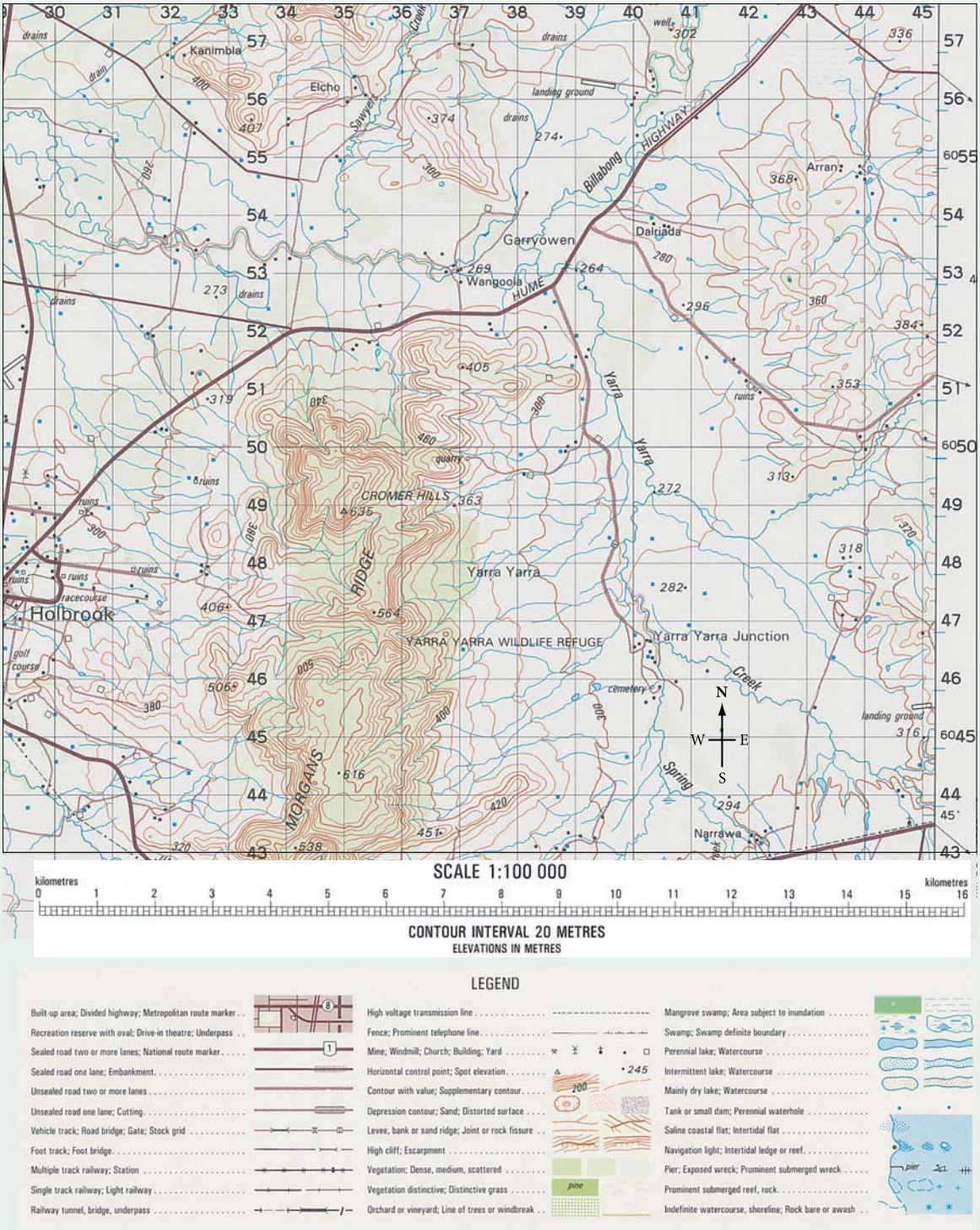
10.4.3 Let me do it

Complete the following activities to practise this skill.

10.4 ACTIVITIES

1. Use **FIGURE 2,** the map of Yarra Yarra Creek Basin, New South Wales, to identify the following landforms.

FIGURE 2 Topographic map of Yarra Yarra Creek Basin



Source: Spatial Vision

- Ridge
- Wide valley
- Very steep slope
- Spot height of 635 metres
- Spur
- Plateau
- Saddle

HASS skills: Analysing

2. Apply your skills to answer the following questions.
   a. Which slope of Morgans Ridge would be the most difficult to climb?
   b. What two natural features can be seen from Morgans Ridge to the east?
   c. What are the heights of the peaks on Morgans Ridge?
   d. Can you see the town of Holbrook from Wangoola? Explain your answer.
   e. What land features form part of Morgans Ridge?

HASS skills: Analysing

Checklist

I have:
- identified patterns in contour lines
- recognised the major land features on a topographic map.

10.5 SkillBuilder: Reading contour lines on a map

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to explain what contour lines are and why they are useful. You will also be able to read contour lines on a topographic map.

10.5.1 Tell me

What are contour lines?

Contour lines drawn on a map join all places of the same elevation (height). These lines are usually brown and have a number written on them to indicate height above sea level. Contour maps are used to show the relief (shape) of the land and the heights of the landscape. Land heights are identified from aerial photography. Natural features, such as rivers, lakes and beaches, and human features, such as towns, roads and power lines, are added to the map to complete the landscape picture. Symbols provided in a legend (or key) or labels on the map add information to complete the image of the environment.

Why are contour lines useful?

It is not possible to see an entire area when in the environment, so maps with contour lines show the relief of the land and help people to identify features. They are also useful because they tell us the actual height above sea level of particular locations on a map. Contour lines are used by many people, and for various purposes, such as:
- organising a hike
- land-use planning of roads, airports, train lines and power-line routes
- identifying slopes for building sites
- planning decisions
- leisure activities; for example, working out where the best rapids on a river might be or where to launch or land a hang-glider.

Reading contour lines on a map involves:
- identifying a contour line
- finding its number (metres above sea level)
- determining the contour interval
- checking spot heights.

10.5.2 Show me

How to read contour lines

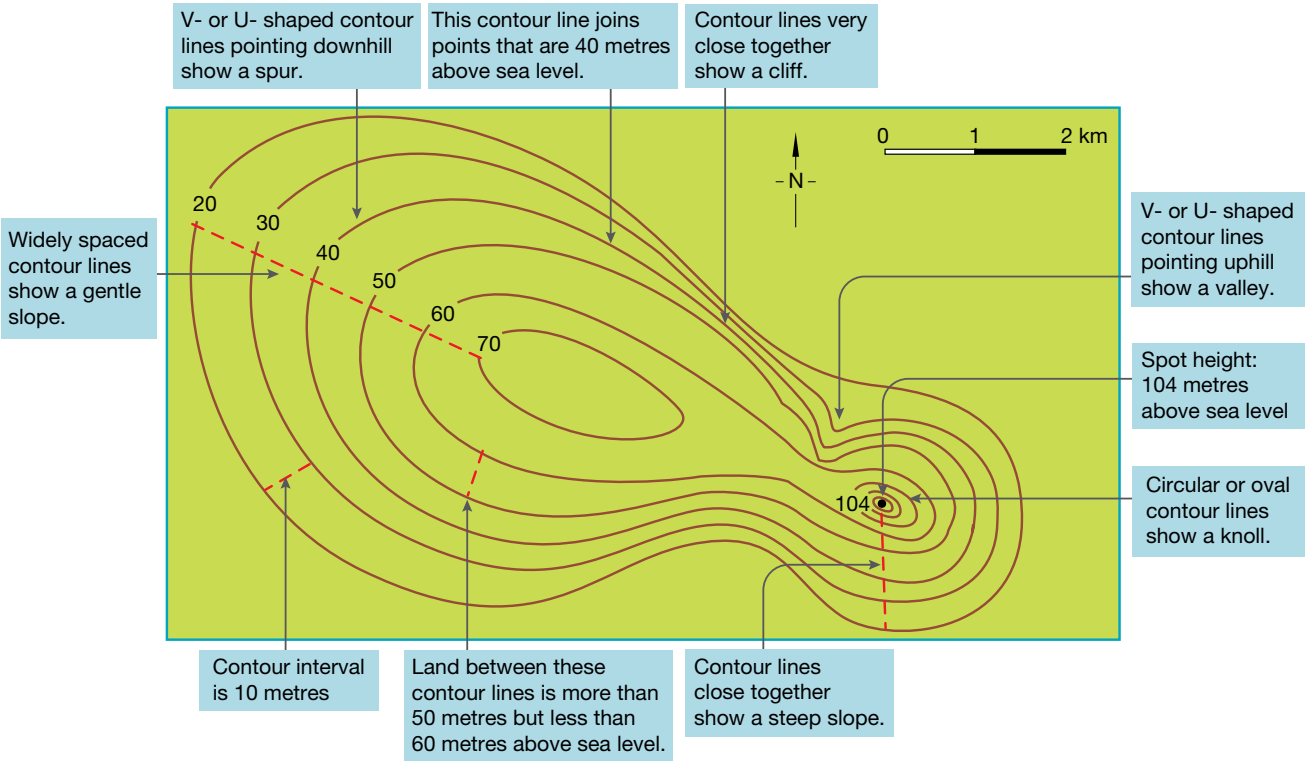
You will need:

- a contour (topographic) map.

Model

The contour lines (brown lines) on the simple topographic map shown in **FIGURE 1** join places of the same height above sea level. The contour lines are drawn at 10-metre intervals. The highest point is identified by a spot height of 104 metres. Landscape features such as steep or gentle slopes, cliffs, valleys, spurs and knolls can be identified using the contour lines on the map.

FIGURE 1 How contour lines show the shape of the land



Procedure

Step 1

To find the height of a particular area of land, identify a contour line in **FIGURE 1** and follow the line to find the number that states the height above sea level (in metres).

Step 2

Spot heights are dots that indicate the exact height at the highest point of a hill or the lowest point of a depression. For example, the hill in **FIGURE 1** is exactly 104 metres above sea level at its peak. This spot is higher than the last contour line (in this case 100 m), but lower than the height at which the next contour line would be drawn (110 m).

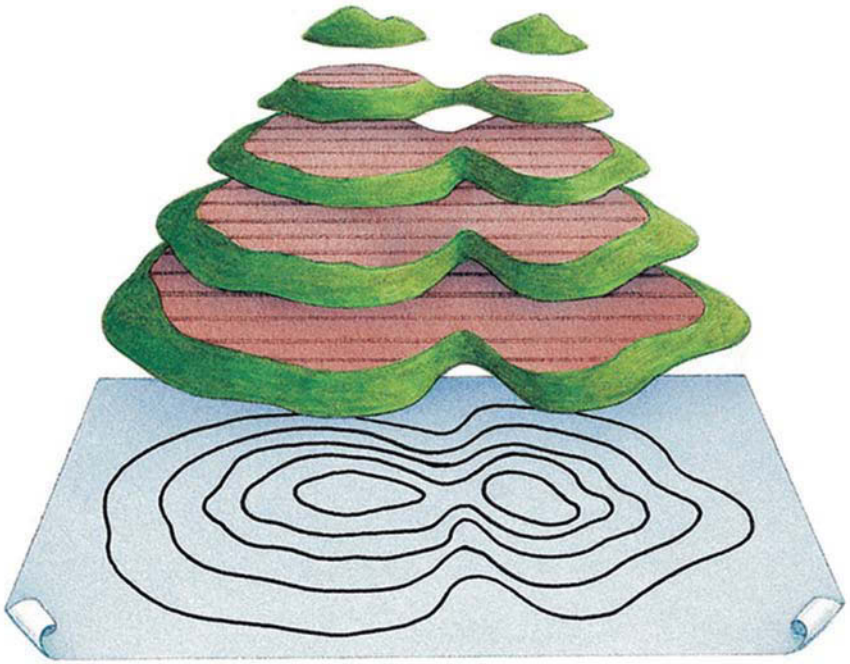
If the contour interval shown in **FIGURE 2** is 20 metres, what height could the land be on these hilltops?

Step 3

The contour interval of a map is the difference in metres between each of the contour lines. This interval is consistent across a map.

If the contour lines are too close and the numbers can't easily be written, it is left to the reader to use the contour interval to calculate heights. The contour interval is often written in the legend as a guide. Check your understanding by considering the landscape shown in **FIGURE 2.** With a contour interval of 20 metres, what would be the height of the land at the top of the contour immediately beneath the hilltops?

FIGURE 2 A topographic map represents a three-dimensional landscape on a flat surface.



on Resources

Video eLesson SkillBuilder: Reading contour lines on a map (eles-1651)

Interactivity SkillBuilder: Reading contour lines on a map (int-3147)

10.5.3 Let me do it

Complete the following activity to practise this skill.

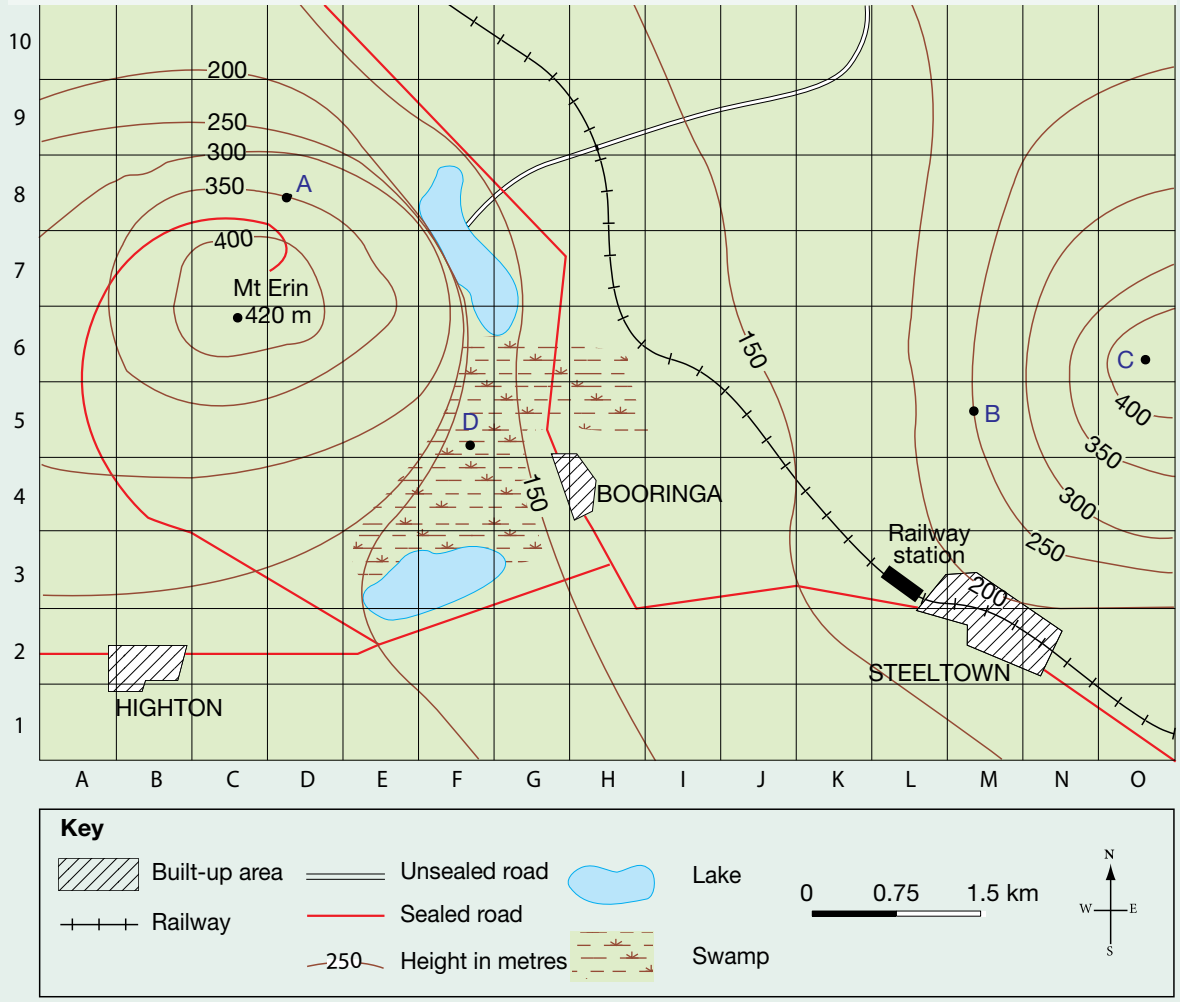
10.5 ACTIVITY

Study **FIGURE 3** and apply your skills in reading contour lines to answer the following questions.

a. What contour heights does the road from Highton to Booringa cross?
b. Does the railway line follow fairly even land or does the train have to climb a steep slope?
c. What is the contour interval on this map?
d. What is the maximum height of Mount Erin at its peak?
e. How would we know that Mount Erin is a hill if it was not labelled so?

HASS skills: Analysing

FIGURE 3 A simple topographic map of Mount Erin and surrounding areas



Source: MAPgraphics Pty Ltd, Brisbane

Checklist

I have:

- understood contour lines
- understood contour intervals
- understood spot heights.

10.6 SkillBuilder: Using latitude and longitude

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to:

- explain the difference between latitude and longitude
- accurately read parallels of latitude
- accurately read meridians of longitude.

10.6.1 Tell me

What are latitude and longitude?

Latitude and longitude are imaginary grid lines encircling the Earth. They can be drawn over a map to help us locate a place.

The lines that run parallel to the equator are called parallels of latitude. Each line is measured in degrees north (N) and south (S) of the equator (0°). The equator divides the Earth into two parts – the northern hemisphere and the southern hemisphere. The latitude at the North Pole is 90°N, and the latitude at the South Pole is 90°S. All places have a latitude reading somewhere between 0° and 90°N, or 0° and 90°S.

Lines of longitude run from north to south from the North Pole to the South Pole. These are called meridians of longitude and are also measured in degrees. The Prime (or Greenwich) Meridian (0°) runs through Greenwich Observatory near London, England. Places are either east (E) or west (W) of this line. All places have a longitude reading somewhere between 0° and 180°E, or 0° and 180°W.

FIGURE 1 The parallels of latitude

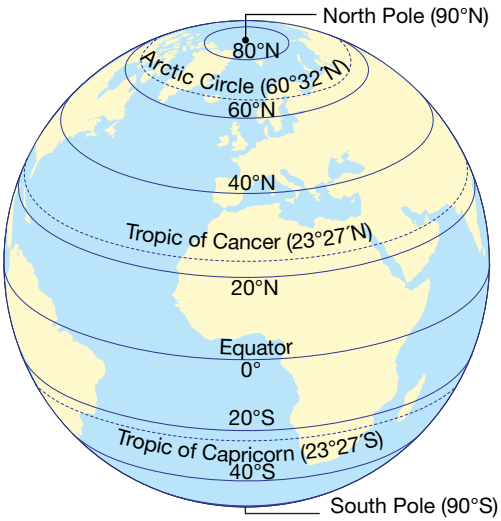
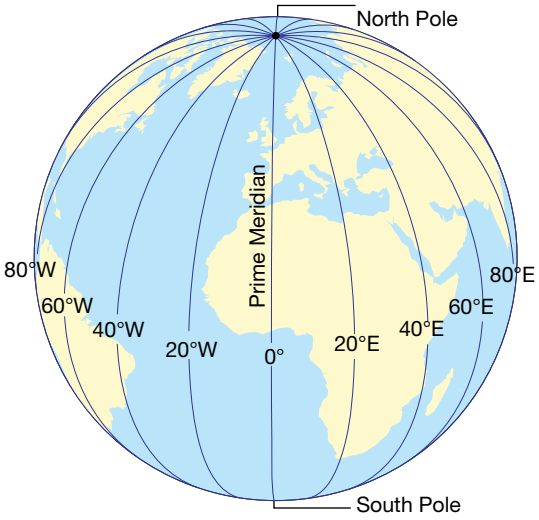


FIGURE 2 The meridians of longitude



How are latitude and longitude useful?

Latitude and longitude are used to give the precise location of a place in an atlas, on a globe, or on a map showing a large region. Lines of latitude and longitude form a grid pattern on a map and this makes identifying the location of a place easy. A gazetteer index lists latitude and longitude readings of all places featured in an atlas.

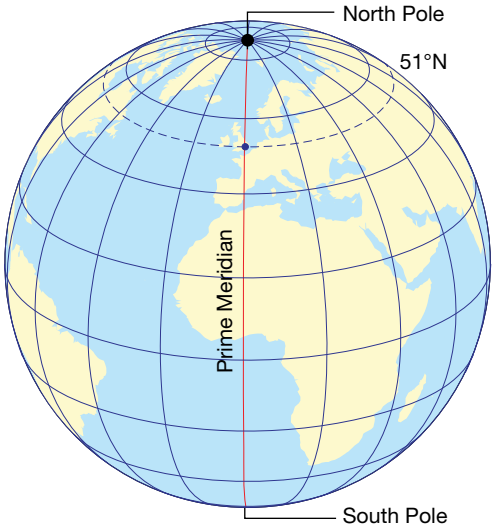
Latitude and longitude are useful for identifying exact locations in a range of situations, including:

- sailing on the open ocean
- flying across vast expanses
- gaining a GPS reading
- viewing Google Earth
- studying maps to plan a touring holiday.

Using latitude and longitude accurately involves:

- identifying the precise location of a place
- accurately reading parallels of latitude
- accurately reading meridians of longitude
- writing the reading correctly.

FIGURE 3 Latitude and longitude lines form a grid pattern



10.6.2 Show me

How to use latitude and longitude

You will need:

- a map with a latitude and longitude grid
- a ruler.

Model

Philadelphia in the United States is located at 40°00′N 75′°10′W. Further east, on the coast, is Boston at 42°20′N 71°05′W. Dallas, in the central south of the country, is at 32°47′N 96°48′W. On the west coast, Los Angeles is at 34°00′N 118°15′W and San Francisco is at 37°45′N 122°27′W.

FIGURE 4 North and Central America

Source: Spatial Vision

Procedure

Step 1

Determine the place for which you want to give a latitude and longitude reading.

Step 2

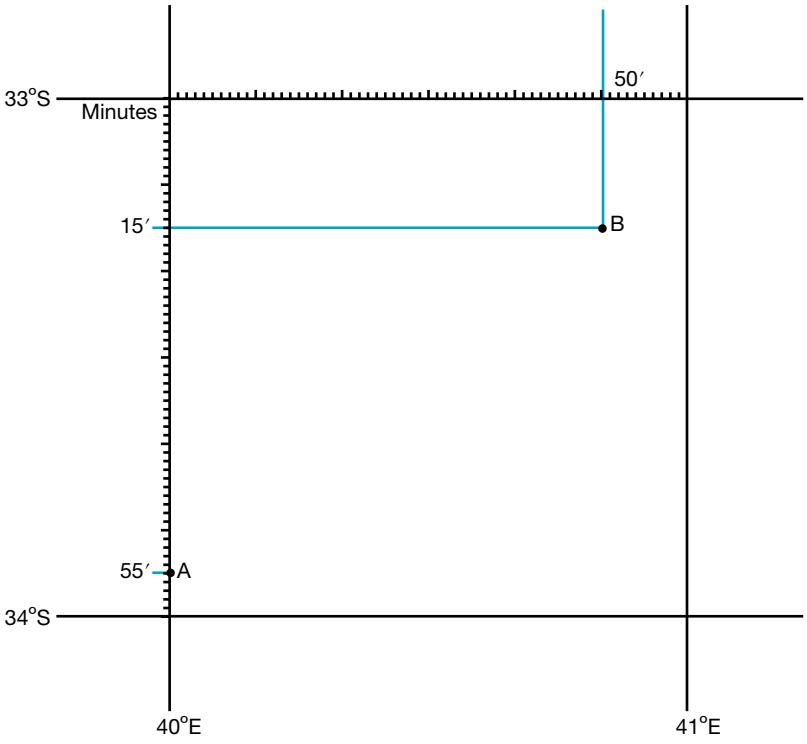
Begin with the parallels of latitude. Determine the degrees on the line closest to the location. For example, in **FIGURE 4** Philadelphia is at 40°N – it is exactly on the line of latitude and north of the equator. The equator (0°) is shown in the bottom left corner of **FIGURE 4** but due to the Earth's curve, it cannot be seen across the entire map because it dips below the area shown. Not all parallels of latitude are drawn on a map, so you will often have to work out what the closest line of latitude is. For example, in **FIGURE 4,** we can see that Dallas is located at 33°N.

You may have noticed in **FIGURE 4** that an additional parallel of latitude has been drawn and labelled the Tropic of Cancer. This line is at 23.5°N. A similar line is found at 23.5°S and is known as the Tropic of Capricorn. It passes through northern Australia just near Rockhampton. It is between these two lines that the sun moves and determines our seasons.

Step 3

Each degree on the grid is made up of 60 minutes (see **FIGURE 5**). It is likely that a place is not situated exactly on the degree line, so you will need to determine a minute reading as well. This becomes especially evident in smaller-scaled maps. Calculate the minutes for the place you are identifying. It is often a good idea to place a ruler on the map or use a finger to follow a line so that your eyes don't inadvertently cross to another grid square.

FIGURE 5 Showing minutes of a degree



Step 4

Combine the readings to obtain a precise latitude for place. Place A in **FIGURE 5** is at 33°55′S. (The 'S' indicates that this place is south of the equator.)

Step 5

Longitude is determined in a similar manner. Find the north–south line (meridian) closest to the place. Take the line reading and then the degrees reading. For example, in **FIGURE 4** Philadelphia is at 75°W. The 'W' indicates it is west of the Prime Meridian. The Prime Meridian is not shown on **FIGURE 4** but the numbering on the meridians at both the top of the map and the bottom of the map indicate that the Prime Meridian is off the map to the right. On a more detailed map, a minute reading could also be obtained.

FIGURE 6 A sample from the gazetteer index of an atlas

Van Diemen, Cape **80 C9** 11.10 S 130.22 E
Van Diemen Gulf **80 C9**
Vanern, Lake **114 G4**
Vanersborg **114 G4** 58.23 N 12.19 E
Vangunu, island **89 G3**
Vanimo **88 D3** 2.40 S 141.17 E
Vannes **116 C4** 47.40 N 2.44 W
Van Rees Range **88 C3**
Vanrhynsdorp **126 B1** 31.36 S 18.45 E

Latitude
Longitude

Step 6

When combining the grid readings, latitude always comes first. A useful tip is to remember that'latitude' comes before'longitude' alphabetically. In **FIGURE 4,** Philadelphia is at 40°N 75°W. In **FIGURE 5,** place B is at 33°15′ S 40°50′ E. Check that you can find these two places.

Step 7

In the gazetteer index of an atlas, the reading for Philadelphia is listed as 40°00′ N 75°10′ W. Have a look in an atlas gazetteer index (usually in the back of the atlas) because the places are all identified by latitude and longitude. With a partner, test each other by naming and looking up locations on a map and practising giving their latitude and longitude.

on Resources

Video eLesson SkillBuilder: Using latitude and longitude (eles-1652)

Interactivity SkillBuilder: Using latitude and longitude (int-3148)

10.6.3 Let me do it

Complete the following activities to practise this skill.

10.6 ACTIVITIES

1. Using **FIGURE 1(B)** in section 10.10.2, give the latitude and longitude readings at the centre of the listed deserts to complete the table below.

Desert	Latitude and longitude reading
Gibson	
Tanami	
Simpson	
Great Sandy	

Geography concepts: Space, Place

2. Apply your skills in using latitude and longitude to answer the following questions.
   a. Which desert can be found at 22°S 133°E?
   b. This South Australian desert can be found at 29°S 141°E. What is its name?
   c. Give a latitude and longitude reading such that a person would find themselves at Davenport Range.
   d. If you were to travel the full length of the Great Dividing Range, at what latitude and longitude would you begin and finish?
   e. Which range extends furthest east – Hammersley, Carnarvon or Robinson? Give the latitude and longitude reading at its most easterly point.
   f. Use the following checklist to assess your development of this skill. Can you tick all the items? If not, with a partner, continue your practice of looking up or providing readings for locations in your atlas until you feel confident in your skills.

Geography concepts: Space, Place

Checklist

I have:
- identified the precise location of a place
- accurately read parallels of latitude
- accurately read meridians of longitude
- written the readings correctly.

10.7 Calculating distance using scale

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to calculate distance measured with a ruler on a map to an actual distance by using a linear scale.

10.7.1 Tell me

What does it mean to calculate distance using scale?

Calculating distance using scale involves working out the actual distance from one place to another using a map. The scale on a map allows you to convert distance on a map or photograph to distance in the real world – what it represents on Earth's surface. A linear scale is the easiest to use, but s ometimes the distance being measured between places is not straight.

Why is calculating distance using scale useful?

Calculating distance by using scale provides a spatial understanding of an area. If you go to an unfamiliar place for a holiday and the tourist information map does not have a scale, it is very difficult for you to know how far it is between places on the map and therefore how long it might take to walk or drive between them. Maps and photographs often show large areas of the Earth on a page. Many people use maps or photographs to gather information and need to understand the distances between places. Examples of people who calculate distance by using scale include:

- architects
- town planners
- engineers
- pilots
- farmers
- tourists.

A good calculation of distance using scale involves accurately converting a ruler-measured distance on a map to an actual distance by using a linear scale.

10.7.2 Show me

How to calculate distance using scale

You will need:

- a map or photograph with a linear scale
- a piece of paper with a straight side for marking places
- a light grey pencil
- a piece of string
- a pencil.

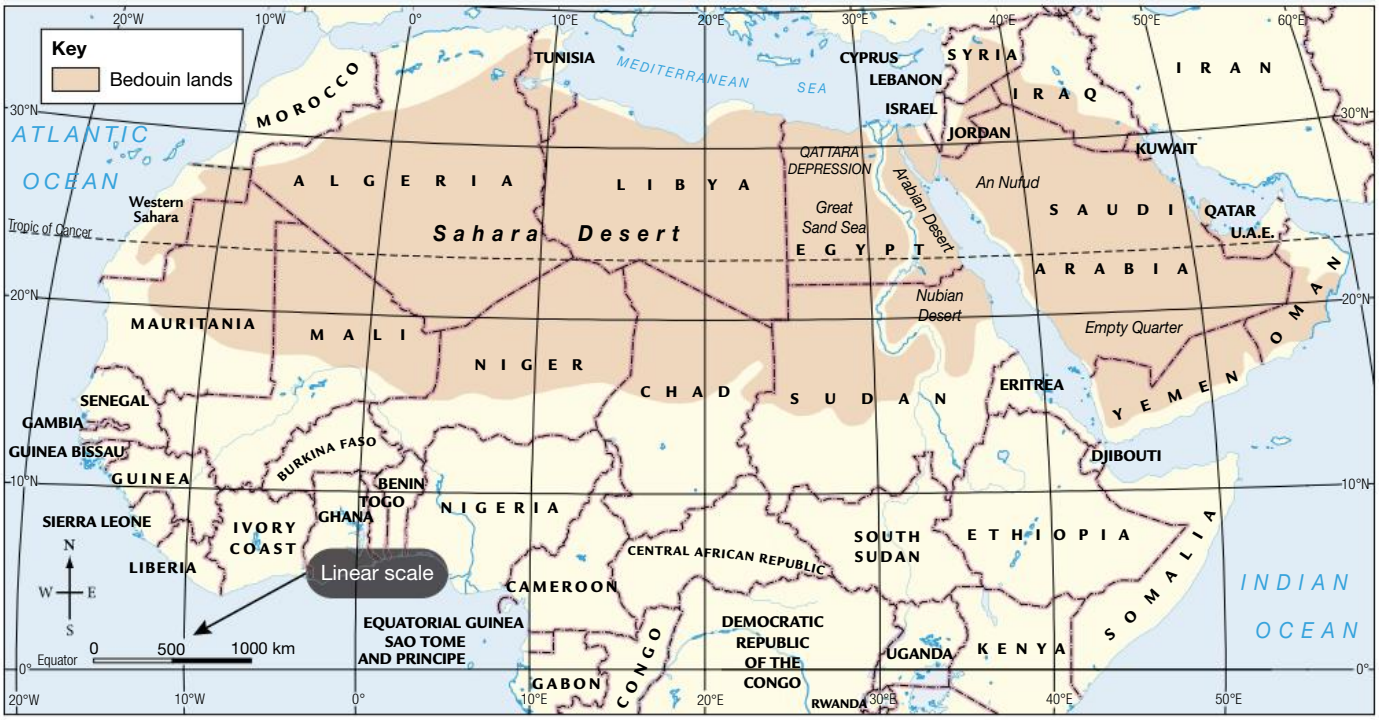
Model

The linear scale of the **FIGURE 1** map is shown in the lower left corner. The shaded Bedouin lands are seen in the key/legend. The Sahara Desert, where the Bedouin people live, is approximately 5250 km from west to east and, on average, 1900 km from north to south.

Procedure

To calculate the distance between places or around places, it is easiest if you have a map or photograph that has a linear scale as shown in **FIGURE 1.**

FIGURE 1 Desert areas inhabited by the Bedouin people



Source: MAPgraphics Pty Ltd, Brisbane

Step 1

Determine the two places between which you want to know the distance. If it is a straight-line distance between the two places – the distance'as the crow flies' – then your paper edge must be long enough to go between these points. If not, and the distance is winding, then you will need to learn to bend your paper (jump to **step 4**) or use a piece of string (jump to **step 8**).

Step 2

Place the straight edge of the piece of paper between the two places. Mark the two extremities of the distance on the edge. Label the place names at each end if working from a map.

Step 3

Place this marked edge of paper onto the linear scale drawn on the map. One end of the markings must be at 0. Read off the distance on the scale. If the distance is longer than the scale bar on the map, mark your paper edge where the scale bar ends and move this new mark to 0, repeating as often as required. If you have to do this you will need to add the distances together to find the total distance between the named places. Don't forget to add the unit of measurement (for example, metres or kilometres).

FIGURE 2 Measuring straight distances with a scale

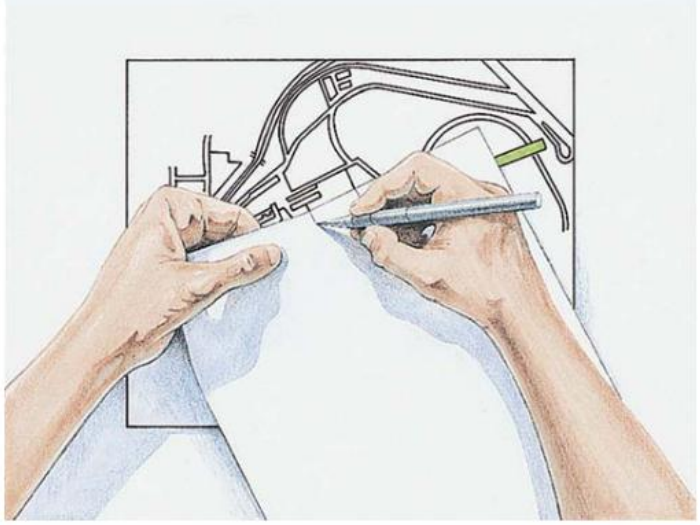
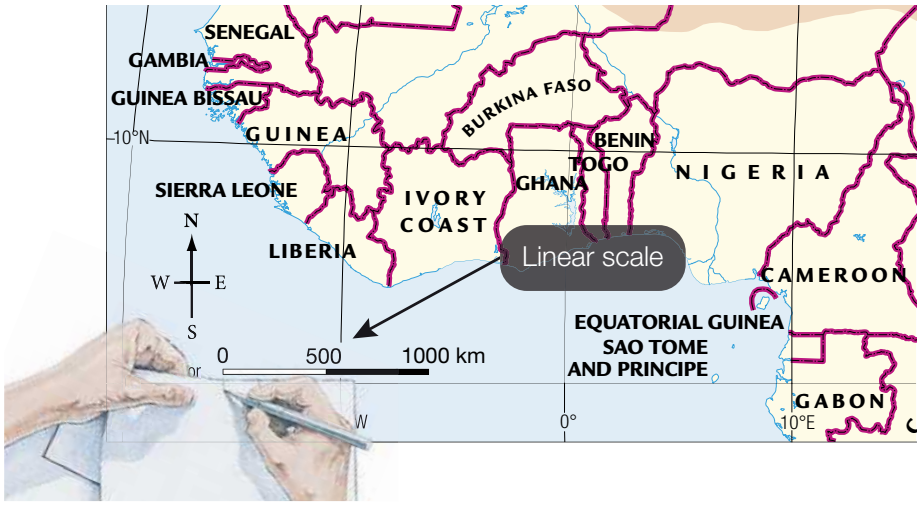


FIGURE 3 Converting the paper edge markings to a'real' distance



Step 4

If the distance is winding rather than straight – perhaps you are following a road through hills, or a river winding its way downstream, or a hiking track across a ridge – begin by placing the edge of the paper against the starting point, marking the edge with the place name.

Step 5

Move the paper carefully so the edge follows the curve on the map. Use your pencil to apply light pressure while you adjust the paper edge to the curve.

Step 6

Mark and label the end point on your paper.

Step 7

Place the paper along the linear scale and read off the distance between your two places as you did in **step 3**. Don't forget to add the unit of measurement (for example, metres or kilometres).

Step 8

The technique using a piece of string is risky – if you let go of the piece of string, you'll have to start again! Place one end of the string at your starting point and bend the string around the winding distance.

Mark the total distance carefully and place the string against the linear scale to calculate the total distance between the two places. One end of the string must be at 0. Read off the

FIGURE 4 Measuring curved distances with a scale using a paper edge

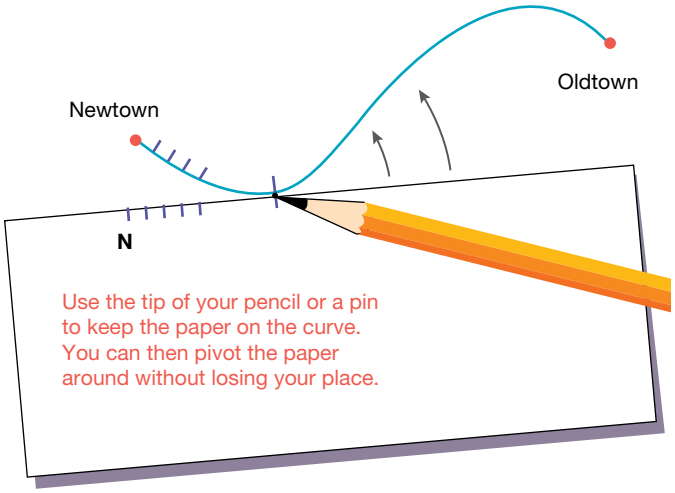
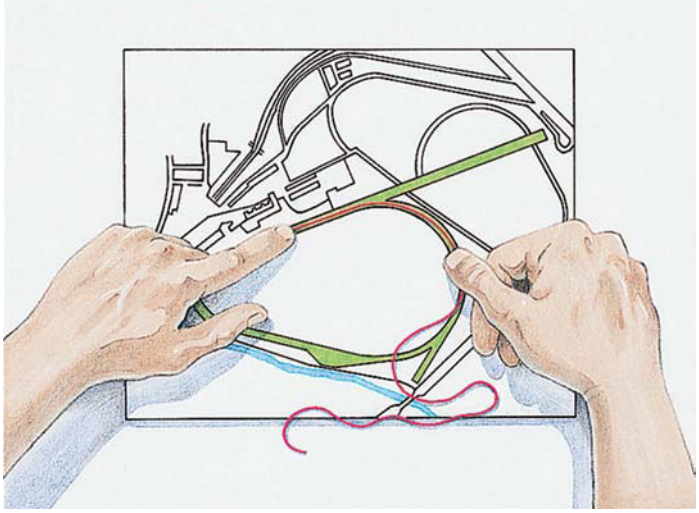


FIGURE 5 Measuring curved distances with a scale using a piece of string



distance on the scale. If the distance is longer than the scale bar on the map, mark the string or hold it carefully where the scale bar ends and move this new mark to 0, repeating as often as required. If you have to do this, you will need to add the distances together to find the total distance between the named places. Don't forget to add the unit of measurement (for example, metres or kilometres).

on Resources

Video eLesson SkillBuilder: Calculating distance using scale (eles-1653)

Interactivity SkillBuilder: Calculating distance using scale (int-3149)

10.7.3 Let me do it

Complete the following activity to practise this skill.

10.7 ACTIVITY

Using **FIGURE 1(B)** in section 10.10.2, complete the following. Tick off the checklist when you feel confident in your development of this skill.

a. How far is it from the west to the east of the Great Victoria Desert?
b. How far is it between the Central Desert and the Simpson Desert?
c. Calculate the distance around the Tanami Desert.
d. What is the distance around the area designated as 'arid zone'?
f. What length of 'arid zone' boundary is also on the coast of Australia?

Geography concept: Scale

Checklist

I have:

- accurately converted a distance measured with a ruler on a map to an actual distance by using a linear scale.

10.8 SkillBuilder: Drawing simple cross-sections

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to complete a simple cross-section using a topographic map.

10.8.1 Tell me

What are cross-sections?

A cross-section is a side-on, or cut-away, view of the land as if it had been sliced through by a knife. It is like taking a vertical slice of the landscape and looking at it side-on. Cross-sections provide us with an idea of the shape of the land. We can use contour lines on topographic maps to draw a cross-section between any two points. Cross-sections also indicate heights at a range of points.

Why are cross-sections useful?

Cross-sections help us visualise the shape of the land between any two points. They are useful because sometimes it is difficult to visualise what topography (the shape of the land) is like when looking at a

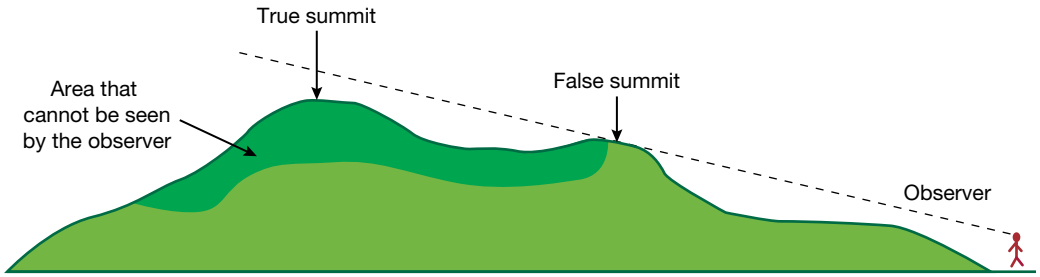
topographic map. Also, they help us determine if a landform will block the view of other landforms; for example, if a high hill obscures the view of the valley beyond and the lower range of hills. Cross-sections are also useful for:

- showing the changing shape of the land
- planning a walk or hike in a mountainous area
- planning constructions, such as houses, on sloping blocks.

A good cross-section has:

- been drawn in pencil
- ruled axes
- labelled axes
- used small dots
- created a smooth curve
- labelled features, if necessary
- a title.

FIGURE 1 Working with cross-sections



10.8.2 Show me

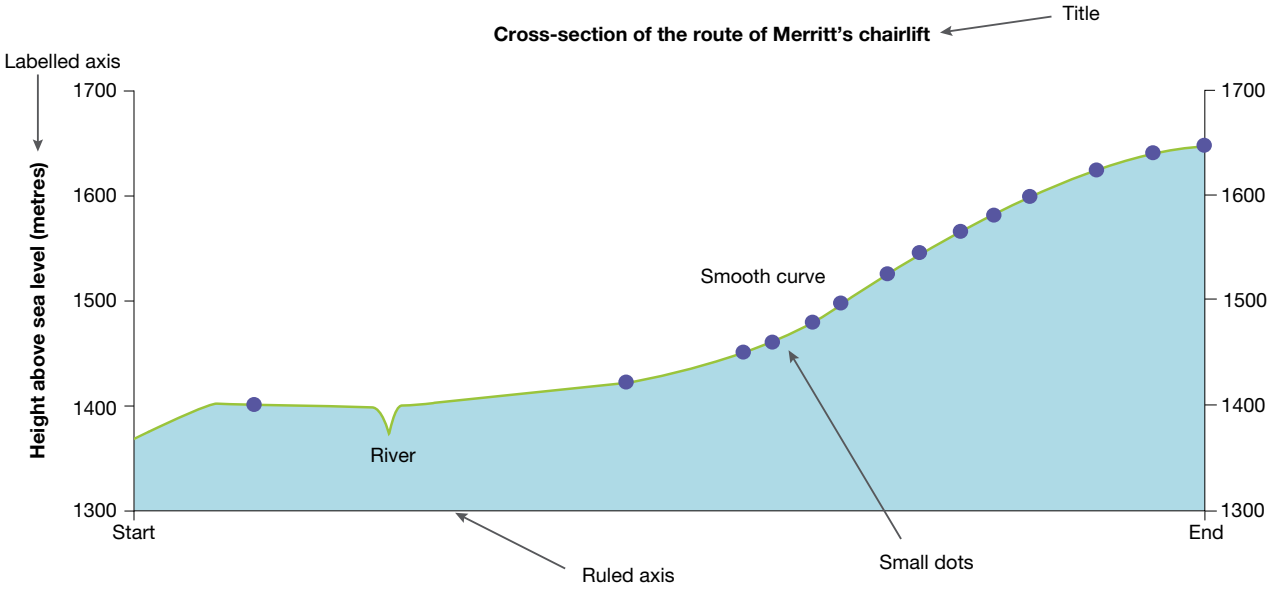
How to complete a cross-section

You will need:

- a topographic map of the region being considered
- a piece of paper with a straight side for marking the contours
- another sheet of paper, or graph paper, to draw the cross-section on
- a light grey pencil
- a ruler
- an eraser.

Model

FIGURE 2 A completed cross-section of Merritt's chairlift route



Procedure

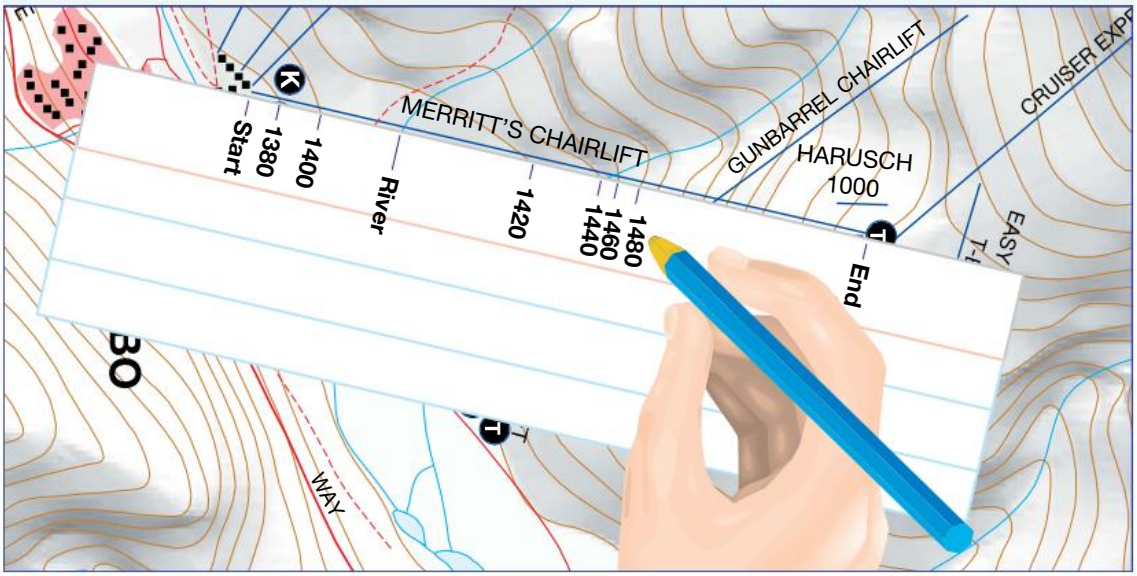
Step 1

Determine the two points between which you want to create a cross-section. Your paper edge must be long enough to reach from one point to the other.

Step 2

Place the straight edge of a piece of paper between the two points. Mark the two extremities of your cross-section on the edge. Label these'start' and'end' or use place names/grid references from the map.

FIGURE 3 Marking up the paper edge where each contour touches the page



Step 3

On the paper, m ark where each contour line touches the edge and write the height of the contour line beside each mark. It may be necessary to lift the paper edge or follow the contour line to find a number. Hold your paper firmly and lift the edges to prevent moving it off the line of the cross-section. When you have completed all the contour markings you can lift the paper away from the map.

Step 4

On another sheet of paper, use your ruler to draw an axis onto which to transfer your markings. The horizontal (base) line should be as long as your cross-section from'start' to'end'. The vertical scale needs to give a realistic impression of the slopes and landforms. For this exercise, use one centimetre to represent 100 metres.

Step 5

Place the marked edge of the paper along the base axis. At each contour marking, find the appropriate height according to the vertical scale and put a small dot directly above the contour marked on the edge of the paper.

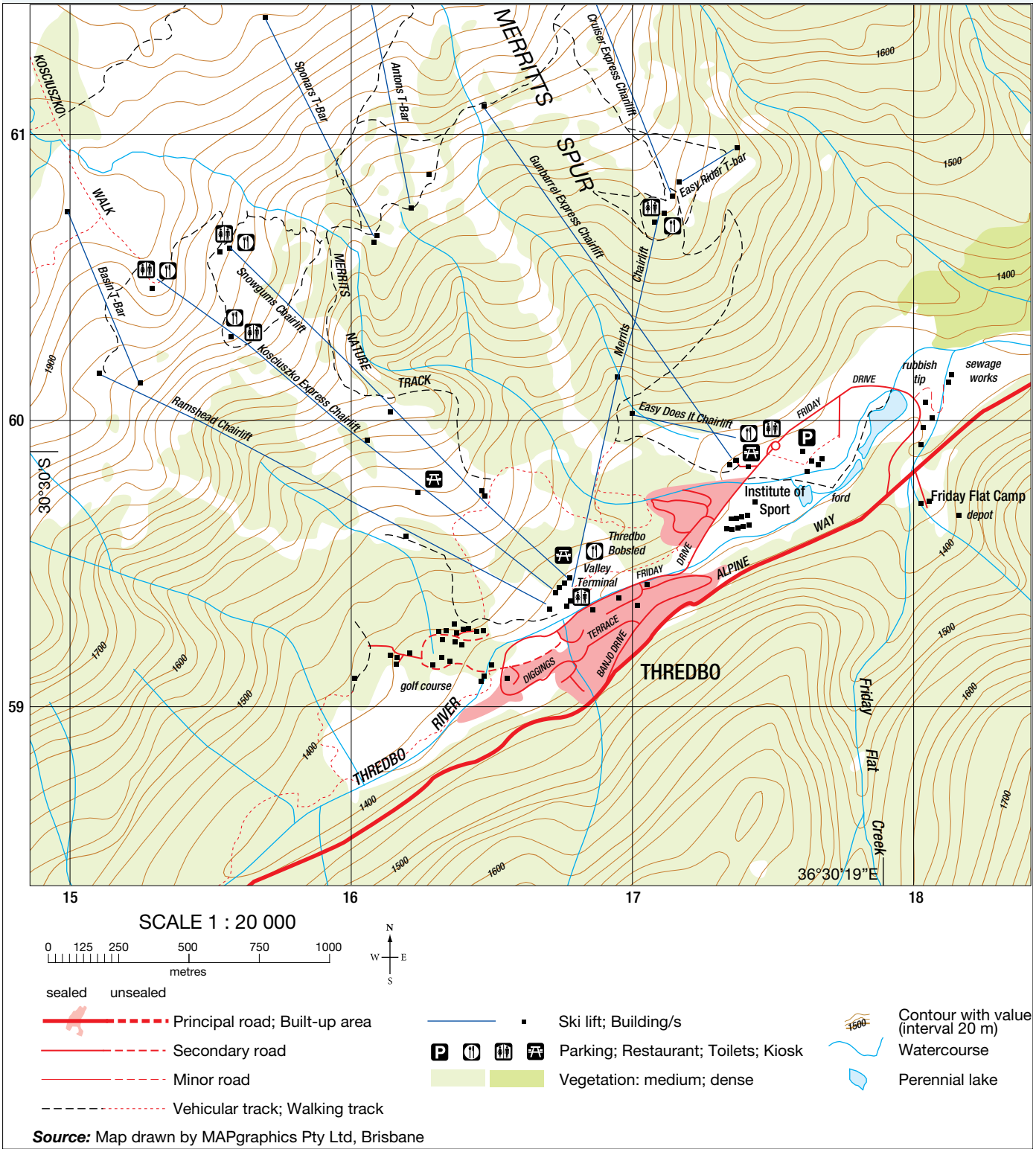
Step 6

Join the dots with a smooth line to show the slope of the land. Notice that a notch has been used to show where a river is located on the cross-section, and that the river has been labelled. Other features can be marked similarly when preparing the cross-section, if required.

Step 7

Complete the cross-section with the geographic conventions of a title and labelling of the axis. Shade the area below the line of your cross-section.

FIGURE 4 Topographic map of Thredbo, New South Wales



SCALE 1 : 20 000

0 125 250 500 750 1000 metres

N W E S

sealed unsealed

Principal road; Built-up area

Secondary road

Minor road

Vehicular track; Walking track

Ski lift; Building/s

Parking; Restaurant; Toilets; Kiosk

Vegetation: medium; dense

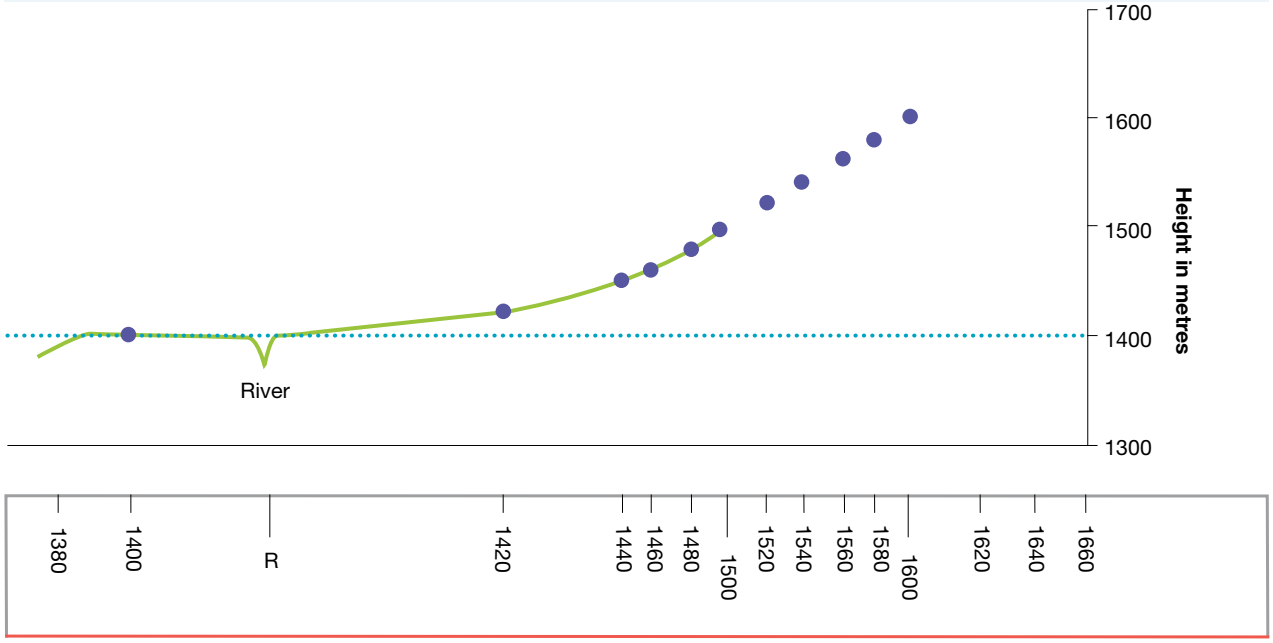
Contour with value (interval 20 m)

Watercourse

Perennial lake

Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

FIGURE 5 Drawing the curve of the cross-section



on Resources

Video eLesson SkillBuilder: Drawing simple cross-sections (eles-1655)

Interactivity SkillBuilder: Drawing simple cross-sections (int-3151)

10.8.3 Let me do it

Complete the following activities to practise this skill.

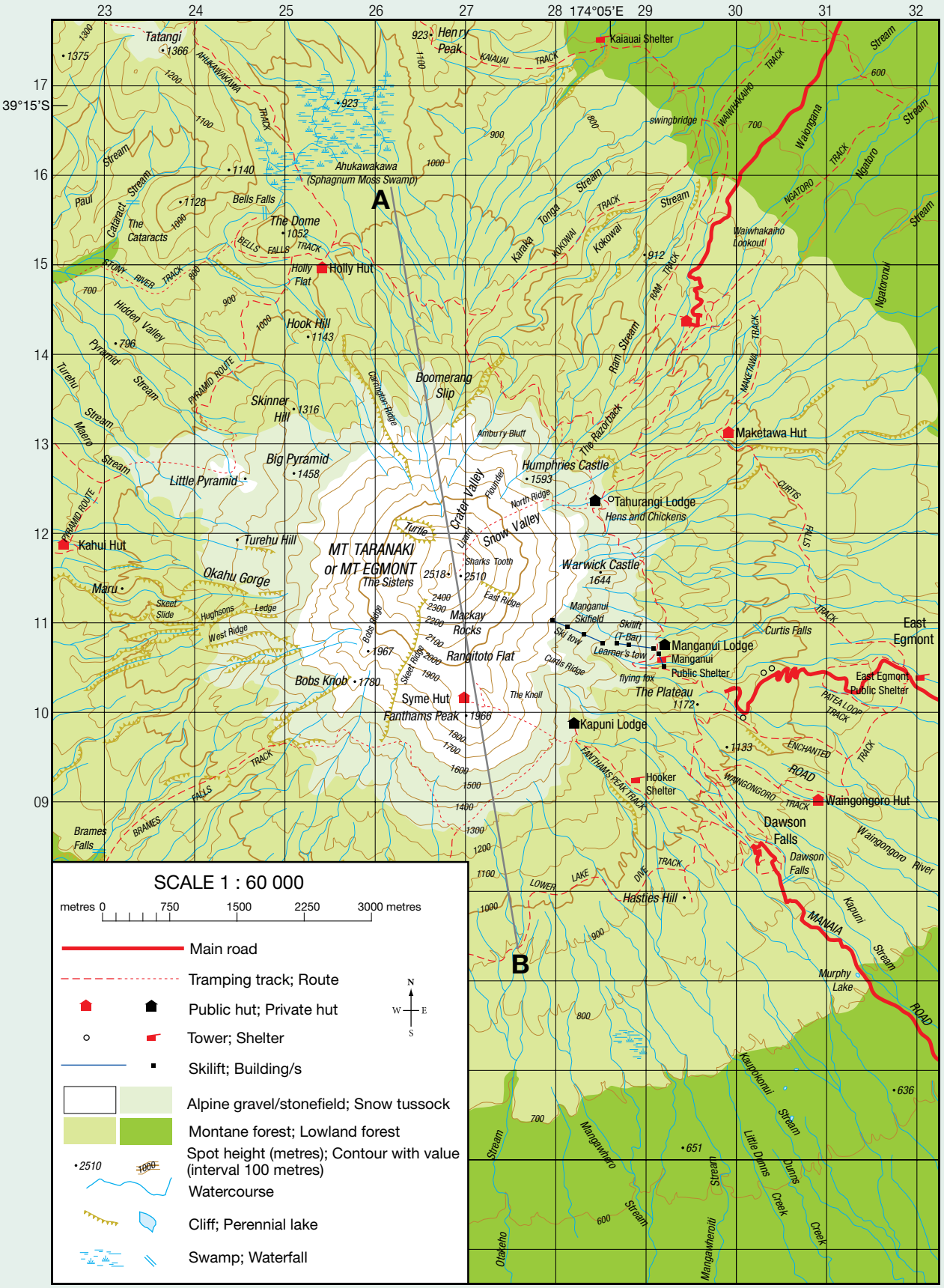
10.8 ACTIVITIES

1. Using **FIGURE 6,** complete a cross-section along the line A–B. Use the checklist to ensure you have correctly completed all aspects of the task. **HASS skills: Analysing**
2. Use your cross-section to answer the following questions.
   a. Based on your cross-section, which side of Mount Taranaki would be the easiest to walk up? Why?
   b. How high is Mount Taranaki at its peak?
   c. How many watercourses are shown on the cross-section?
   d. Describe the vegetation cover of Mount Taranaki along the cross-section.
   e. What type of land feature is Mount Taranaki? **HASS skills: Evaluating**

Checklist

I have:
- used pencil
- ruled the axis
- used small dots
- created a smooth curve
- labelled the axis
- included a title.

FIGURE 6 Topographic map of Mt Taranaki, New Zealand



Source: Topographic Map 273-09 Egmont. Crown Copyright Reserved. Map drawn by MAPgraphics Pty Ltd, Brisbane

10.9 SkillBuilder: Interpreting an aerial photo

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to:

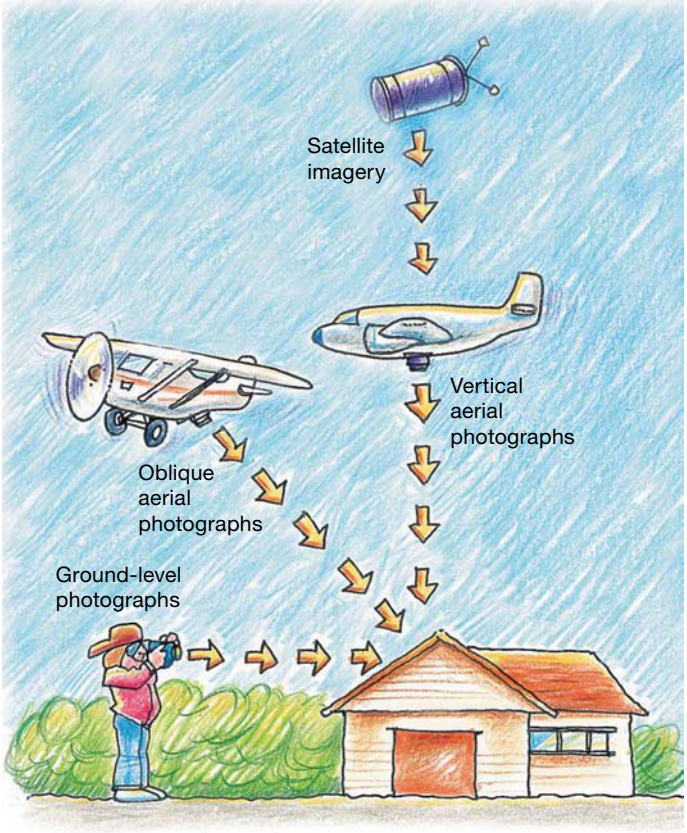
- explain why aerial photographs are useful
- interpret shapes, sizes, tones, patterns and textures on a vertical aerial photograph
- write a detailed description of the vertical aerial photograph.

10.9.1 Tell me

What are aerial photos?

Aerial photographs are those that are taken from above the Earth from an aircraft. Aerial photos, either oblique or vertical, record how a place looks at a particular moment in time. Greater detail of a place can be captured than in a photo taken from ground level. Some aerial photos are also satellite compilations; that is, created by a number of images transmitted from the satellite.

FIGURE 1 Cartographers use different types of photographs



Vertical aerial photos are taken from directly above; that is, looking straight down on objects. Specially equipped aircraft take these photos. These photos are often referred to as a'bird's eye' view. This is the view from which maps are drawn. When you look at one of these photos, there is a similarity to a plan drawing. For example, Katherine Gorge in **FIGURE 2** is so deep and narrow that it appears as a thin line'snaking' through the rock formation.

Oblique aerial photos are those taken at an angle from an aircraft. These photos show the height and shape of objects better than vertical aerial photos, but some of the objects in the background can be hidden. Objects in

the foreground appear larger than those in the background. For example, in the oblique aerial photograph in **FIGURE 3** showing rock formations in Purnululu National Park in the Kimberley region of Western Australia, the sandstone domes appear larger in the foreground than in the background.

FIGURE 2 Vertical aerial photograph of Katherine Gorge

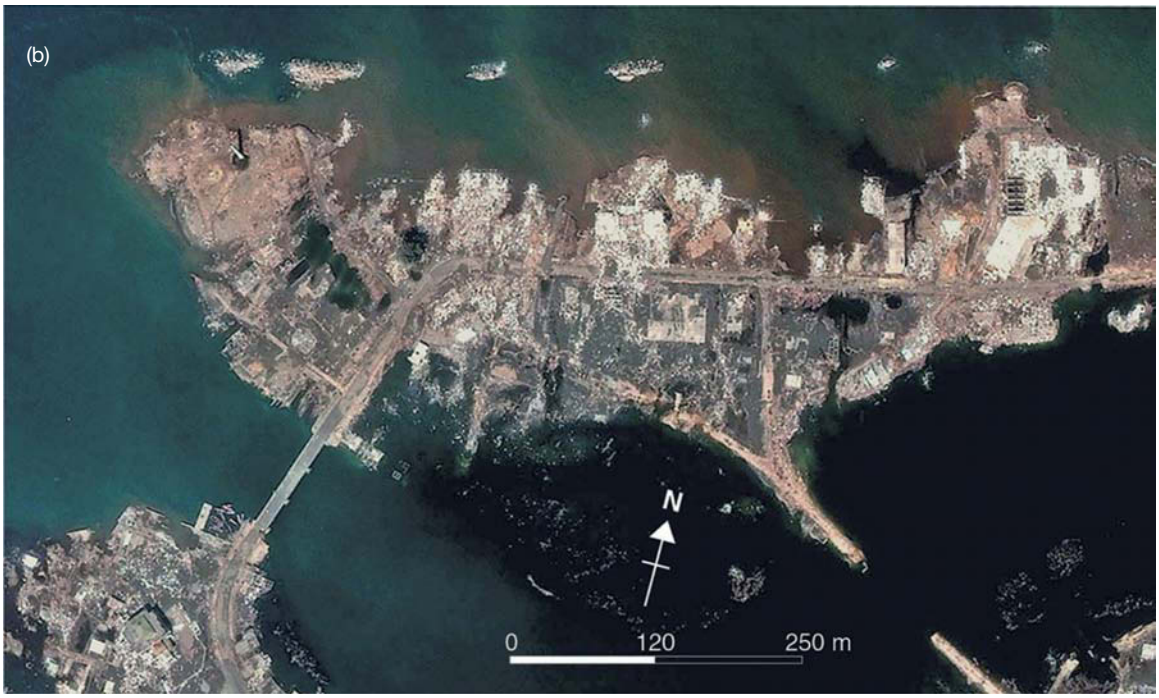
FIGURE 3 Oblique aerial photo of rock formations in Purnululu National Park

Source: © MAPgraphics Pty Ltd, Brisbane

Why are aerial photos useful?

Aerial photos can reveal details that are not recorded on maps. They make it easier to see landforms with distinct shapes, different landscapes, land uses, specific places and spatial patterns of the environment. Aerial photos from different time periods can show how a place has changed over time (see **FIGURE 4**).

FIGURE 4 Satellite images of Banda Aceh, Indonesia (a) before, (b) two days after and (c) four years after the tsunami on 28 December 2004



Source: Geoimage Pty Ltd © DigitalGlobe 2009

Interpretation of aerial photos provides a rich source of data for understanding the environment. We can obtain much information about a place by carefully analysing and interpreting an aerial photograph. We also need to be able to describe aerial photo to others. Some groups that use aerial photos are:

- urban developers
- firefighters
- search and rescue organisations
- transport authorities
- agronomists (people who manage land and crops).

Interpreting an aerial photograph involves:

- identifying key features by recognising elements such as shapes, colours, patterns and textures
- describing the main aspects in detail.

10.9.2 Show me

How to interpret a vertical aerial photo

You will need:

- a vertical aerial photo.

Model

The small Australian country town shown in **FIGURE 5** is predominantly a rectangular shape with a grid road system. A major road becomes a divided road as it passes through the town centre. Beside this road is the main shopping strip. The houses are on quite large blocks of land and most gardens have trees. Backyard swimming pools are scarce. The local bowling club can be found in the south-east of town. There appears to be some expansion of the town toward the west. This aerial photograph was taken either in summer when the land is dry or the town is in a low rainfall environment.

Procedure

To identify features on an aerial photograph, such as that in **FIGURE 5,** you need to apply the elements of interpreting an aerial photograph – shapes, size, tone, patterns and texture.

FIGURE 5 Vertical aerial photograph

Source: © Aerial Impressions

Step 1

First, let's consider 'shape' and 'size'. Objects from a vertical viewpoint have obvious shapes. Buildings appear as blocks (you are looking at the roof only). Small blocks are houses; larger blocks are factories if a number are grouped together; single, larger blocks are generally public buildings such as schools, halls and shopping centres. Oval or round shapes are sporting grounds/tracks. Can you imagine a golf course from above? Its size is large; its shape indicates green grass and rows of trees dividing the fairways. Look around the aerial photograph in **FIGURE 5** and identify the trees in the median strip of the major road.

Step 2

'Texture' and 'tone' are gained from the objects themselves in the course of the photography. Texture indicates whether the object has a degree of smoothness or whether it is rough. A mown oval will appear as 'smooth and green'; a forest will appear as 'lumpy and various greens' according to the size and species of trees in the forest; farmland sown to different crops and with some land ploughed will appear as a mosaic of colours.

Tone is the reflection of light from objects to the camera.

- Water glistens when clear, but appears brown when in flood.
- The deeper the water, the darker the colour.
- Sealed highways reflect light in comparison to the dirt of rural tracks. **FIGURE 5** shows a range of differently sized and surfaced roads.
- Sandy beaches glow a cream colour compared to the dark colour of bare soil.

Step 3

'Pattern' is what a geographer delights in observing, as they try to understand the world around them. This involves discovering key patterns in the aerial photograph. Towns generally have a series of roads in a grid pattern. Rivers, as a natural feature, wind their way through an environment. Irrigation channels and railway lines built by humans appear as straight lines. **FIGURE 5** shows how readily the boundary can be identified in this rural environment.

on Resources

Video eLesson SkillBuilder: Interpreting an aerial photo (eles-1654)

Interactivity SkillBuilder: Interpreting an aerial photo (int-3150)

10.9.3 Let me do it

Complete the following activities to practise this skill.

10.9 ACTIVITIES

1. Study the vertical aerial photo of Villarrica volcano, Chile (**FIGURE 6**). Use the steps in section 10.9.2 'Show me' to identify key shapes, sizes, patterns and textures. Expand the size of this aerial photo and, using the Paint program (or similar software), label the following features:
   - the central vent
   - snow covered area
   - mud and/or lava flows
   - lakes
   - barren land
   - forested areas
   - a coastal settlement.

Geography concept: Environment

2. Apply your skills in interpreting aerial photos to answer the following questions about **FIGURE 6**.
   a. Why do you think the mountain peak is covered in snow?
   b. What is the source of the water in the lakes?
   c. Suggest why some of the land is bare.
   d. How do you know that small areas of land near the base of the volcano are used for agriculture?
   e. By its shape, what type of volcano is Mount Villarrica? **HASS skills: Evaluating**
3. Write a detailed description of the aerial photograph, including your interpretation of the shapes, sizes, tones, patterns and textures in the image. Use the checklist to ensure you have covered all aspects of this task. **HASS skills: Communicating and reflecting**

Checklist

I have:
- interpreted shapes, sizes, tones, patterns and textures on a vertical aerial photograph
- written a detailed description of the vertical aerial photograph.

FIGURE 6 Villarrica volcano, Chile

Source: © NASA Earth Observatory image by Jesse Allen and Robert Simmon, using EO–1 ALI data provided courtesy of the NASA EO–1 team.

10.10 SkillBuilder: Understanding thematic maps

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to:
- explain what a thematic map is, and why they are useful
- interpret shapes, sizes, tones, patterns and textures on a vertical aerial photograph
- write a detailed description of the vertical aerial photograph.

10.10.1 Tell me

What is a thematic map?

A thematic map is a map drawn to show one aspect; that is, one theme. For example, a map may show the location of vegetation types, hazards or weather. Parts of the theme are given different colours or, if only one idea is conveyed, symbols may show location.

Why are thematic maps useful?

Thematic maps are used to identify and represent a single feature. Because n o additional clutter is presented on the map, the reader can focus on one feature only.

Thematic maps are useful for:
- focusing the viewer's attention on a single feature
- highlighting the significance of a single feature
- comparing different areas of a map in terms of the existence of a feature.

A good description of a thematic map:
- utilises the title to identify the theme
- applies the key/legend in order for readers to understand the colouring and/or symbols
- identifies and communicates the key theme and features.

10.10.2 Show me

How to understand a thematic map

You will need:

- a thematic map
- an atlas.

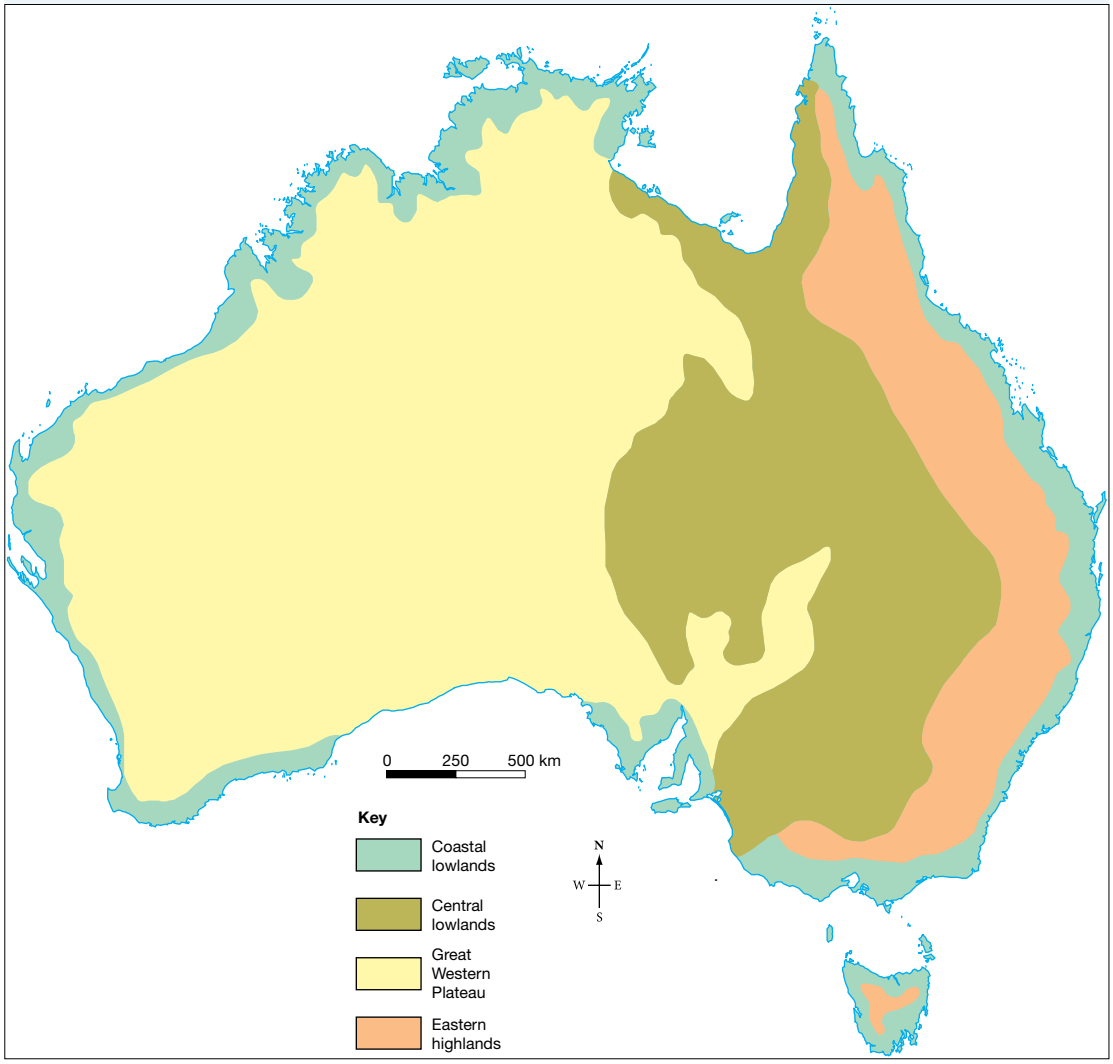
Model

FIGURE 1(A) shows four major landform regions. It is a simplified version of the natural features map shown in **FIGURE 1(B)**. Much of Australia is dominated by the Great Western Plateau, particularly in the west of the country. Following the coastline are the coastal lowlands, except around the Great Australian Bight and near the Victorian/South Australian border. The eastern highlands run parallel to the east coast from the northern tip of Australia to the south. The central lowlands run from the Gulf of Carpentaria to the Victorian/South Australian border.

Procedure

To understand a thematic map, you must be prepared to follow a planned approach to its study.

FIGURE 1(A) Thematic map of the major landform regions of Australia



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

Step 1

Read the title of the thematic map. What part of the world does the map show? When was the data gathered? What is the theme? In **FIGURE 1(A)**, the theme is'major landforms in Australia'.

Step 2

Check that the map was put together by a reliable authority. Who is the source of the map? Sometimes textbooks don't state the source, but you can usually find this information by looking at the list of acknowledgements in the book.

Step 3

Read the key/legend to understand the colours and/or symbols that are used. In **FIGURE 1(A)**, four different colours are used to represent each of the four major landforms.

FIGURE 1(B) Topographic map of the natural features of Australia

Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

To interpret the colours you need to comment on where the various colours or symbols occur. Can you discuss the map by continent, or by region? An atlas may be useful to help you identify regions or places. In **FIGURE 1(A)**, the eastern highlands stretch from the north of Australia to the south, parallel to the coastline.

Step 4

You also need to discuss the colours or symbols that appear only in small areas of the map. In **FIGURE 1(A)**, the central lowlands reach to the coast near the Victorian/South Australian border and the Great Western Plateau meets the coast in the Great Australian Bight.

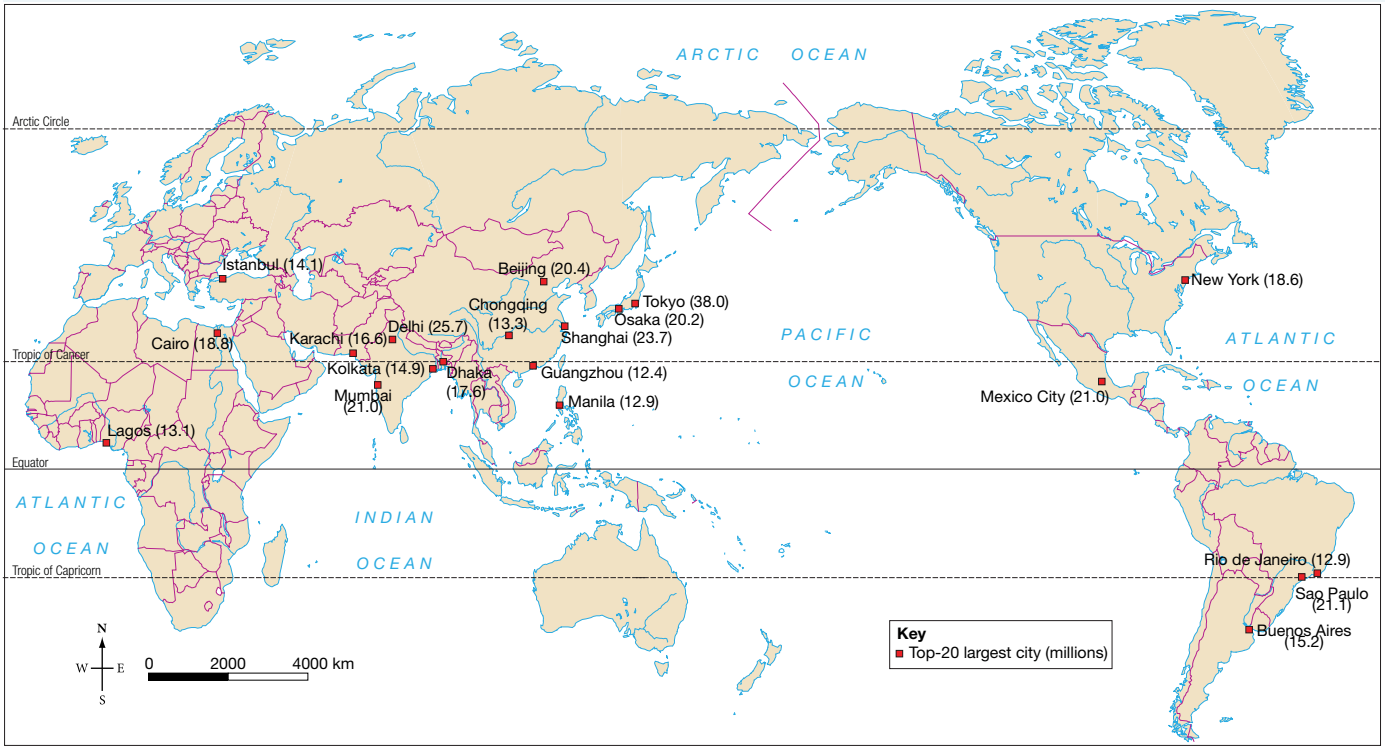
on Resources

- **Video eLesson** SkillBuilder: Understanding thematic maps (eles-1658)
- **Interactivity** SkillBuilder: Understanding thematic maps (int-3154)

10.10.3 Let me do it

Complete the following activities to practise this skill.

FIGURE 2 The world's 20 largest cities



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane. Data from United Nations, Department of Economic and Social Affairs, Population Division (2014). World Urbanization Prospects: The 2014 Revision, CD-ROM Edition.

10.10 ACTIVITIES

1. Using **FIGURE 2,** describe the locations of the world's 20 largest cities. Use the checklist to ensure you cover all aspects of the task. **Geography concept: Place**
2. Apply your skills by answering the following questions.
   a. What is the title of the map in **FIGURE 2**?
   b. What theme is being shown in **FIGURE 2**?
   c. On which continent are most of the 20 largest cities located?
   d. Which continents contain none of the 20 largest cities?
   e. How many people live in the three largest cities in South America? **HASS skills: Analysing**

Checklist

I have:
- utilised the map title to identify the theme
- applied the key/legend in order to understand the colouring and/or symbols
- identified and communicated the key theme and features.

10.11 SkillBuilder: Comparing population profiles

LEARNING INTENTION

By the end of this SkillBuilder, you will know what a population profile is, why they are useful and be able to compare two population profiles from different countries.

10.11.1 Tell me

What is a population profile?

A population profile, sometimes called a population pyramid, is a bar graph that provides information about the age and gender of a population. The bars identify the proportion of a country's population within a particular age group. The graph is split to show information about males and females. The shape of the population profile tells us about a particular population.

Why are population profiles useful?

Population profiles help us to interpret and understand a list of statistics. Any patterns are easily identified and compared. A triangular shape that is widest at the base, as in **FIGURE 1,** tells us that the population is growing rapidly. A square shape, as in **FIGURE 2,** indicates that population growth is slow. An inverted triangle, as in **FIGURE 3,** tells us that there is negative growth – that is, the population is decreasing.

A population profile is used to show us the structure of a population.
- If the lower bars of the profile are wide, the population is young (that is, there is a larger proportion of young people than older people in the population).
- If the upper bars of the profile are wide, the population is ageing.
- Comparisons can be made of the numbers of males and females within a population.
- Exceptions, particularly indents, in the shape may be due to significant events, such as war, disease, emigration or natural disasters.
- Expansions in the shape may be due to factors such as immigration, changes in birth control laws or the ending of a war.

FIGURE 1 Population profile of Niger, 2009

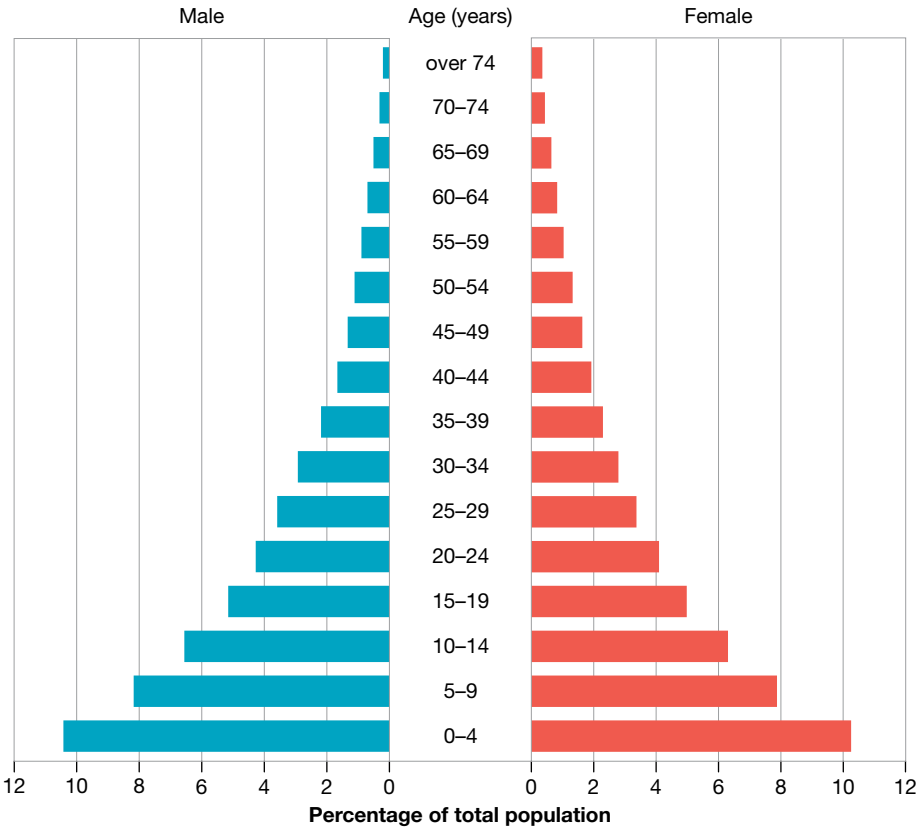


FIGURE 2 Population profile of Germany, 2009

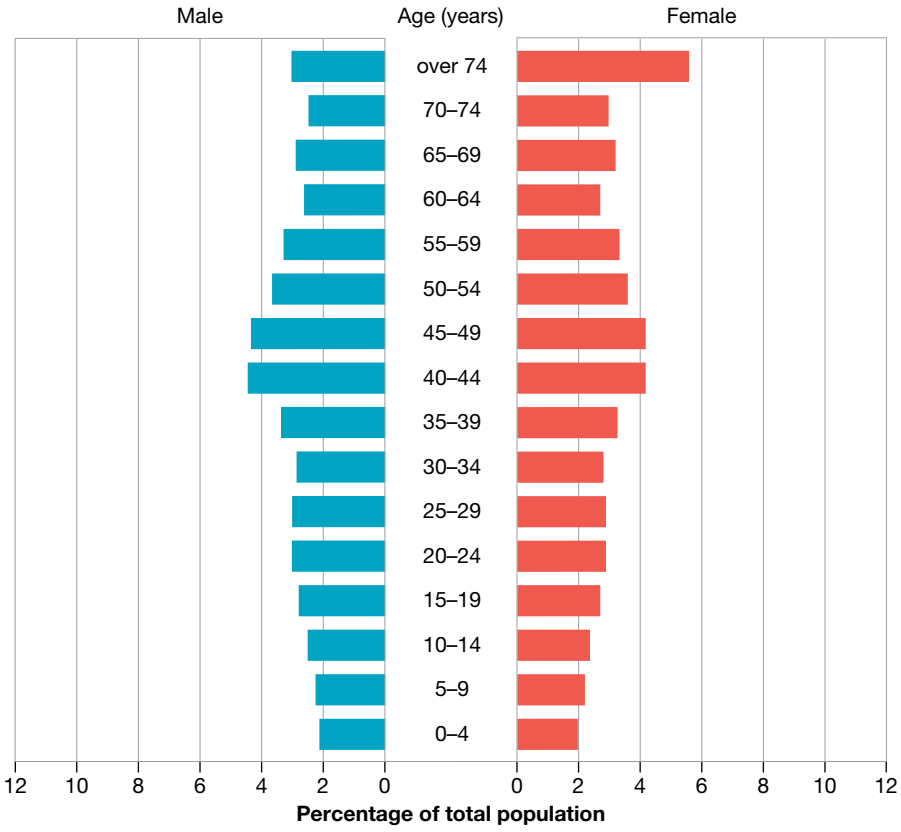
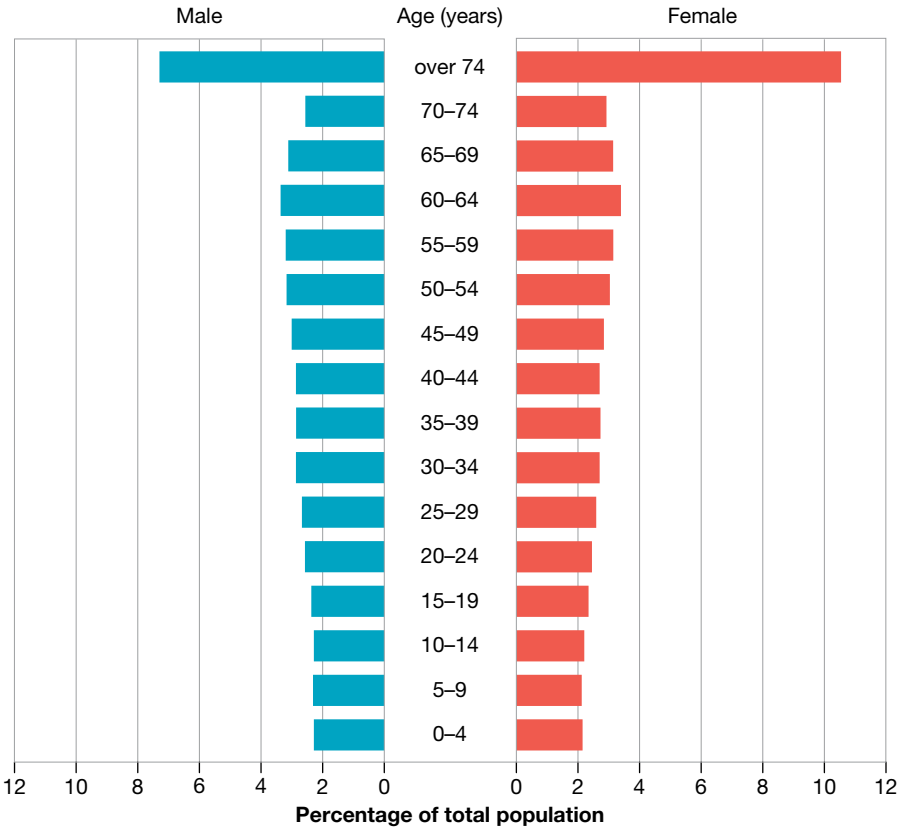


FIGURE 3 Population profile of Germany, 2050



Population profiles are useful for:

- comparing populations of different countries or places
- planning future urban developments
- determining the facilities required in an area; for example, a widening in the bars showing the 5–14 years age group means more schools will be needed, while a widening in the bars showing the 60+ years age group means aged care facilities will be required
- planning by governments for services for the future.

A clear comparison of population profiles has:

- identified the countries to be compared
- considered the three categories of level of dependence (see **Step 2** of the following Procedure)
- provided quantification (numbers) from the population profile
- compared male populations with female populations.

10.11.2 Show me

How to compare population profiles

You will need:

- two population profiles to compare – these can be for the same place at different times, or for two different places at the same time, such as in **FIGURES 4(a)** and **(b)**.

Model

In **FIGURE 4(a)**, Indonesia's profile does not fit a triangular shape; it is not very wide at the bottom, suggesting that it has relatively fewer young people and an ageing population. The profile of Vanuatu is widest at the base (the 0–4 years age group) and tapers in a triangular shape, indicating that it has a youthful population. Vanuatu will have to consider the needs of its population carefully in the future.

In Vanuatu, 41.8 per cent of the population can be regarded as dependent (very young or very old), but in Indonesia the dependent population makes up 32.5 per cent of the population. People in Vanuatu's population can be expected to live into their 70s, whereas those in Indonesia can expect to live into their 80s.

In Vanuatu, the gender balance is skewed to males (the bars show that the male population is slightly larger than that of females in most age groups), whereas in Indonesia the numbers are more evenly balanced (although the proportion of females increases in the 60+ years age group).

Procedure

Step 1

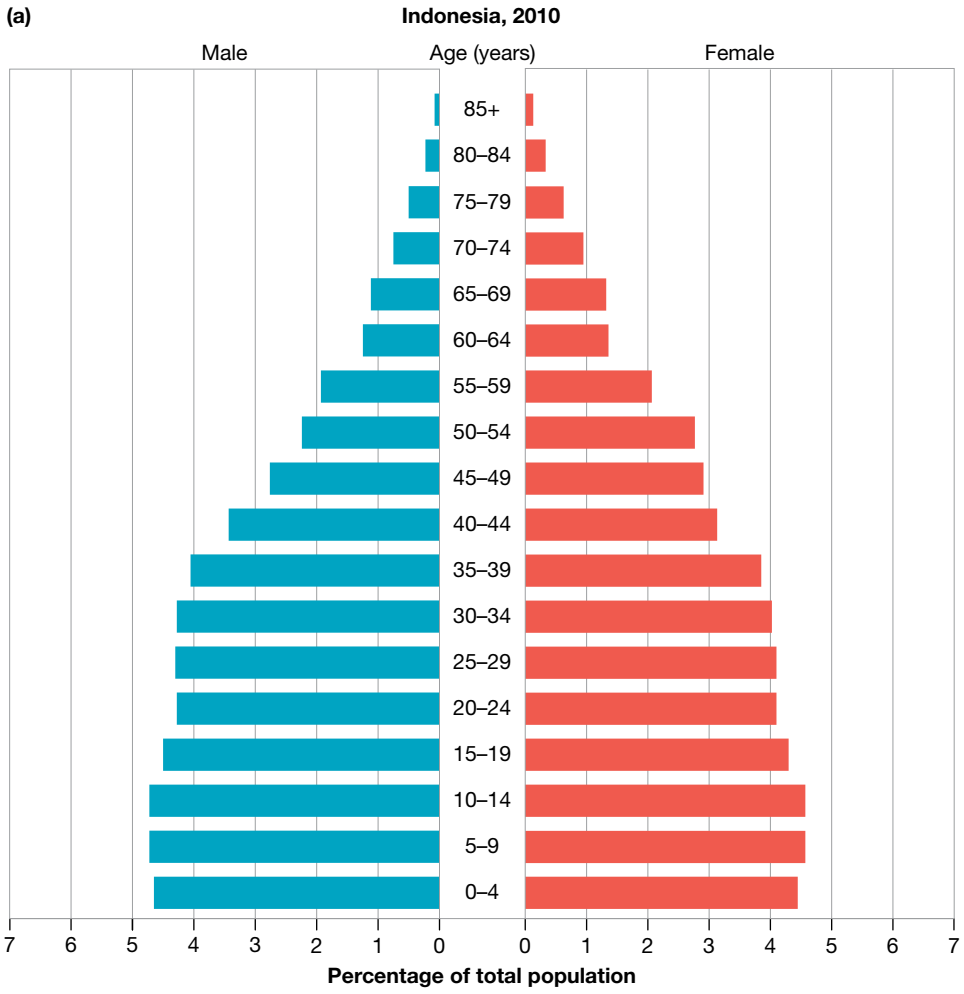
To complete a comparison of population profiles, you must have two or more population profiles for the same place at different times, or for different places at the same time. For this example, we will use the population profiles for Indonesia and Vanuatu shown in **FIGURES 4(a)** and **(b)**.

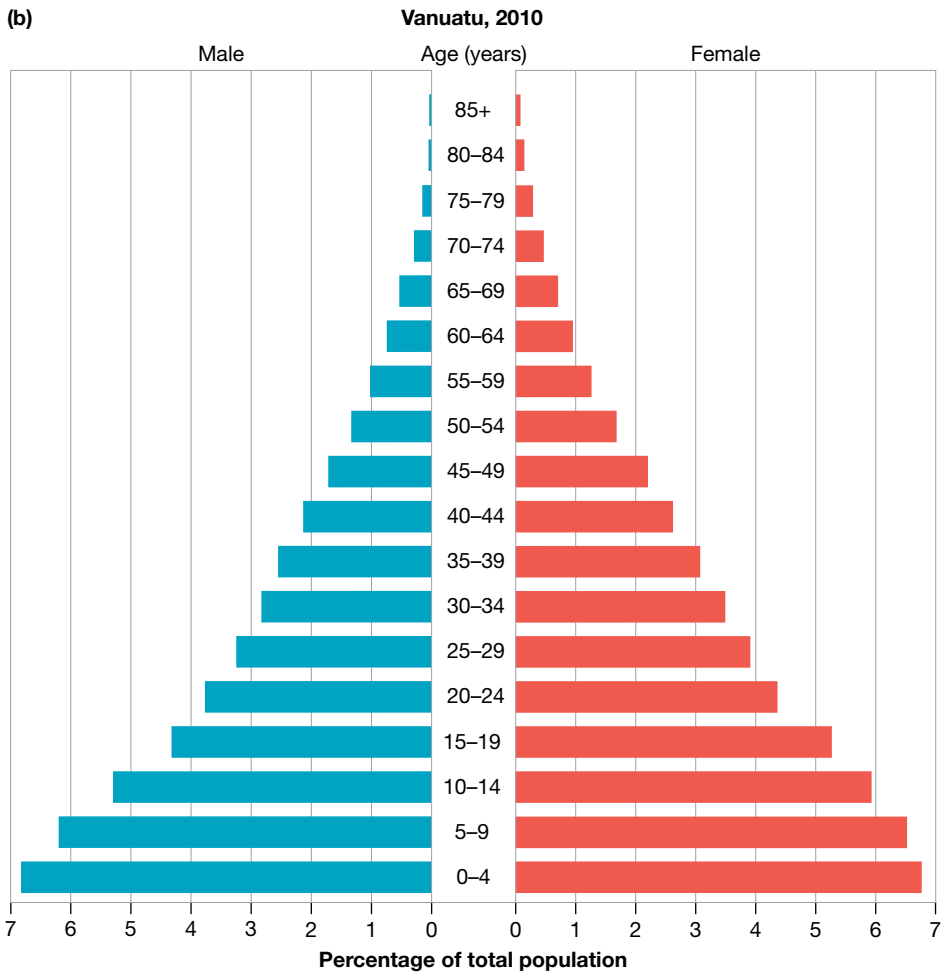
Step 2

Populations can be broadly grouped into three categories according to the level of dependence of the age group:

- children (0–14 years) – dependent population, that is, those that need others to provide their basic needs
- adults (15–64 years) – economically productive and independent, that is, the workforce of a population
- aged (65 years and over) – economically inactive and dependent, that is, no longer earning money and therefore relying on other means of support such as pensions or savings.

FIGURE 4 Population profiles of (a) Indonesia and (b) Vanuatu, 2010





A population is considered to be old when less than 30 per cent of the population is younger than 15 years and more than 6 per cent is aged 65 years and over. A population is considered to be young when more than 30 per cent of the population is younger than 15 years and less than 6 per cent is aged 65 years and over.

For each population profile, calculate the percentage of males and females in each of the three categories described above. You can do this by using the **Population pyramid** weblink in the Resources tab and selecting the country and year that you want to research. Calculate the total population in each of the three categories of dependence. What does this tell you about the population in each of the population profiles?

Step 3

Look for patterns revealed by each population profile. Look at the gender structure – the number of males and females – of the graph. Is it in balance, that is, are there as many males as females? Often there are more females than males in the older age groups because females tend to have a longer lifespan. Migration can result in the movement of one gender more than another. War can affect the gender structure because a higher proportion of men may be killed. However, after a war, more births are likely to occur. Government policies such as the one-child policy of China, which was put into effect in 1979, but became less restrictive in 2016, where males are favoured, has changed the gender balance in affected countries. Write a statement about the balance of the population profiles.

Are the profile shapes for Indonesia and Vanuatu similar? If not, at what age groups do the variations appear? Write a few statements to summarise your findings. Some key points you could cover include Vanuatu's economic development and Indonesia's mass education and family planning programs of the 1990s.

Step 4

Consider any unusual aspects. Traditionally, population profiles were called population pyramids because they were shaped like a pyramid or triangle – wide at the base and narrow at the top. Are there any indents (places where the graph narrows unexpectedly) or extended age groupings? Can you suggest why these might occur? Historical and economic events are an important consideration. A country's history – for example, conflicts or natural disasters – can often explain unusual changes. When economic times are tough, fewer children are born; when economic times are good, parents feel they have the finances to support larger families. You will need to research the history of a country to gain information that will allow you to make an accurate interpretation of its population figures.

on Resources

- **Video eLesson** SkillBuilder: Comparing population profiles (eles-1704)
- **Interactivity** SkillBuilder: Comparing population profiles (int-3284)
- **Weblink** Population pyramid

10.11.3 Let me do it

Complete the following activities to practise this skill.

10.11 ACTIVITIES

1. a. Using the **Population pyramid** weblink in the Resources tab, find the current year population profile for South Africa and compare it with the current year population profile for Thailand by writing a paragraph about population structure (using the steps in section 10.11.2 'Show me' to help you). Use the following checklist to ensure you cover all aspects of the task.
   b. Spend some additional time on the website looking at the changes in population pyramids over time for other countries. It is amazing what you will discover! **Geography concept: Change**
2. Apply your skills by answering the following questions.
   a. What percentage of people in Thailand are aged less than 10 years? Compare this with the figure for South Africa.
   b. In which country, South Africa or Thailand, is a female most likely to live longest?
   c. Which population profile is narrowest in the 0–4 years age group?
   d. At what point does the population structure for South Africa take on a pyramid shape?
   e. Which country, South Africa or Thailand, is likely to have more people in the workforce in 2025? Give reasons for your answer. **HASS skills: Analysing**

Checklist

I have:

- identified the countries to be compared
- considered the three categories of level of dependence
- provided quantification (numbers) from the population profile
- identified and utilised male population and female population numbers
- compared the total populations in each gender.

10.12 SkillBuilder: Creating and reading compound bar graphs

LEARNING INTENTION

By the end of this SkillBuilder, you will know what a compound bar graph looks like and what they are used for. You will also be able to create and interpret a compound bar graph.

10.12.1 Tell me

What are compound bar graphs?

A compound bar graph is a bar or series of bars divided into sections to provide detail of a total figure. These bars can be drawn vertically or horizontally. The height or length of each section represents a percentage, with the total length of the bar representing 100 per cent.

Why are compound bar graphs useful?

Compound bar graphs allow us to see at a glance the various components that make up the total. For example, it might show the origin of tourists arriving in a country. In this case, each part of the compound bar would allow the reader to visually interpret what percentage of tourists came from each country of origin.

Compound bar graphs are useful for:

- showing the proportion of sectors within a total
- comparing sets of data between places
- comparing sets of data over time
- accurate interpretation of comparisons.

A good compound bar graph has:

- been drawn in pencil
- ruled lines to clearly represent and communicate data
- used colour according to a key
- a scale
- provided the source of the data
- a clear title.

A good interpretation of a compound bar graph has clearly represented and communicated the data.

10.12.2 Show me

How to create and interpret a compound bar graph

You will need:

- a set of data including parts that make up a total figure of 100 per cent
- a piece of paper on which to draw a graph, preferably graph paper
- a light grey pencil
- a ruler
- coloured pencils
- a calculator.

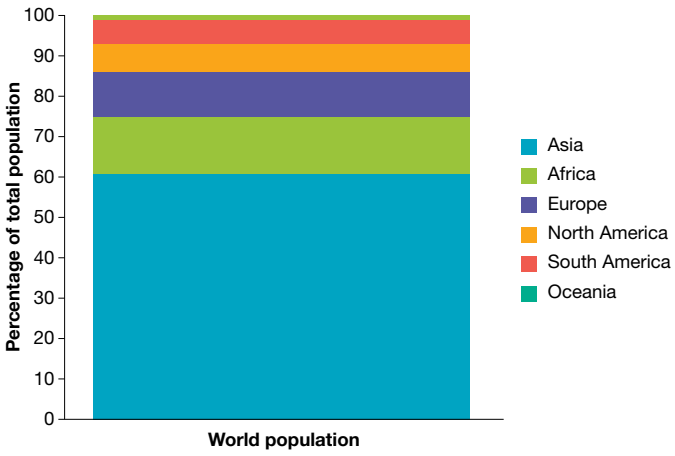
Model

FIGURE 1 clearly shows that the greatest percentage (60 per cent) of the world's population lived in Asia in 2011. Africa was the second most populated continent, with 15 per cent of the population. Europe was home to fewer people than Africa, with 11 per cent of the population. North and South America combined contained fewer people (14 per cent) than Africa. Oceania, including Australia, was home to a very small percentage of the world's population (0.5 per cent).

TABLE 1 World population, 2011

Region	Population	Percentage of total
Asia	4 140 336 501	60.7
Africa	994 527 534	14.6
Europe	738 523 843	10.8
North America	528 720 588	7.7
South America	385 742 554	5.7
Oceania	36 102 071	0.5
Total	**6 823 953 091**	**100**

FIGURE 1 Compound bar graph illustrating the 2011 world population figures from **TABLE 1**



Procedure

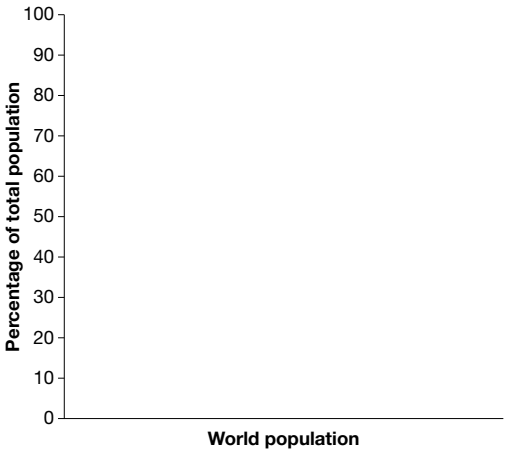
To complete a compound bar you must have a set of data that totals 100 per cent, with detailed information as to how that total is made up.

Step 1

Decide on a width (x-axis) and length (y-axis) for the bar graph – this will depend on the amount of space available and the complexity of the data being graphed. The x-axis width is not particularly important, but it is easier if the length is easily divided into hundredths (where each division equals 1 per cent). The easiest length to work with is 10 centimetres (100 millimetres). This means that each millimetre represents 1 per cent, or 10 millimetres represents 10 per cent.

Draw your y-axis 10 centimetres long. Add a scale alongside the axis (see **FIGURE 2**).

FIGURE 2 Draw your y-axis so that the total length represents 100 per cent.



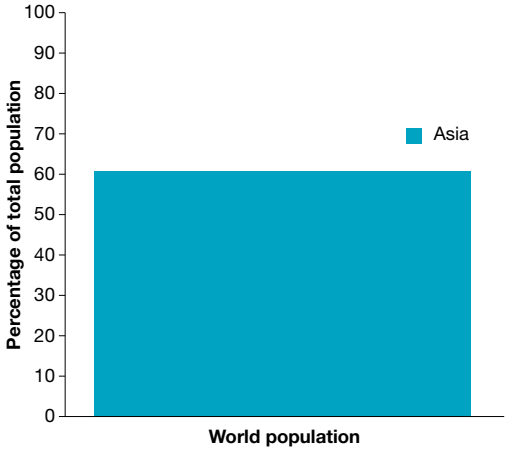
Step 2

Look at the set of data and use a calculator to convert the data into percentages of the total, if necessary. To do this, divide the figure for any part (for example, from **TABLE 1,** Oceania's population, 36 102 071) by the total figure (total world population, 6 823 953 091) and multiply the result by 100. Check your data before beginning to graph. The percentages you have should add up to 100 per cent (see **TABLE 1)**. You don't want to finish colouring your bar and find that one data piece won't fit.

Step 3

Since this is a compound graph, all numbers compound (add onto) one another. Mark on your graph the length of the section of bar representing your first piece of data as a percentage. For example, 60.7 per cent = 60.7 millimetres if your total bar length is 100 millimetres. Colour this segment and add a key near your graph, with appropriate labelling (see **FIGURE 3**). Data will usually be graphed in order from the largest to the smallest.

FIGURE 3 Colour the first section of your bar, representing the first (and largest) piece of data, and add a key.



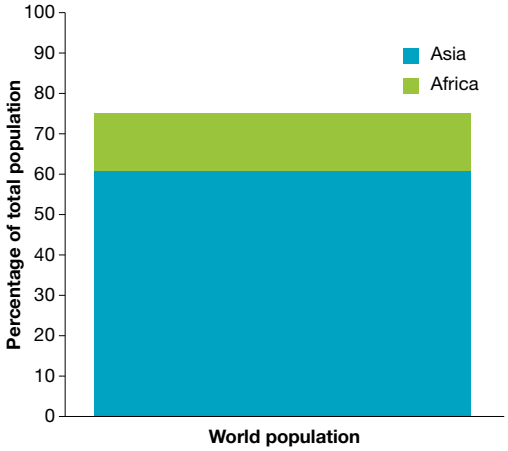
Step 4

Add the next percentage to the percentage for the first piece of data. In this example, add 14.6 per cent to the previous 60.7 per cent and you have a total of 75.3 per cent – this indicates where the next segment of the bar will end. Draw a line where this percentage is represented on your bar (75.3 per cent = 75.3 millimetres if your total bar length is 100 millimetres). Shade the segment in a different colour and add this colour to the key.

Step 5

Repeat Step 4 until you have completed the graphing, colouring and key. Don't forget to give your compound bar graph a title and state the source of your data under the graph (see **FIGURE 1** for the final graph).

FIGURE 4 Colour the second section of your bar. A add the new colour to the key.



Step 6

Now you can interpret the information displayed in your compound bar graph. Write a description of the information it shows about world population. Begin with a comment on the most obvious feature – the colour that fills the largest section of the bar. In this example, you would state that the greatest percentage of the world's people (60.7 per cent) live in Asia. Now consider each of the other coloured sections of the compound bar and comment on how these colours (and therefore the data) relate to one another. For example, the combined population of North and South America (13.4 per cent) is smaller than that of Africa. The model text accompany ing **FIGURE 1** gives a sample description of the data.

on Resources

Video eLesson SkillBuilder: Create and read compound bar graphs (eles-1705)

Interactivity SkillBuilder: Creating and reading compound bar graphs (int-3285)

10.12.3 Let me do it

Complete the following activities to practise this skill.

10.12 ACTIVITIES

1. Using the data provided in **TABLE 2,** create compound bar graphs to show the proportion of the world's urban population by continent in 2000, and as predicted for 2030. *Hint:* The numbers you need to create the graph are percentages, which you will need to calculate. Use the checklist to ensure you complete all aspects of the task correctly.

TABLE 2 Global urban population in 2000, and predicted urban population 2030

Continent	Urban population 2000 (millions)	Predicted urban population 2030 (millions)
North America	248	344
Latin America and the Caribbean	394	585
Oceania	22	34
Europe	515	573
Asia	1392	2703
Africa	288	744
Total	**2859**	**4983**

Source: United Nations, Department of Economic and Social Affairs, Population Division (2012). *World Urbanization Prospects: The 2011 Revision*

HASS skills: Organising and constructing

2. Carefully analyse your two completed compound bar graphs to answer the following questions.
   a. i. Which continent had the second highest proportion of people living in urban areas in 2000?
      ii. What ranking is that continent expected to have in 2030?
   b. Which continent is predicted to have the greatest increase in urban population by 2030?
   c. What do you notice about the expected *change* in the urban population of Europe between 2000 and 2030?
   d. Compare the expected *change* in the urban population in Asia and Africa between 2000 and 2030.
   e. Give two other interesting facts your two compound graphs show about the expected *changes* to the world's urban population between 2000 and 2030.

HASS skills: Analysing

Checklist

I have:

- drawn in pencil
- ruled lines to clearly represent and communicate the data
- coloured according to a key
- included a scale
- provided the source of the data
- included a clear title
- clearly represented and communicated the data in my interpretation.

10.13 SkillBuilder: Reading and describing basic choropleth maps

LEARNING INTENTION

By the end of this SkillBuilder, you will be able to read, understand and describe a basic choropleth map.

10.13.1 Tell me

What is a basic choropleth map?

A basic choropleth map is a shaded or coloured map that shows the density or concentration of a particular aspect of an area. The key/legend shows the value of each shading or colouring. The darkest colours show the highest concentration, and the lightest colours show the lowest concentration.

Why are basic choropleth maps useful?

A basic choropleth map is used to show particular aspects in a pictorial way. They allow the viewer to quickly identify where the values are highest (darkest) and lowest (lightest) and note any patterns over space. However, the information is based on averages and precise data is not given for a particular place or region within the map. Areas can contain within them wide variations from the average value mapped. An atlas will have a wide range of choropleth maps.

Basic choropleth maps are useful for showing:

- differences between the highest and lowest concentrations of aspects
- average rainfall across a country
- average population densities per region
- average wealth per country
- average number of cars per household in local council areas.

A good description of a basic choropleth map is achieved if:

- an overall pattern is described
- the highest concentration is identified
- the lowest concentration is identified
- any anomalies are stated
- quantification is used wherever possible.

10.13.2 Show me

How to read and describe a basic choropleth map

You will need:

- a basic choropleth map.

Model

The population density across Brazil (see **FIGURE 1**) varies considerably from the coast to the inland regions. The population density is greatest (more than 100 people per square kilometre) along the Atlantic Ocean coast, especially in the largest cities. For a distance of about 700 kilometres from the coast, the population density is generally around 50 people per square kilometre. The large inland area of Brazil has a low population density of fewer than 10 people per square kilometre.

Procedure

Step 1

Read the title of the map to get an impression of what the map is going to show you. Check that the source of the information is a recognised authority. If the source is not stated, check the list of acknowledgements for the textbook to find out where the information came from.

Step 2

Read the key/legend. Check the units of measurement that are used. Think about the divisions that are used for colours. The darker the colour, the more intense or higher the value; similarly, the paler the colour, the less intense or lower the value. Cast your eye over the map, taking in the colours and trying to work out any general patterns that emerge.

FIGURE 1 Population density in Brazil

Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

Step 3

To interpret the colours, you need to comment on where the darkest colours or the more intense/higher values occur. Can you discuss the map by continent, or by region? For example, the highest density of people in Brazil occurs in the cities, such as São Paulo and Fortaleza, on the Atlantic Ocean coastline.

Step 4

To further interpret the colours, you need to comment on where the lightest colours or the least intense/lower values occur. Can you discuss the map by continent, or by region? For example, the lowest density of people in Brazil occurs in the large inland region, especially along and around the Amazon River and its tributaries.

Step 5

Are there any coloured areas that stand out from the rest as being unusual? That is, is there a colour among a mass of another colour that isn't expected? This is referred to as an anomaly, and needs to be discussed. Identify the place that is different from the surrounding area. For example, the population densities around Brasilia and Goiania are unusual because these appear to be isolated clusters of higher populations, whereas most of the surrounding area contains fewer than 10 people per square kilometre.

on Resources

Video eLesson SkillBuilder: Reading and describing basic choropleth maps (eles-1706)

Interactivity SkillBuilder: Reading and describing basic choropleth maps (int-3286)

10.13.3 Let me do it

Complete the following activity to practise this skill.

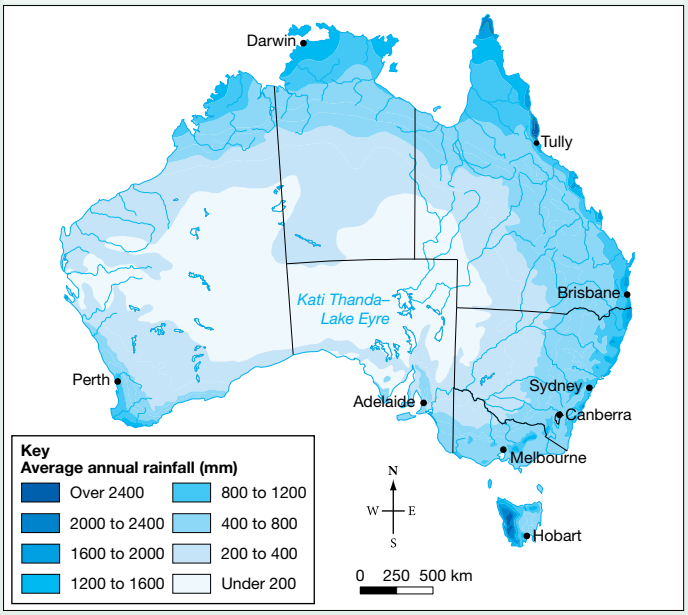
10.13 ACTIVITY

Read and interpret **FIGURE 2,** a basic choropleth map of Australia's annual rainfall distribution, by answering the following questions. Use the checklist to ensure you cover all aspects of the task.

a. Which region(s) of Australia has a pattern indicating the highest rainfall? Provide statistics or numbers (quantification) in your answer, such as percentage (%), size or area (square kilometres, km^2).
b. Which region(s) of Australia has a pattern indicating the lowest rainfall? Include quantification in your answer.
c. Are there any *places* that do not fit the expected pattern? State the locations of these anomalies.
d. Which Australian state receives the most rainfall?
e. Give two reasons for why large parts of Australia have low rainfall.

Geography concept: Interconnection

FIGURE 2 The distribution of annual rainfall in Australia



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

Checklist

I have:

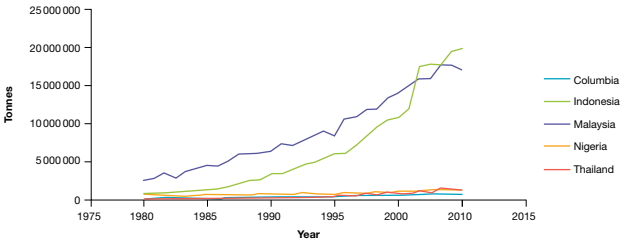
- described an overall pattern
- identified the highest concentration
- identified the lowest concentration
- stated any anomalies
- used quantification wherever possible.

10.14 SkillBuilder: Drawing a line graph using Excel

online only

What is a line graph?

A line graph is a clear method of displaying information so it can be easily understood. Using a digital means of drawing a line graph enables you to show multiple data sets clearly.



Select your learnON title to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson SkillBuilder: Drawing a line graph using Excel (eles-1662)

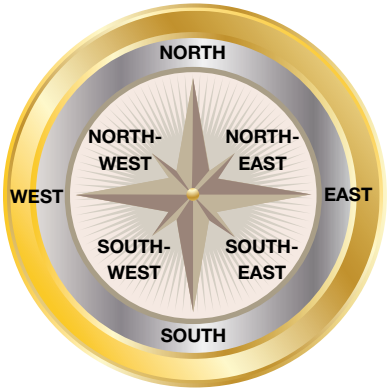
Interactivity SkillBuilder: Drawing a line graph using Excel (int-3158)

10.15 SkillBuilder: Using positional language

online only

What is positional language?

Positional language uses compass points to locate places and provide directions between places. North, north-east, east, south-east, south, south-west, west, and north-west are shown on an 8-point compass. We can use positional language to describe the location of one feature in relation to another.



Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson SkillBuilder: Using positional language (eles-1649)

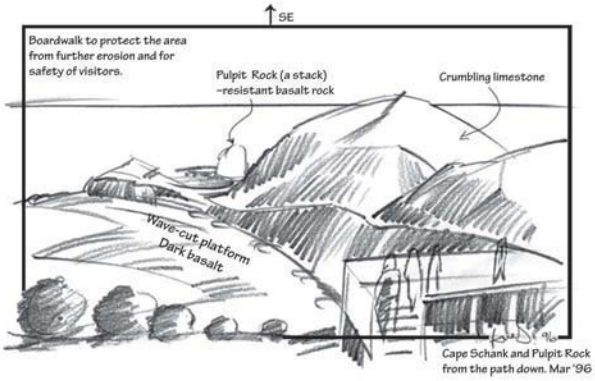
Interactivity SkillBuilder: Using positional language (int-3145)

10.16 SkillBuilder: Constructing a field sketch

online only

What are field sketches?

Field sketches are drawings completed during fieldwork – geography outside the classroom. Field sketches allow a geographer to capture the main aspects of landscapes in order to edit the view, focusing on the important features and omitting the unnecessary information.



Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson SkillBuilder: Completing a field sketch (eles-1650)

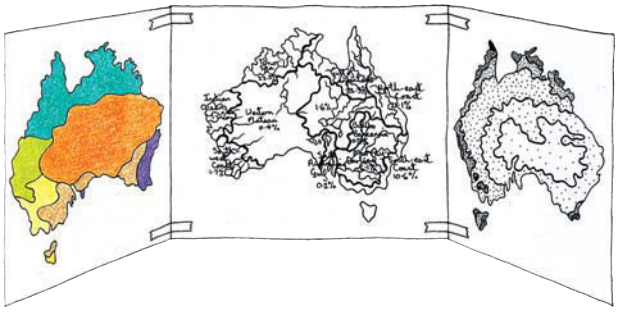
Interactivity SkillBuilder: Constructing a field sketch (int-3146)

10.17 SkillBuilder: Creating and describing complex overlay maps

online only

What is a complex overlay map?

A complex overlay map is created when one or more maps of the same area are laid over one another to show similarities and differences between the mapped information. Traditionally, the second map is on tracing paper that is attached to the original page. Complex overlay maps show relationships between factors – the similarities and the differences in a pattern.



Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson SkillBuilder: Creating and describing complex overlay maps (eles-1656)

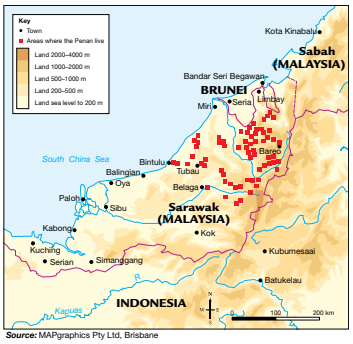
Interactivity SkillBuilder: Creating and describing complex overlay maps (int-3152)

10.18 SkillBuilder: Drawing a précis map

online only

What is a précis map?

A précis map is a simplified map – the cartographer has decided which details to leave in and which to leave out. It is different from a sketch map, which includes all the main features.



Source: MAPgraphics Pty Ltd, Brisbane

Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson SkillBuilder: Drawing a précis map (eles-1657)

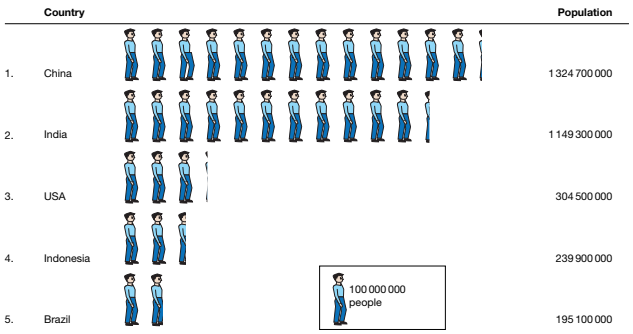
Interactivity SkillBuilder: Drawing a précis map (int-3153)

10.19 SkillBuilder: Creating and reading pictographs

online only

What is a pictograph?

A pictograph is a graph drawn using pictures to represent numbers, instead of bars or dots that are traditionally used on graphs. A pictograph is a simple way of representing data and conveying information quickly and efficiently in a different format.



Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson SkillBuilder: Creating and reading pictographs (eles-1659)

Interactivity SkillBuilder: Creating and reading pictographs (int-3155)

10.20 SkillBuilder: Describing photographs

online only

What is meant by 'describing photographs'?

A description is a brief comment (up to a paragraph) on a photograph, identifying and communicating features from a geographic point of view. As geographers, we use our understanding of the world to interpret the image and tell others about the main features or information the photograph reveals.

Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson SkillBuilder: Describing photographs (eles-1660)

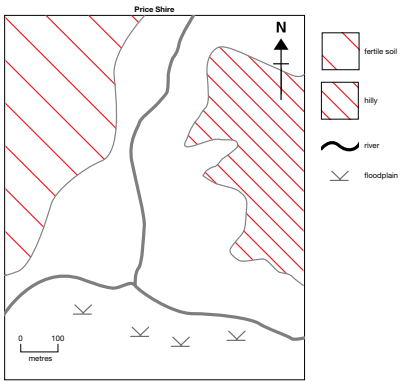
Interactivity SkillBuilder: Describing photographs (int-3156)

10.21 SkillBuilder: Constructing a basic sketch map

online only

What is a basic sketch map?

A basic sketch map is a map drawn from an aerial photograph or developed during field work that identifies the main features of an area. Basic sketch maps are used to show the key elements of an area, so other more detailed characteristics are not shown.



Select your learnON format to access:

- an overview of the skill and its application in Geography (Tell me)
- a video and a step-by-step process to explain the skill (Show me)
- an activity and interactivity for you to practise the skill (Let me do it).

on Resources

Video eLesson SkillBuilder: Constructing a basic sketch map (eles-1661)

Interactivity SkillBuilder: Constructing a basic sketch map (int-3157)

10.22 Review

10.22.1 Key knowledge summary

10.2 Concepts in Geography

- The acronym SPICESS helps you remember the seven geographical concepts:
  - Space
  - Place
  - Interconnection
  - Change
  - Environment
  - Sustainability
  - Scale.

10.3 Skills in Geography

- Many occupations are linked to the study of Geography.
- New jobs are developing in the spatial sciences that use geographical tools such as GPS, GIS, satellite imaging and surveying.
- Skills you will build in Year 8 Geography include:
  - Recognising land features
  - Reading contour lines on a map
  - Using latitude and longitude
  - Calculating distance using scale
  - Drawing simple cross-sections
  - Interpreting an aerial photo
  - Understanding thematic maps
  - Comparing population profiles
  - Creating and reading compound bar graphs
  - Reading and describing basic choropleth
  - Drawing a line graph using Excel
  - Using positional language
  - Constructing a field sketch
  - Creating and describing complex overlay maps
  - Drawing a precis map
  - Creating and reading pictographs
  - Describing photographs
  - Constructing a basic sketch map

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6413)
Reflection (ewbk-6412)
Student Learning Matrix (ewbk-6393)

RESOURCE SUMMARY

on Resources

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

10.2 Concepts in Geography

MyWorld Atlas
- Developing Australian Curriculum concepts > **Space**
- Developing Australian Curriculum concepts > **Place**
- Developing Australian Curriculum concepts > **Interconnection**
- Developing Australian Curriculum concepts > **Change**
- Developing Australian Curriculum concepts > **Environment**
- Developing Australian Curriculum concepts > **Sustainability**
- Developing Australian Curriculum concepts > **Scale**

10.4 SkillBuilder: Recognising land features

eWorkbook
- SkillBuilder: Recognising land features (ewbk-6394)

Digital document
- Topographic map of Yarra Yarra Creek Basin (doc-31343)

Video eLesson
- SkillBuilder: How to recognise land features (eles-1648)

Interactivity
- SkillBuilder: Recognising land features (int-3144)

10.5 SkillBuilder: Reading contour lines on a map

eWorkbook
- SkillBuilder: Reading contour lines on a map (ewbk-6395)

Video eLesson
- SkillBuilder: Reading contour lines on a map (eles-1651)

Interactivity
- SkillBuilder: Reading contour lines on a map (int-3147)

10.6 SkillBuilder: Using latitude and longitude

eWorkbook
- SkillBuilder: Using latitude and longitude (ewkb-6396)

Video eLesson
- SkillBuilder: Using latitude and longitude (eles-1652)

Interactivity
- SkillBuilder: Using latitude and longitude (int-3148)

10.7 SkillBuilder: Calculating distance using scale

eWorkbook
- SkillBuilder: Calculating distance using scale (ewbk-6397)

Video eLesson
- SkillBuilder: Calculating distance using scale (eles-1653)

Interactivity
- SkillBuilder: Calculating distance using scale (int-3149)

10.8 SkillBuilder: Drawing simple cross-sections

eWorkbook
- SkillBuilder: Drawing simple cross-sections (ewbk-6398)

Video eLesson
- SkillBuilder: Drawing simple cross-sections (eles-1655)

Interactivity
- SkillBuilder: Drawing simple cross-sections (int-3151)

10.9 SkillBuilder: Drawing simple cross-sections

eWorkbook
- SkillBuilder: Interpreting an aerial photo (ewbk-6399)

Video eLesson
- SkillBuilder: Interpreting an aerial photo (eles-1654)

Interactivity
- SkillBuilder: Interpreting an aerial photo (int-3150)

10.10 SkillBuilder: Understanding thematic maps

eWorkbook
- SkillBuilder: Understanding thematic maps (ewbk-6400)

Video eLesson
- SkillBuilder: Understanding thematic maps (eles-1658)

Interactivity
- SkillBuilder: Understanding thematic maps (int-3154)

10.11 SkillBuilder: Comparing population profiles

eWorkbook
- SkillBuilder: Comparing population profiles (ewbk-6401)

Video eLesson
- SkillBuilder: Comparing population profiles (eles-1704)

Interactivity
- SkillBuilder: Comparing population profiles (int-3284)

Weblinks
- Population pyramid

10.12 SkillBuilder: Creating and reading compound bar graphs

eWorkbook
- SkillBuilder: Creating and reading compound bar graphs (ewbk-6402)

Video eLesson
- SkillBuilder: Create and read compound bar graphs (eles-1705)

Interactivity
- SkillBuilder: Creating and reading compound bar graphs (int-3285)

10.13 SkillBuilder: Reading and describing basic choropleth maps

eWorkbook
- SkillBuilder: Reading and describing basic choropleth maps (ewbk-6403)

Video eLesson
- SkillBuilder: Reading and describing basic choropleth maps (eles-1706)

Interactivity
- SkillBuilder: Reading and describing basic choropleth maps (int-3286)

10.14 SkillBuilder: Drawing a line graph using Excel

eWorkbook
- SkillBuilder: Drawing a line graph using Excel (ewbk-6404)

Video eLesson
- SkillBuilder: Drawing a line graph using Excel (eles-1662)

Interactivity
- SkillBuilder: Drawing a line graph using Excel (int-3158)

10.15 SkillBuilder: Using positional language

eWorkbook
- SkillBuilder: Using positional language (ewbk-6405)

Video eLesson
- SkillBuilder: Using positional language (eles-1649)

Interactivity
- SkillBuilder: Using positional language (int-3145)

10.16 SkillBuilder: Constructing a field sketch

eWorkbook
- SkillBuilder: Completing a field sketch (ewbk-6406)

Video eLesson
- SkillBuilder: Completing a field sketch (eles-1650)

Interactivity
- SkillBuilder: Constructing a field sketch (int-3146)

10.17 SkillBuilder: Creating and describing complex overlay maps

eWorkbook
- SkillBuilder: Creating and describing complex overlay maps (ewbk-6407)

Video eLesson
- SkillBuilder: Creating and describing complex overlay maps (eles-1656)

Interactivity
- SkillBuilder: Creating and describing complex overlay maps (int-3152)

10.18 SkillBuilder: Drawing a précis map

eWorkbook
- SkillBuilder: Drawing a précis map (ewbk-6408)

Video eLesson
- SkillBuilder: Drawing a précis map (eles-1657)

Interactivity
- SkillBuilder: Drawing a précis map (int-3153)

10.19 SkillBuilder: Creating and reading pictographs

eWorkbook
- SkillBuilder: Creating and reading pictographs (ewbk-6409)

Video eLesson
- SkillBuilder: Creating and reading pictographs (eles-1659)

Interactivity
- SkillBuilder: Creating and reading pictographs (int-3155)

10.20 SkillBuilder: Describing photographs

eWorkbook
- SkillBuilder: Describing photographs (ewbk-6410)

Video eLesson
- SkillBuilder: Describing photographs (eles-1660)

Interactivity
- SkillBuilder: Describing photographs (int-3156)

10.21 SkillBuilder: Constructing a basic sketch map

eWorkbook
- SkillBuilder: Constructing a basic sketch map (ewbk-6411)

Video eLesson
- SkillBuilder: Constructing a basic sketch map (eles-1661)

Interactivity
- SkillBuilder: Constructing a basic sketch map (int-3157)

10.22 Review

eWorkbook
- Reflection (ewbk-6412)
- Student Learning Matrix (ewbk-6393)

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

10.14 SkillBuilder: Drawing a line graph using Excel

10.14.1 Tell me

What is a line graph?

A line graph is a clear method of displaying information so it can be easily understood. It is best used to show changes in data over time.

A line graph can be drawn by hand. In this SkillBuilder, you will develop your skills in constructing a line graph using Excel, which is a spreadsheet program. Using a digital means of drawing a line graph enables you to show multiple data sets clearly.

Why are line graphs useful?

A line graph is useful to help analyse data quickly and also to compare data. **FIGURE 1** shows five data sets and you can quickly see which two countries are the top producers of palm oil.

A good line graph has:

- time shown on the horizontal axis
- axes labelled
- a key, if necessary
- a clear title
- shown the source of the data.

10.14.2 Show me

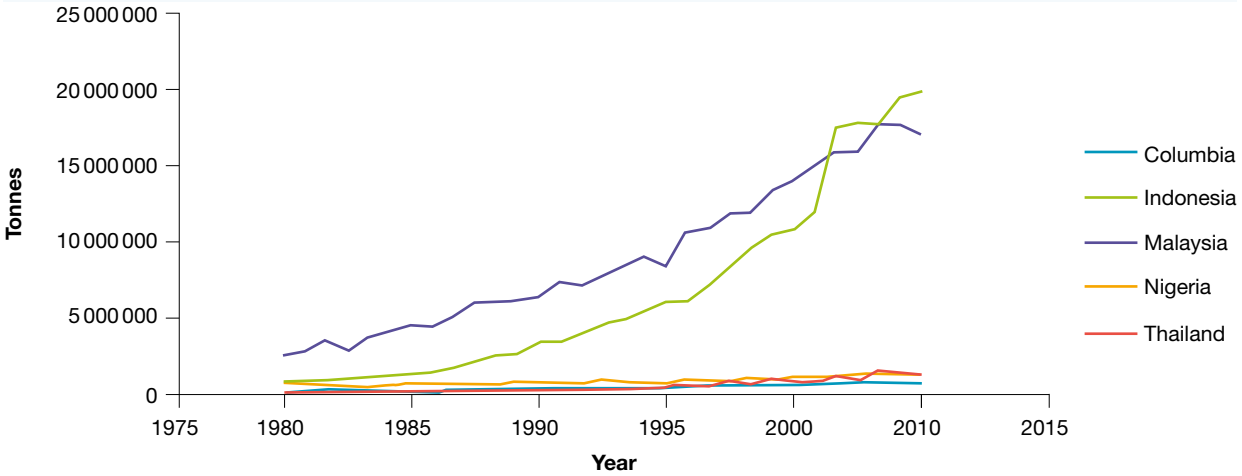
How to draw a line graph using Excel

You will need:

- Excel software
- a set of data.

Model

FIGURE 1 Production of palm oil for the top five producers (1980–2010)



Source: Food and Agriculture Organization of the United Nations 2012 FAOSTAT, http://faostat3.fao.org/home/ index.html

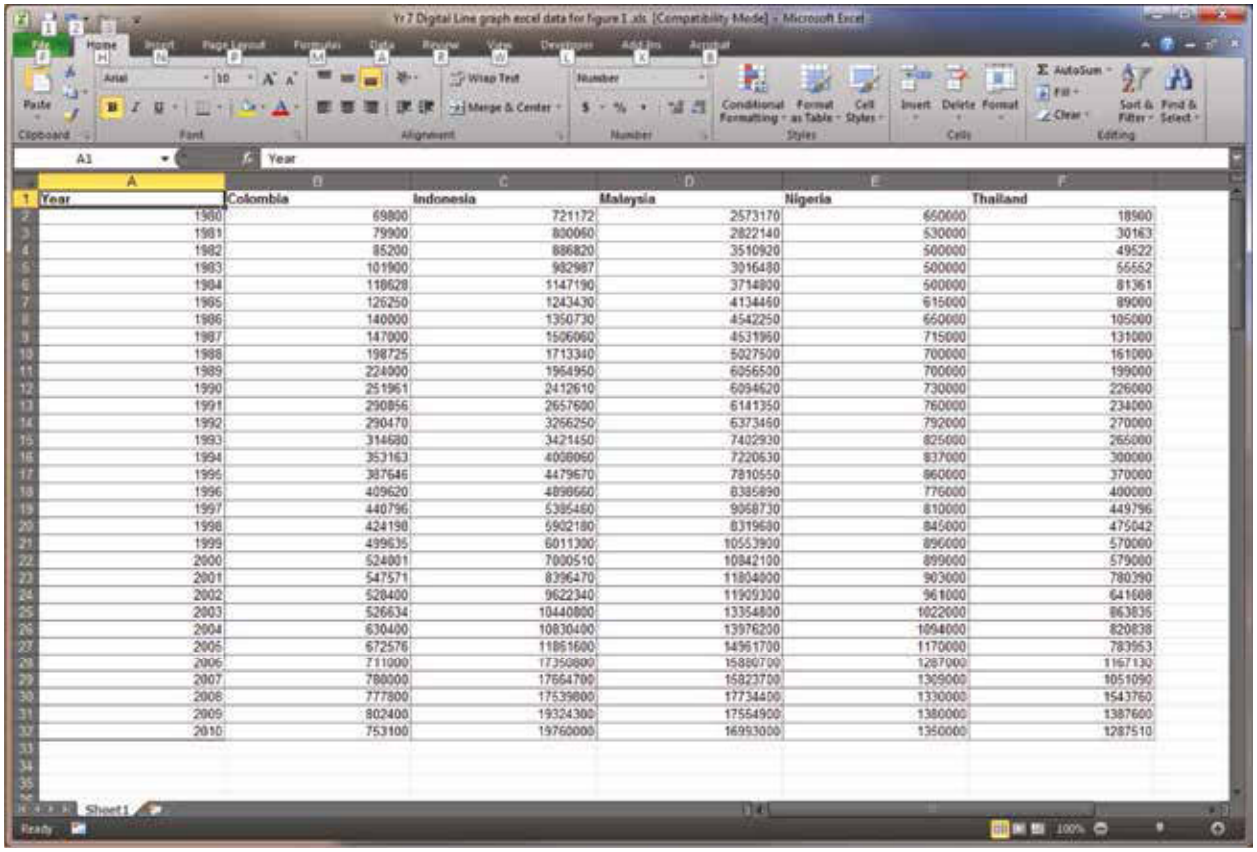
Procedure

Step 1

Enter the data into the Excel worksheet. Put time (hours, days, months or years) in column A and the other variable in column B. Do not leave blank rows or columns. Make sure each column has a heading to describe the data.

If there is more than one set of data, list the second data set in column C, and so on.

FIGURE 2 Data for the top five producers of palm oil (1980–2010) is entered in separate columns of an Excel worksheet.



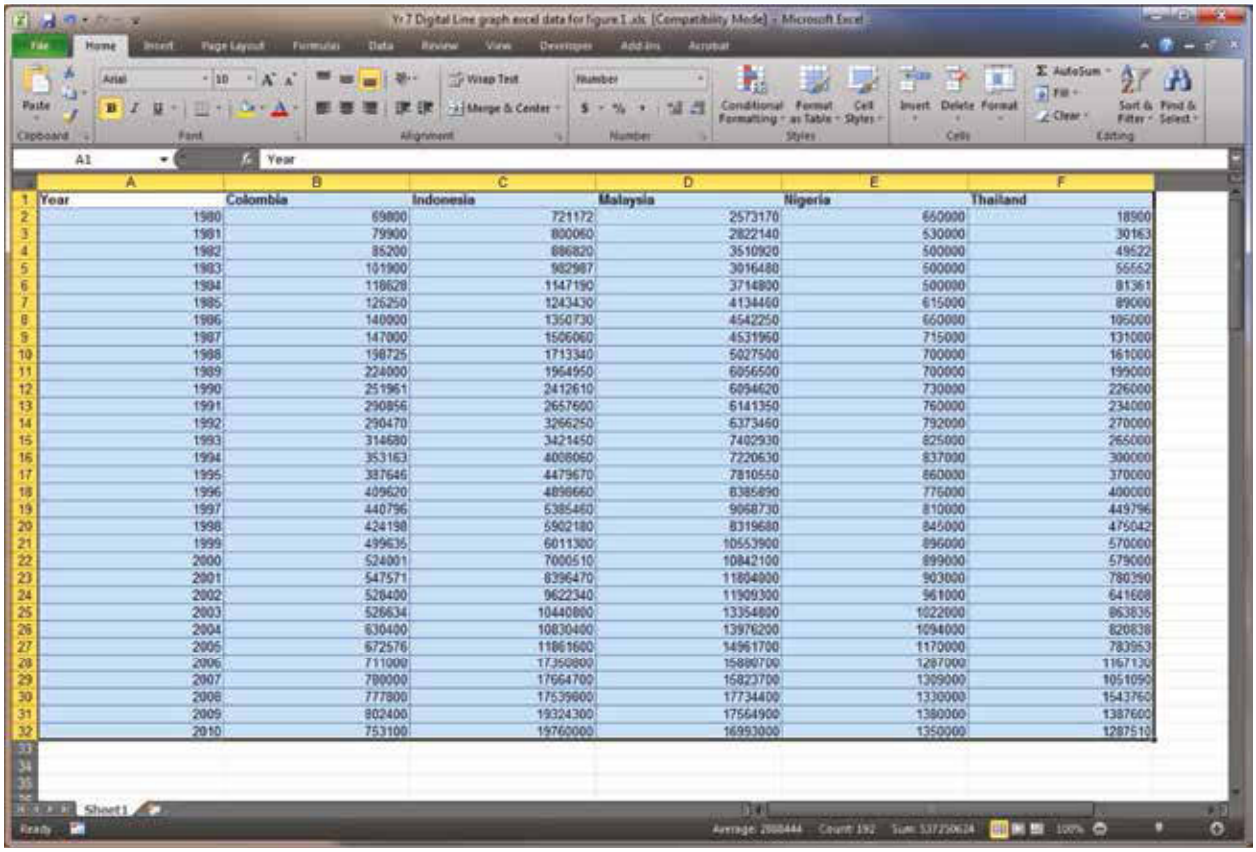
Year	Colombia	Indonesia	Malaysia	Nigeria	Thailand
1980	69800	721172	2573170	650000	18900
1981	79900	800060	2822140	630000	30163
1982	85200	886820	3510920	500000	49522
1983	101900	982987	3016480	500000	55552
1984	118628	1147190	3714800	500000	81361
1985	126250	1243430	4134460	615000	89000
1986	140000	1350730	4542250	650000	105000
1987	147000	1506060	4531960	715000	131000
1988	198725	1713340	5027500	700000	161000
1989	224900	1964950	6056500	700000	199000
1990	251961	2412610	6094620	730000	226000
1991	290856	2657600	6141350	760000	234000
1992	290470	3256250	6373460	792000	270000
1993	314680	3421450	7402930	825000	265000
1994	353163	4008060	7220630	837000	300000
1995	387646	4479670	7810550	860000	370000
1996	409620	4898660	8385890	776000	400000
1997	440796	5385460	9068730	810000	449796
1998	424198	5902180	8319680	845000	475042
1999	499635	6011300	10553900	896000	570000
2000	524001	7000510	10842100	899000	579000
2001	547571	8396470	11804000	903000	780390
2002	528400	9622340	11909300	961000	641608
2003	526634	10440800	13354800	1022000	863835
2004	630400	10830400	13976200	1094000	820838
2005	672576	11861600	14961700	1170000	783953
2006	711000	17350800	15880700	1287000	1167130
2007	780000	17664700	15823700	1309000	1051090
2008	777800	17539800	17734400	1330000	1543760
2009	802400	19324300	17554900	1380000	1387600
2010	753100	19760000	16993000	1350000	1287510

Step 2

Drag- select with the mouse button to highlight the cells containing the data to be included in your line graph.

Note: Make sure you select any column and row details (headings) that you want included in the graph.

FIGURE 3 The required data (all values in the example shown here) is selected.

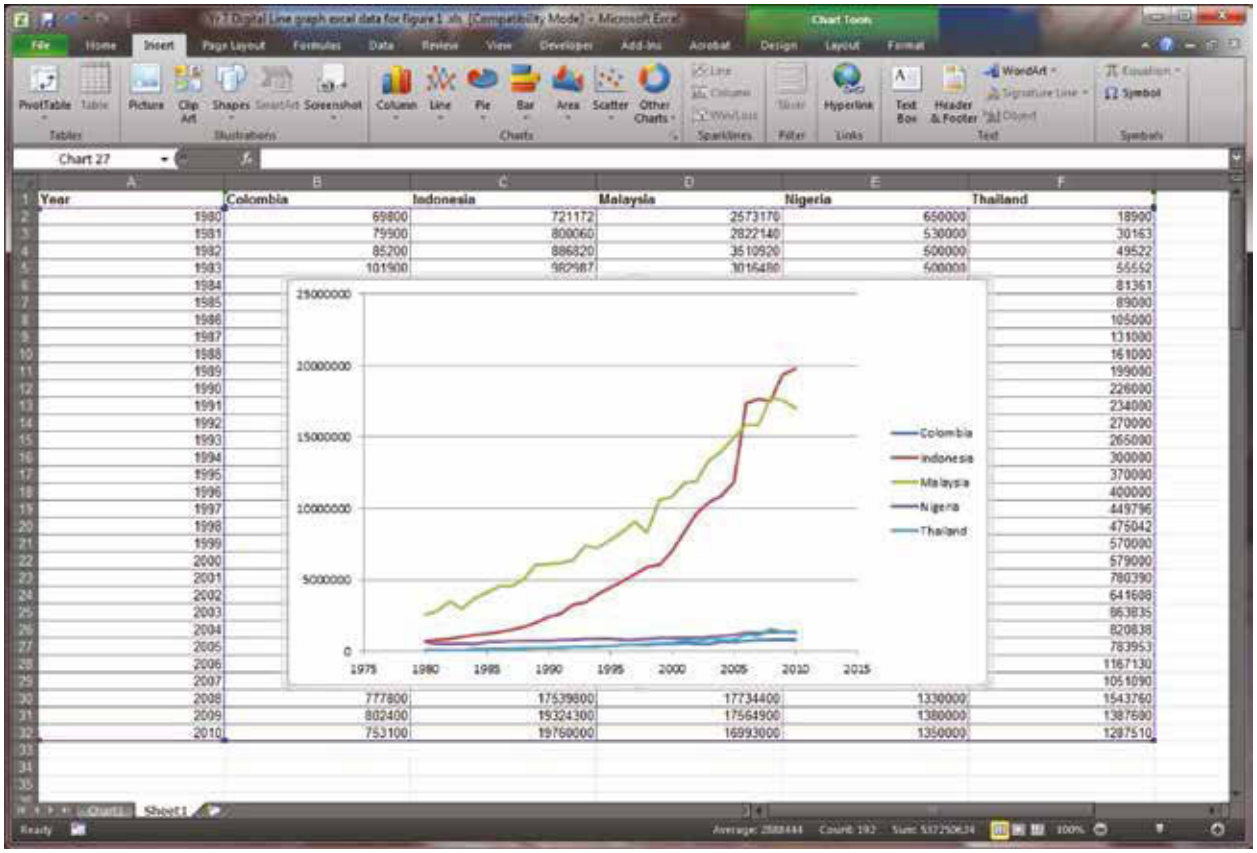


Year	Colombia	Indonesia	Malaysia	Nigeria	Thailand
1980	69800	721172	2573170	660000	18900
1981	79900	800060	2822140	630000	30163
1982	85200	886820	3510920	500000	49522
1983	101900	982987	3016480	500000	55652
1984	118628	1147190	3714800	500000	81361
1985	126250	1243430	4134460	615000	89000
1986	140000	1350730	4542250	660000	105000
1987	147000	1506060	4531960	715000	131000
1988	198725	1713340	5027500	700000	161000
1989	224000	1964950	6056500	700000	199000
1990	251961	2412610	6094620	730000	226000
1991	290856	2657600	6141350	760000	234000
1992	290470	3266250	6373460	792000	270000
1993	314680	3421450	7402930	825000	265000
1994	353163	4008060	7220630	837000	300000
1995	387646	4479670	7810550	860000	370000
1996	409620	4896660	8385890	776000	400000
1997	440796	5385460	9068730	810000	449796
1998	424198	5902180	8319680	845000	475042
1999	499635	6011300	10553900	896000	570000
2000	524001	7000510	10842100	899000	579000
2001	547571	8396470	11804900	903000	780390
2002	528400	9622340	11909300	961000	641608
2003	526634	10440800	13354800	1022000	863836
2004	630400	10830400	13976200	1094000	820838
2005	672576	11861600	14961700	1170000	783953
2006	711000	17350800	15889700	1287000	1167130
2007	780000	17664700	15823700	1309000	1051090
2008	777800	17539600	17734400	1330000	1543760
2009	802400	19324300	17564900	1380000	1387600
2010	753100	19760000	16993000	1350000	1287510

Step 3

Click on the ‘Insert’ tab, then click on a category in the ‘Charts’ section to open a drop-down list of available graph types. Hover your mouse pointer over a graph type to bring up a description of the graph. Click on the ‘Scattergraph’ category and select the ‘Scatter with Straight Lines’ option. A line graph is created and placed on your worksheet. You can change the graph style using the tabs within the ‘Chart Tools’ section.

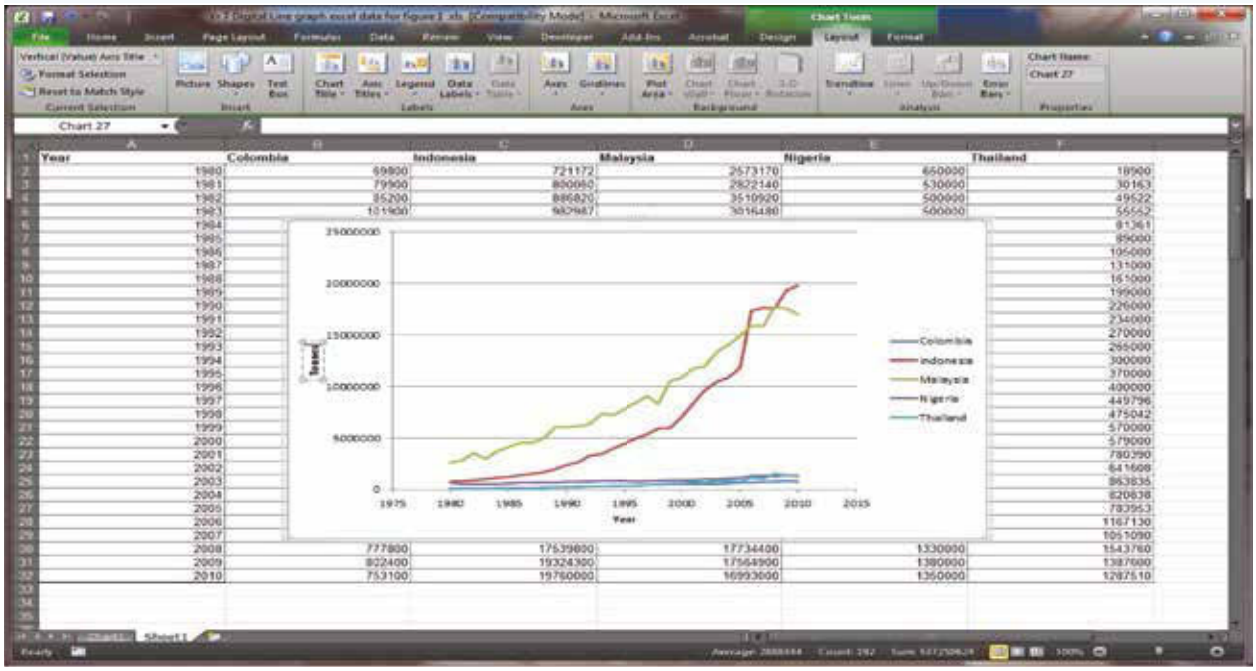
FIGURE 4 Select the ‘Scatter with Straight Lines’ option to produce a graph with a line for each of the variables in your data set.



Step 4

Label the axes. Click on the ‘Layout’ tab within the ‘Chart Tools’ section. Select ‘Axis Titles’ and enter the axis names for the horizontal and vertical axes.

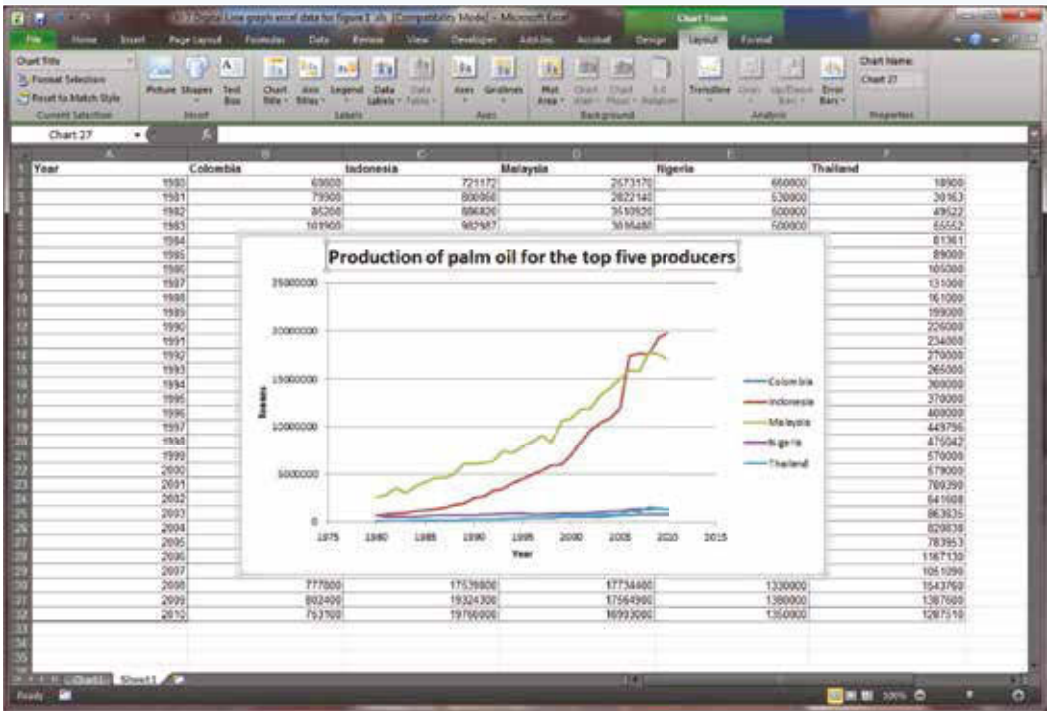
FIGURE 5 Label the axes on your graph.



Step 5

To add a title to the line graph, click on the ‘Layout’ tab within the ‘Chart Tools’ section. Select ‘Chart Title’ and choose the option ‘Above Chart’ for placement of your title. Type an appropriate title for your graph in the text box that appears.

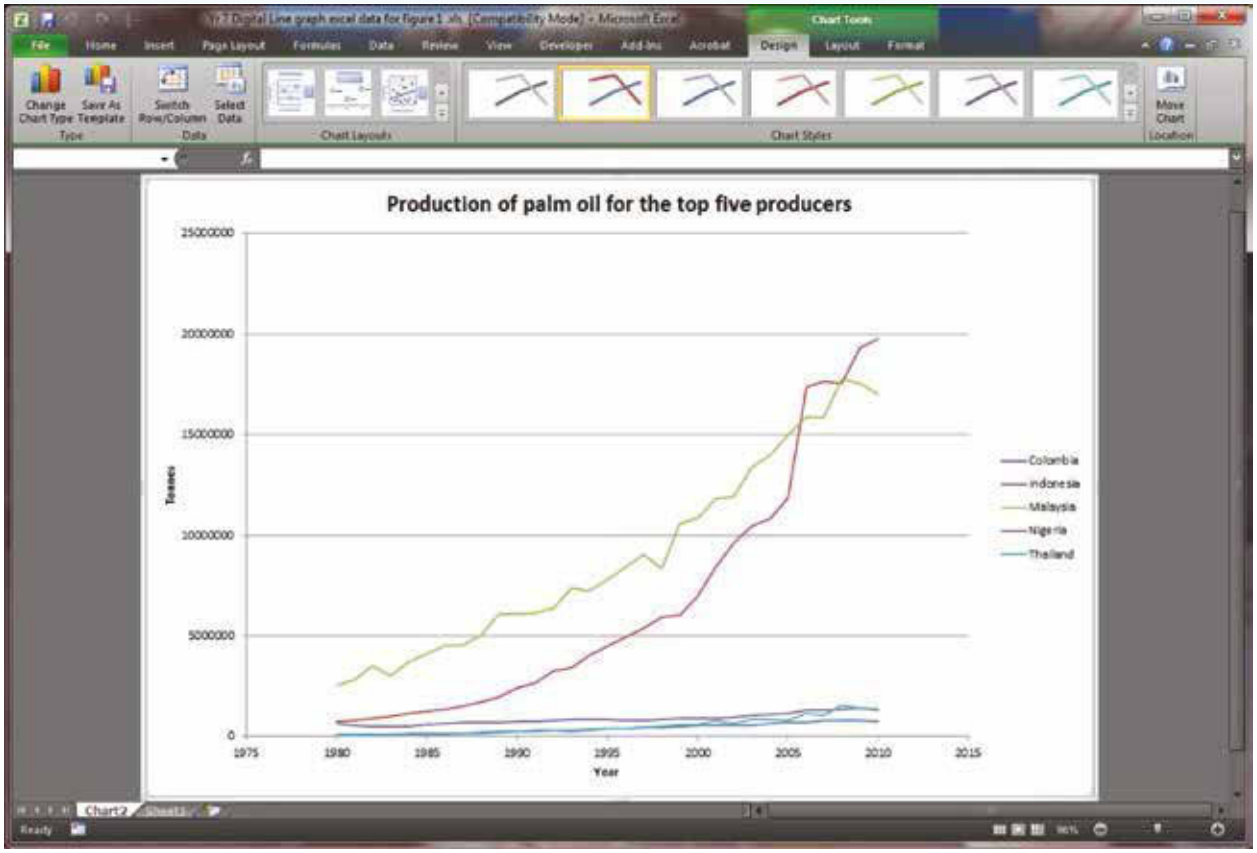
FIGURE 6 Add a title to your graph.



Step 6

Select the 'Design' tab within the 'Chart Tools' section. Click on the 'Move Chart' button on the right. This places your chart on a new page within your spreadsheet.

FIGURE 7 Move your graph onto its own page within the spreadsheet.

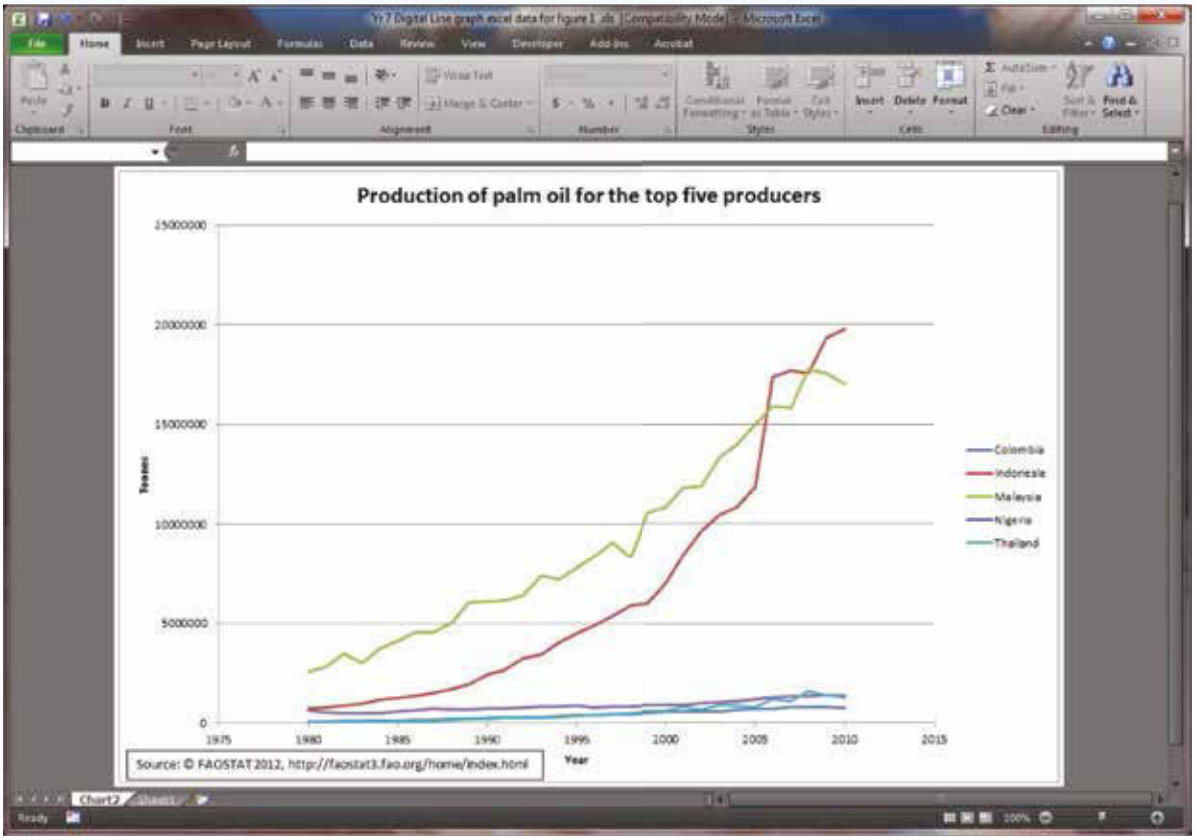


Step 7

Add the source of the data. One way to add this kind of extra information is to use a text box.

Select the chart. Click on the 'Insert' tab and select 'Text Box'. Drag your cursor to draw a text box of an appropriate size, and enter the details of the source of your data. Format your text to a suitable size and style, and move the text box to an area where it does not interfere with the reading of the graph.

FIGURE 8 Include source details for the data you have used in your graph.



on Resources

Video eLesson Drawing a line graph using Excel (eles-1662)

Interactivity Drawing a line graph using Excel (int-3158)

10.14.3 Let me do it

Complete the following activities to practise this skill.

10.14 ACTIVITIES

1. Use the data shown in **TABLE 1** to create a line graph using Excel.
2. Analyse your graph to answer the following questions.
   a. What unit of measurement is used in this graph?
   b. Describe the general trend of palm oil production from 1985 to 2010.
   c. Suggest two possible causes for the change in palm oil production in 1998.
   d. What has happened to palm oil production since 2008?

Checklist

I have:

- shown time on the horizontal axis
- labelled the axes
- included a key, if necessary
- provided a clear title and source information.

TABLE 1 Palm oil production in Malaysia, 1980–2010

Year	Tonnes of palm oil produced
1985	4 134 460
1986	4 542 250
1987	4 531 960
1988	5 027 500
1989	6 056 500
1990	6 094 620
1991	6 141 350
1992	6 373 460
1993	7 402 930
1994	7 220 630
1995	7 810 550
1996	8 385 890
1997	9 068 730
1998	8 319 680
1999	10 553 900
2000	10 842 100
2001	11 804 000
2002	11 909 300
2003	13 354 800
2004	13 976 200
2005	14 961 700
2006	15 880 700
2007	15 823 700
2008	17 734 400
2009	17 564 900
2010	16 993 000

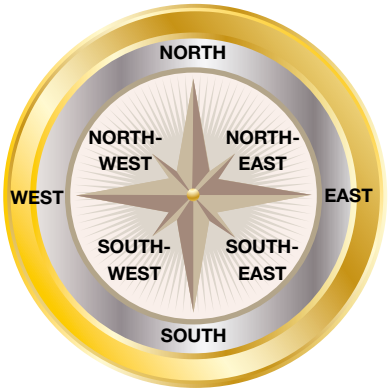
10.15 SkillBuilder: Using positional language

10.15.1 Tell me

What is positional language?

Positional language uses compass points to locate places and provide directions between places. A magnetic compass will always point to north. All other directions are taken from this reference point. An 8-point compass – with points north, north-east, east, south-east, south, south-west, west, and north-west – is standard in most Geography books and atlases. A 16-point compass provides even further detail.

FIGURE 1 An eight-point compass



Why is positional language useful?

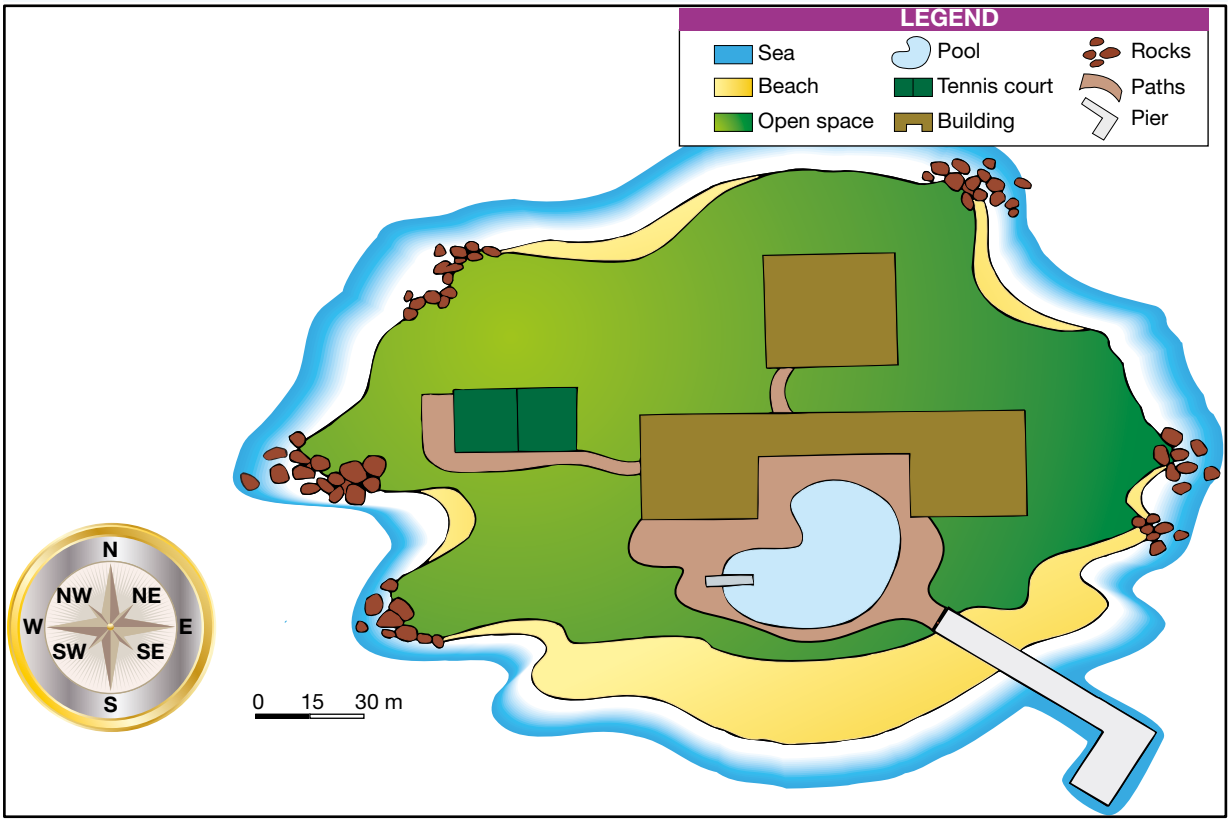
Positional language allows geographers to be accurate when giving directions and locations of places. It avoids the confusion that can occur with positioning if words such as left and right, up and down, top and bottom are used. No matter what direction you are facing, compass direction always remains the same, based around north.

10.15.2 Show me

How to use positional language

Model

FIGURE 2 A cartographer's map of Holiday Island



As we check in at the main building for our stay on Holiday Island, a guide explains the features of the holiday resort.

'You arrived at the pier, which is to our south-east. On the way to this building you passed the paved poolside area, which is now to your south. There are four beach areas – the largest is to the south, a small moon-shaped beach is to the west-south-west and the other beaches are to the north-north-west and north-east across the open spaces. To the . . . '

You will need:

- a map (use **FIGURE 3**)
- a pencil
- tracing paper.

Procedure

Practise using the positional language of a 16-point compass with any type of map, such as in an atlas, a street map, a topographic map, a plan, a sketch, or an image such as aerial or oblique photos and satellite images.

Step 1

On the piece of tracing paper, draw a simple 16-point compass based on **FIGURE 1**. You will need to add the following points: NNE, ENE, NNW, WNW, SSE, ESE, SSW, WSW. Ensure that you mark the centre of the compass with a dot.

Step 2

Place the centre of the 16-point compass (the dot) on the point of origin from which a direction is being given. Ensure that north is in the vertical position. On all maps/images, unless an indicator determines otherwise, north is assumed to be vertical (i.e. pointing to the top).

For example, to discover that place A is north-north-west of place B, the direction is taken from place B, so the centre of the compass should be on place B.

Step 3

Read the compass direction from the centre dot to the place identified and write down that direction.

Step 4

The placement of the centre of the compass must be moved for each individual direction required.

on Resources

Video eLesson How to use positional language (eles-1649)

Interactivity Using positional language (int-3145)

10.15.3 Let me do it

Complete the following activities to practise this skill.

10.15 ACTIVITIES

1. The completed example in **TABLE 1** uses the map in **FIGURE 3** to show directions from one place to another place.

   In this example, you are at Kakadu National Park and you want to give a direction so that someone arrives at Litchfield National Park.

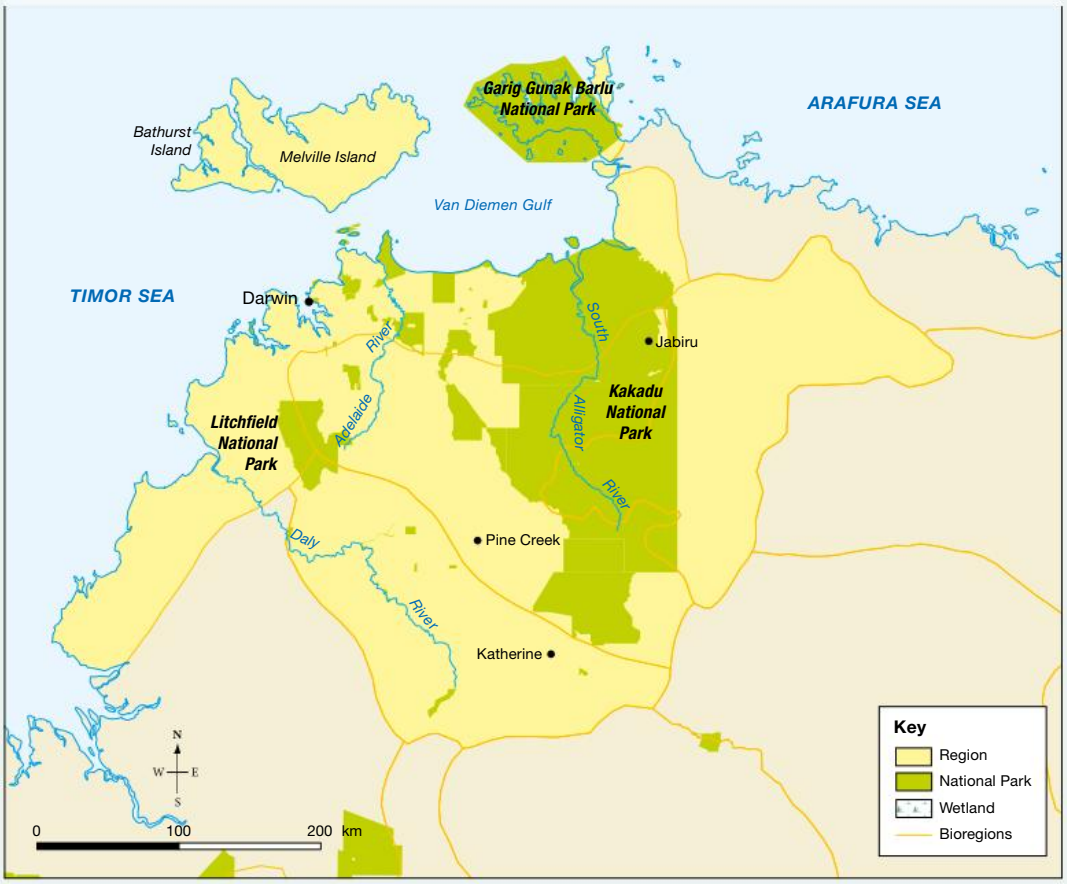
   Copy the table below into your workbook. Using the map and your tracing paper compass, create five more examples of positional language in the table. Ensure that you use a range of directions from your 16-point compass.

TABLE 1 Examples of positional language

Place of origin	Place of arrival	Direction
Kakadu National Park	Litchfield National Park	West

Ask a class member to check your directions.

FIGURE 3 Map of Kakadu National Park



Source: Spatial Vision

2. Apply your skills to answer the following questions.
   a. In which direction from Katherine would you need to fly to get to Kakadu National Park?
   b. In what direction is Jabiru in Kakadu National Park from Darwin?
   c. In what direction is Jabiru from Pine Creek?
   d. If I was to drive from Katherine in a north-west direction, would I arrive in Jabiru or Darwin?
   e. I want to drive from Pine Creek to Jabiru. Describe the directions in which I would need to travel while on the road.

Checklist

I have:
- drawn and labelled an accurate 16-point compass
- used the compass to indicate direction using positional language.

10.16 SkillBuilder: Constructing a field sketch

10.16.1 Tell me

What are field sketches?

Field sketches are drawings completed during fieldwork – Geography outside the classroom. Field sketches allow a geographer to capture the main aspects of landscapes in order to edit the view, focusing on the important features and omitting the unnecessary information. Field sketches are free-hand drawings with annotations. Colour may be added but is not a requirement. A field sketch aids our sense of observation and allows us to record and interpret environments.

Why are field sketches useful?

Field sketches capture the important information. You might think it is easier to take an image on your phone or with a camera, but you are then capturing the non-relevant data as well. By making a drawing in the field you are interpreting the environment, analysing the landscape and highlighting a geographical understanding of what you see by careful and clear labelling.

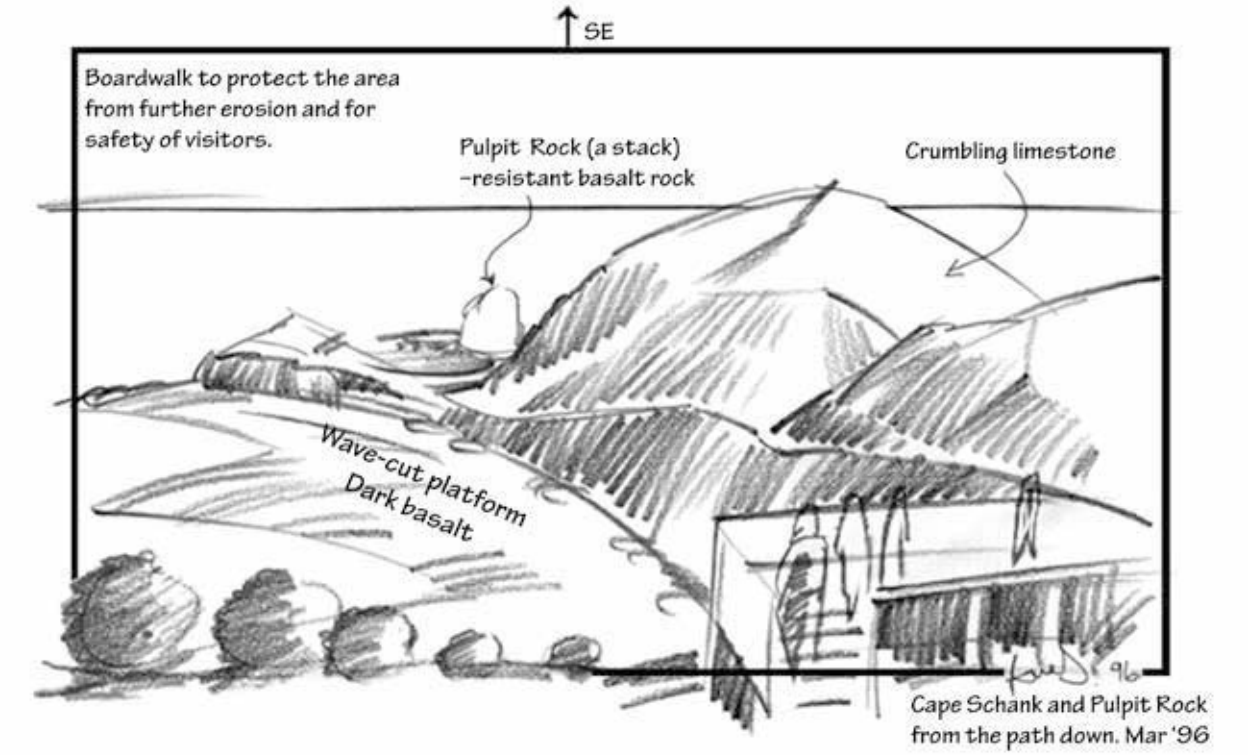
A good field sketch has:
- been completed on plain paper
- been drawn in pencil
- a title
- a date
- labels of key features
- an indicator to show direction
- shading.

10.16.2 Show me

How to construct a field sketch

Model

FIGURE 1 Field sketch of Cape Schanck



Source: © Geography Teachers' Association of Victoria Inc. Interaction, journal of the GTAV, June 1998. Illustration redrawn by Harry Slaghekke.

You will need:

- plain paper
- a clipboard
- a grey pencil (soft)
- a ruler
- an eraser.

Procedure

FIGURE 1 is an example of a coastal field sketch. Obviously, to complete a coastal field sketch you need to be in a coastal environment, but any environment can be sketched – natural or human-altered. You can choose an environment near you.

Step 1

Choose the field of view to be sketched; that is, 'from this tree to that bend in the stairs'. Make yourself comfortable because you'll need to stay in the one place while you complete the sketch.

Step 2

Partly close your eyes so that you are peeking at the world – all the small details will disappear and your eyes will focus on the main outlines, which are the first parts to be drawn. Practise viewing the environment.

Step 3

Attach your paper securely to the clipboard because wind plays havoc with field sketching! Using a pencil, draw a border (frame) in which you are going to sketch. Always draw in pencil and keep your eraser handy.

Step 4

Draw in the horizon as a baseline; that is, where the land meets the sky.

Step 5

Divide your sketch horizontally into three portions: background, middle-ground and foreground (what is closest to you).

Step 6

Peek at the landscape through partly closed eyes and now add the main outlines to your sketch. Start with main features in the background (most distant), then middle-ground and lastly foreground. There will be a few shapes on your page, but no detail (see **FIGURE 2**).

FIGURE 2 Initial outline

Source: © Geography Teachers' Association of Victoria Inc. Interaction, journal of the GTAV, June 1998. Illustration redrawn by Harry Slaghekke.

Step 7

Using this base you can now add details and shading. Identify those aspects that are relevant to your study. In this coastal example, there are natural features – a wave-cut platform, a stack, a headland and limestone ridges – and a human feature, the boardwalk.

FIGURE 3 Further detail and shading

Source: © Geography Teachers' Association of Victoria Inc. Interaction, journal of the GTAV, June 1998. Illustration redrawn by Harry Slaghekke.

Step 8

Annotate (label) your sketch to draw attention to the landscape features. Ask yourself what the connection is between the natural features and the human-altered features. Can your labelling assist in making this interconnection clear to those who view your field sketch?

Step 9

Add the finishing touches.

- On the border, add a direction indicator as to which way you are looking at the landscape.
- Title your sketch – identify the place with as much detail as possible.
- Date your drawing.

FIGURE 1 shows the completed field sketch with all features added.

on Resources

Video eLesson	Constructing a field sketch (eles-1650)
Interactivity	Constructing a field sketch (int-3146)

10.16.3 Let me do it

Complete the following activities to practise this skill.

10.16 ACTIVITIES

1. Your teacher may take the class into the school grounds and ask you to do a field sketch of an area within the school boundary, or you may be able to view an *environment* beyond the fence line.
   OR
   At home, select a street view or a garden view and complete an annotated field sketch. Use the checklist to ensure you cover all aspects of the task.
2. Study your field sketch and consider the *environment* to answer the following questions.
   a. What natural features have been labelled in the field sketch?
   b. What human-altered features have been labelled in the field sketch?
   c. Is there any *interconnectedness* between the natural *environment* and human activities?
   d. How do your five senses respond to this *environment*?
   e. How might this *place change* in the future?

Checklist

I have:
- drawn a border
- added a compass direction
- titled the sketch
- dated the sketch
- shaded to give depth
- clearly labelled the significant aspects.

10.17 SkillBuilder: Creating and describing complex overlay maps

10.17.1 Tell me

What is a complex overlay map?

A complex overlay map is created when one or more maps of the same area are laid over one another to show similarities and differences between the mapped information. All maps must be at the same scale. Laid over a base map with information that is consistent (for example, landforms), traced copies of maps showing variables (for example, population) allow you to see the elements underneath. Traditionally, the second map is on tracing paper that is attached to the original map.

Why are complex overlay maps useful?

Complex overlay maps are analysed to show relationships between factors – the similarities and the differences in a pattern. They are useful when looking for the degree to which features are arranged in a similar pattern. In a complex overlay map there may be three or more layers, allowing three or more variables to be compared. Complex overlay maps also help you work out between which features there is the strongest or weakest relationship or interconnection.

In today's world of computers, geographic information system (GIS) programs do this task. Digitally, layers can be turned 'off' and 'on' to show the interconnection between factors in a distribution pattern.

Complex overlay maps are useful for:
- town planners to see new settlement patterns overlaid on the land's shape
- construction engineers to see original buildings and the interconnection of extensions to a building
- logistic engineers to overlay the distribution of a number of features to identify similarities

- farmers to seek alternative planting rotations with an increased knowledge of the features involved, such as soil types, rainfall and topography.

A good series of complex overlay maps has:

- been drawn in pencil first, then coloured
- been drawn in light colours, so that the base map remains clear
- a key on each overlay, offset so each can be seen
- been accurately taped together so the maps overlap exactly
- labelled features, if necessary
- included BOLTSS.

A clear description of complex overlay maps has:

- identified and communicated key features
- clearly represented and communicated the data.

10.17.2 Show me

How to create and describe a complex overlay map

You will need:

- three maps of the same region at the same scale showing different information (one to be a base map)
- one of these maps to act as a base map
- two pieces of tracing paper, at least as large as the base map
- a light grey pencil and coloured pencils
- a ruler
- an eraser
- adhesive tape.

Model

FIGURE 1 An illustration of a completed complex overlay map showing Australia's seasonal rainfall patterns (left), drainage catchments (centre) and average annual rainfall (right)

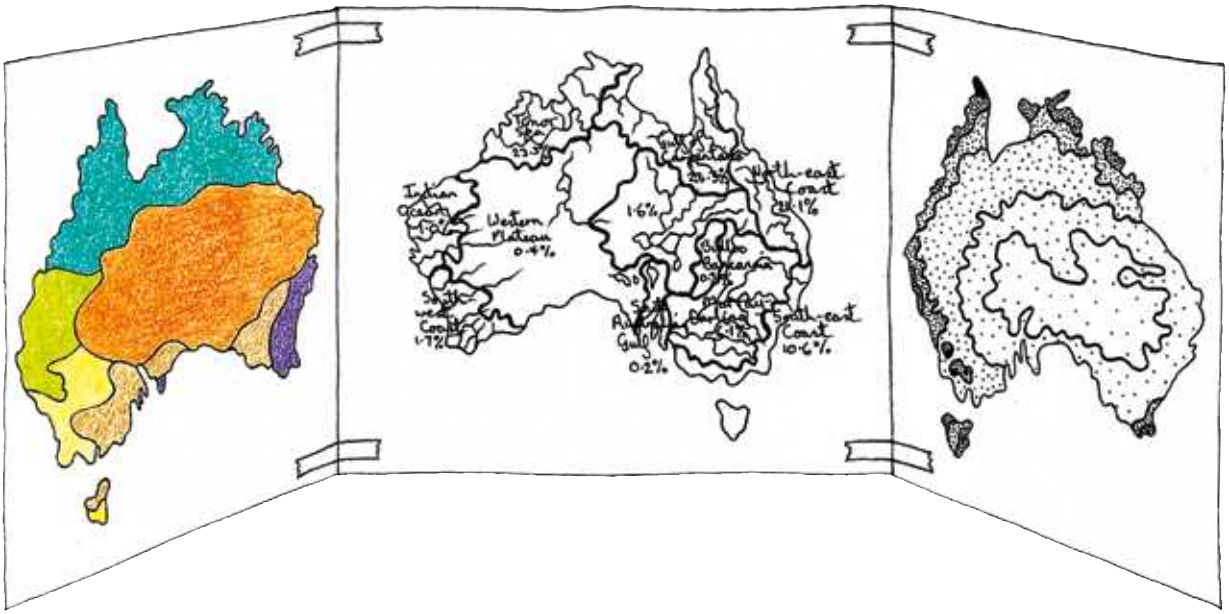


FIGURE 1 shows a map of Australia's drainage catchments used as the base map (centre) in a complex overlay. Taped to this on tracing paper is a map of Australia's average annual rainfall (shown at right in **FIGURE 1**), attached so as to be able to fold onto the base map. Taped to the opposite side of the base map is a map of

Australia's seasonal rainfall patterns (shown at left in **FIGURE 1**). This is also attached so as to be able to fold onto the base map. Additional layers could be added by taping further maps (drawn on tracing paper) to the top and bottom of the base map.

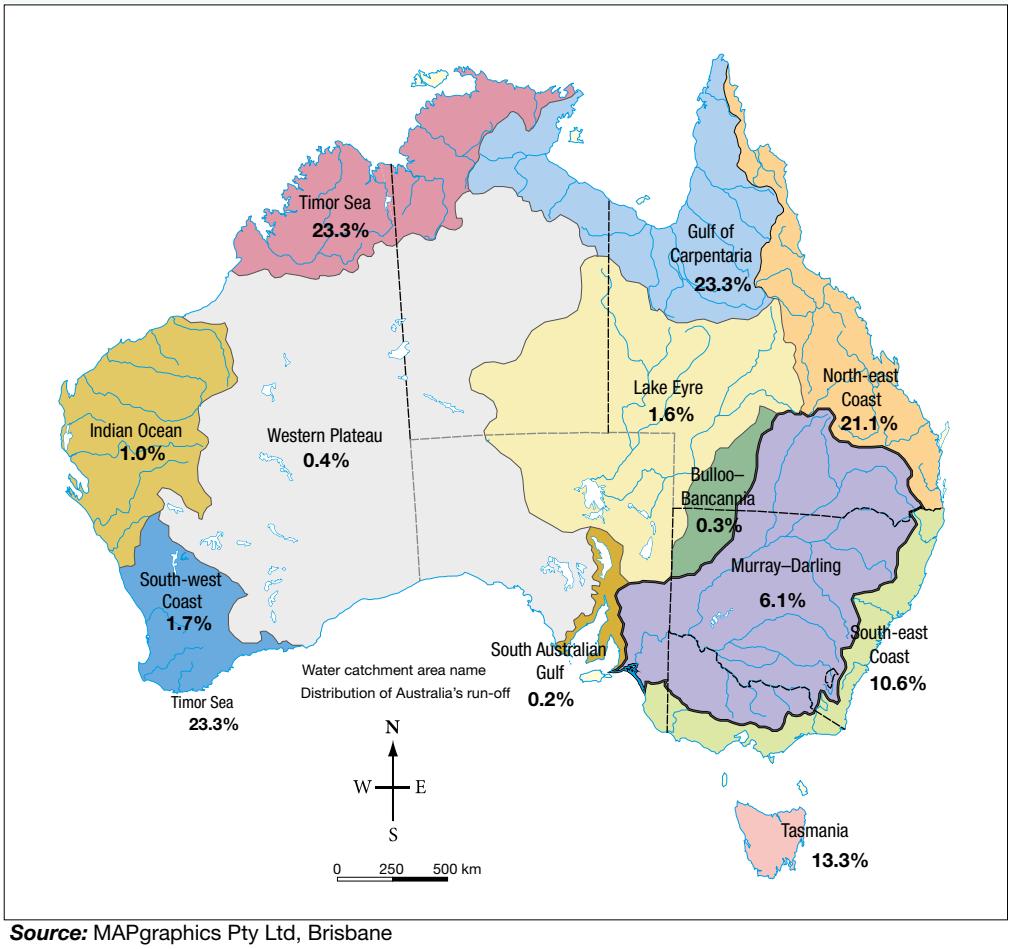
This series of map overlays provides an example of interconnection; in this case, the interconnection between annual rainfall and seasonal rainfall, between annual rainfall and drainage catchments, and between seasonal rainfall and drainage catchments.

Further analysis is required to show areas that are not connected and areas that are sometimes related, but not always. For example, the Murray–Darling Basin drainage catchment has a wide range of seasonal rainfall patterns across its area, varying from uniform rainfall to arid zones.

Procedure

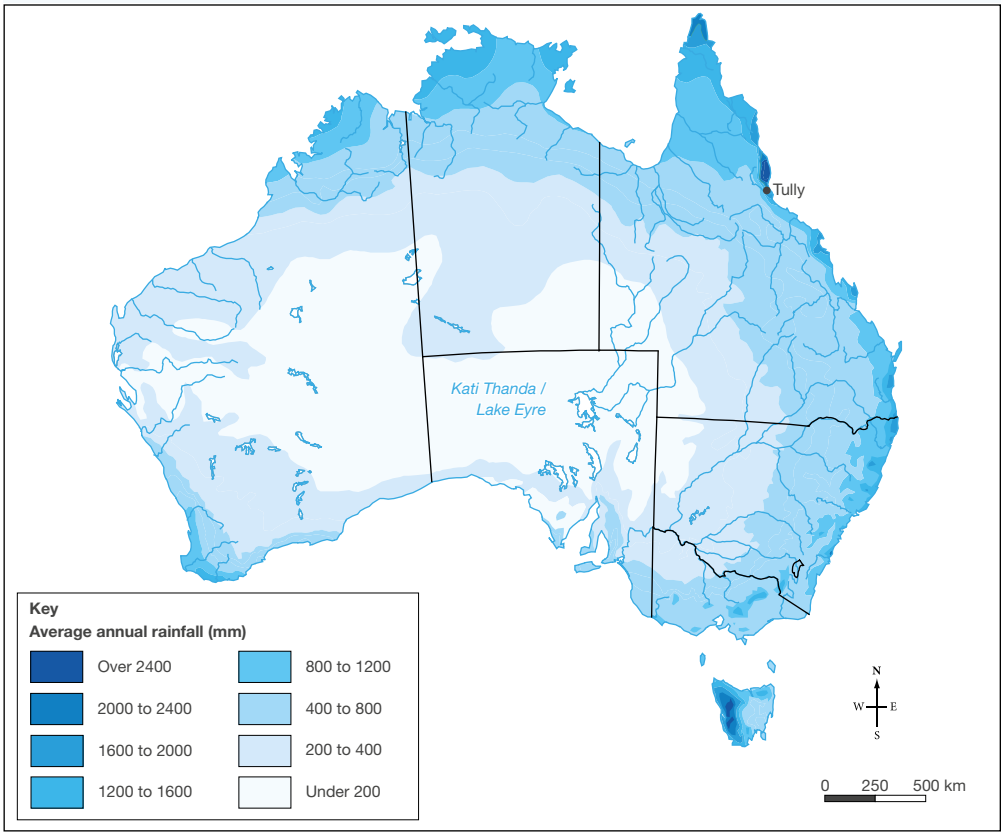
To complete and describe complex overlay maps you must have two or more maps of the same place and at the same scale with different information. For this example, we will use maps showing Australia's drainage catchments (**FIGURE 2a**), Australia's average annual rainfall (**FIGURE 2b**) and Australia's seasonal rainfall patterns (**FIGURE 2c**).

FIGURE 2(a) Australia's drainage catchments



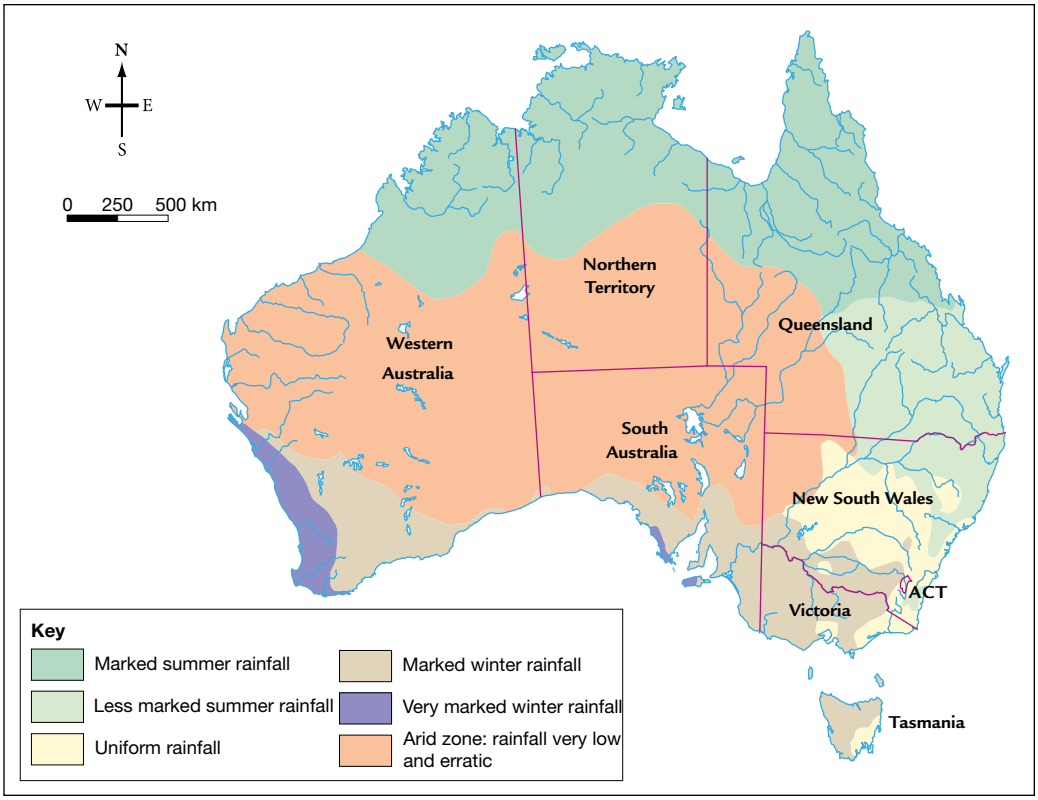
Source: MAPgraphics Pty Ltd, Brisbane

FIGURE 2(b) Australia's average annual rainfall



Source: Bureau of Meteorology, 2003, on the Australian Water Map, Earth Systems Pty Ltd

FIGURE 2(c) Australia's seasonal rainfall patterns



Source: MAPgraphics Pty Ltd, Brisbane

Step 1

Select the base map – this will show information that is unlikely to vary. In this instance, it is the drainage catchments. You may need to trace the base map if it appears in a book, because it might not be possible to stick other maps to the original.

Step 2

Trace each of the other maps onto separate sheets of tracing paper. Don't forget to include BOLTSS on your maps. Each map should have its own title, its own key and its own source. The scale and north pointer need to appear only on the base map.

Step 3

Using adhesive tape, hinge the maps to fold on top of each other so that the map outlines (coastlines) match up. Alignment is very important, so choose obvious borders to line up. **FIGURE 3** shows the second map hinged to the right of the base map. **FIGURE 4** shows the third map added, hinged to the left of the base map.

FIGURE 3 Hinged map (first overlay) over base map

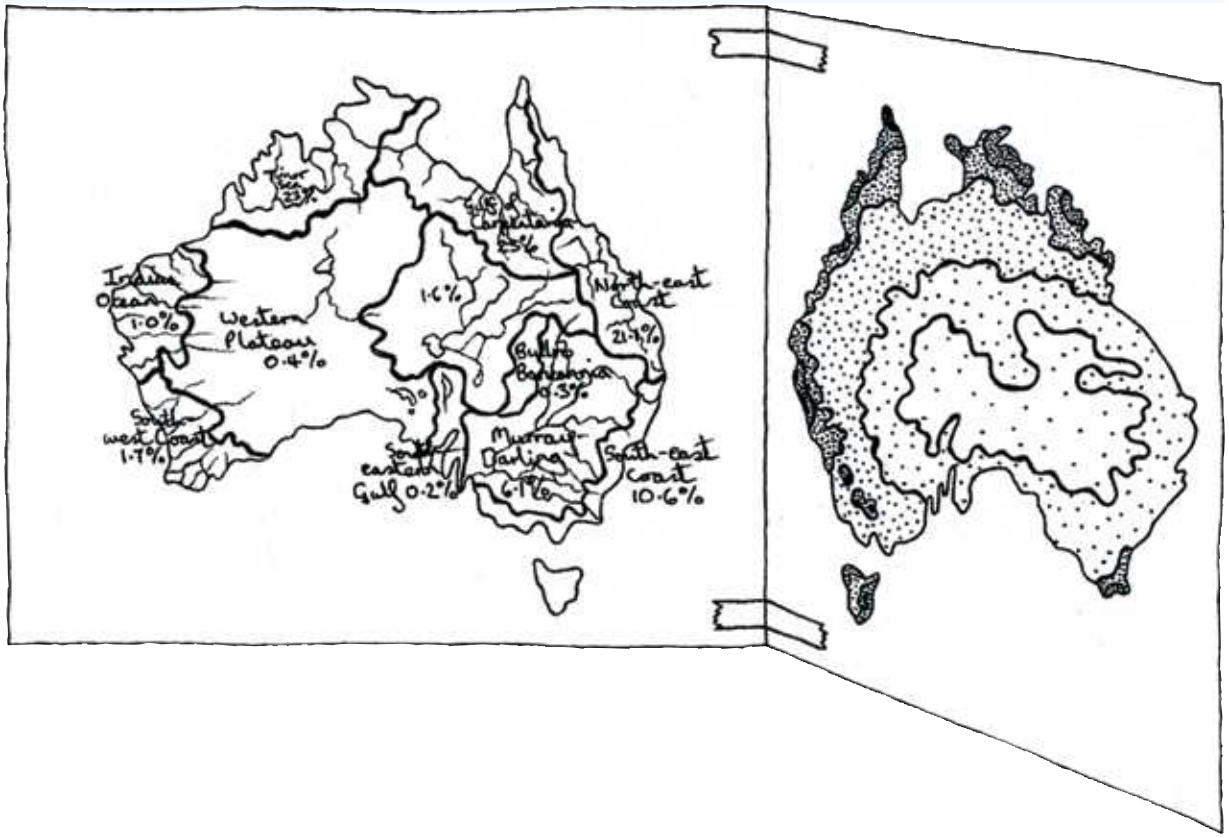
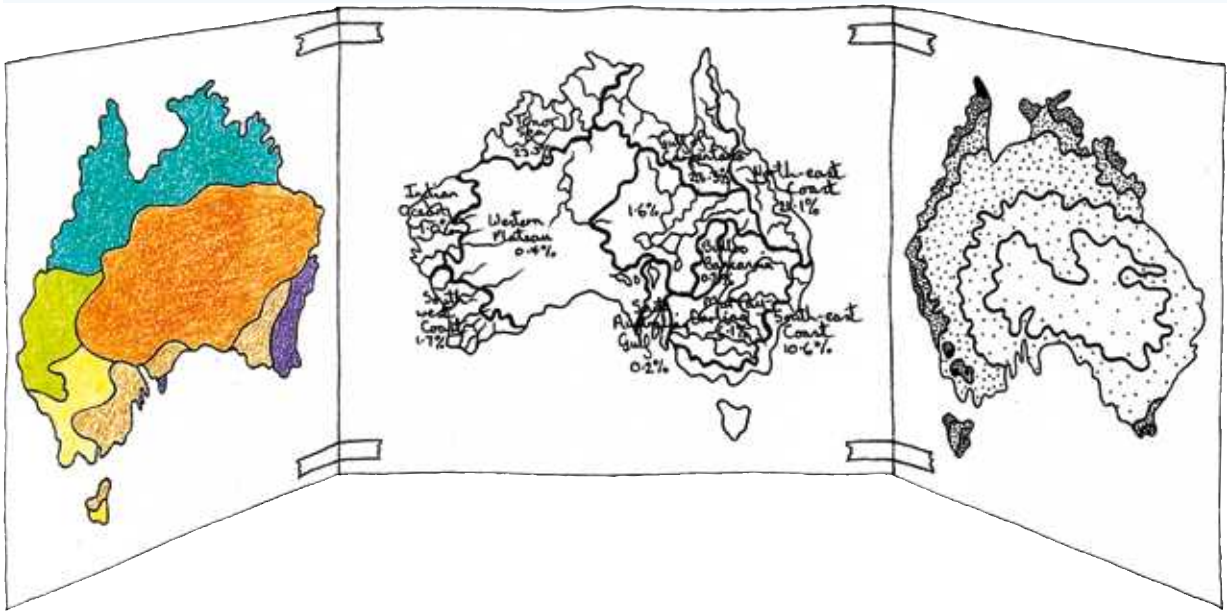


FIGURE 4 Two maps hinged to a base map, forming a complete overlay map shown prior to folding



Step 4

You are now able to lift each map separately from the others to see the information individually, or view two or more maps combined.

Step 5

To analyse the information that the overlay maps show, you should comment on where there is a relationship or interconnection of features. Lay any two maps together and identify any similar patterns. Write a sentence about these similarities. Then lay all three maps together, identify any similar patterns and write a sentence about these. An example is that the area with less than 400 mm of rainfall forms the arid zone, with erratic rainfall across the Western Plateau and Lake Eyre catchments.

Step 6

Next, look for significant differences across two maps. Write a sentence about these differences. Then look for significant differences across the three maps and write a sentence about these. For example, the very marked winter rainfall in south-west Western Australia does not produce greater annual rainfall than that in western Tasmania and near Tully, Queensland.

Step 7

Now go through the process again looking for unusual occurrences; that is, where things appear random and show no interconnection. An example is that the Murray–Darling Basin drainage catchment has a wide range of seasonal rainfall patterns across its area, varying from uniform rainfall to arid zones.

on Resources

Video eLesson Creating and describing complex overlay maps (eles-1656)

Interactivity Creating and describing complex overlay maps (int-3152)

10.17.3 Let me do it

Complete the following activities to practise this skill.

10.17 ACTIVITIES

1. Use **FIGURE 5**, which shows the topography of Borneo, and **FIGURES 6** and **7**, which show orangutan distribution in 2015 and rainforest distribution in 2020. Create an overlay map to show the ***interconnection*** between topography, rainforest distribution and orangutan distribution. Use the checklist to ensure you cover all aspects of the task correctly.
   Note: You will need to make your base map (from **FIGURE 5**) to the same scale as **FIGURES 6** and **7**. To do this, draw a 3 × 3 grid over the base map, then draw a smaller 3 × 3 grid on a piece of paper – this new grid should be the same size as **FIGURES 6** and **7**. Working one grid square at a time, sketch a copy of the base map into the new smaller grid.
2. Apply your skills in describing a complex overlay map by answering the following questions.
   a. Is there a pattern (relationship or ***interconnection***) between the location of the highest land and rainforest distribution (2005) in Borneo?
   b. Is there a pattern (relationship or ***interconnection***) between the location of rainforests and the distribution of orangutans (2015) in Borneo?
   c. Are there any areas in Borneo where there is no relationship between rainforest distribution and orangutan numbers?
   d. On what type of land might rainforests be found in the future?
   e. Between which of the following two features is the strongest relationship?
      - High land and rainforest distribution
      - High land and distribution of orangutans
      - Rainforest distribution and the orangutan population.
   f. What would explain this strong relationship?

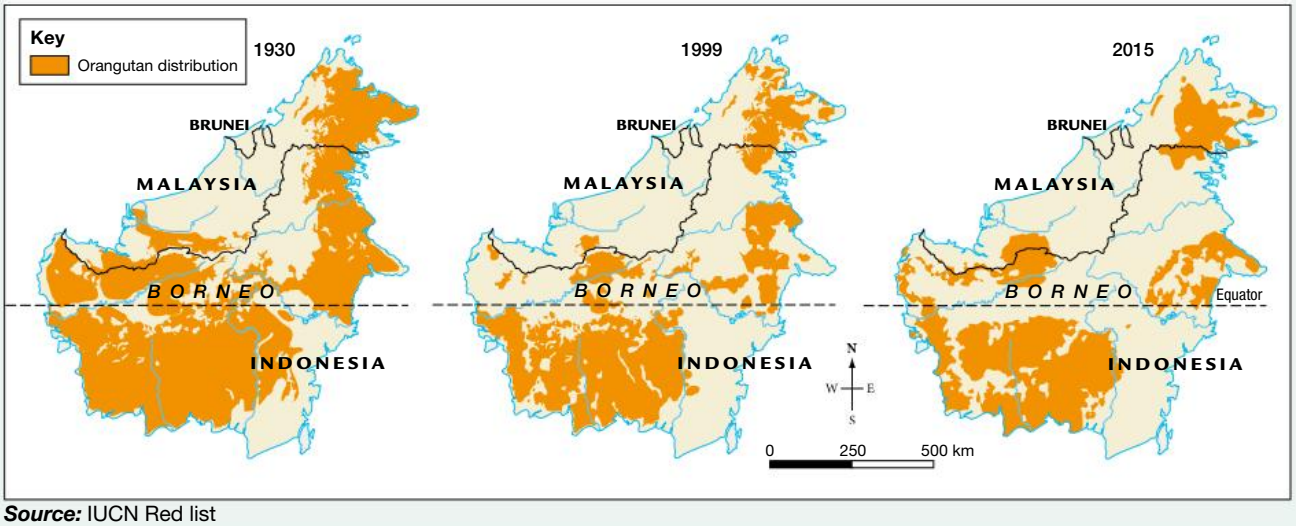
FIGURE 5 Topography of Borneo

Source: Spatial Vision

Key

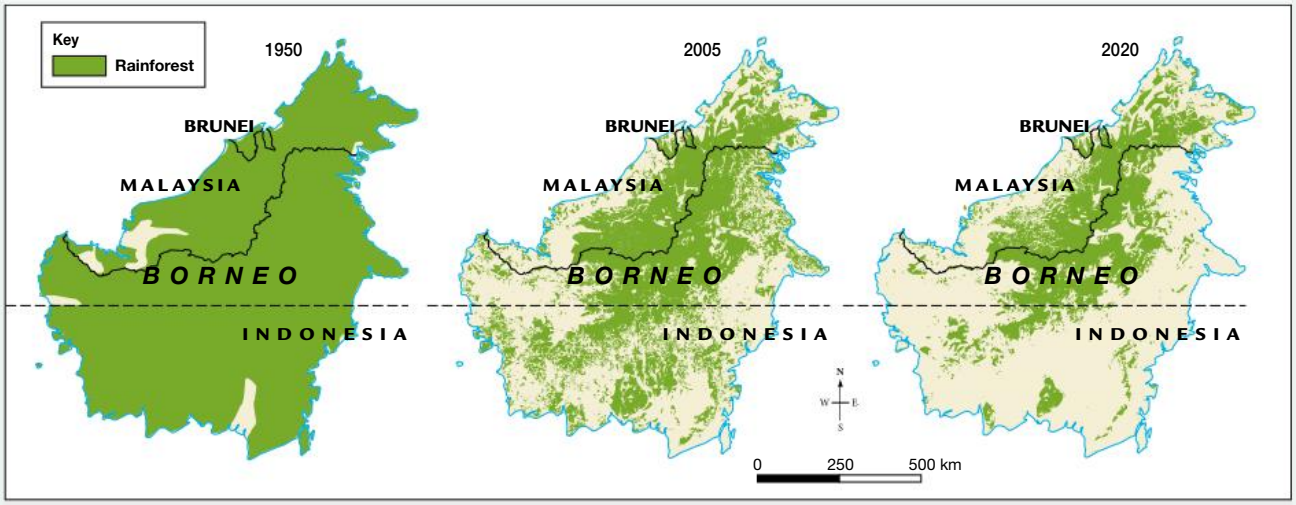
	Lake	**MALAYSIA**	Country name	**Ujung Pandang**	1 000 000 to 5 000 000 people
	River		Country border	**Palu**	500 000 to 1 000 000 people
	Wetland		Country capital	**Sampit**	100 000 to 500 000 people
Mt Kinabalu 4101 m	Mountain	*Sabah*	State/province name	**Satui**	Under 100 000 people
	World Heritage Area		State/territory border		
			Major road		

FIGURE 6 Orangutan distribution in Borneo, 1930–2015



Source: IUCN Red list

FIGURE 7 Rainforest distribution in Borneo, 1950–2020



Source: Spatial Vision

Checklist

In creating my complex overlay map, I have:

- drawn in pencil first, then coloured
- used light colours, so that the base map remains clear
- placed a key on each overlay, but offset it so each can be seen
- created hinges with adhesive tape at appropriate spots
- labelled features, if necessary
- included BOLTSS.

In describing my complex overlay map, I have:

- identified and communicated key features
- clearly represented and communicated the data.

10.18 SkillBuilder: Drawing a précis map

10.18.1 Tell me

What is a précis map?

A précis map is a simplified map – the cartographer has decided which details to leave in and which to leave out. It is different from a sketch map, which includes all the main features.

Why are précis maps useful?

A précis map is a summary of an area. There may be just one feature shown, such as rainforest. Sometimes more features are shown, such as vegetation, urban areas and roads.

They are useful for:

- identifying a particular feature or features, such as rainforests or residential/industrial areas of a city
- close examination of a particular feature
- focusing the reader's attention on a feature, such as the distribution of a plant species
- showing or including detail not visible on a satellite image or aerial photograph.

A good précis map has:

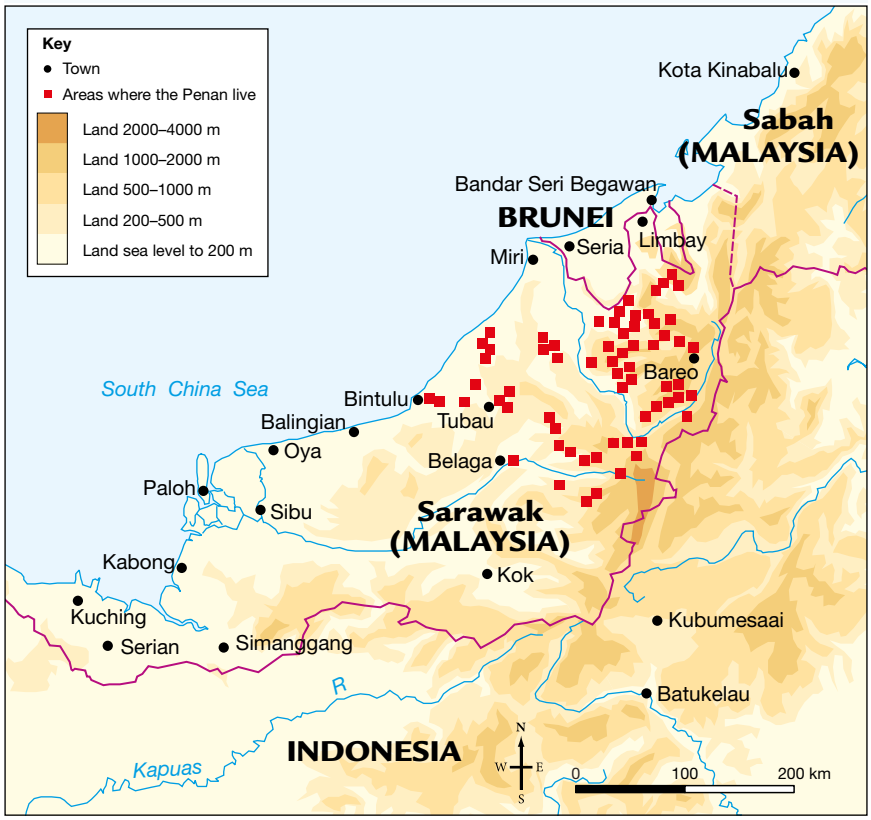
- been neatly presented
- been drawn in pencil
- been coloured or shaded and includes a key
- accurately shown a feature or features
- included BOLTSS.

10.18.2 Show me

How to draw a précis map

Model

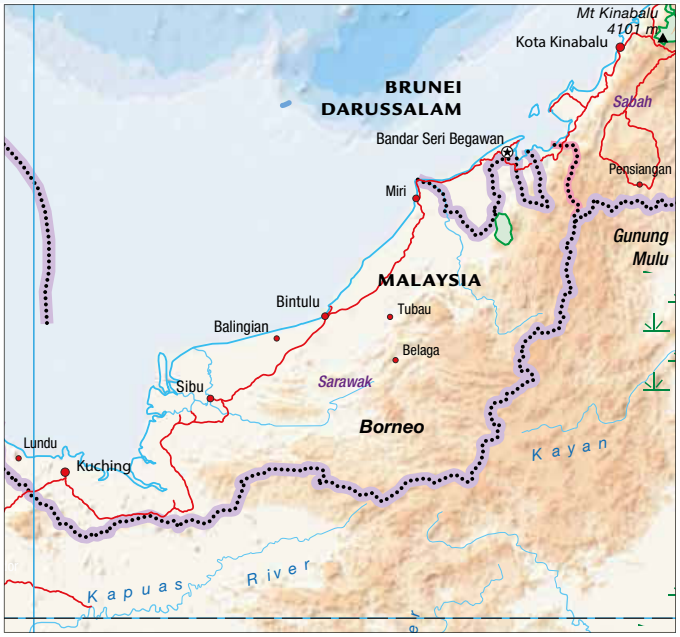
FIGURE 1 Précis map showing Sarawak, in Malaysian Borneo.



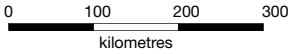
Source: MAPgraphics Pty Ltd, Brisbane

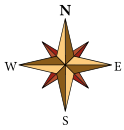
FIGURE 1 shows four aspects – the height of the land, the major towns, the rivers and the areas where the Penan people live. The cartographer has elected to omit aspects such as transport systems and vegetation. The areas in which the Penan people live have been drawn as symbols and in no way depict the boundaries of their locations. **FIGURE 1** is a précis of the complex map in **FIGURE 2**.

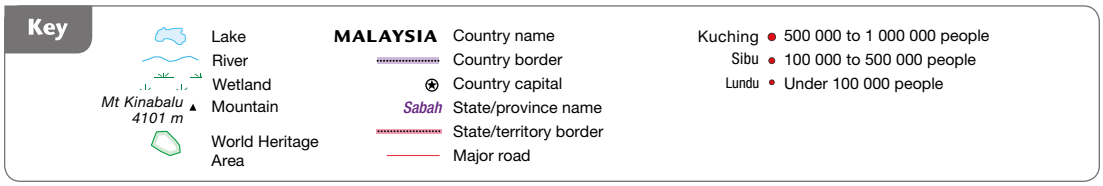
FIGURE 2 Complex map showing Sarawak, in Malaysian Borneo



Source: Spatial Vision







You will need:

- a map of the region being considered
- a light grey pencil
- coloured pencils
- a ruler
- an eraser.

Procedure

Step 1

Determine the area that you want to use to create a précis map. In **FIGURE 1** this has been done by removing details for surrounding countries, so that only Sarawak is detailed.

Step 2

Rule a border on your page within which to create your map. Make this the same size as the original to avoid having to scale your drawing.

Step 3

Identify the feature/s and their extent that you are going to include on your précis map. In **FIGURE 1**, the cartographer has chosen to leave in land heights, rivers and towns, and has chosen to leave out roads and vegetation.

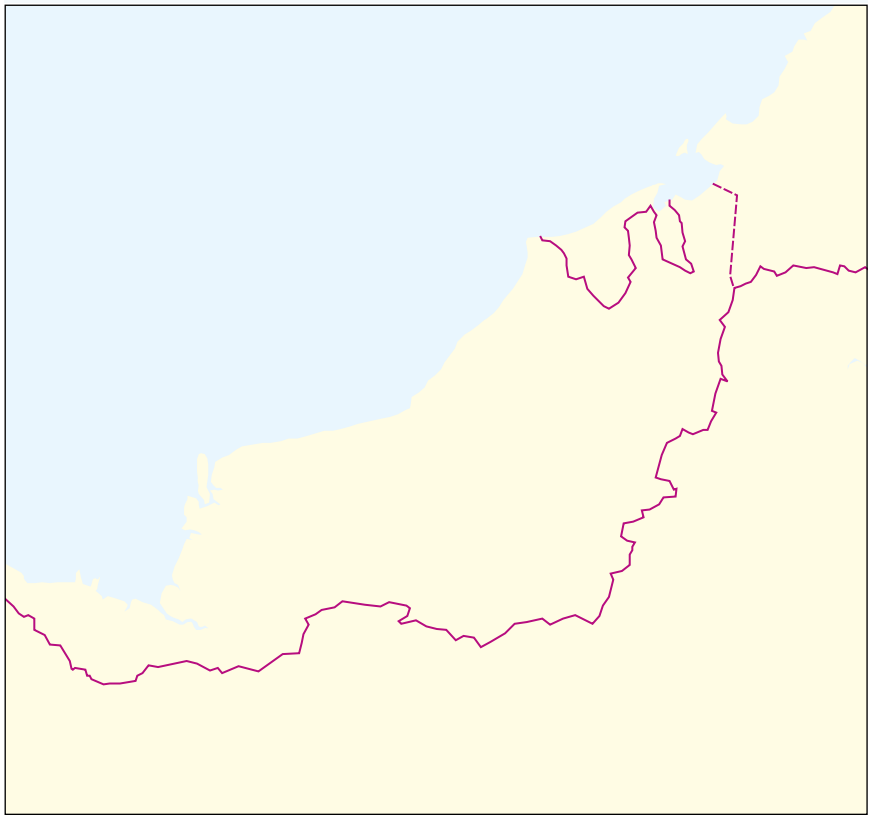
Step 4

Create a colour-coded key for each feature and place it next to or below the map.

Step 5

Within the border that you created in **Step 2**, draw an outline of the area that is to be mapped. Retain the scale of the original map that you are using.

FIGURE 3 Setting up the base map for the précis map



Step 6

Individually, take each of the features that you identified in **Step 3** and mark on your map, in a generalised way, the area that it covers. When you have completed one feature, colour it before moving to the next feature and mark your key appropriately (see **FIGURES 4**, **5**, **6** and **7**). It will prevent confusion if you complete the colouring as you go, rather than leaving it all until the end.

FIGURE 4 Land heights have been added to the base map.

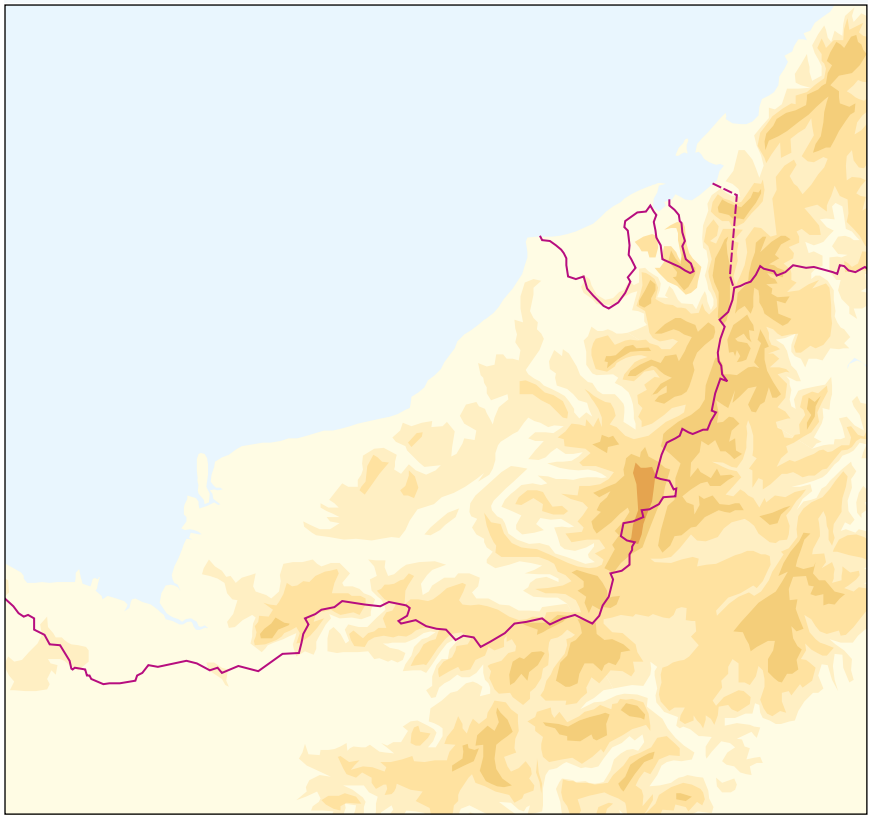


FIGURE 5 Rivers have been added to the base map.

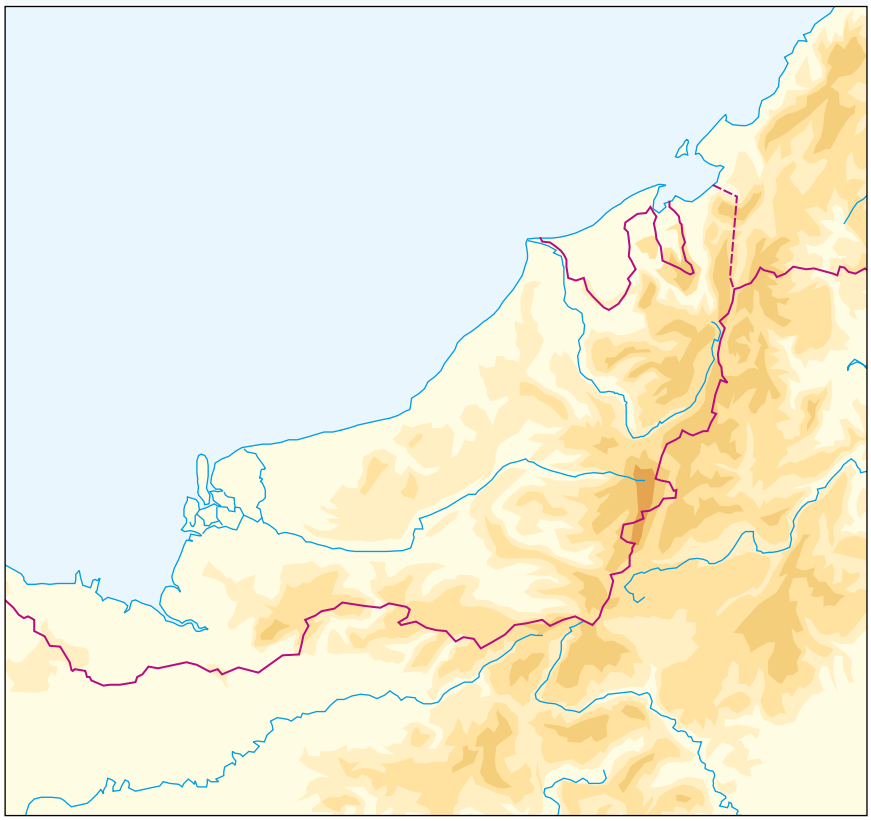
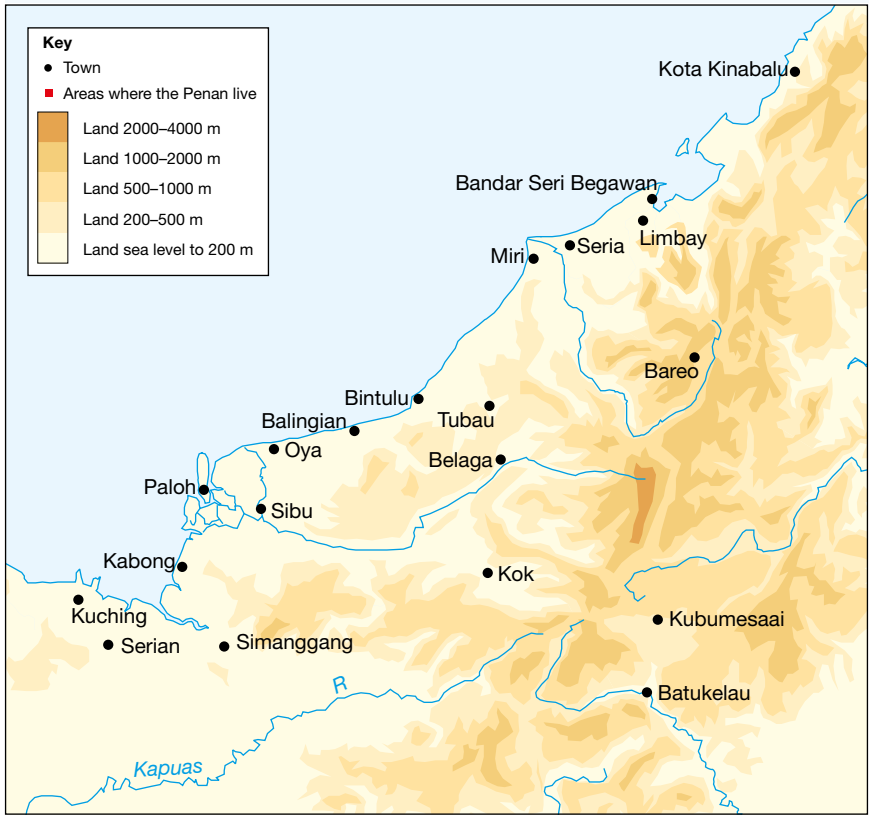


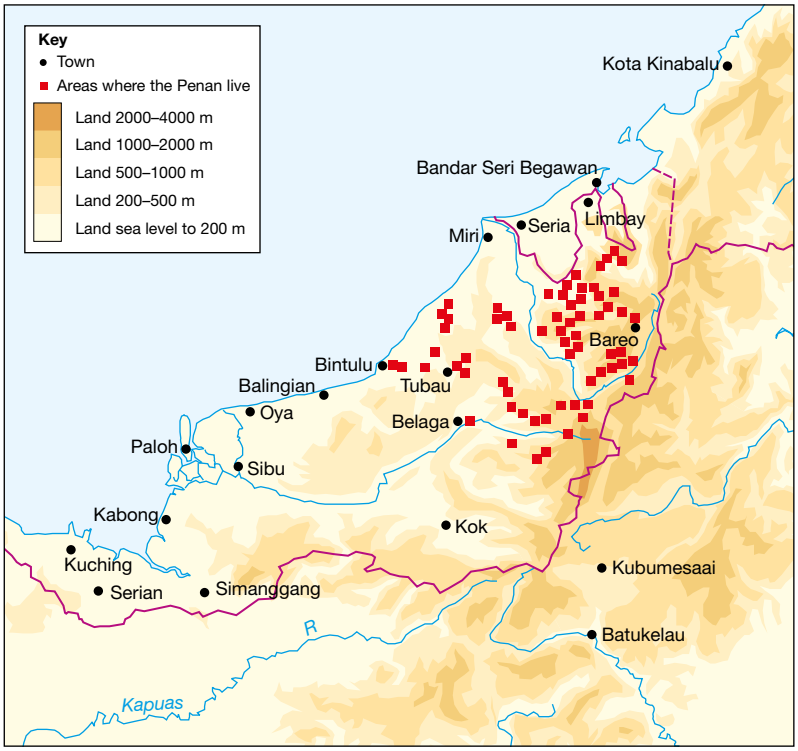
FIGURE 6 Towns have been added to the base map.



Step 7

Complete the précis map with BOLTSS.

FIGURE 7 The locations of Penan lands have been added to the base map.



on Resources

Video eLesson Drawing a précis map (eles-1657)

Interactivity Drawing a précis map (int-3153)

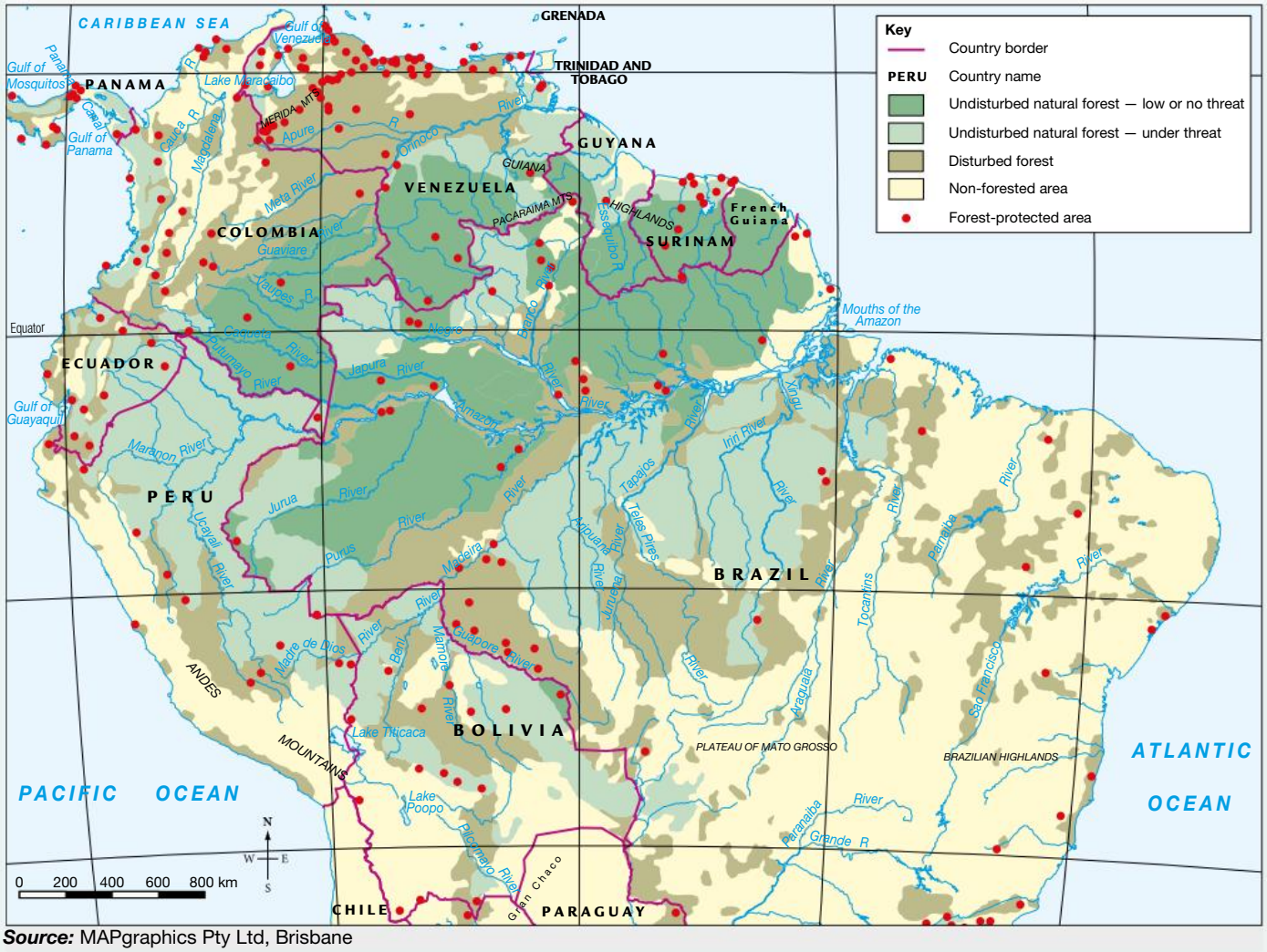
10.18.3 Let me do it

Complete the following activities to practise this skill.

10.18 ACTIVITIES

1. Refer to the map of the Amazon shown in **FIGURE 8** below On a separate piece of paper, create a précis map showing only the levels of deforestation. Map the outline and include the borders of countries. To show levels of deforestation, you should include the areas of undisturbed natural forest (low or no threat), undisturbed natural forest (under threat) and disturbed forest. Ensure that you complete the conventions of good mapping (include BOLTSS). Use the checklist to ensure that you cover all aspects of the task.
2. Use your completed précis map to answer the following questions.

FIGURE 8 The Amazon Basin



Source: MAPgraphics Pty Ltd, Brisbane

a. What level of deforestation dominates the Amazon Basin?
b. Is there more area of forest under threat than there is deforested area?
c. Is there a greater area of forest under threat than there is not threatened?
d. In which area of the Amazon Basin is the majority of the least disturbed forest?
e. Describe the regions of the Amazon Basin where you would be most likely to see evidence of deforestation.

Checklist

I have:
- presented the information neatly
- drawn in pencil
- coloured/shaded with a key
- accurately shown a feature or features
- included BOLTSS.

10.19 SkillBuilder: Creating and reading pictographs

10.19.1 Tell me

What is a pictograph?

A pictograph is a graph drawn using pictures to represent numbers, instead of the bars or dots that are traditionally used on graphs. Data can be drawn vertically or horizontally. Each picture is given a value.

Why are pictographs useful?

A pictograph is a simple way of representing data and conveying information quickly and efficiently in a different format. It is very visual for the reader.

Pictographs are useful for:
- simplifying data
- showing differences between data
- presenting data.

A good pictograph has:
- been drawn in pencil
- used clear and simple pictures or graphics of the same size.

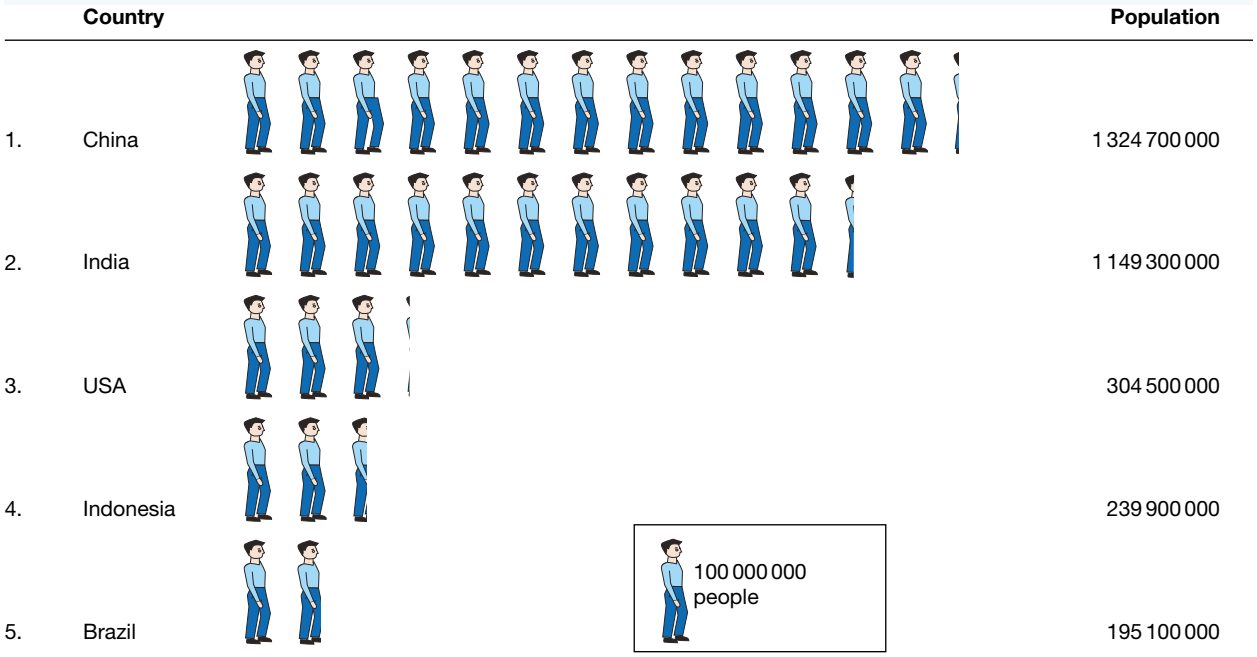
10.19.2 Show me

How to create and read a pictograph

Model

FIGURE 1 is a pictograph that shows that the populations of China and India are large in comparison to those of other countries. The populations of the United States and Indonesia appear to be similar, but the key shows that each complete symbol (person) represents 100 million people, so in fact there is a large difference in the population sizes. Indonesia's population is almost 250 million, while that of the United States is over 300 million.

FIGURE 1 Top five countries by population, 2008



You will need:

- a basic set of data
- a piece of paper on which to draw the pictograph
- a light grey pencil
- coloured pencils
- a ruler.

Procedure

To complete a pictograph you need a small set of data on one theme to graph.

Step 1

Decide on a simple picture to represent the data that you are going to graph. For example, you might decide to use stick figures to represent numbers of people, fish if your data is about fishing, or dollar signs if your data concerns money.

Step 2

Consider the data and determine a number that each picture should represent. In **FIGURE 1**, the drawing of one person is equivalent to 100 000 000 people in a population. Choose a scale that will not require too many pictures for each part of the graph, and check what the size of the graph will be when your representations are included. The pictograph must fit on the page or in the space you have available.

Step 3

Draw lines on your page, equal distances apart, to represent each variable (for example, country or year) for which you have data. On these lines you need to draw the appropriate number of pictures.

Step 4

Spend some time doing calculations to determine how many pictures you need to represent each number. Notice in **FIGURE 1** that 'part people' are used. For example, half a person in the pictograph would represent 50 000 000 people. Think about how your pictograph will show 'parts of the whole' to represent the data you are plotting.

Step 5

Complete your pictograph with its drawings. Ensure that the key is in place and that the pictograph has a clear title.

Step 6

Reading a pictograph requires you to carefully analyse the data provided. Check the title and the key, and determine the numbers represented by the graph. Write a few sentences summarising what the pictograph tells you. For example, **FIGURE 1** shows that the populations of China and India are large in comparison to those of other countries.

on Resources

SkillBuilder: Creating and reading pictographs (eles-1659)
SkillBuilder: Creating and reading pictographs (int-3155)

10.19.3 Let me do it

Complete the following activities to practise this skill.

10.19 ACTIVITIES

1. Use the data below to draw a pictograph of the ten cities with the largest populations. Use the checklist to ensure you complete the task correctly.

Rank	City	Country	Population (rounded figures, 2011)
1	Tokyo	Japan	35.7 million
2	Mexico City	Mexico	19.0 million
2	Mumbai	India	19.0 million
2	New York City	United States	19.0 million
5	São Paulo	Brazil	18.8 million
6	Delhi	India	15.9 million
7	Shanghai	China	15.0 million
8	Kolkata	India	14.8 million
9	Dhaka	Bangladesh	13.2 million
10	Jakarta	Indonesia	13.2 million

2. Apply your skills to answer the following questions.
   a. What did you immediately notice when you first looked at your completed pictograph?
   b. Which cities did you not expect to see on this list? Why?
   c. Which country did you think would contain one of the ten cities with the highest populations, but does not?
   d. How much larger is Tokyo than Mexico City?
   e. Sydney is Australia's largest city (5.7 million in 2019). Add Sydney to your pictograph. What do you notice?

Checklist

I have:
- drawn in pencil
- used clear and simple pictures or graphics of the same size.

10.20 SkillBuilder: Describing photographs

10.20.1 Tell me

What is meant by 'describing a photograph'?

A description is a brief comment (up to a paragraph) on a photograph, identifying and communicating features from a geographic point of view. Sometimes it is necessary to infer information from a photograph; for example, a cloud of dust in an image may tell us that the climate is dry, or that the place is experiencing drought, or that some movement disturbed the soil at the time the photograph was taken.

Why is describing photographs useful?

Photographs record the details of a place at a particular moment in time. As geographers, we use our understanding of the world to interpret the image and tell others about the main features or information the photograph reveals.

Photographs are also useful for:

- comparing features before and after a disaster
- showing land features when planning town expansions
- explaining about a place and the way people use space
- revealing the living conditions of people on the other side of the world.

A good description of a photograph:

- includes an overview of the main features
- has considered the angle of photography – aerial, oblique or ground
- has tried to identify the place in the photograph
- notes other relevant information from the photograph
- acknowledges the anomalies in the image (those things that seem out of place)
- includes any written information that came with the photograph
- has considered the time of the day and the date when the photograph was taken
- has looked for visual clues of *scale* (e.g. comparisons with people or building heights)
- clearly communicates what you want the viewer to notice or see in the photograph
- has considered whether there is evidence of bias from the photographer, especially with the size of the image.

10.20.2 Show me

How to interpret photographs

Model

FIGURE 1 is a ground-level photograph of a city, which shows a mix of traditional buildings of about 10 storeys in height and modern sky scrapers of at least double that height. You can see an inner-urban area with traffic lights, street vendors and one-way streets. A lone tree is struggling to grow in the shade of the buildings. Some of the people may be tourists, as the man in the light-coloured shirt seems to be looking around as he walks. It appears to be a warm day, because people are wearing short-sleeved shirts and sunglasses, and some buildings are casting shadows onto others. You can tell that people are at work in these offices, because the lights are on in many levels of the buildings. The street name (W 56 St) tells the viewer that this is a street in New York. It is likely that the photograph was taken within the last 15 years, because the man in the foreground wears earphones and is listening to music while he walks.

FIGURE 1 A modern city environment

You will need:

- a photograph of a built or natural environment.

Procedure

To interpret a photograph, you must have a geographic photograph of a place. Begin by using the 'See, Think, Wonder' technique.

Step 1

See

What can you see? Look for all the main details. What takes up most of the space? Look for all the small details. What are you wanting or needing to point out in this image? Do not try to explain anything. Make a list of the things that you can see. In **FIGURE 1**, this list would include high-rise buildings, traffic on the roads, pedestrians, street signs and more.

Step 2

Think

What do you think is happening? What do you think about it? Make a list of what you think. In **FIGURE 1**, you might think it is early morning and workers and tourists are in the street, going about their daily activities. Perhaps you think that the high-rise buildings contain offices within which people are beginning their work for the day.

Step 3

Wonder

What is the mystery? What do you wonder about this image? For example, in **FIGURE 1**, why are all the streets one way? Make a list of what you wonder about.

Step 4

Is there any information with the photograph? For example, information might be given about the photographer or when the image was taken. Does the photograph appear with an article?

Step 5

Have you determined where the place is? Can you suggest in which region of the world the photograph is taken, even if the exact country or place is difficult to decide? As you develop your geographic understanding, you will gain impressions from images. In **FIGURE 1**, the street name (using numbering) on the sign indicates that this is a city in the United States, probably New York.

Step 6

What does the light in the image indicate about the time of day when the photograph was taken? Are there any shadows? Are there any indications as to whether the sun is high in the sky, rising in the early morning, or setting in the evening? This might tell you about the activities of people at a particular time of day. In **FIGURE 1**, the light comes from an angle and so appears to be the light of early morning.

Step 7

Is this a recent or an old photograph? Clothes, cars and other items in the image, such as appliances, can help to date the photograph. Sometimes photographs have dates embedded in the corner of the image. **FIGURE 1** shows a man walking with earphones in, listening to a personal media player. This technology has only been widely available for around 15 years.

Step 8

At what angle is the photograph taken – aerial, oblique or ground? Think about why the photographer may have used this angle. Does the background information add to your understanding of the photograph? Think about the things that you cannot see. For example, what types of office work might happen in the buildings in **FIGURE 1**?

Step 9

Do you need to make a statement about the height of any objects in the photograph? Is there an item from which you can reference height? In **FIGURE 1**, each floor of a building represents about four metres.

Step 10

Ask yourself whether you think the photographer may be using bias in the photograph; that is, has the photographer unfairly influenced the image? Is it likely that left and right or top and bottom of this image show the same scene, or has the photographer selected these elements to tell a particular story? In **FIGURE 1**, bias does not seem to be apparent. The photographer has included what the eye can see. Look at **FIGURES 2 (a)** and **(b)** – is the story the same in both images?

FIGURE 2 (a) appears to be a scene of a peaceful rural or parkland environment. When the full image is shown in **FIGURE 2 (b)**, it becomes apparent that this place is part of a very urban space, in the centre of a large city.

FIGURE 2 (a) A peaceful rural environment? (b) Central Park, New York City

(a)

(b)

on Resources

Video eLesson	Describing photographs (eles-1660)
Interactivity	Describing photographs (int-3156)
Weblink	Kibera slum

10.20.3 Let me do it

Complete the following activity to practise this skill.

10.20 ACTIVITY

Use the **Kibera slum** weblink in the Resources tab to look at the photograph of the Kibera slum in Nairobi, Kenya. Using the online zoom tool, explore the details of the photograph. Interpret the image by answering the following questions. Use the checklist to ensure you cover all aspects of the task.

a. What activities are being carried out in the slum?
b. Describe the buildings in the slum, including size, construction techniques, building materials and density of buildings.
c. Describe the possible movement of people through the slum.
d. In the left foreground is a water tank. This seems unusual in this environment. Can you suggest what might be happening in this community?
e. What additional information would you like to have about this place, especially considering the presence of the multistorey buildings in the background?
f. Write a paragraph of text to describe the Kibera slum, following the steps outlined in the Procedure.

Checklist

I have:

- included an overview of the main features
- considered the angle of photography – aerial, oblique or ground
- tried to identify the place in the photograph
- noted other relevant information from the photograph
- acknowledged the anomalies in the image (those things that seem out of place)
- included any written information that came with the photograph
- considered the time of the day and the date when the photograph was taken
- looked for visual clues of scale (e.g. comparisons with people or building heights)
- clearly communicated what I want the viewer to notice or see in the photograph
- considered whether there is evidence of photographer bias, especially with the size of the image.

10.21 SkillBuilder: Constructing a basic sketch map

10.21.1 Tell me

What is a basic sketch map?

A basic sketch map is a map drawn from an aerial photograph or developed during fieldwork. It identifies the main features of an area and is different from a précis map, in which the cartographer opts to include or leave out certain features.

Why are basic sketch maps useful?

Basic sketch maps are used to show the key elements of an area, so other more detailed characteristics are not shown.

They are useful for:

- summarising an idea for presentations about a feature
- identifying and communicating key features or characteristics of an area.

A basic sketch map has:

- been drawn in pencil
- not tried to show everything in great detail
- been coloured using a key
- included BOLTSS.

10.21.2 Show me

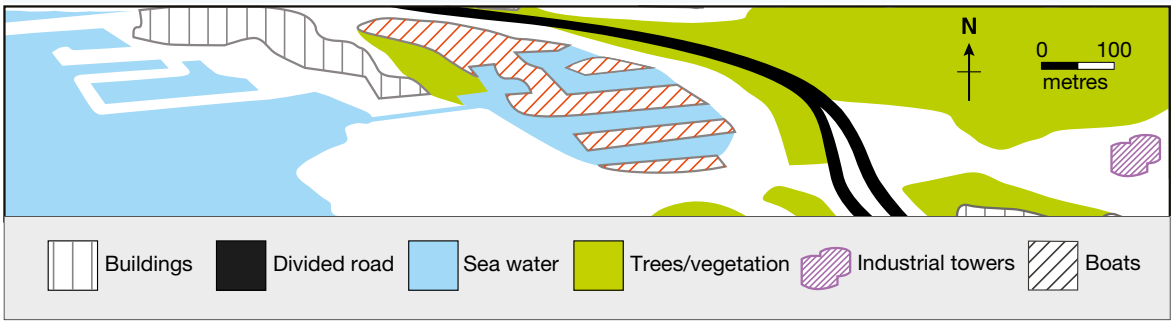
How to construct a basic sketch map

You will need:

- an aerial photograph
- a piece of paper on which to draw the map
- a light grey pencil
- coloured pencils
- a ruler
- an eraser.

Model

FIGURE 1 Sketch map of Darwin, Northern Territory, showing base features



Procedure

To complete a basic sketch map from an aerial photograph of a place, complete the following steps.

FIGURE 2 Aerial photograph of Darwin, Northern Territory

Step 1

Determine the relevant area of the aerial photograph that you want to use to make a basic sketch map.

FIGURE 3 The area for the sketch map is identified.

Step 2

Rule a border on your page within which to create your map. Keep the border the same size as the area of the photograph you are planning to draw, to avoid scale issues.

Step 3

Identify the feature(s), and their extent, that you are going to transfer onto your basic sketch map. Look for both natural and human features. In **FIGURE 3**, we can identify buildings, a divided road, sea water, trees and vegetation, industrial towers, and boats.

Step 4

Create a colour-coded key for each feature and place it near the map. If you want to use appropriate symbols, choose those too. For example, a red cross might be a suitable symbol to represent a hospital. You can add to your key as you go.

Step 5

Inside the border, draw an outline of the base features of the area, such as rivers, coastlines and major roads. These will guide your colouring.

Step 6

Individually, take each of the features that you have identified and mark on your base map the approximate area that it covers. When you have completed one feature, colour it before moving to the next feature. This will prevent confusion with colouring other features.

Step 7

You may wish to label some significant features of the sketch map. This shoud be done neatly and horizontally.

Step 8

Complete the simplified sketch map with BOLTSS.

on Resources

Video eLesson	Constructing a basic sketch map (eles-1661)
Interactivity	Constructing a basic sketch map (int-3157)

20.21.3 et me do it

Complete the following activities to practise this skill.

10.21 ACTIVITIES

1. Using the aerial photograph of Darwin shown in **FIGURE 2**, complete a basic sketch map of the city and its *environments*. Use the checklist to ensure you have completed the task correctly.
2. Use your sketch map to answer the following questions.
   a. Describe the natural *environment* of Darwin. Mention the base features that you used to make your sketch.
   b. What type of buildings make up the greatest proportion of the built *environment* of Darwin?
   c. Suggest two reasons for the focus of the city on marine activities.
   d. There is vacant land to the right of the coastal road. On your sketch map, shade the land use that might appear here in 20 years' time. Justify your shading using labelling placed on your sketch map.
   e. How does this city compare to the *place* in which you live?

Checklist

I have:

- drawn in pencil
- not tried to show everything in great detail
- used colour with a key
- included BOLTSS.

11 Landforms and landscapes

11.1 Overview

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

From oceans to deserts to cities, what exactly are landscapes and how is each one unique?

11.1.1 World landscapes and landforms

Landscapes are the visible features of the land, ranging from the icy landscapes of polar regions and lofty mountain ranges, through to forests, underground karst systems, deserts and coastal plains. Shaped by physical processes over millions of years, landscapes have been overlaid by the presence of humans; this includes the places we build, such as towns and cities, and the changes we make to the natural landscape.

on Resources

- **eWorkbook** Customisable worksheets for this topic (ewbk-5511)
- **Video eLesson** World landscapes and landforms (eles-1623)

FIGURE 1 Wave Rock is a natural rock formation near the town of Hyden, in the south-west of Western Australia.

11.2 Different types of landscapes

LEARNING INTENTION

By the end of this subtopic, you will be able to:

- identify different environments
- classify environments as part of either the natural or built environment
- explain how people might use the environment
- classify people's impact on environments as either positive or negative.

11.2.1 Types of landscapes

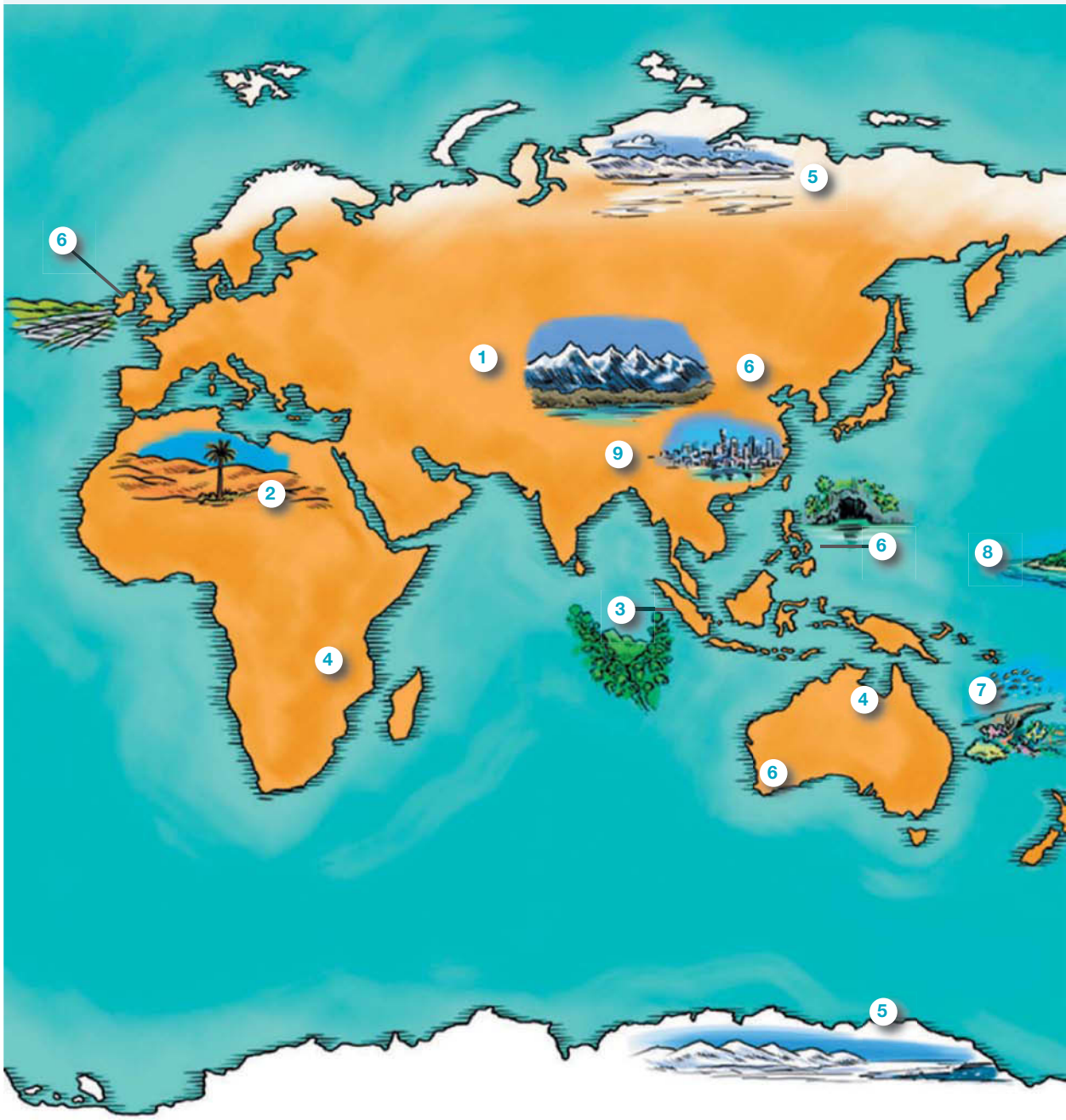
Many different landscapes are across the Earth, and similarities can be observed within regions. Variations in landscapes are influenced by factors such as climate, geographical features (including mountains and rivers), latitude, the impact of humans, and where the landscapes are located.

FIGURE 1 At 8848 metres, Mount Everest in the Himalayas is the highest mountain on Earth.

FIGURE 2 The Ngilgi cave formations in Western Australia are protected.

int-3604

FIGURE 3 Selected world landscapes



1. Mountains rise above the surrounding landscape. They often have steep sides and high peaks and are the result of processes operating deep inside the Earth. Some reach high into the atmosphere, where it is so cold that snow is found on their peaks.
2. Deserts are areas of low rainfall; they are an arid or dry environment. They can experience temperature extremes: hot by day and freezing at night. However, not all deserts are hot. Antarctica is the world's largest desert, and the Gobi Desert, located on a high **plateau** in Asia, is also a cold desert.
3. Rainforests are the most diverse landscapes on Earth. They are found in a variety of climates, ranging from the hot wet tropics to the cooler temperate areas. The lush vegetation found in these regions depends on a high level of rainfall. Over 50 per cent of all known plant and animal species are found within them. In addition, many of our foods and medicines come from rainforests.
4. Grasslands, or savannas, are sometimes seen as a transitional landscape found between forests and deserts. They contain grasses of varying heights and coarseness, and small or widely spaced trees. They are often inhabited by grazing animals.
5. Polar regions and tundra can be found in polar and alpine regions. Characterised by **permafrost**, they are too cold for trees to grow. Vegetation such as dwarf shrubs, grasses and lichens have adapted to the extreme cold and short growing season. **Glaciers** often carve spectacular landscape features.

plateau an extensive area of flat land that is higher than the land around it. Plateaus are sometimes referred to as tablelands.

permafrost a layer beneath the surface of the soil where the ground is permanently frozen

glacier a large body of ice, formed by an accumulation of snow, which flows downhill under the pressure of its own weight

aquifer a body of permeable rock below the Earth's surface that contains water, known as groundwater

6 Karst landscapes form when mildly acidic water flows over soluble rock such as limestone. Small fractures form, which increase in size over time and lead to underground drainage systems developing. Common landforms include limestone pavements, disappearing rivers, reappearing springs, sinkholes, caves and karst mountains. Around 25 per cent of the world's population obtains water from karst **aquifers**.

7 Aquatic landscapes cover around three-quarters of the Earth and can be classified as freshwater or marine. Marine landscapes are the saltwater regions of the world, and include oceans and coral reefs. Freshwater landscapes are found on land, and include lakes, rivers and wetlands.

8 Islands are areas of land that are completely surrounded by water. They can be continental or oceanic. Continental islands lie on a continental shelf — an extension of a continent that is submerged beneath the sea. Oceanic islands rise from the ocean floor and are generally volcanic in origin. A group or chain of islands is known as an archipelago.

9 Human or built landscapes are those that have been altered or created by humans.

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigating Australian Curriculum topics > Year 8: Landforms and landscapes > **Grasslands**

on Resources

Interactivities Selected world landscapes (int-3604)
Landscapes galore (int-3102)

Google Earth Mount Everest

11.2 ACTIVITY

Choose one of the landscapes featured in **FIGURE 3** and investigate it. Create a poster for a tourism campaign highlighting the features of your chosen landscape. Include at least four of the following: location, climate, striking natural features, unique or interesting animal and/or plant species, and specific cultural or historical human aspects of the landscape.

HASS skills: Communicating and reflecting
Geography concept: Place

11.2 EXERCISE

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

Learning pathways

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

Check your understanding

1. Describe a built ***environment***. What do you think a natural ***environment*** is?
2. What factors make landscapes different?
3. List as many different human or built ***environments*** as you can think of.
4. Why do you think people ***change*** landscapes?
5. Select two of the landscapes featured in this subtopic and explain how they are different.

Apply your understanding

6. Copy the following table into your workbook.

Characteristics	How it formed	How people use it	Positive impacts	Negative impacts

   a. Select one of the landscape types described in this subtopic and complete the table, noting the positive and negative aspects of human use.
   b. Which list is larger – the positive impacts or negative impacts?
   c. Review the column of negative impacts. Select three of these impacts and suggest a way in which the ***environment*** could be used more ***sustainably***.
7. Describe how the ***scale*** of the following landscapes might differ around the world: deserts, polar regions, aquatic landscapes and islands.
8. Which of the featured landscapes would you like to know more about? Draw up a list of questions that you would like to have answered.
9. Why do you think rainforests are described as 'the most diverse landscapes on Earth'?
10. Which of the featured landscapes do you think would be the least diverse? Give reasons for your answer.

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

11.3 The processes that shape landscapes

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- explain the processes that have shaped the Earth
- define the key terms weathering, erosion, deposition, tectonic forces and transportation
- explain how soil is formed.

11.3.1 Are all processes natural?

Processes are at work that continuously sculpt and change the landscape. In the future, the Earth's surface will look very different from the way it looks today.

A variety of natural processes shape and reshape not only the surface of the Earth but also what lies beneath it. Natural processes include uplift, such as that caused by tectonic activity, **erosion**, **deposition** and **weathering**. People change the landscape when they clear land for agriculture or build cities and road networks. Sometimes they alter the course of a river or trap its flow behind the walls of a dam.

11.3.2 The role of tectonic forces

The Earth's surface, or crust, is split into a number of plates, which fit together like a giant jigsaw puzzle. These plates sit on a layer of semi-molten material in the Earth's **mantle** – the layer of the Earth between the crust and the core. Heat from the Earth's core creates convection currents within the mantle, causing the plates to move. Most of the Earth's great mountain regions were formed as a result of this movement.

When two plates collide, one plate often slides under the other, in a process known as subduction, and it becomes part of the mantle. Other rocks are forced upwards and bent or folded. Large mountain ranges that were formed in this way include the Himalayas in Asia and the Rocky Mountains in North America. You will find more information on how mountains are formed in topic 13.

11.3.3 How is the landscape worn away?

Erosion is the wearing away of the Earth's surface by natural elements such as wind, water, ice and human activity. The landscape is further eroded when agents such as wind, water and ice **transport** these materials to new locations. Eventually, transported material is deposited in a new location. Over time, this material can build up and new landforms result. The Grand Canyon in Arizona in the United States (**FIGURE 1**) is an example of these elements at work. These processes work more quickly on softer rocks.

Human activity also contributes to erosion. Deforestation, agriculture, urban sprawl, logging and road construction all alter the natural balance and increase erosion by as much as 40 per cent in some areas. Vegetation not only provides valuable habitat for native animals but is also vital for binding the soil together. Once vegetation is removed, it is more easily broken down and removed by wind and water. When topsoil (see **FIGURE 6**) is removed, plants are unable to obtain the nutrients they need for growth. Sometimes wide, deep channels, known as gullies, form (see **FIGURE 2**).

erosion the wearing away and removal of soil and rock by natural elements, such as wind and water, and by human activity

deposition the laying down of material carried by rivers, wind, ice and ocean currents or waves

weathering the breaking down of bare rock (mainly by water freezing and cooling as a result of temperature change) and the effects of climate

mantle the layer of the Earth between the crust and the core

transport the movement of eroded materials to a new location by elements such as wind and water

FIGURE 1 Over millions of years, the Colorado River has cut deep channels to form the Grand Canyon.

FIGURE 2 Note the scale of this gully compared to the people.

int-7829

FIGURE 3 After tectonic forces cause a section of the Earth to be raised (uplifted), other processes take over and resculpt the landscape.

1. Weathering is the breakdown of rocks due to the action of rainwater, temperature change and biological action. The material is not transported (removed).

   It can be physical, chemical or biological.

2. Erosion is the process whereby soil and rocks are worn away and moved to a new location by agents such as wind, water or ice.

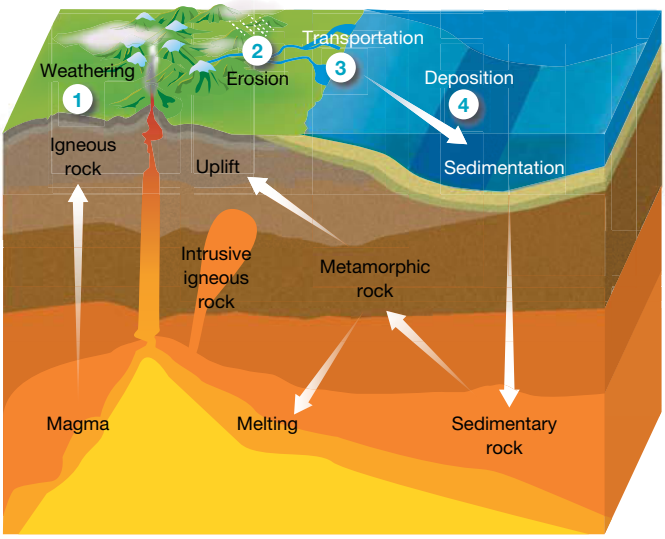
3. Transportation is the process that moves eroded material to a new location – examples include soil carried by the wind, sediment or pebbles in a stream.

4. Deposition – materials moved by wind and water eventually come to a halt. Over time new landforms are built. Sand dunes and beaches are common landforms associated with deposition.

Physical – occurs where water is continually freezing and thawing. The water penetrates cracks and holes in the rocks. As water freezes it expands, making the cracks larger. Over time the rock breaks apart.

Chemical – some rocks, such as limestone, contain chemicals that react with water, causing the limestone to dissolve.

Biological – living organisms such as algae produce chemicals that break down rocks. They can also be forced apart by plant roots.



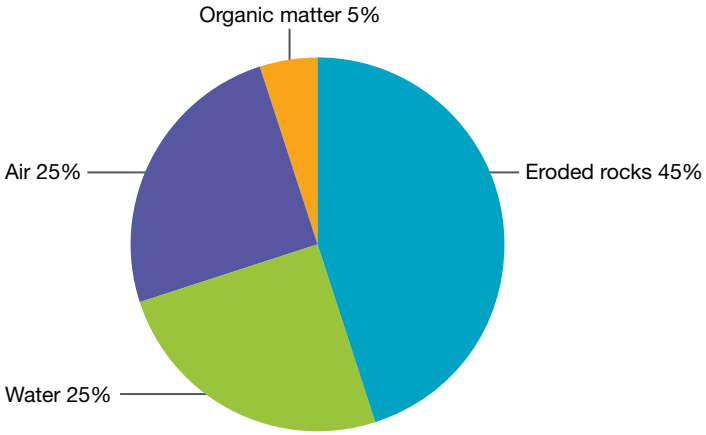
11.3.4 What is soil?

We rarely give much thought to the soil beneath our feet, but soil is the basis of all life on the Earth. It provides the nutrients needed for growing plants, which provide food for animals. Without soil, people could not grow crops or raise livestock. Without soil, nothing could survive.

Soil is a thin layer of material on the surface of the Earth. In it, plants can grow. In some parts of the world it is metres deep, but in Australia it is a thin layer of 15 to 20 centimetres depth. The composition of soil is shown in **FIGURE 4** and the factors that influence soil formation are shown in **FIGURE 5**.

Australia generally has poor soils when compared with those found on other continents such as North America and Europe. Australian soils are generally low in nutrients and, in some areas, especially arid zones, they have a high salt content. Patches of good soil, though, are scattered throughout the continent.

FIGURE 4 While the composition of soil varies widely across the Earth, an average soil will have these characteristics.



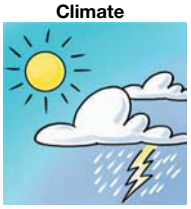
How is soil formed?

Factors that influence soil formation are shown in **FIGURE 5**.

int-7831

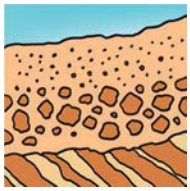
FIGURE 5 Influences on soil formation

Climate



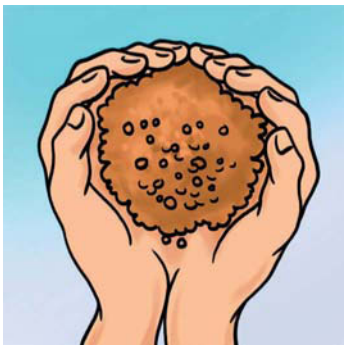
Climate affects the rate of weathering of soil. In high rainfall areas, soil develops more rapidly, but excess moisture also washes out or leaches nutrients. In rainforests, for example, the rich supply of humus from decaying plant matter produces lush vegetation. However, high rainfall means that without this constant supply of humus, soil fertility is quickly lost. In arid regions, where evaporation is high, soils often contain too much salt to support plant growth. Weather also plays a role; a climate with a freezing and thawing cycle will speed up the breakdown of rocks. In warm climates, the activity of soil organisms is high, and chemical processes also happen more quickly.

Parent meterial

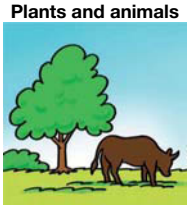


Surface rocks and bedrock are broken down through weathering and erosion. The type of soil that forms depends on the parent material and the minerals it contains. A coarse, sandy soil will develop from sandstone. Bedrock that is mainly granite produces a sandy loam, while shale turns into heavy clay soil.

Soil

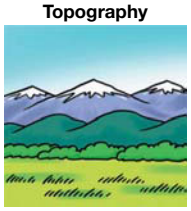


Plants and animals



Decaying plant and animal matter on the soil's surface is broken down by microorganisms into material that is incorporated into the soil, making it nutrient rich.

Topography



Surface features such as hills, valleys and rivers influence soil development. Soil is generally deeper on the top and at the base of a hill than on its slopes. Floodplains next to river valleys are often nutrient rich, due to sediment being deposited as floodwaters recede.

Time

These processes take place over long periods of time. Soils undergo many changes with the passage of time.

For example, there is:

- volcanic soil on the Darling Downs in Queensland and around Orange in New South Wales
- alluvial soil in river valleys such as around the Clarence River in New South Wales and Margaret River in Western Australia.

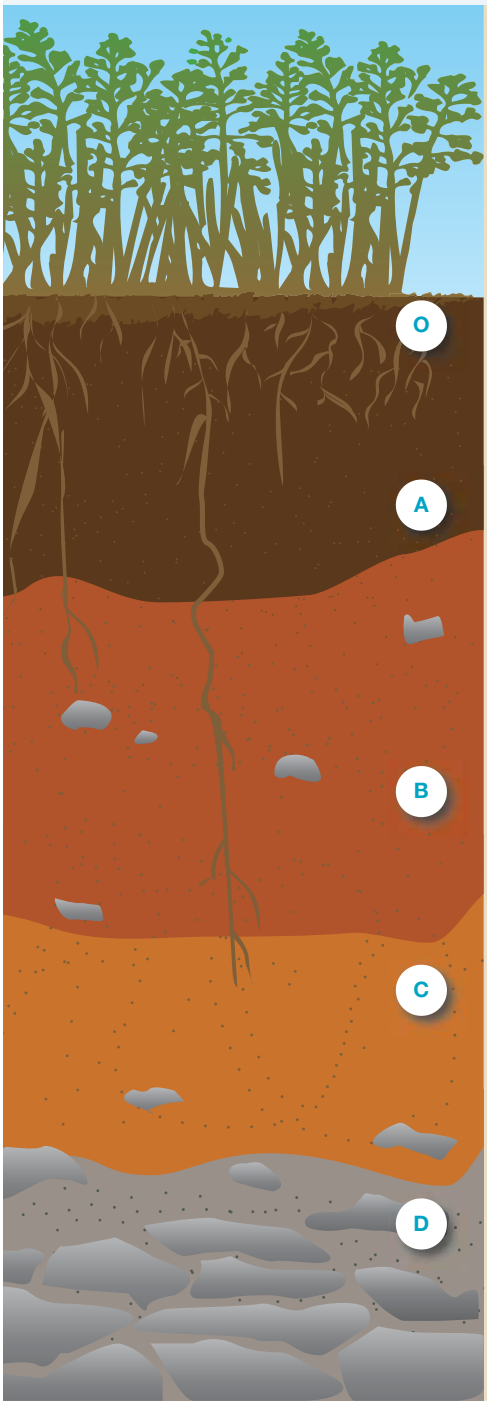
In many parts of Australia, it takes more than 1000 years for natural processes to produce three centimetres of soil.

11.3.5 What is a soil profile?

Soil forms in layers called horizons (see **FIGURE 6**). A soil profile is a side view or cross-section of these different layers or horizons.

int-3608

FIGURE 6 A typical soil profile



Horizon O (organic matter): Thin layer of decomposing matter, humus and material that has not started to decompose, such as leaf litter

Horizon A (topsoil): The upper layer of soil, nearest the surface. It is rich in nutrients to support plant growth, and usually dark in colour. Most plant roots and soil organisms are found in this horizon. In areas of high rainfall, such as tropical rainforests, minerals are leached out of this layer. A constant supply of decomposing organic matter is needed to maintain soil fertility.

Horizon B (subsoil): Plant litter is not present in horizon B so little humus is present. Nutrients leached from horizon A accumulate in this layer, which is lighter in colour.

Horizon C (parent material): Weathered rock that has not broken down enough to be soil. Nutrients leached from horizon A are also found in this layer.

D: Underlying layer of solid rock

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Earthquakes and volcanoes > **Active Earth**

on Resources

Interactivities	Landforms matched to a topographic map (int-7829) Break down! (int-3101) Influences on soil formation (int-7831) A typical soil profile (int-3608)
Weblink	Soil formation
Google Earth	Grand Canyon

11.3 ACTIVITIES

1. Use the internet to discover a landform that you find interesting. Create a physical or virtual model of your landform. It can be a section of the Grand Canyon, a volcano or a mountain range — use your imagination. Copy and paste an image of the landform into a Word document. Annotate your image or model with information about its location and how it was formed. Add further annotations to describe how your landform might have ***changed*** over time. Detail how it might have looked in the past and how it might look in the future. Think carefully about the ***scale*** of this ***change***. **HASS skills: Communicating and reflecting**
2. Study the ***environment*** around your home or school and find a ***place*** with evidence of erosion. Make a sketch and label the features of the landscape. Highlight areas where erosion is evident and add annotations to explain what you think might have caused this ***change*** and, in particular, the ***scale*** of this ***change***. Estimate the proportion of this ***environment*** that has been affected. What proportion do you think is the result of human activity? Compare your estimate with the figure of 40 per cent given in section 11.3.3. **HASS skills: Evaluating**
3. Use the internet to investigate soils found in desert and rainforest ***environments***. Construct a soil profile for each ***place*** and highlight the differences between them. Find out if the percentages shown in **FIGURE 4** are different in each ***place***, and add this information to your soil profiles. **HASS skills: Communicating and reflecting**
4. Use the **Soil formation** weblink in the Resources tab to d escribe the main steps in the formation of soil. **HASS skills: Analysing**
5. Think about what you have learned about soil formation.
   a. Dig a hole outside where the soil has not been disturbed too much. Dig until you find small pieces of weathering rock. Measure the depth of your hole. How does this compare with the depth of soils in Australia and overseas?
   b. Find two pieces of rock that show signs of weathering. Check the hardness of these rocks; the harder the rocks, the more difficult it will be to obtain a sample. Rub them together over a piece of paper. Were you able to collect a spoonful of grains in a reasonable amount of time? If so, how long did it take to rub off a spoonful of particles?
   c. The rate of soil formation is estimated at less than 0.05 millimetres a year in eastern Australia. How long would it take to develop one centimetre of soil? How long would it take to form enough soil to replace what was in the hole you dug earlier?
   d. Write a paragraph explaining what this exercise tells you about soil formation and the need to use soil in a ***sustainable*** manner. **HASS skills: Communicating and reflecting**

11.3 EXERCISE

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

Learning pathways

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

Check your understanding

1. What is soil?
2. Why is soil important?
3. In your own words, define the natural processes at work shaping the Earth.
4. Explain the difference between weathering and erosion.
5. Identify human factors that might contribute to erosion.

Apply your understanding

6. Explain how and why human activity might contribute to weathering and erosion.
7. Using terms such as uplift, erosion, deposition, weathering and transportation, explain the ***interconnection*** between physical processes and the ***environment***.
8. In your own words, explain how soil is formed and why it is not uniform across the surface of the Earth.
9. Using examples, describe two different ways that mountain ranges can be formed.
10. Australia is an ancient landmass. Which processes described in this subtopic are currently shaping Australia's landforms? Justify your answer.
11. Australia is the world's flattest continent with the lowest average elevation. What does this say about volcanic activity in Australia? What might happen if the world stopped being tectonically active? Theorise as to the role earthquakes may play in shaping landscapes.

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

11.4 Underground landscapes

LEARNING INTENTION

By the end of this subtopic, you will be able to explain how a karst landscape is formed.

11.4.1 What is karst?

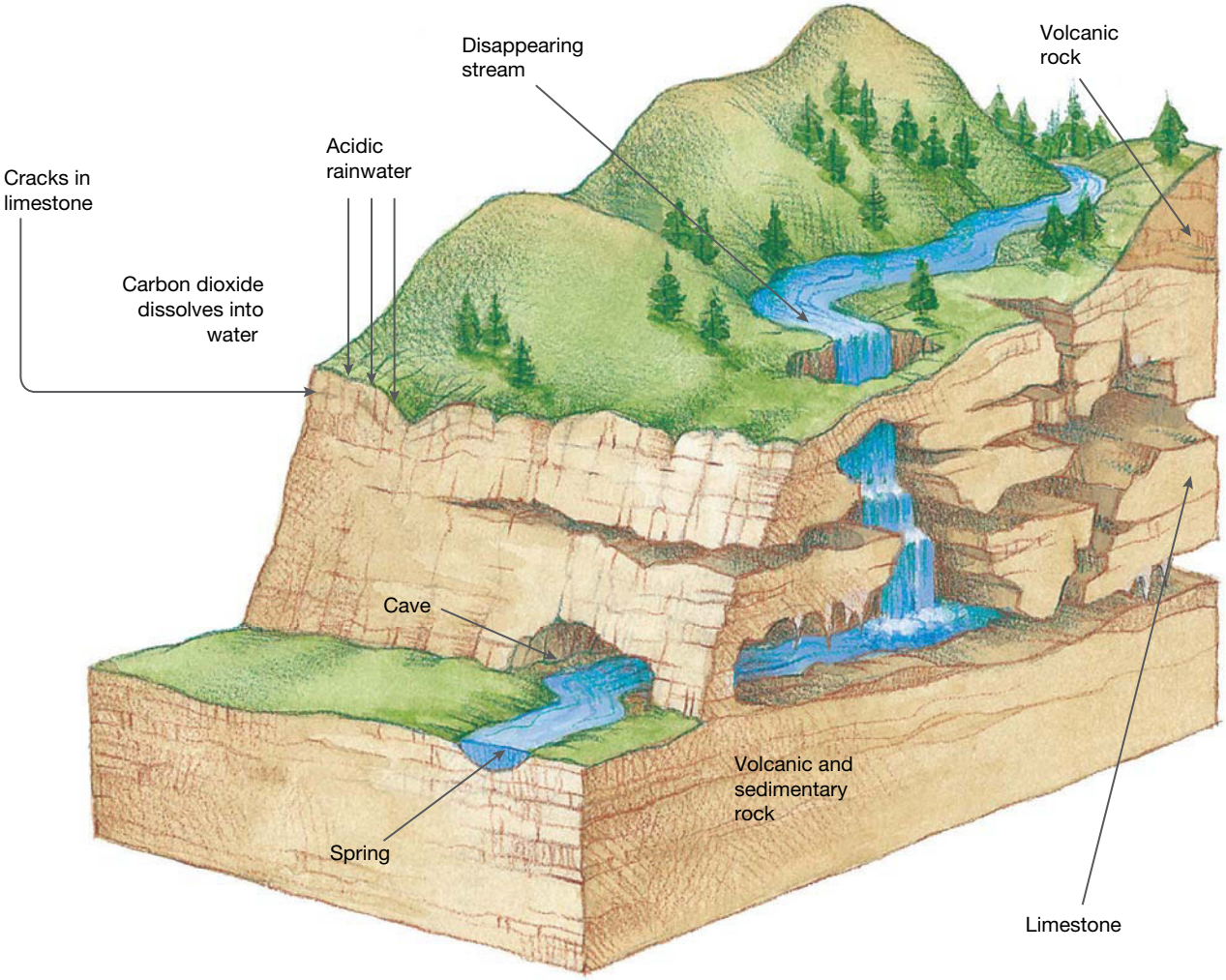
Apart from rivers and streams that flow across the surface of the Earth, vast networks of rivers also exist under the ground. The result is a network of caves and channels that carve a very different landscape, known as karst.

Karst is a landscape formed by water dissolving bedrock (solid rock beneath soil) over hundreds of thousands of years (see **FIGURE 1**). On the surface of the Earth, sinkholes (holes in the Earth's surface), vertical shafts (tunnels), and fissures (cracks) will be evident. Rivers and streams may seem to simply disappear, but intricate drainage networks are underground, complete with caves, rivers, **stalactites** and **stalagmites** (see **FIGURE 2**).

stalactite a feature made of minerals, which forms from the ceiling of limestone caves, like an icicle. They are formed when water containing dissolved limestone drips from the roof of a cave, leaving a small amount of calcium carbonate behind.

stalagmite a feature made of minerals found on the floor of limestone caves. They are formed when water containing dissolved limestone deposits on the cave floor and builds up.

FIGURE 1 Formation of a karst landscape



Karst topography makes up about 10 per cent of the Earth's surface; however, a quarter of the world's population depends on karst environments to meet its water needs.

11.4.2 How are karst landscapes formed?

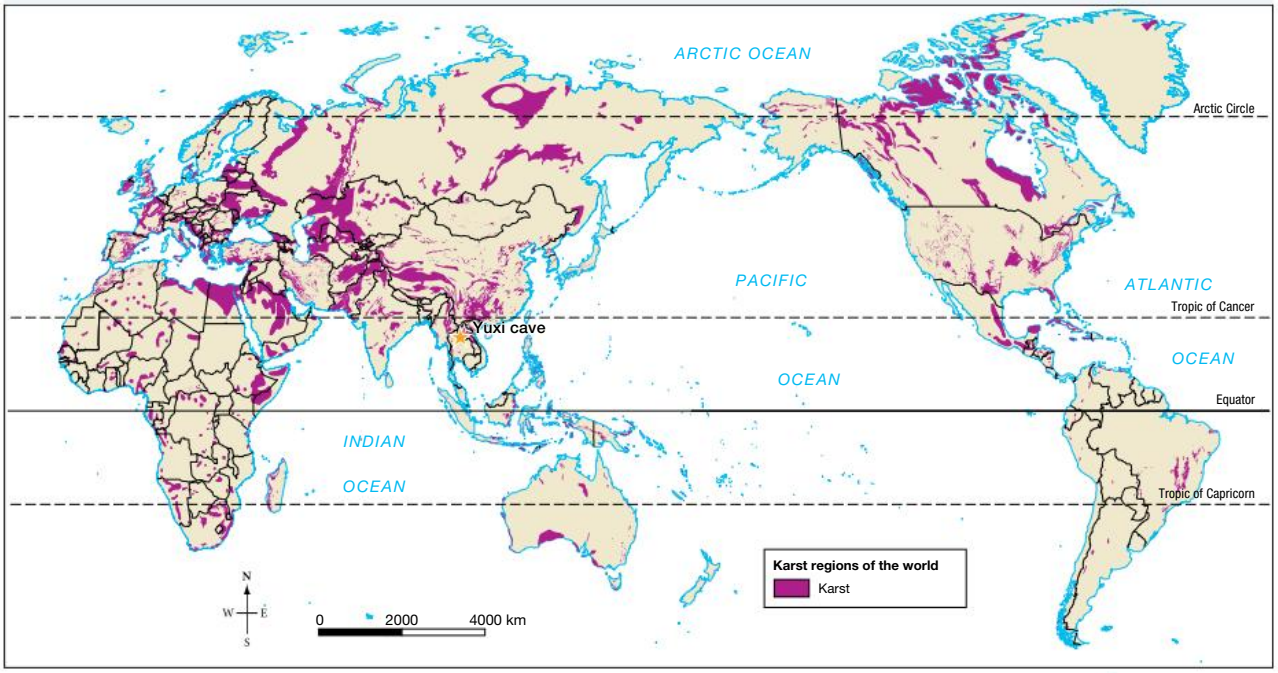
Water becomes slightly acidic when it comes into contact with carbon dioxide in the atmosphere (as it does when raindrops form) or when it filters through organic matter in the soil and percolates into the ground. Acidic water is able to dissolve soluble bedrock, such as limestone and dolomite. This creates cracks or fissures, allowing more water to penetrate the rocks. When the water reaches a layer of non-dissolving rocks, it begins to erode sideways, forming an underground river or stream. As the process continues, the water creates hollows, eventually creating a cave. Some karst landscapes contain aquifers that are capable of providing large amounts of water.

FIGURE 2 Lake Cave, Margaret River, Western Australia

11.4.3 Where are karst landscapes found?

Karst landscapes are found all over the world, as shown in **FIGURE 3**, in locations where mildly acidic water is able to dissolve **soluble** bedrock such as limestone and dolomite.

FIGURE 3 Karst regions of the world



Source: World Map of Carbonate Rock Outcrops v3.0.

In tropical regions, where rainfall is very high, karst mountains sometimes develop. This is because the high rainfall levels wear away the soluble rock much faster than rock is worn away in karst areas with lower rainfall. Examples of tropical karst mountains include the peaks of Ha Long Bay in Vietnam and the Guilin Mountains in China.

The Earth's largest arid limestone karst cave system is located on Australia's Nullarbor Plain, covering 270 000 square kilometres. It extends 2000 kilometres from the Eyre Peninsula in South Australia to Norseman in the Goldfields–Esperance region of Western Australia, and from the Bunda Cliffs on the Great Australian Bight in the south to the Victoria Desert in the north. The extensive cave system provides a unique habitat for a variety of native flora and fauna. Within the caves are fossils that can reveal much about our distant past; indeed, fossils of thylacines (Tasmanian tigers) have been found in the cave systems south of Perth. These caves are also often important Aboriginal heritage sites.

soluble able to be dissolved in water

on Resources

Interactivity Underground wonders (int-3103)

11.4 ACTIVITIES

1. Examples of karst landscapes in Australia include the Buchan, Naracoorte, Jenolan, Labertouche, Princess Margaret Rose, Judbarra and Abercrombie caves. Working with a partner, investigate one of these ***environments*** and prepare an annotated visual display. Show its location on a map, and include the ***scale***, features, land use and any concerns or threats to the ***environment***. Include information on what is being done to ensure the ***sustainable*** management of the ***place***. Share your findings with the rest of the class.
HASS skills: Communicating and reflecting
2. The Nullarbor Plain cave ***environment*** is a popular destination for caving groups. Use the internet to investigate this ***environment*** and why people are attracted to it. Compare this ***environment*** to the one you studied in activity 1. Pay particular attention to the ***scale*** and ***change*** that has occurred in each ***place***. Is one more fragile than the other? Explain. Suggest strategies for the ***sustainable*** management of karst in the Nullarbor.
HASS skills: Questioning and researching

11.4 EXERCISE

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

Learning pathways

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

Check your understanding

1. In your own words, explain how a karst landscape is formed.
2. Describe the global distribution of karst landscapes.
3. Do you think we should preserve karst landscapes? Give reasons for your answer.
4. Karst landscapes are predominantly found underground. Identify evidence on the surface of the Earth that might indicate the existence of a karst landscape.
5. What percentage of the Earth's topography could be described as karst?

Apply your understanding

6. The world's largest arid limestone karst system is found on the Nullarbor Plain, Australia.
   a. The Nullarbor Plain is an example of a desert landscape. Suggest how an ***environment*** formed by water can occur in this location.
   b. Describe how you think this landscape would be different if it were located in Australia's tropical north.
7. Explain how the karst landscape can provide us with a link to our distant past.
8. Explain how the karst landscape can provide a quarter of the world's population with water.
9. Karst is often described as a 'hidden landscape'. Suggest reasons for this description.
10. Suggest a reason for the absence of 'discovered' karst landscapes in Antarctica.

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

11.5 Australian landforms

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- identify the key features of the Australian landscape
- describe the processes that have shaped the Australian landscape.

11.5.1 What processes have shaped Australasia?

The tectonic forces of folding, faulting and volcanic activity have created many of Australia's major landforms. Other forces that work on the surface of Australia, and give our landforms their present appearance, are weathering, mass movement, erosion and deposition.

Australia is an ancient landmass. The Earth is about 4600 million years old, and parts of the Australian continent are about 4300 million years old.

Over millions of years, Australia has undergone many changes. Mountain ranges and seas have come and gone. As mountain ranges eroded, sediments many kilometres thick were laid down over vast areas. These sedimentary rocks were then subjected to folding, faulting and uplifting. This means that the rocks that make up the Earth's crust have buckled and folded along areas of weakness, known as faults. Sometimes, fractures or breaks occur, and forces deep within the Earth cause sections to be raised, or uplifted. Over time the forces of weathering and erosion have worn these down again. Erosion acts more quickly on softer rocks, forming valleys and bays. Harder rocks remain as mountains, hills and coastal headlands.

FIGURE 1 Many of Queensland's mountain peaks were formed by volcanic activity around 20 million years ago. The Glasshouse Mountains, north of Brisbane, are volcanic plugs. They are composed of volcanic rock that hardened in the vent of a volcano. Over millions of years, weathering and erosion have worn away the softer rock that surrounded the vent, leaving only the plugs.

Because it is located in the centre of a **tectonic plate**, rather than at the edge of one, Australia currently has no active volcanoes on its mainland, and has very little tectonic lift from below. This means its raised landforms such as mountains have been exposed to weathering forces for longer than mountains on other continents and are therefore more worn down.

About 33 million years ago, when Australia was drifting northwards after splitting from Antarctica, the continent passed over a large **hotspot**. Over the next 27 million years, about 30 volcanoes erupted while they were over the hotspot. The oldest eruption was 35 million years ago at Cape Hillsborough, in Queensland, and the most recent was at Macedon in Victoria around six million years ago. Over millions of years, these eruptions formed a chain of volcanoes in eastern and south-eastern Australia, known today as the Great Dividing Range (see **FIGURE 2**). At present, the hotspot that caused the earlier eruptions is probably beneath Bass Strait.

tectonic plate one of the slow-moving plates that make up the Earth's crust. Volcanoes and earthquakes often occur at the edges of plates.

hotspot an area on the Earth's surface where the crust is quite thin, and volcanic activity can sometimes occur, even though it is not at a plate margin

The present topography of much of Australia results from erosion caused by ice. For example, about 290 million years ago a huge icecap covered parts of Australia. After the ice melted, parts of the continent subsided and were covered by **sediment**, forming sedimentary basins (a low area where sediments accumulate) such as the Great Artesian Basin. On a smaller scale, parts of the Australian Alps and Tasmania were also eroded by glaciers during the last ice age.

Rivers and streams are another cause of erosion, having carved many of the valleys in Australia's higher regions.

When streams, glaciers and winds slow down, they deposit or drop the material they have been carrying. This is called deposition. Many broad coastal and low-lying inland valleys have been created by stream deposition. These areas are called floodplains.

sediment material carried by water

FIGURE 2 Relief map of Australia. The Great Dividing Range stretches from north of Cairns in Queensland to Mount Dandenong near Melbourne in the south.

Source: ©WorldSat International, 2017

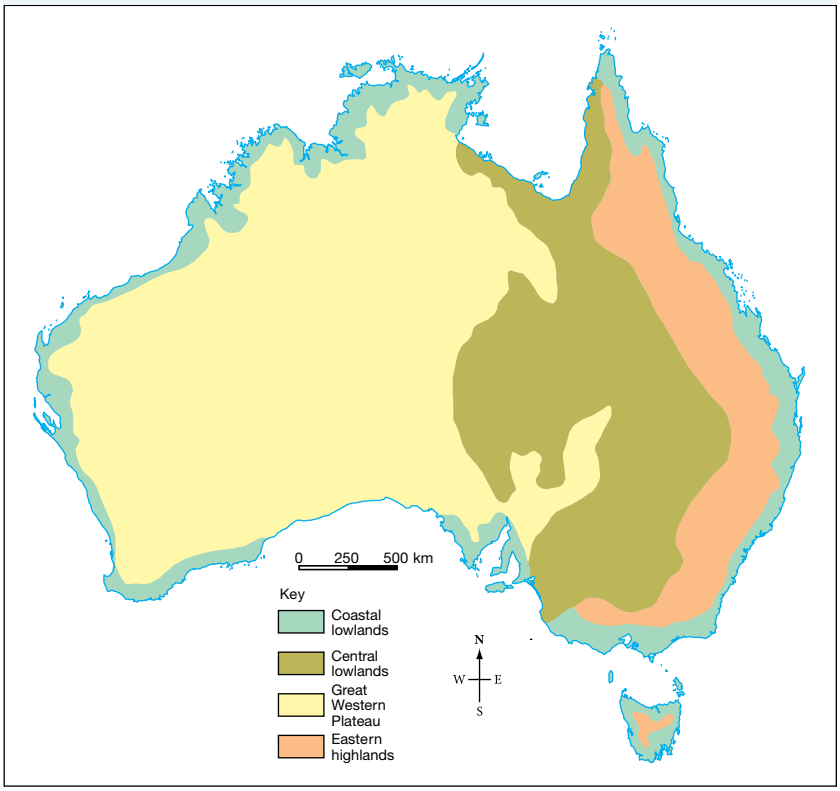
11.5.2 Australia's landform regions

int-3606

The topography of Australia can be divided into four major regions (see **FIGURE 3**):

- The coastal lowlands around Australia's edge are narrow and fragmented. The plains often take the form of river valleys, such as the Hunter River Valley.
- The eastern highlands region, which includes the Great Dividing Range, is mainly a series of tablelands and plateaus. Most of the area is very rugged, because rivers have cut deep valleys. It is the source of most of Australia's largest rivers, including the Fitzroy, Darling and Murray. The highest part is in the south-east, where a small alpine area is snow-covered for more than half the year.
- The central lowlands are a vast area of very flat, low-lying land that contains three large **drainage basins**: the Carpentaria Lowlands in the north, the Lake Eyre Basin in the centre (see **FIGURE 4**) and the Murray–Darling Basin in the south.
- The Great Western Plateau is a huge area of tablelands, most of which are about 500 metres above sea level. It includes areas of gibber (or stony) desert and sandy desert. There are several rugged upland areas, including the Kimberley and the MacDonnell Ranges.

FIGURE 3 Australia's four major landform regions

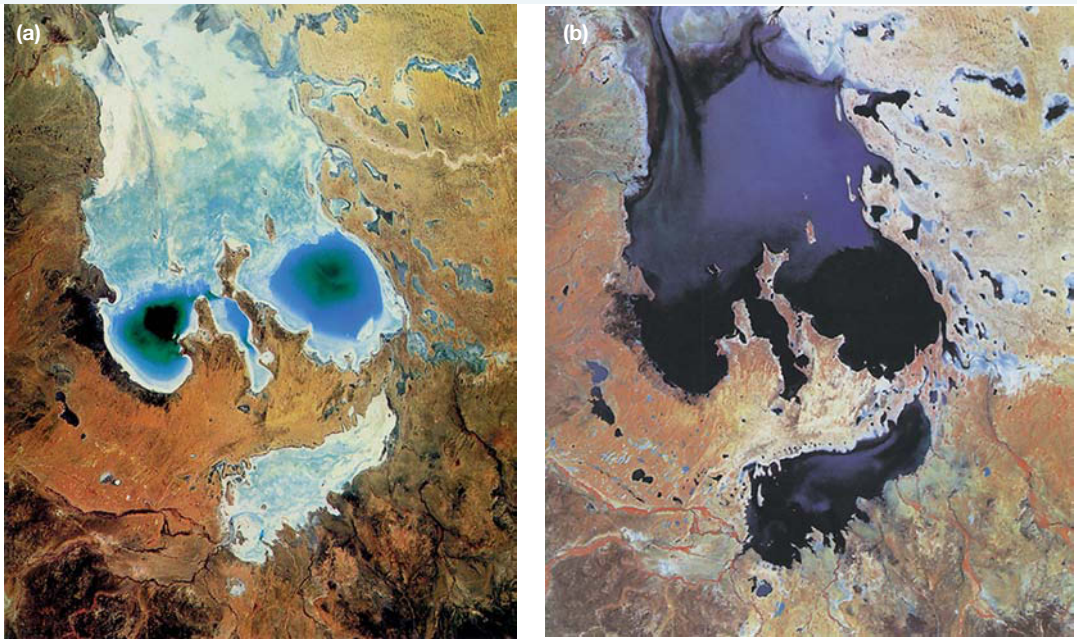


Source: MAPgraphics Pty Ltd Brisbane

drainage basins an area of land that feeds a river with water; or the whole area of land drained by a river and its tributaries

int-3605

FIGURE 4 Kati Thanda–Lake Eyre, the lowest point on the Australian mainland, is part of the Great Artesian Basin. It is 15 metres below sea level. Once a freshwater lake, the region is now the world's largest salt pan. The evaporated salt crust shows white in the satellite image (a) below. The lake completely fills with water only a few times each century. Deep water is shown as black in image (b) below.



CASE STUDY: Water issues in the Murray–Darling Basin region

The Murray–Darling Basin covers about one million square kilometres, and more than 20 major rivers flow into it. It has a wide variety of landscapes, ranging from alpine areas in the south-east to plains in the west. The basin produces 43 per cent of Australia's food and over 40 per cent of Australia's total agricultural income.

The Murray–Darling Basin is the largest and most important drainage basin in Australia, covering one-seventh of the continent. However, the amount of water flowing through it in one year is about the same as the *daily* flow of the Amazon River.

FIGURE 5 An aerial view of the Murray River, where it enters the Coorong and Lake Alexandrina in South Australia

The basin is facing severe problems:

- Only about 20 per cent of the water flowing through the basin ever reaches the sea. The rest is diverted for agriculture, industry and domestic use.
- The Murray supplies about 40 per cent of Adelaide's drinking water. The quality of the water continues to decline, mainly because of salinity levels.
- Approximately 50 to 80 per cent of the wetlands in the basin have been severely damaged or destroyed, and more than a third of the native fish species are threatened with extinction.
- River system inflows vary from year to year. The long-term average is 9030 GL. In 2018, inflows were around 2740 GL, among the lowest on record.
- An estimate of weather trends shows that the flow to the Murray River mouth may be reduced by a further 25 per cent by 2030. However, with the added problem of climate change, it is predicted that precipitation in the Murray–Darling catchment will decrease, so that the reduction in flow to the mouth could be as high as 70 per cent.

11.5.3 How does water flow across the land?

Permanent rivers and streams flow in only a small proportion of the Australian continent. Australia is in fact the driest of all the world's inhabited continents. It has:

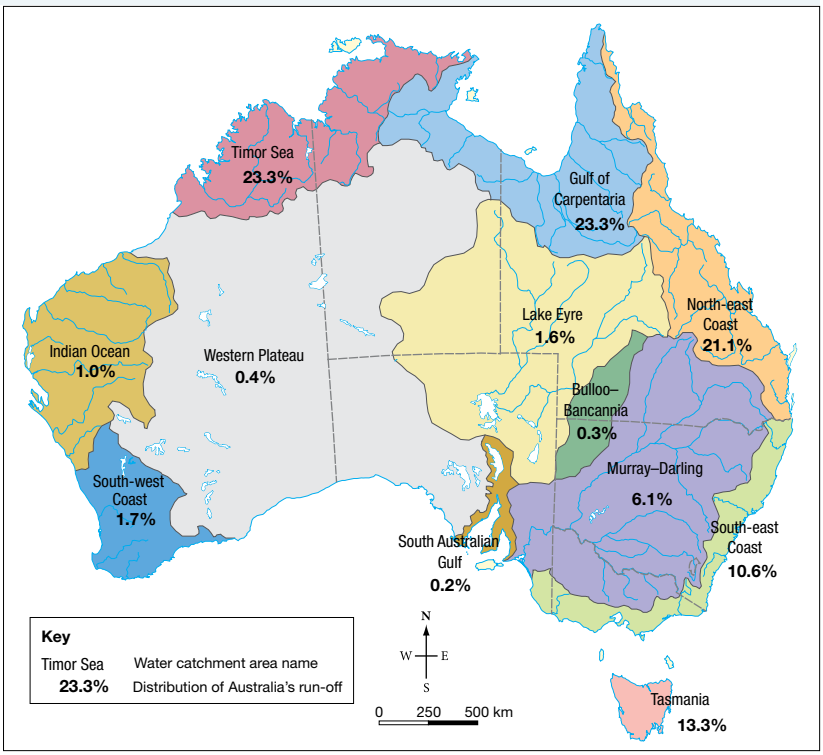
- the least amount of run-off
- the lowest percentage of rainfall as run-off
- the least amount of water in rivers
- the smallest area of permanent wetlands
- the most variable rainfall and stream flow.

Australia has many lakes and drainage basins (see **FIGURES 7** and **8**). Many of our lakes hold little water compared with those found on other continents. The largest drainage basins are in the tropical north of Australia and they are far from our major population centers.

The Ord River Scheme in Western Australia was constructed near Kununurra to try to utilise some of the water that flowed into the Timor Sea. The Ord River dam can hold up to 5641 gigaliters, which is the equivalent of 11.2 Sydney Harbours. The water in the Ord River Scheme provides irrigation for farms throughout the region. It has created land suitable for a range of crops where previously only cattle ranches were economically varible. This is controversial, however, because some see the scheme as waste of money and an environmental disaster. Others see the scheme as a potential bread basket for Western Australia and a provider of thousands of jobs and export dollars.

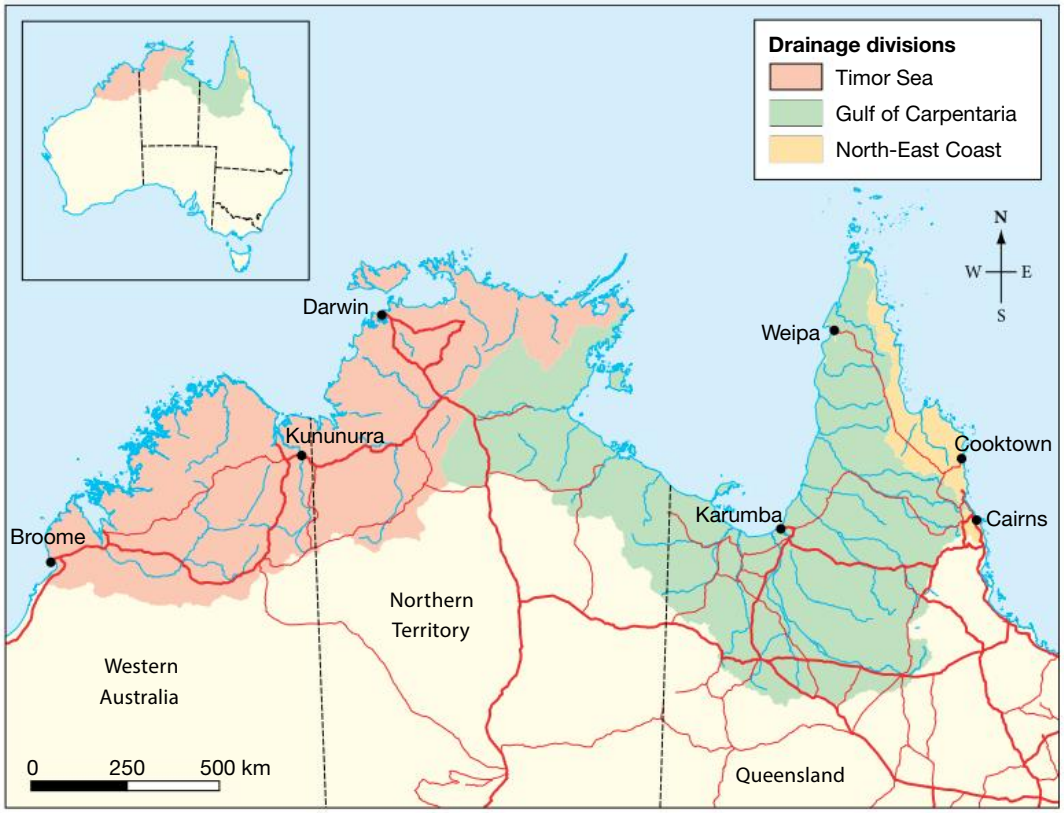
FIGURE 6 Lake Argyle

FIGURE 7 Australia's drainage basins



Source: MAPgraphics Pty Ltd Brisbane

FIGURE 8 The Northern Australian drainage basins



Source: Department of Sustainability and the Environment

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigating Australian Curriculum topics > Year 8: Landforms and landscapes > **Uluru**
- Investigate additional topics > Managing water resources > **Murray–Darling Basin**

on Resources

Interactivities Australia's four major landform regions (int-3606)
Kati Thanda–Lake Eyre (int-3605)

Google Earth Kununurra
Murray–Darling River

11.5 ACTIVITIES

1. Use your atlas to list the highest mountains in each Australian state and territory. Describe the location of each. **Geography concept: Place**
2. Use Google Earth to view any part of the Murray–Darling Basin. Describe the landscape that you see. **Geography concept: Environment**
3. Find Kununurra using Google Earth. What type of land use surrounds the town? How does this differ from the rest of the land in this region? **Geography concept: Environment**
4. Using the same image from activity 3, scroll north and south of the township. In which direction would further development take place? Justify your response. **Geography concept: Space**

5. Think carefully about the issues that may be involved with the development of the region around Kununurra and describe what you think the pros and cons would be in further developing the Ord River Scheme. In groups, research the debate that has surrounded this scheme and make a presentation to the class outlining what you think should happen to this region in the future. **Geography concept: Sustainability**
6. Australia is an ancient landmass and has undergone many ***changes*** over millions of years. In groups, brainstorm and compile lists under the following headings.
   - Physical ***changes*** that have taken place on the Australian landmass
   - Tectonic processes that have contributed to these ***changes***
   - ***Changes*** caused by processes such as weathering and erosion

   Within your group, write a series of paragraphs that explain the ***interconnection*** between these factors. **Geography concept: Interconnection**

11.5 EXERCISE

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

Learning pathways

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

Check your understanding

1. In your own words, explain what is meant by the terms folding, faulting and uplift.
2. Describe some of the physical ***changes*** Australia's landmass has undergone.
3. Describe the major characteristics of Australia's four main landform regions.
4. Explain why Australia is so low in altitude and flat compared with other continents.
5. Why is the Murray–Darling Basin Australia's most important drainage basin?

Apply your understanding

6. Use your atlas to find the Cape Hillsborough and Macedon volcanoes, or refer to **FIGURE 2**.
   a. Calculate the distance between them.
   b. Use the information in this subtopic to work out the rate at which the Australian landmass is moving.
   c. How far has Australia moved over the Bass Strait hotspot? Now calculate where under Bass Strait this hotspot might now lie.
   d. Use the information in this subtopic to explain why this hotspot has ***changed*** its location over time.
7. It is said that the amount of water that flows down the Amazon River in a day is more than flows down the Murray in a year.
   a. What does that tell you about how dry Australia's climate is?
   b. How might this affect the ***environment*** around the Murray River?
8. Describe the role of the Bass Strait hotspot in creating the landforms on Australia's east coast.
9. Describe how Kati Thanda–Lake Eyre has ***changed*** over time. Suggest a reason for these ***changes***.
10. Approximately 80 per cent of the water flowing through the Murray–Darling Basin is diverted.
    a. What is this water used for?
    b. What impact might this have on people and the ***environment***?

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

11.6 Landscapes of Western Australia

LEARNING INTENTION

By the end of this subtopic, you will be able to identify the landscapes of Western Australia, particularly Ningaloo Reef.

11.6.1 Ningaloo Reef

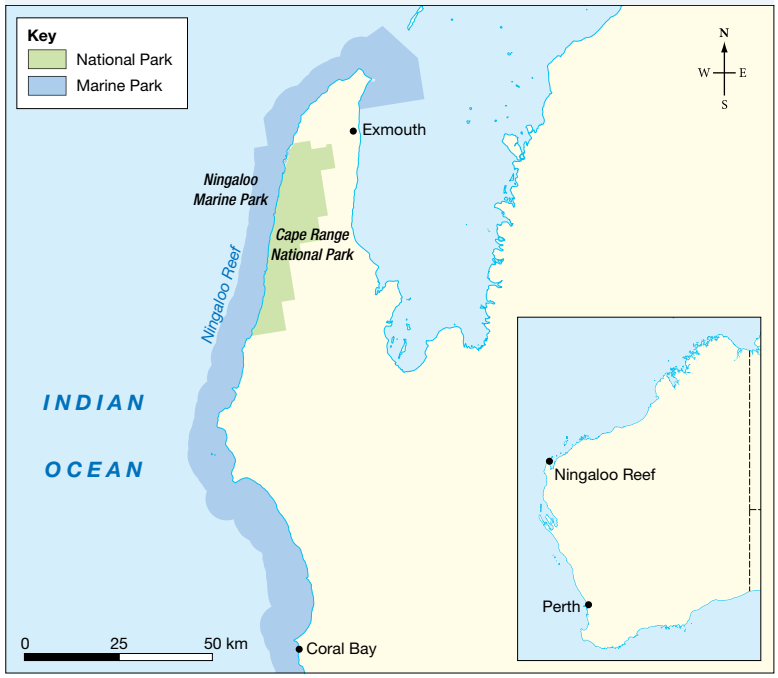
Western Australia is a diverse region of landscapes including the vast limestone plateau of the Nullarbor plain in the south-east, the largest areas of coastal heathlands in Australia, and the interior arid zone encompassing three deserts: the vast expanses of the Great Sandy Desert, the Gibson and the Great Victoria Desert. To the north-west, the Kimberley and Hamersley ranges meet the Indian Ocean and the Timor Sea. (Refer to **FIGURE 2** in subtopic 11.5 to locate these landscapes.) Off the coast, an abundance of islands with an array of landforms and unique flora and fauna can be found. In the tropical north-west, Australia's longest fringing reef, Ningaloo, is the home to a spectacular array of marine species.

Ningaloo Reef is the longest stretch of fringing reef in the world. This means that, unlike the Great Barrier Reef, a thriving coral reef ecosystem often lies within a kilometre of the coast. Ningaloo Reef is located on Western Australia's northern coast, primarily along the Cape Range Peninsula. In 2011, it was given World Heritage status by UNESCO, meeting two criteria:

1. Ningaloo contains superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance.
2. Ningaloo contains important and significant natural habitats of a wide range of animals and plants, including a number of threatened species of outstanding universal value from the point of view of science or conservation.

FIGURE 1 Ningaloo Reef extends for 260 kilometres along Western Australia's coastline.

FIGURE 2 Location of Ningaloo Reef in Western Australia.



Source: Geoscience Australia

How Ningaloo formed

Ningaloo Reef was built by colonies of tiny coral polyps. Coral polyps are tiny animals that build reefs in association with algae. The algae photosynthesize and contribute to the coral polyp, which feeds on passing plankton in the currents. Coral reefs can only exist in shallow water where sunlight can penetrate to help the algae grow. The coral polyp builds a skeleton of calcium carbonate that provides shelter from predators.

Coral reefs require very specific conditions to exist:

- clean, clear shallow water, usually below 30 metres in depth
- a temperature range of no lower than 18 degrees Celsius and no warmer than 40 degrees; coral reefs grow optimally in water between 23 and 29 degrees.

Ningaloo has a unique set of characteristics that allow a vast reef system to flourish close to shore:

- It receives 320 days of sunshine per year.
- The Exmouth region receives very little rainfall (230 mm per year). This results in very little run-off from rivers and streams so the waters off the coast are exceptionally clear.
- This coastline has seen very little development, meaning very low pollution levels.
- This region is also at a junction of two oceanic currents: the Ningaloo Current, bringing warm water from the north that enables corals to flourish, and the Leeuwin Current, bringing cold oxygen-rich waters from the south. The convergence of the oceanic currents provides conditions for exceptional biodiversity, including a stunning array of corals and fish.

FIGURE 3 Over centuries, successive generations of coral polyps build vast reefs that provide structural habitat for an incredible array of marine animals.

FIGURE 4 The Ningaloo Reef is home to a wide variety of flora and fauna.

Wildlife of Ningaloo

Ningaloo Reef is home to many iconic species of marine wildlife, including:

- humpback whales
- southern right whales
- orcas
- dugongs
- loggerhead sea turtles
- manta rays
- whale sharks.

FIGURE 5 Loggerhead sea turtle

11.6 ACTIVITIES

1. In pairs, imagine you are planning a trip to Ningaloo Reef. Research the attractions and activities you can undertake along the coast and create a seven-day itinerary of your journey along this coastline. Include images in a presentation to the class. **HASS skills: Questioning and researching**
2. Ningaloo is listed as a World Heritage Site. What does 'World Heritage' mean? Research the criteria for listing a site as being of World Heritage significance and rank them in order from most significant to least important. Justify your responses with the use of examples from around the world. **HASS skills: Questioning and researching**

3. Choose one of the marine species found at Ningaloo Reef and complete a poster containing the following information:
   - Why you chose this animal
   - The current distribution of your animal
   - The current population
   - Threats to this species
   - Interesting facts
   - How important Ningaloo is to the species **HASS skills: Analysing**
4. The Ningaloo Reef ecosystem is currently threatened by climate change and human encroachment for tourism and mining. Examine and assess the level of threat from one of these dangers. Ensure that you provide a comprehensive analysis. **Geography concept: Sustainability**
5. Choose one of the other landscapes of Western Australia discussed at the start of this subtopic and create a presentation lobbying for it being included on the World Heritage list. **HASS skill: Evaluating**

11.6 EXERCISE

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

Learning pathways

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

Check your understanding

1. What conditions need to exist for a coral reef to form?
2. Explain why Ningaloo Reef is so rich and varied in life?
3. Explain the latitudes that Ningaloo is found at. Why might the latitude be significant?

Apply your understanding

4. Explain the interconnection between the climate of the region and Ningaloo Reef.
5. Why might the construction of resorts along the Cape Range Peninsula threaten Ningaloo Reef?
6. Draw a flow diagram illustrating how a coral reef is 'built'.
7. Why might the reef be limited in its expansion south? Could this change in the future? Discuss.

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

11.7 Cultural significance of landscapes

LEARNING INTENTION

By the end of this subtopic, you will be able to explain the cultural significance of landscapes.

11.7.1 The Australian context

Landscapes are the product of processes that have operated for millions of years. While all humans have come to realise the importance of the landscape and the role it plays in our lives, Aboriginal and Torres Strait Islander cultures have always known that it is important to work with nature rather than always seek to change and exploit it.

archaeological concerning the study of past civilisations and cultures by examining the evidence left behind, such as graves, tools, weapons, buildings and pottery

Aboriginal peoples and Torres Strait Islander peoples are recognised as the first Australians. Evidence of their presence in Australia is found across the continent in their rock art (as shown in **FIGURE 1**), in **archaeological** records, and through

their cultural heritage passed down through generations. They relied on and nurtured the plants, animals and the environment for their survival, and so have an understanding of the complex nature of Australia's varying landscape.

Europeans, on the other hand, arrived in 1788 and occupied areas of Australia. They had a very different view of the landscape, based on ideas they brought with them from Britain. They sought to change the landscape and adapt it to meet their needs. They established permanent settlements and depended on farming introduced species to provide for their needs.

The perspective of Aboriginal and Torres Strait Islander peoples is one of belonging to the landscape, while the European perspective is based on the idea of owning land.

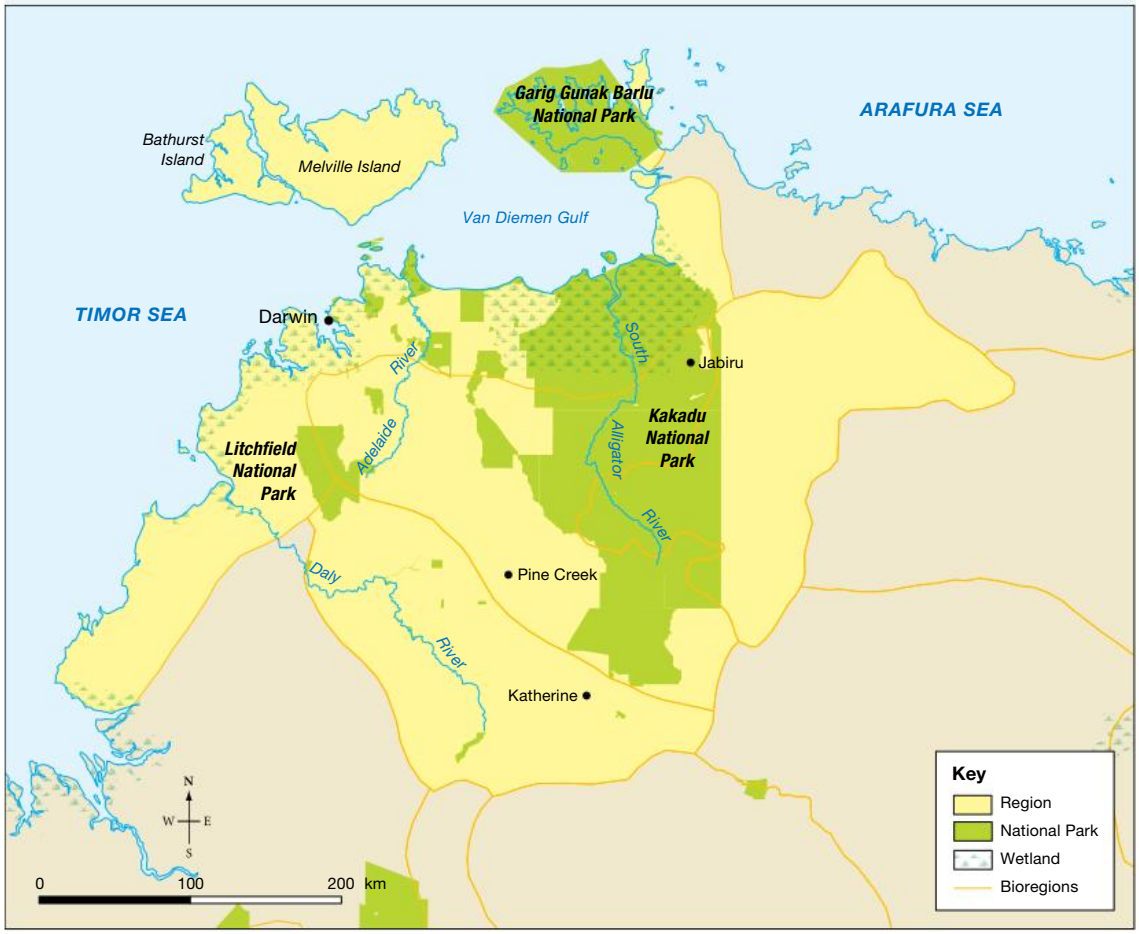
FIGURE 1 Rock art depicting a cloud or rain spirit, found in Western Australia's Kimberley region

11.7.2 Kakadu – Australia's first World Heritage Area

Kakadu National Park, as seen in **FIGURE 2**, covers an area of approximately 20 000 square kilometres of the Northern Territory – an area roughly a third the size of Tasmania. It stretches 200 kilometres from north to south, and spans 100 kilometres from east to west. Within the boundaries of the park are vast uranium deposits. Kakadu is unique in that it is recognised for both its natural beauty and its cultural value.

int-3609

FIGURE 2 Map of Kakadu National Park



Source: Spatial Vision

FIGURE 3 Consider how the Kakadu landscape is viewed and valued

1. More than 7000 sites preserve Bininj/Mungguy heritage; the rock art of Kakadu is one of the oldest and longest running accounts of culture on Earth.

2. Kakadu is home to a variety of plant and animal species that are unique to this region.

3. The land provided food such as wallabies and fruit; the rivers, fish and turtles; and the wetlands, bulbs and waterfowl.

4. Culture, traditions and nature are all linked, and connect people to their Country. People are responsible for looking after the land; they do not own it.

5. Aboriginal land management is very different to European farming; European settlers often did not understand.

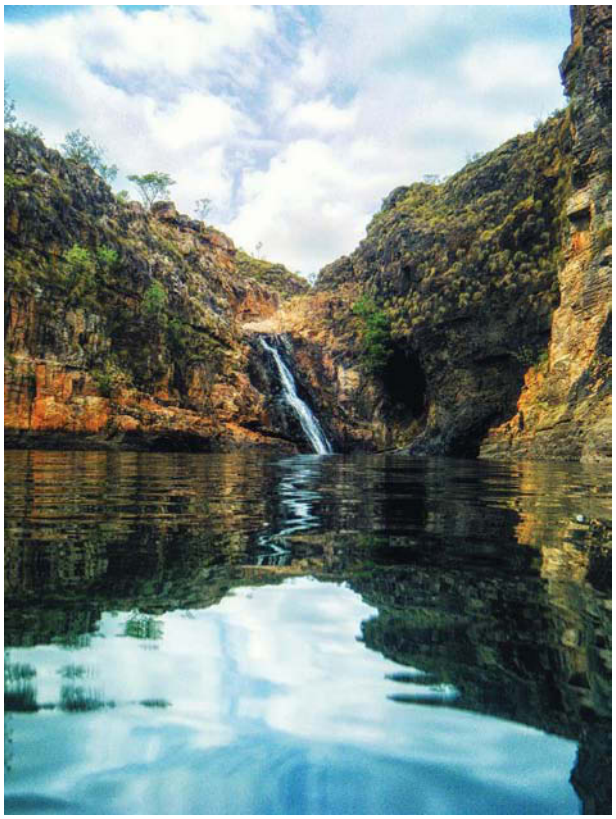
6. European land management involves ownership: building fences, restricting access and extracting resources to make a profit.

7. Europeans brought in new rules, religion, laws and diseases that affected the human experience and natural cycles of the landscape.

8. Native flora and fauna have been affected and some small native mammals have become extinct.

9. The region is remote, so there was much less European colonisation of the area, and little commercial interest until Uranium was found

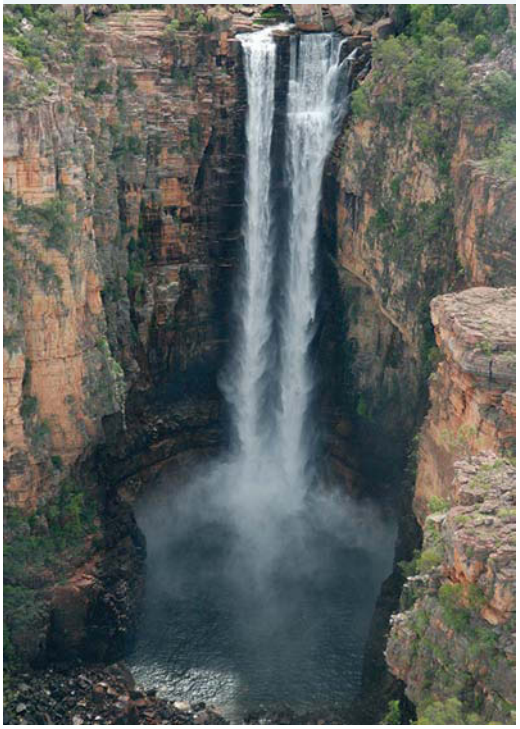
10. When Kakadu became a National Park, three possible uranium mining areas – Jabiluka, Ranger and Koongarra – were excluded from the park, even though they were surrounded by it. The Jabiluka mine site began development but has never been mined because of successful protests from the Mirarr people. Koongarra was added to the National Park in 2013 after campaigning by a senior Traditional Owner of the Djok clan. The Ranger mine is due to close at the end of 2020.



11.7.3 Kakadu and its resources

More than 200 000 tourists visit Kakadu National Park annually. Kakadu is a UNESCO World Heritage List site that is recognised for both its cultural and natural importance. Culturally, the area features some of the oldest rock art in the world, with Bininj/Mungguy paintings dating back 20 000 years. It is believed that Kakadu has been home to the Bininj and Mungguy peoples for over 65 000 years. The natural heritage of the area includes diverse native plant and animal species, vast wetlands, steep gorges and waterfalls (see **FIGURE 4**).

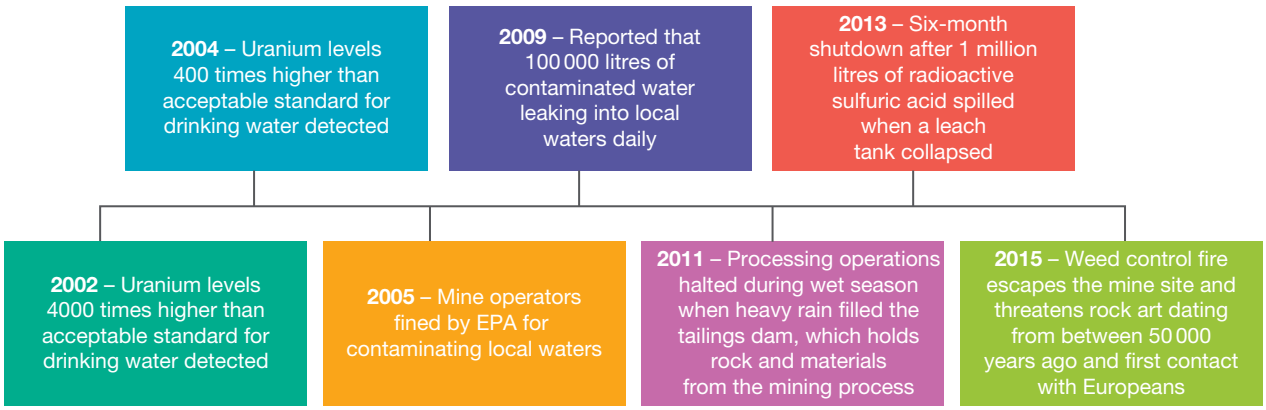
FIGURE 4 Jim Jim Falls at Kakadu is a popular tourist destination.



Kakadu also has vast deposits of uranium ore, which is a potentially valuable export for Australia. Opponents of uranium mining are concerned about the possibility that Australia's uranium could be processed and used to make nuclear weapons. Others fear the effects of mining on the environment and the potential for a devastating pollution event.

The Ranger uranium mine has been operating since 1980 and lies within the boundaries of Kakadu National Park. Three kilometres downstream from the mine, the Mirrar people (a local Aboriginal community) swim and fish. Since the mine opened, there have been more than 200 leaks and spills, and the mine has generated some 30 million tonnes of liquid radioactive waste (see **FIGURE 5**). The mine is scheduled for closure in 2021. Some parts of the mine area are undergoing rehabilitation, with an extensive $800 million rehabilitation program scheduled for when the mine finally closes.

FIGURE 5 Timeline of major breaches at the Ranger uranium mine since 2002



DISCUSS

Why do you think the Australian government allows uranium mining in such an important region of Australia?

General capability: Ethical understanding

on Resources

Interactivity Map of Kakadu National Park (int-3609)

Google Earth Mount Everest
Kakadu

11.7 ACTIVITY

Write a letter to the editor of a newspaper outlining your views on uranium mining in ***environmentally*** sensitive areas. Explain whether you consider this type of activity a ***sustainable*** use of the landscape.

HASS skills: Communicating and reflecting

11.7 EXERCISE

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

Learning pathways

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

Check your understanding

1. Where is Kakadu National Park and why is it important?
2. Copy the following table into your workbook and use it to compile a list of differences in the way the Australian landscape was viewed by Aboriginal and Torres Strait Islander peoples and non-Aboriginal and Torres Strait Islander Australians. The first one has been completed for you.

Aboriginal and Torres Strait Islander peoples' views	Non-Aboriginal and Torres Strait Islander peoples' views
Communities look after land, it is not owned by individuals.	Individuals own land.

3. Consider the Aboriginal and Torres Strait Islander population.
   a. Where are the more densely populated regions of Australia? *Hint:* Find a map in your atlas that shows population distribution.
   b. Would it be more difficult for Aboriginal and Torres Strait Islander communities in these areas to maintain their traditional lifestyle and culture?
4. Describe the ***interconnection*** that Aboriginal and Torres Strait Islander peoples have with the landscape. What evidence of this ***interconnection*** is found in this subtopic?
5. Consider the resources in the Kakadu region.
   a. What is uranium used for and why is it considered a valuable resource?
   b. What risks does uranium mining pose in the Kakadu region?

Apply your understanding

6. Think about your personal values and beliefs and analyse how they might be similar or different to those reflected in **FIGURE 3**.
7. Think back to section 11.7.3 on mining in the Kakadu region.
   a. Suggest three possible impacts on the landscape if a new uranium mine was opened in the Kakadu region.
   b. Do you think ***changes*** would have a large-***scale*** or a small-***scale*** impact? Explain.
8. Predict what pressures decision makers in Australia might face in future when balancing the needs of the different groups who have an interest in Kakadu's resources.
9. Explain how we have such an extensive knowledge of Bininj and Mungguy peoples' culture, history and beliefs.
10. Present one argument for and one argument against granting leases to mine resources such as uranium in the Kakadu region.

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

11.8 Preserving and managing landscapes

LEARNING INTENTION

By the end of this subtopic, you will be able to explain why landscapes need to be protected.

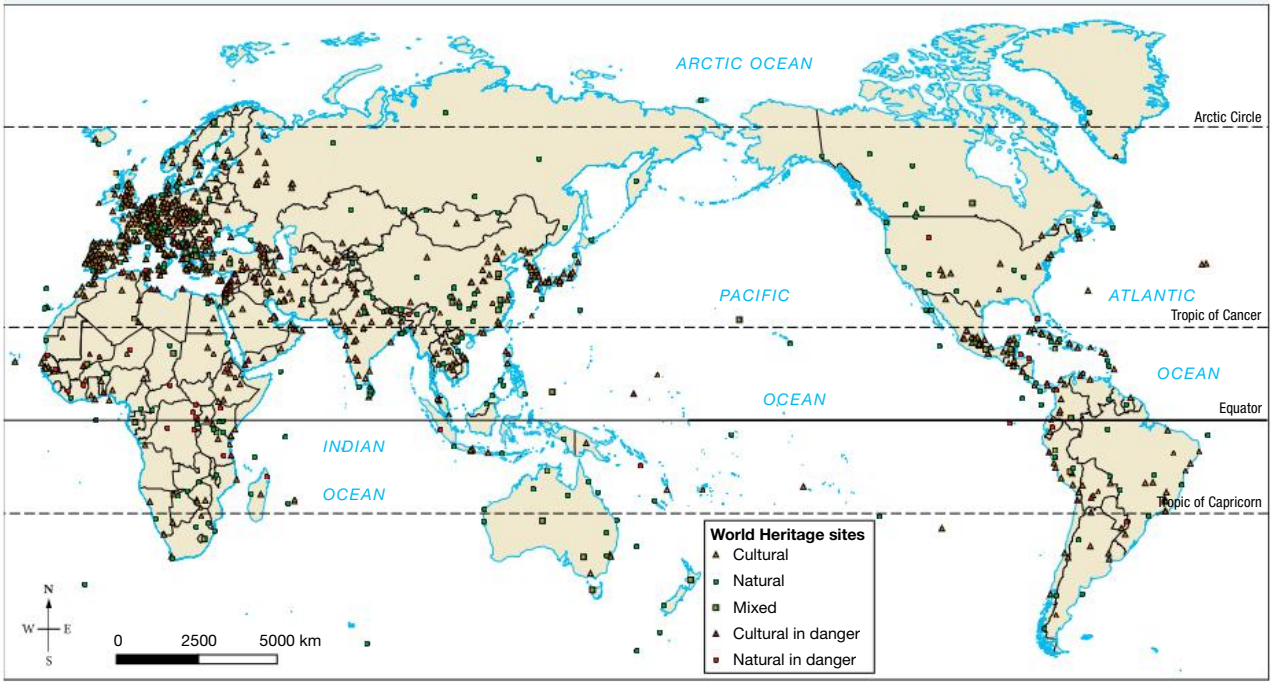
11.8.1 The World Heritage Convention

Worldwide, people recognise the value of landscapes and the need to protect their natural beauty and cultural heritage, and to manage their resources sustainably. Landscapes are easily damaged or destroyed but are difficult to recreate and repair. The key is to ensure that they are carefully managed so the landscapes we value today are still present in the future.

From the middle of the twentieth century, concern grew about the need to protect areas of both cultural and natural significance (see **FIGURE 1**).

int-7833

FIGURE 1 The World Heritage list includes 1092 sites of significance.



Source: Copyright © 1992–2019 UNESCO/World Heritage Centre. All rights reserved.

DISCUSS

Some natural landscapes can be loved to death when they are visited and used by large numbers of people, sometimes having a negative impact on the landscape. As a class, discuss how several Western Australian landscapes could be managed and whether people should be allowed to use them.

General capability: Critical and creative thinking

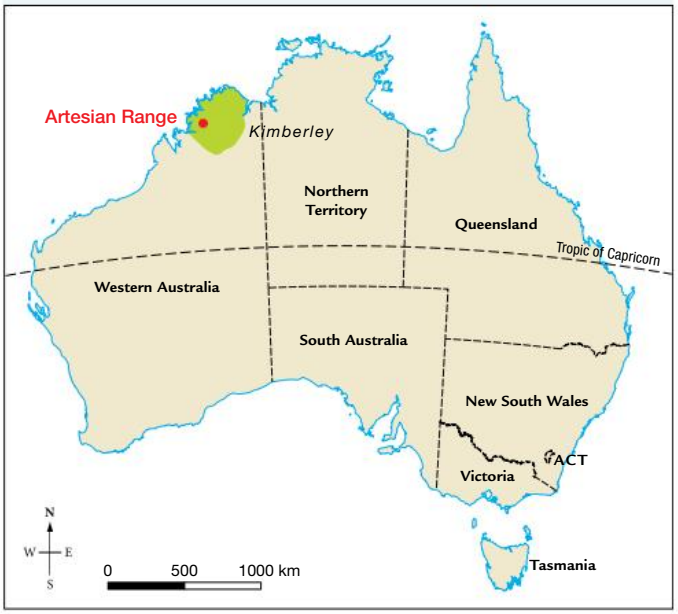
11.8.2 The Artesian Range

The Artesian Range is a unique part of the Australian landscape. It has been described as a lost world, a modern-day Noah's Ark, and our last opportunity to protect and preserve a part of the Australian mainland that has had little contact with modern civilisation. Within its hidden valleys and canyons lies a diverse range of flora and fauna. The rich tropical rainforests and woodlands provide vital habitats for some of Australia's most endangered wildlife.

The Artesian Range covers 1800 square kilometres (see **FIGURE 2**). It is largely inaccessible; the only way in is by helicopter or boat. It is a maze of hidden valleys and canyons, rocky ranges and plateaus, towering **escarpments**, wide valleys and deep gorges (see **FIGURE 3**). Its sandstone ranges were formed as a result of tectonic plate activity. These rock formations date back some 1.8 million years.

Although it is difficult for humans to reach the area, exotic species such as donkeys, horses, pigs and cats have gradually invaded the Kimberley. And while fire is a natural part of the landscape, changing fire patterns and the increasing number of late-season wildfires are also a threat to the Artesian Range. Australian Wildlife Conservancy (AWC), an independent non-profit organisation funded by donations, has now secured the land and manages it for conservation. AWC undertakes fire management, feral animal control, and biological surveys and monitoring, protecting the full length of the Artesian Range.

FIGURE 2 The Artesian Range covers 1800 square kilometres of the Kimberley region.



Source: Spatial Vision

escarpment a steep slope or long cliff formed by erosion or vertical movement of the Earth's crust along a fault line

FIGURE 3 The Artesian Range is a rugged and largely inaccessible landscape, renowned for its natural beauty and unique wildlife.

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Exploring places > The world > **World Heritage sites**

Resources

Interactivity The World Heritage list includes 1092 sites of significance (int-7833)

Weblink World Heritage list

11.8 ACTIVITIES

1. Use the **World Heritage list** weblink in the Resources tab and select a site in one of the countries listed on the map. Prepare a visual presentation of one of the sites listed, outlining its importance and how it is protected. **HASS Skills: Communicating and reflecting**
2. In small groups, investigate an invasive species and describe the ways in which it has ***changed*** the ***environment***. Is this ***change*** occurring on a small or large ***scale***? Explain. Suggest a strategy that the Australian Wildlife Conservancy could employ to eradicate invasive species from this ***environment***. **Geography concept: Change**
3. a. Explain what you understand by the terms 'cultural significance' and 'natural significance'.
   b. Is it possible for ***places*** to have both cultural and natural significance? Draw up a table like the one below. With the aid of a partner, add as many ***places*** as you can to the list. Try to have a balance of Australian and international examples. Compare your list with that of another pair of students.

Cultural significance	Natural significance	Cultural and natural significance

   c. Which column in your table has the most entries? Suggest a reason for the pattern you observe.
   d. Select one ***place*** from column 3. Find a picture of this ***place*** and copy and paste it into a Word document. Add annotations to explain the major features of your chosen ***place*** and why it is of cultural and natural significance. **Geography concept: Place**

11.8 EXERCISE

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

Learning pathways

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

Check your understanding

1. Why is it important to protect sites that have cultural or natural significance?
2. Describe the location of the Artesian Range and why it is unique.
3. Suggest reasons the Artesian Range has been largely inaccessible to people.
4. Identify two management strategies used by the Australian Wildlife Conservancy (AWC) to manage and conserve the Artesian Range.
5. Do you think invasive species or wildfires pose the greatest risk to the Artesian Range? Give a reason for your answer.

Apply your understanding

6. Explain how exotic species such as cats, foxes and camels have been able to become established in the Artesian Range when it is difficult for people to enter the region.
7. Evaluate the ways in which the community demonstrates the value it ***places*** on cultural diversity and why this is important to the community.

8. The Artesian Range has been described as a 'modern-day Noah's Ark'. Explain what you understand by this description.
9. Describe the processes that have led to the formation of the Artesian Range and its different landscape features.
10. Uluru is considered to have both cultural and natural significance. Suggest a reason for this classification.

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

11.9 Thinking Big research project: Karst landscape virtual tour

LEARNING INTENTION

By the end of this subtopic, you will be able to describe the connection of Aboriginal and Torres Strait Islander people to their environment and explain the significance of creation stories.

Scenario

Karst environments feature in some Aboriginal peoples' creation stories. They feature in ceremonies and are thought to have curative powers. Part of their mystique is that they predominantly exist underground and are difficult to access. The Australian government is creating a display at the National Museum and wants to include a diorama that showcases this environment and its connection to creation stories.

Task

Together with a partner you will create a virtual tour of a karst landscape that:

- showcases how the landscape was created from both a geographical perspective and the Aboriginal culture's perspective
- includes a guided tour of a unique karst environment within Australia.

Process

- Open the ProjectsPLUS application for this topic and then click the **Start new project** button to enter the project due date and set up your project group. Working in groups will enable you to share ideas, store your research and collaborate on the finished product. Save your settings and the project will be launched.
- Check the assessment criteria before you begin.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered.
- Revisit the relevant subtopics and the suggested weblinks before branching out and conducting additional research. Don't forget to compile your bibliography as you progress through the task – use the bibliography template in the **Media centre**.
- Use internet research to find a series of images that showcase the karst landscape and a map that shows the location of karst environments in Australia.
- Investigate and select a creation story related to the karst landscape, and its importance to the Aboriginal people of the region where the story originates.
- Place your images into the diorama template and write a script that includes:
  - the creation story (and the places from which you have sourced your information)
  - key features of the karst landscape
- Record your script and attach the audio file to your diorama images.
- Carefully check your timing to ensure that the audio and images are synchronised.
- Submit your completed project and bibliography.

on Resources

ProjectsPLUS Karst landscape virtual tour (pro-0168)

11.10 Review

11.10.1 Key knowledge summary

11.2 Different types of landscapes

- Landscapes are influenced by factors such as climate, geographical features and latitude.
- The type of landscape that develops is determined by the mix of these factors.
- There are variations within landscapes and they are impacted by human activity.

11.3 The processes that shape landscapes

- Landscapes are continually changing; tectonic forces are at work to build landscapes, and processes such as weathering and erosion wear them away.
- Human activity such as deforestation increases the rate of erosion.
- Soil varies across landscapes and ultimately determines the type of vegetation that a landscape can support.

11.4 Underground landscapes

- Karst landscapes are found all over the world, predominantly in tropical regions.
- Karst landscapes form where slightly acidic water filters through soluble bedrock, such as limestone, forming hollows and caves beneath the surface of the Earth.
- The largest arid limestone karst cave system is located on Australia's Nullarbor Plain.

11.5 Australian landforms

- Australia is an ancient landscape and has undergone many changes over millions of years.
- Tectonic forces have uplifted the land, creating mountain ranges. The landscape was been worn away and sculpted by the processes of weathering, erosion and deposition.
- Australia has also migrated, so that its climate and vegetation are vastly different from what they were millions of years ago.

11.6 Landscapes of Western Australia

- Western Australia is a region of diverse landscapes that includes the vast limestone plateau of the Nullarbor plain in the south-east, the largest areas of coastal heartlands in Australia, and the interior arid zone encompassing three deserts: the vast expanses of the Great Sandy Desert, the Gibson and the Great Victoria Desert.
- To the north-west, the Kimberley and Hamersley ranges meet the Indian Ocean and the Timor Sea.
- Off the coast, an abundance of islands with an array of landforms and unique flora and fauna can be found. In the tropical north-west, Australia's longest fringing reef, Ningaloo, is the home of a spectacular array of marine species.

11.7 Cultural significance of landscapes

- Aboriginal and Torres Strait Islander peoples have been in Australia for over 60 000 years and have a close bond with the land.
- The Australian landscape is culturally significant to Aboriginal and Torres Strait Islander peoples and their beliefs conflict with those of the European settlers.
- Addressing the competing needs of culture and resources involves striking a delicate balance.

11.8 Preserving and managing landscapes

- The World Heritage list ensures that places of natural and cultural significance are preserved and managed so they are not lost for future generations.
- Australia has several sites that are culturally significant and also considered natural wonders, such as the Artesian Range.
- The inaccessible nature of the Artesian Range has protected it from human activity; however, it is threatened by introduced species.

11.10.2 Key terms

aquifer a body of permeable rock below the Earth's surface that contains water, known as groundwater

archaeological concerning the study of past civilisations and cultures by examining the evidence left behind, such as graves, tools, weapons, buildings and pottery

deposition the laying down of material carried by rivers, wind, ice and ocean currents or waves

drainage basins an area of land that feeds a river with water; or the whole area of land drained by a river and its tributaries

erosion the wearing away and removal of soil and rock by natural elements, such as wind and water, and by human activity

escarpment a steep slope or long cliff formed by erosion or vertical movement of the Earth's crust along a fault line

glacier a large body of ice, formed by an accumulation of snow, which flows downhill under the pressure of its own weight

hotspot an area on the Earth's surface where the crust is quite thin, and volcanic activity can sometimes occur, even though it is not at a plate margin

mantle the layer of the Earth between the crust and the core

permafrost a layer beneath the surface of the soil where the ground is permanently frozen

plateau an extensive area of flat land that is higher than the land around it. Plateaus are sometimes referred to as tablelands.

sediment material carried by water

soluble able to be dissolved in water

stalactite a feature made of minerals, which forms from the ceiling of limestone caves, like an icicle. They are formed when water containing dissolved limestone drips from the roof of a cave, leaving a small amount of calcium carbonate behind.

stalagmite a feature made of minerals found on the floor of limestone caves. They are formed when water containing dissolved limestone deposits on the cave floor and builds up.

tectonic plate one of the slow-moving plates that make up the Earth's crust. Volcanoes and earthquakes often occur at the edges of plates.

transport the movement of eroded materials to a new location by elements such as wind and water

weathering the breaking down of bare rock (mainly by water freezing and cooling as a result of temperature change) and the effects of climate

11.10.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

From oceans to deserts to cities, what exactly are landscapes and how is each one unique?

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

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5511)
Reflection (ewbk-5510)
Crossword (ewbk-5507)
Student Learning Matrix (ewbk-5499)

Interactivity Introducing landforms and landscapes crossword (int-7595)

11.10 Review exercise

Multiple choice

1. What are three characteristics that are common of a desert landscape?
   - **A.** Large cities, wetlands and harsh weather conditions
   - **B.** Sand, cliffs and harsh weather conditions
   - **C.** Sand, dense forest and harsh weather conditions
   - **D.** Sand, large cities and harsh weather conditions
2. What is the difference between a natural and a human environment?
   - **A.** Natural environments are altered by humans whereas built environments are not.
   - **B.** Built environments are altered by humans whereas natural environments are not.
   - **C.** There is no difference because neither of them are altered by humans.
   - **D.** Natural environments are larger than built environments.
3. How have rivers and streams made physical changes to Australia's landmass?
   - **A.** Through the process of folding, faulting and uplifting
   - **B.** By transporting materials to new areas, creating floodplains and coastal landscapes
   - **C.** By forming the Great Dividing Range
   - **D.** None of the above
4. Why is soil important?
   - **A.** It is not important.
   - **B.** It is the basis for plant growth, which feeds both people and animals.
   - **C.** 75 per cent of mammals eat soil as their main source of nutrition.
   - **D.** It protects the Earth from damage from the sun.
5. Landscapes are in a state of continual change. Which two natural processes powered by water are most responsible for continually changing landscapes?
   - **A.** Erosion and weathering
   - **B.** Erosion and deposition
   - **C.** Transportation and deposition
   - **D.** Transportation and calcification
6. Where is Kakadu National Park located?
   - **A.** New South Wales
   - **B.** Northern Territory
   - **C.** Queensland
   - **D.** Tasmania
7. What is humus in the soil?
   - **A.** the dark, organic material in topsoil. It is made up of decomposing plant material such as leaves, seeds and roots.
   - **B.** bedrock that is mainly granite
   - **C.** a layer beneath the surface of the soil where the ground is permanently frozen
   - **D.** decomposed animal bones
8. In 2011, Ningaloo Reef was given World Heritage status by UNESCO, meeting which two criteria? Select two correct answers.
   - **A.** to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance
   - **B.** to represent a masterpiece of human creative genius
   - **C.** contains important and signifi cant natural habitats of a wide range of animals and plants, including a number of threatened species of outstanding universal value from the point of view of science or conservation.
   - **D.** to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared

9. What is the term used to describe the laying down of material carried by rivers, wind, ice and ocean currents or waves?
   A. Erosion
   B. Sediment
   C. Transport
   D. Deposition

Short answer

10. Why do glaciers move?
11. Copy the following table. The first column lists factors that influence variations within landscapes and their location. In the second column, provide an example of how this feature influences a particular landscape.

Factors that influence landscapes	Example
Climate	
Geographical features	
Latitude	
Impact of humans	

12. Match the following terms with the correct definition in the following table: aquifer, artesian basin, erosion, escarpment, fault, folding, weathering.

Term	Definition
	Rocks that buckle and fold under pressure
	Fractures or weakness in the Earth's crust
	The breaking down of bare rock, mainly by water freezing and cooling as a result of temperature change
	A body of permeable rock below the Earth's surface that contains water, known as groundwater
	The wearing away and removal of soil and rock by natural elements, such as wind and water, and by human activity
	A steep slope or long cliff formed by erosion or vertical movement of the Earth's crust along a fault line
	An underground layer of water-bearing rock from which groundwater can be extracted using a well

13. Study the landforms in **FIGURE 1** showing the Colorado Plateau, which has been shaped by natural processes over millions of years.
   a. Make a sketch of the landscape and add annotations to explain how the Colorado Plateau is the result of natural processes that have taken place over a long period of time. In your answer, explain how these processes would have sculpted this environment.
   b. Describe how this landscape might have looked in the past and how it might look in the future.
   c. What process do you think is currently dominating the ***changes*** taking place in this landscape?

FIGURE 1 Part of the Colorado Plateau

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 11 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

11.1 Overview

Video eLesson
- World landscapes and landforms (eles-1623)

11.2 Different types of landscapes

eWorkbook
- Location and formation of deserts (ewbk-5500)
- Desert environment (ewbk-5508)
- Characteristics of a rainforest (ewbk-5509)

Interactivities
- Selected world landscapes (int-3604)
- Landscapes galore (int-3102)

Google Earth
- Mount Everest

MyWorld Atlas
- Investigating Australian Curriculum topics > Year 8: Landforms and landscapes > **Grasslands**

11.3 The processes that shape landscapes

eWorkbook
- Processes that transform landscapes (ewbk-5502)
- Soil formation (ewbk-5503)

Interactivites
- Landforms matched to a topographic map (int-7829)
- Break down! (int-3101)
- Influences on soil formation (int-7831)
- A typical soil profile (int-3608)

Weblink
- Soil formation

Google Earth
- Grand Canyon

MyWorld Atlas
- Investigate additional topics > Earthquakes and volcanoes > **Active Earth**

11.4 Underground landscapes

eWorkbook
- Landscapes created underground (ewbk-5504)

Interactivities
- Underground wonders (int-3103)
- The formation of sand dunes (int-7838)

11.5 Australian landforms

eWorkbook
- Landscapes and landforms in Australia (ewbk-5501)

Interactivities
- Australia's four major landforms (int-3606)
- Kati Thanda–Lake Eyre (int-3605)

Google Earths
- Kununurra
- Murray–Darling River

MyWorld Atlas
- Investigating Australian Curriculum topics > Year 8: Landforms and landscapes > Uluru
- Investigate additional topics > Managing water resources > Murray–Darling Basin

11.7 Cultural significance of landscapes

eWorkbook
- Kakadu - Australia's first World Heritage area (ewbk-5506)

Interactivity
- Map of Kakadu National Park (int-3609)

Google Earths
- Mount Everest
- Kakadu

11.8 Preserving and managing landscapes

eWorkbook
- Protecting and managing landscapes (ewbk-5505)

Interactivity
- The World Heritage list includes 1092 sites. (int-7833)

Weblink
- World Heritage list

MyWorld Atlas
- Exploring places > The world > **World Heritage sites**

11.9 Thinking Big research project: Karst landscape virtual tour

ProjectsPLUS
- Karst landscape virtual tour (pro-0168)

11.10 Review

eWorkbook
- Reflection (ewbk-5510)
- Crossword (ewbk-5507)
- Student Learning Matrix (ewbk-5499)

Interactivity
- Introducing landforms and landscapes crossword (int-7595)

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

12 Landscapes formed by water

12.1 Overview

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

From gentle rain to rushing rivers, how does simple water form and transform landscapes?

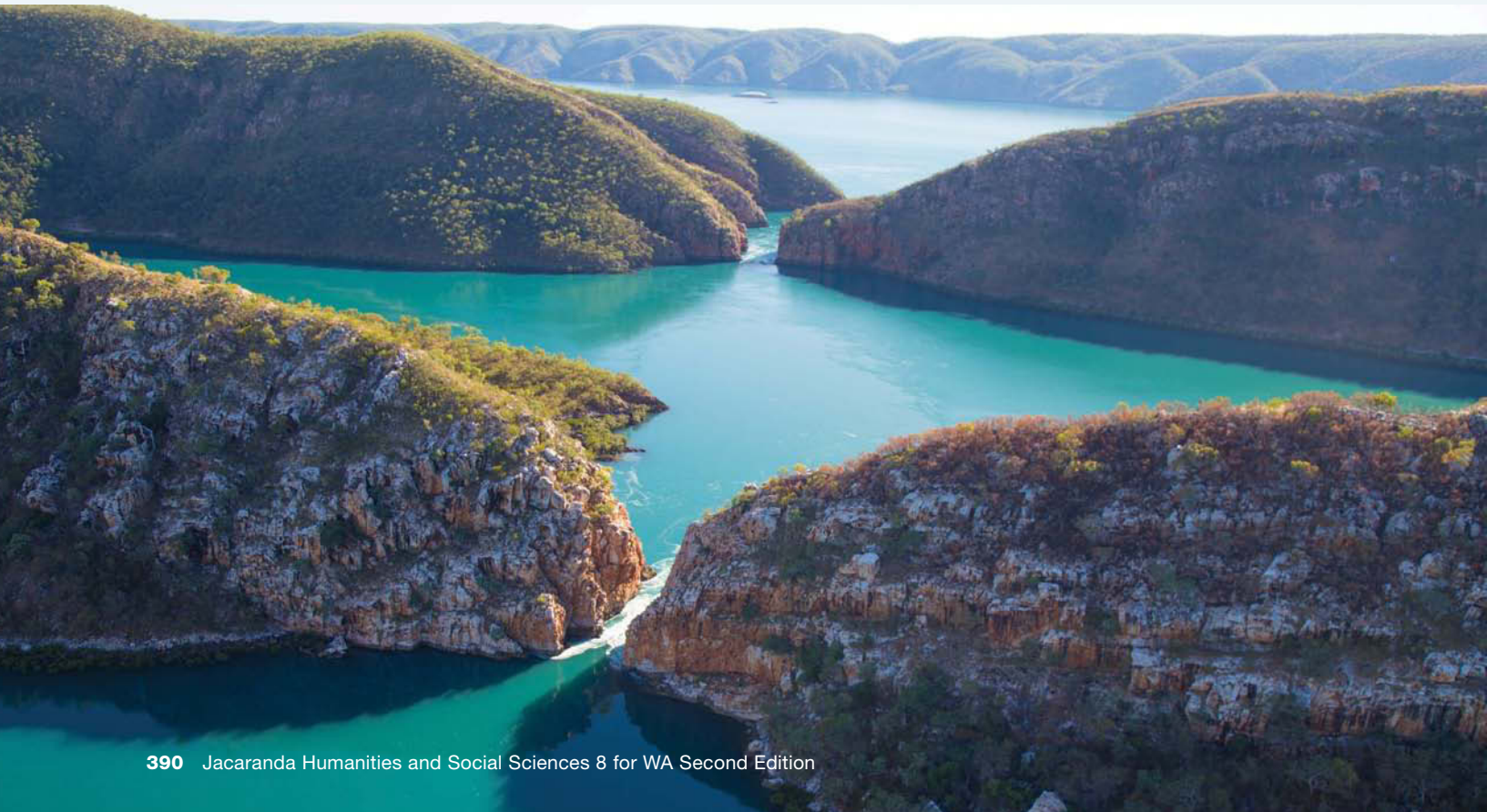
12.1.1 Introduction

Water is one of the most powerful agents in creating landscapes. If you have ever been caught outside in a heavy downpour, walked through a fast-flowing creek, or been dumped in the surf, then you have felt and seen the energy of flowing water. It can knock you off your feet, move buildings and carve huge holes in the Earth's surface. Landscapes created by water are found everywhere.

on Resources

- **eWorkbook** Customisable worksheets for this topic (ewbk-5520)
- **Video eLesson** Landscapes sculpted by water (eles-1624)

FIGURE 1 The Horizontal Falls are a natural phenomenon located in the Kimberley region of Western Australia.



12.2 Landscapes formed by water

LEARNING INTENTION

By the end of this subtopic, you will be able to explain how water changes landscapes.

12.2.1 How does water change landscape features?

A torrent of gushing water can shift rocks, remove topsoil or shape river valleys. Gentle rain can change the chemical structure of any surface material, sculpting the imposing coastal landforms we see around the world. In cold climates, compressed snow in glaciers works like a slow-moving bulldozer to erode land and create unique landscape features. Once fresh water has made its way to the ocean, the power of waves creates coastal landscape features.

FIGURE 1 How is the flow of water changing the landscape in this photograph?

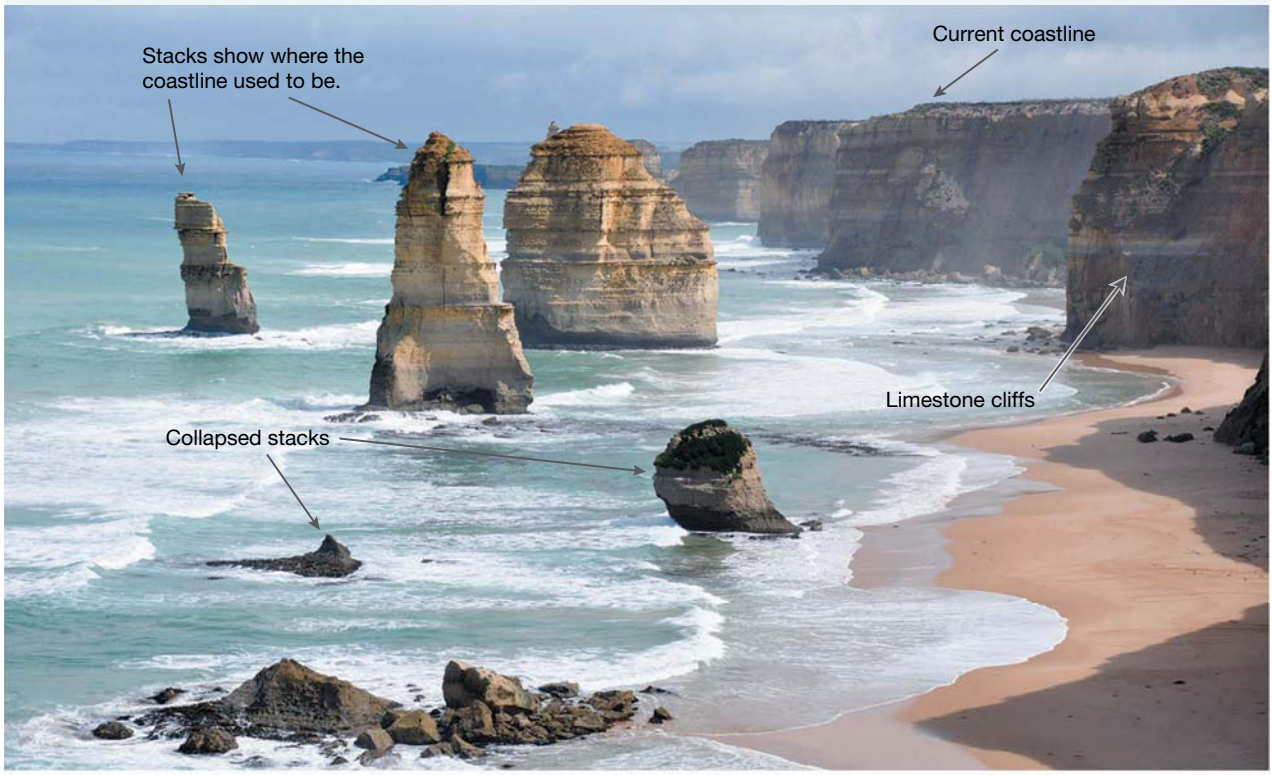
As you learned in topic 11, landscapes are predominantly changed or created by two processes: **erosion** and **deposition**. Through erosion, water can carve through rock – reducing once-mighty cliffs to lowly sea-stacks. Through deposition, water creates beaches, spits and sand dunes as it carries sand across the oceans of the world. In **FIGURE 1** you can see the power of water as it rushes over a rockface and carves pools in its hard surface. You may have seen pools of a similar shape carved by waves in rocky coastal landforms.

As water makes contact with landscapes, it can change the shape and size of its features or landforms (**FIGURES 1** and **3**). The coastal landscape that you see today is not the same as it was hundreds or thousands of years ago. **FIGURE 2** is a photo of the Twelve Apostles, located on the south-western coast of Victoria. The name suggests that there may once have been twelve pillars of rock, or stacks, visible along this stretch of coastline. In the foreground you can see the remnants of two quite recently collapsed stacks. Even these stacks were once joined to the cliffs as part of the mainland. This highly erodible coastline has been constantly altered by many years of rainfall and wave action on the soft limestone cliffs.

erosion the wearing away and removal of soil and rock by natural elements, such as wind and water, and by human activity

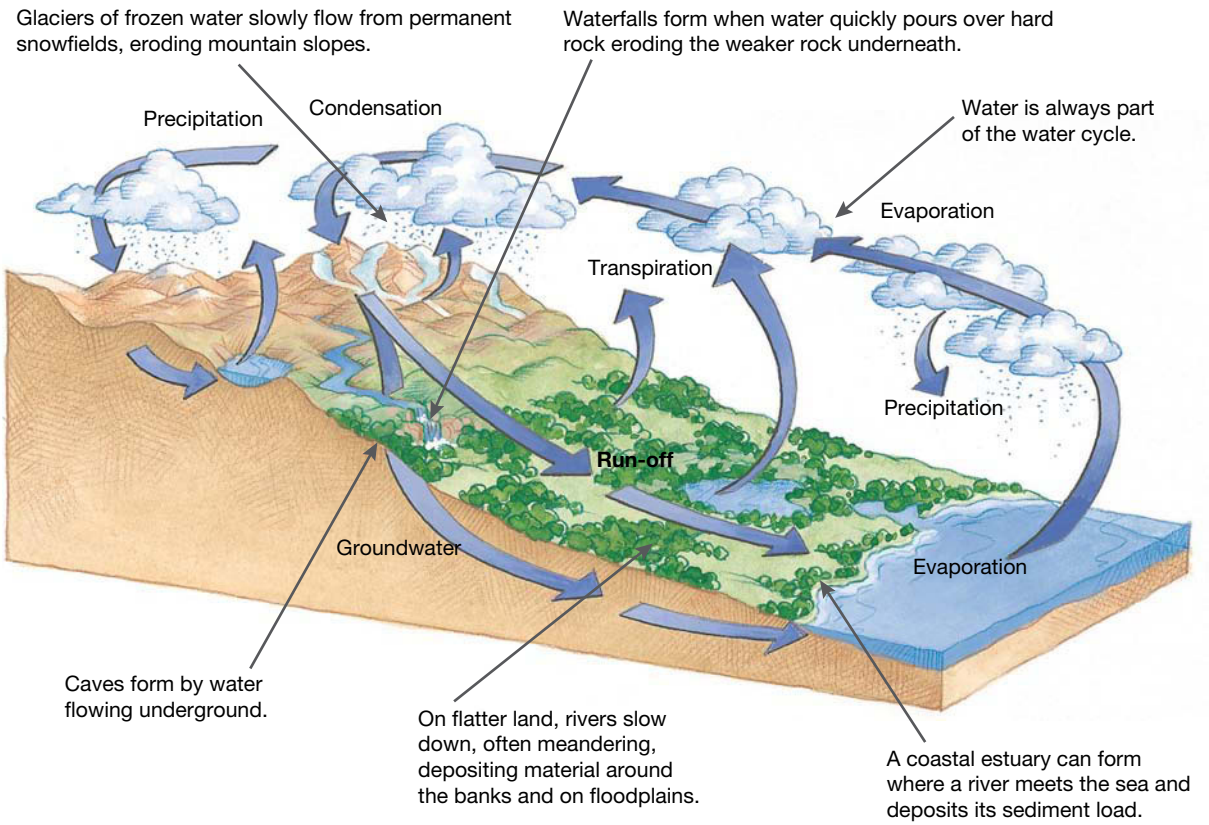
deposition the laying down of material carried by rivers, wind, ice and ocean currents or waves

FIGURE 2 The Twelve Apostles in Port Campbell National Park, Victoria. How might the potential for erosion change along this coast if the waves were larger and it was high tide?



int-7834

FIGURE 3 Water constantly moves over and through the Earth and through the air.



on Resources

Interactivity Water constantly moves over and through the Earth and through the air (int-7834)

12.2 ACTIVITY

Use your research skills to create a list of world water facts on the following:

a. the biggest glacier
b. the longest river
c. the biggest wave
d. the highest waterfall
e. the widest river
f. the biggest ocean
g. a world water fact of your choice.

Show on a map where each is located.

HASS skills: Questioning and researching
Geography concept: Place

12.2 EXERCISE

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

Learning pathways

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

Check your understanding

1. Landscapes are in a state of continual ***change***.
   a. Which two natural processes powered by water are most responsible for continually ***changing*** landscapes?
   b. How are these two processes linked?
2. Where would **FIGURES 1** and **2** be ***placed*** on the landscape depicted in **FIGURE 3**? Explain.
3. Explain how the water cycle and the formation of landscapes are ***interconnected***.
4. Draw your own copy of the diagram shown in **FIGURE 3**. Make sure that you include your own versions of the annotations as well.
5. Of the two processes discussed in this subtopic, which is the most powerful – erosion or deposition?

Apply your understanding

6. Many landscapes ***change*** rapidly; for example, the Twelve Apostles.
   a. Describe another example of a landscape that has been shaped by the power of water.
   b. Do you think the ***changes*** to the landscape have been positive or negative?
   c. To what extent should people try to stop the ***changes*** caused by water?
7. Water can be considered one of the most important architects of desert landscape features. After looking at the images in this subtopic, try to explain how you think water can change the landscapes of arid or desert ***environments***.
8. Identify three possible ways that people can ***change*** the flow of water, either across the surface of the Earth or along the coast. Predict how you believe this may alter landscape features. Examples may include the use of river water for irrigation or the construction of a marina.
9. Think back to the last time you visited a coastal ***environment***. What features were prominent in the ***environment*** you visited? What processes were responsible for the creation of these features?
10. Erosion and deposition are two processes that can transform coastal landscapes. Describe an additional way in which coastal landscapes can be ***changed***.

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

12.3 Coastal erosion

LEARNING INTENTION

By the end of this subtopic, you will be able to identify coastal features created by erosion and distinguish between the impact of wave action and running water.

12.3.1 How do waves change an environment?

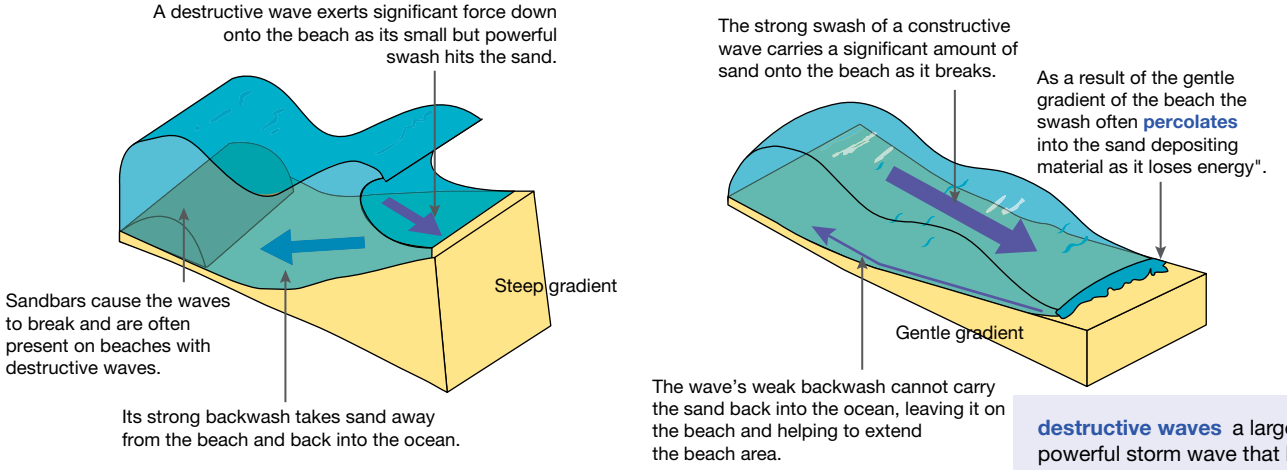
The coast is the zone or border between land and ocean. It is in this collision zone that the movement of sea water and the impact of the ocean on the land together create coastal landscapes. Coastal landscapes have landforms that are common to coastlines in different places around the world because they are built up or worn away in similar ways.

Before we investigate the different types of coastal landforms that exist, we need to first understand the processes which shape these landforms. Coastal erosion is mostly caused by the continued presence of waves in an environment. Waves are caused when the wind blows over the ocean. The size of a wave depends on the strength of the wind and the distance the wind has been blowing (referred to as the *fetch*). A strong wind and a long fetch will result in a powerful wave with a high degree of erosive potential. These waves are called **destructive waves** and they are involved in creating landforms by erosion. A gentle wind and a small fetch will create less powerful waves known as constructive waves. While these waves are not involved in erosion, they do create depositional landforms (see subtopic 12.4).

Next time you are walking along a beach, stop to check whether the waves in this environment are constructive or destructive. You can do this by analysing the strength of the **swash** and **backwash**. As a wave hits the shore it sends water (as well as sand, shells and other debris) onto the beach. This is called the swash. Water is then pulled back into the ocean by gravity in what is known as the backwash. If the swash is more powerful than the backwash, the waves are constructive and you should see depositional landforms. If the backwash is more powerful than the swash, the waves are destructive and you should see more landforms which have been caused by erosion. The structure of constructive and destructive waves can be seen in **FIGURE 1**.

int-7835

FIGURE 1 Comparing constructive and destructive waves



destructive waves a large powerful storm wave that has a strong backwash

swash the movement of water in a wave as it breaks onto a beach

backwash the movement of water from a broken wave as it runs down a beach returning to the ocean

percolate of water, to filtrate through soil and rocks

Coastal landforms are not solely created by the power of waves. Rainfall and constant strong winds can also influence the appearance of coastal landforms. For example, after a puddle of rain water evaporates, it leaves behind salts and minerals which can interact with rocks. This can lead to scarring of the rock surface and, over time, deep crevasses can be formed. Other physical processes can also greatly affect the coastal

landscape; for example, the tectonic force of earthquakes and volcanoes; changing sea levels; and human activities such as building roads, ports and houses, and damming rivers.

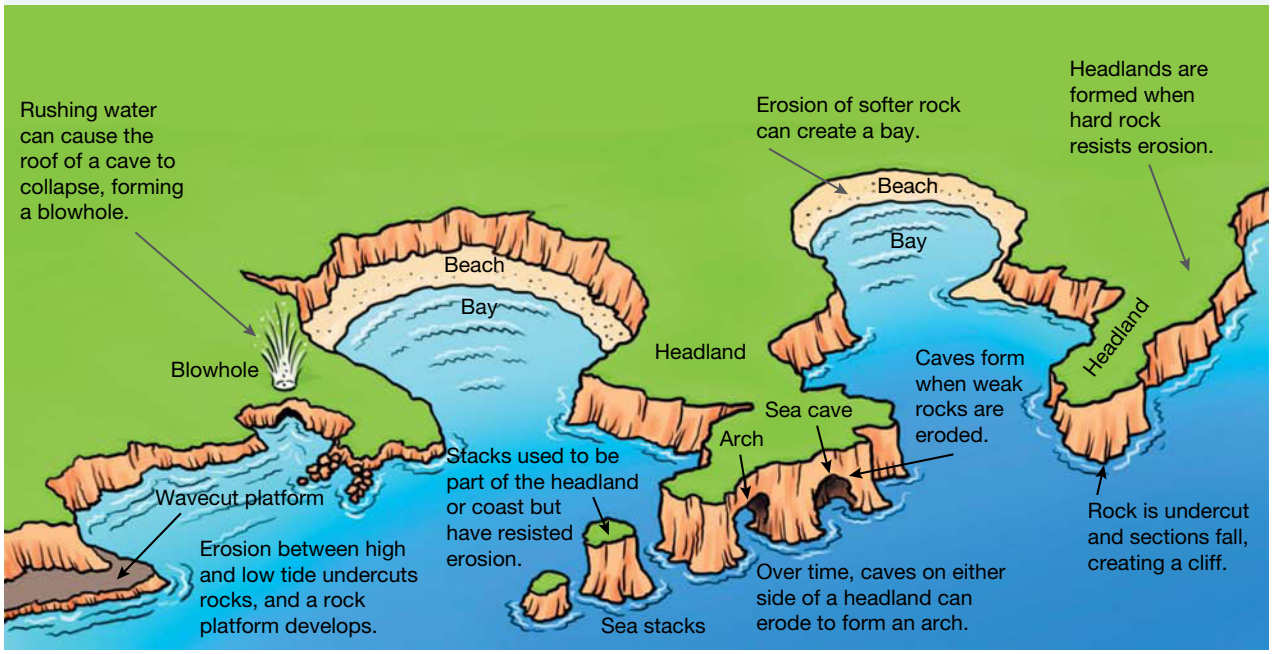
Which coastal landscape features are created by erosion?

Features such as cliffs, headlands, bays, arches, caves, blow-holes and stacks are all landforms found along an eroding coastline (**FIGURE 2**). These features are formed by wave action and rainfall, which attack the cliffs and find points of weakness that are then eroded. Water running off a cliff face can carry eroded material into the sea below. When waves hit the cliff face, they undercut the base of the cliff to form a notch. As the notch increases in size it forms a cave and eventually the cliff gets undercut, becomes unstable and falls into the sea.

Destructive waves can also alter a sandy coastline. They can remove sand from a beach, destroy the vegetation on dunes, and remove management features designed to protect landscape features.

int-3124

FIGURE 2 Coastal landforms created by erosion



Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Oceans and coasts > **Coastal processes**

on Resources

Interactivities Comparing constructive and destructive waves (int-7835)
Coastal landforms created by erosion (int-7836)
Coastal sculpture (int-3124)

Google Earth Twelve Apostles

12.3 ACTIVITIES

1. Create an annotated diagram that explains the difference between swash and backwash.
HASS skills: Analysing
2. In small groups, create your own claymation or stop-motion movie, Prezi, or animated PowerPoint to show the ***changes*** that happen to a cliffed coast eroding to form a notch, cave, arch and stack.
HASS skills: Communicating and reflecting, Geography concept: Change
3. Most Australians live within an hour's drive of the coast, and many people either spend regular holidays on the coast or move to the coast in their retirement, for a 'sea change'. How might the continually ***changing*** coastal landscape (as seen in **FIGURE 2**) affect coastal housing and popular holiday places? Brainstorm this with a small group. **HASS skills: Evaluating**
4. Using a sketch map, identify how several of the ***changes*** identified in question 3 might affect the coastal landscape of your favourite beach. **Geography concept: Change**
5. Rising sea levels, whether they are a naturally occurring process or have resulted from human activity, will affect coastal landscapes. Use a diagram, with annotations, to explain how rising sea levels could ***change*** two of the landforms illustrated in **FIGURE 2**. **Geography concept: Change**

12.3 EXERCISE

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

Learning pathways

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

Check your understanding

1. What is a coast?
2. What are three physical processes that have influenced the creation of coastal landforms?
3. What are three human activities that have influenced the creation of coastal landforms?
4. Place the following landforms in the order in which they would be created:
   a. arch, cave, headland, stack
   b. blowhole, cave, cliff.
5. Explain the difference between constructive and destructive waves.

Apply your understanding

6. Find an image of a sandy coastline that has recently been affected by destructive waves. Explain the process that has occurred. Use the terms *swash* and *backwash* in your explanation.
7. What does the construction material that is deposited on a beach consist of?
8. Do you think people will still feel the same way about a coastal landscape such as the Twelve Apostles when only two or three are still standing? How might the ***changing*** landscape affect the value or pleasure people get from visiting this ***place***? Write a short paragraph to comment.
9. Destructive waves are bad for all coastal ***environments*** and as such, management techniques should be used to minimise their impacts. Do you agree or disagree with this statement? Justify your response.
10. Should we try to protect coastal landforms like the Twelve Apostles or should we simply let nature run its course?

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

12.4 Which coastal landforms are created by deposition?

LEARNING INTENTION

By the end of this subtopic, you will be able to identify coastal features created by deposition and distinguish between constructive and destructive waves.

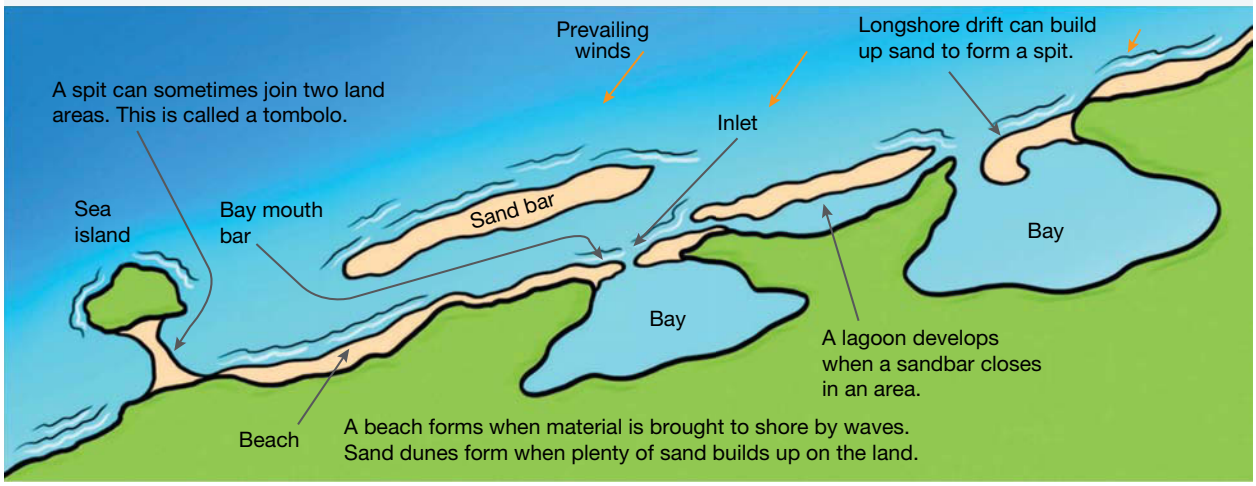
12.4.1 How are depositional coastal landforms formed?

As we learned in subtopic 12.3, not all waves are destructive. Though they lack the sheer force of destructive waves, constructive waves still have an important role to play in the creation of coastal landforms. The movement of these waves towards the land is more likely to push material such as sand and shells and deposit them on the beach, building new coastal features.

A beach is a good example of a depositional coastal landform (**FIGURE 1**). Sand has been deposited and built up over a period of time. Constructive waves build coastal landscape features by repositioning wave-born materials to also create spits, sand dunes and lagoons.

int-7837

FIGURE 1 Depositional landforms: coastal landforms created by deposition



The coastal features created by deposition can be created only when material is brought onshore by the swash of constructive waves. The construction material is in the form of sand, shells, coral and pebbles. The source of the construction material may come from eroding cliffs, from an offshore source, or from rivers which, when they enter the sea, dump any material they were transporting.

This construction material is then shaped by prevailing winds. **FIGURE 2** illustrates the cross-section of a beach formed when there is plenty of sand being pushed onshore by the swash. This construction material is dried by the sun and blown inland to create dunes.

Beach material can also be shifted by waves, which get their energy from the wind. The wind influences or directs the angle that waves move towards the coast. Waves come from the direction of the **prevailing wind**. This means that waves often move towards the shore at an angle, and their swash pushes any material they are carrying onto the beach at an angle. As the backwash of the wave returns to the sea, its path takes the shortest possible route down the beach towards the water. This action is known as **longshore drift**, and it is shown in **FIGURE 3**. Longshore drift moves

prevailing wind the main direction from which the wind blows

longshore drift a process by which material is moved along a beach in the same direction as the prevailing wind

material along the beach in a zigzag pattern that follows the direction of the prevailing wind. Longshore drift moves sand along the beach and creates spits and bars. If the prevailing wind changes direction, then so does the direction of longshore drift.

int-7838

FIGURE 2 The formation of sand dunes

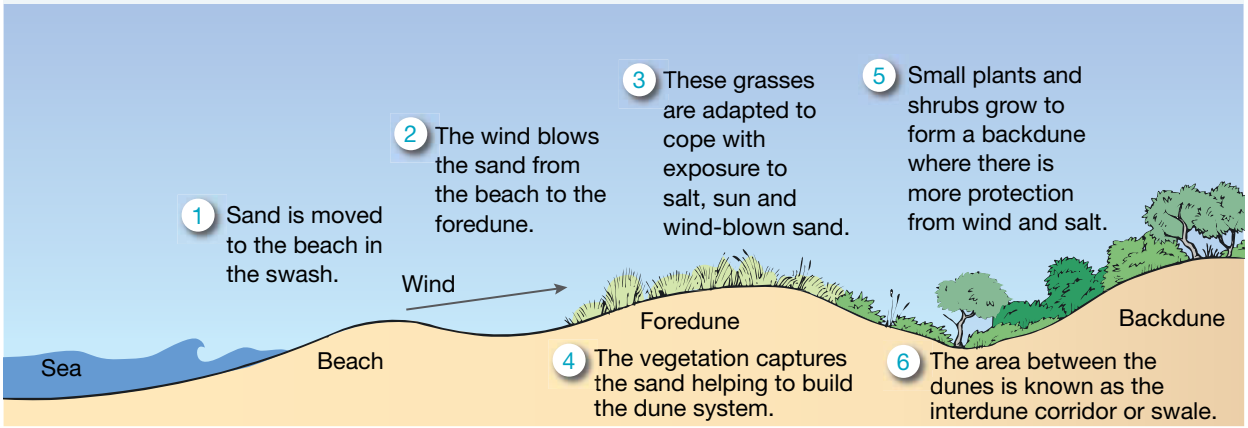


FIGURE 3 The process of longshore drift

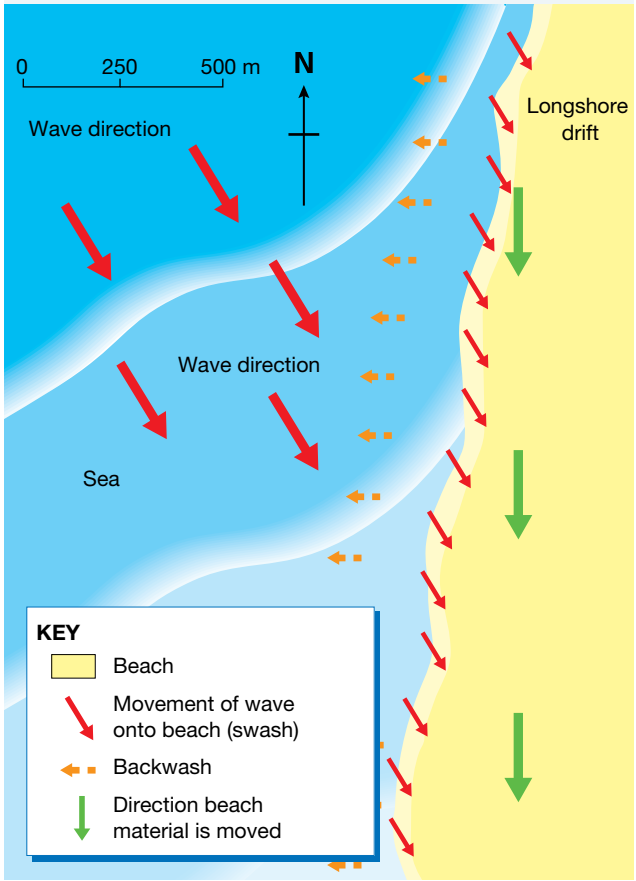


FIGURE 4 Angel Road is a depositional landform connecting three small islands with the mainland in Japan.

12.4.2 CASE STUDY: Cape Peron

A tombolo is a coastal depositional feature where a sand spit has joined an island to another island or to the mainland. One of the best examples of a tombolo in Western Australia is found at Cape Peron, south of Rockingham. Cape Peron and the surrounding islands are part of the Shoalwater Islands Marine Park.

At the end of the last ice age, some 10 000 years ago, Cape Peron was part of a limestone ridge which created high points in a north to south line along the coast. Sea levels rose, creating a chain of islands. Wave action slowly moved sand between the islands and a cuspate spit formed, connecting Cape Peron to the mainland. **Cuspate spits** form where wave action deposits material from two directions. In the last 2000 years, this process has slowly created a tombolo. Today, another island, Penguin Island, is slowly being joined to the coast by a sand bar. Tombolos tend to form in areas where the waves are constructive, and the area is sheltered from the prevailing winds. This is the case for Cape Peron and it is characterised by stretches of sandy beaches.

Other parts of the marine park show evidence of erosion. Cape Peron has many erosive landform features such as cliffs, arches and collapsed bridges. These landforms tend to be more exposed to the prevailing winds and thus more destructive waves. To the west there are a number of offshore reefs and stacks.

The eastern shore of Cape Peron is sheltered from storms and prevailing winds and is characterised by stretches of sandy beaches.

cuspate spits projections of a beach into an enclosed or semi-enclosed lagoon.

FIGURE 5 Coastal landforms at Cape Peron

Resources

Interactivities Depositional landforms: coastal landforms created by deposition (int-7837)
The formation of sand dunes (int-7838)

12.4 ACTIVITIES

1. Draw a flow diagram explaining the formation of the tombolo shown in **FIGURE 4**. **HASS skills: Analysing**
2. Use your atlas and the internet to locate and name ***places*** in Australia that have the following coastal landforms: a spit, a beach with dunes, a bay, a headland (point, cape or promontory) and an estuary. Find four examples of each landform and mark them on a map. You could create a Google map of your results, with links to images of each feature. **HASS skills: Analysing**
Geography concept: Place

12.4 EXERCISE

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

Learning pathways

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

Check your understanding

1. Where does the material come from that builds beaches?
2. The formation of sand dunes cannot happen unless there is plenty of sand in the swash to allow them to grow. Use the information in **FIGURE 2** to provide the evidence for you to agree or disagree with this statement.
3. How is weather involved in the formation of sand dune ***environments***?
4. Describe the process of longshore drift.
5. Explain two ways in which the wind can help shape beach ***environments***.
6. Suggest four strategies which could be used at Cape Peron to reduce the impact of human activities on the natural environment.

Apply your understanding

7. Study **FIGURE 3**.
   a. In which direction is sand moving on the beach?
   b. How will this beach ***change*** if the longshore drift continues in this direction?
   c. Redraw this diagram to show how the movement of sand along this beach would ***change*** this ***environment*** if the prevailing wind ***changed*** to come from the south-west.
8. Referring to **FIGURE 2**, sketch a new diagram to show what you think would happen to these sand dunes if a fire destroyed the vegetation on the foredune.
9. Describe how coastal landforms are the result of ***interconnections*** between the sea and the atmosphere.
10. If it was a windy day, where on the beach or dune would it be best to take shelter? Explain your answer.
11. Describe some of the possible ***interconnections*** between Cape Peron and the nearby urban community of Rockingham.
12. What might be some of the impacts on Cape Peron of the construction of a marina development in the area marked 'sandy beaches' on **FIGURE 3**?

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

12.5 Managing coasts

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- identify strategies used to prevent coastal environments
- distinguish between soft engineering and hard engineering strategies
- evaluate strategies for managing coastal erosion.

12.5.1 How can a coast be managed?

It is possible to reduce or slow the change to coastal landscapes if we understand the **physical processes** and human activities that cause it. While it is not possible to change the speed and direction of the wind or the number of months each year when destructive waves reach a shoreline, it is possible to redistribute or trap the sand shifted by storm waves or longshore drift. It is also possible to protect coastal houses and roads using barriers to reduce the direct impact of waves.

Coastal management techniques are commonly divided into two main categories – hard engineering strategies and soft engineering strategies. **Hard engineering** strategies typically involve using physical structures to control the effects of natural processes. Sea walls, groynes, gabions and breakwaters are all examples of hard management techniques. What is interesting about these kinds of strategies is that, over time, they can often create problems that are more severe than the ones which they were trying to solve. Let's use a seawall as an example.

FIGURE 1 The sea wall in Seabird, Western Australia

Look at **FIGURE 1**. As waves hit the shore in this area, they removed sand from the beach and decreased the stability of the dune system. Concerned that the dunes would eventually be washed away completely, the local shire decided to build a sea wall. Although the wall succeeded in protecting the dune, its presence inadvertently caused another management issue. As you can also see in the photograph, there is no sand in front of the sea wall. Before the wall existed, waves did indeed remove sand from the beach and dune system. However, they also replenished the sand over time in a natural cycle. The presence of the wall has interrupted this natural cycle, eventually resulting in the complete loss of beach area in front of the wall. This is just one example of how hard engineering strategies can often cause long-term issues in coastal environments.

Due to the issues that often arise from hard engineering strategies, many of the strategies we see used today involve **soft engineering** techniques. Taking a more sustainable approach to coastal management, these strategies commonly use natural processes instead of permanent physical infrastructure. Instead of building a sea wall, the Shire of Gingin (responsible for the Seabird sea wall) could have revegetated the dune system to improve its stability. Dune revegetation is a common soft engineering strategy that involves planting natural grasses and shrubs. As these plants grow, their roots help bind the sand together, halting erosion.

physical processes continuing and naturally occurring actions such as wind and rain

hard engineering a coastal management technique that involves using physical structures to control the effects of natural processes

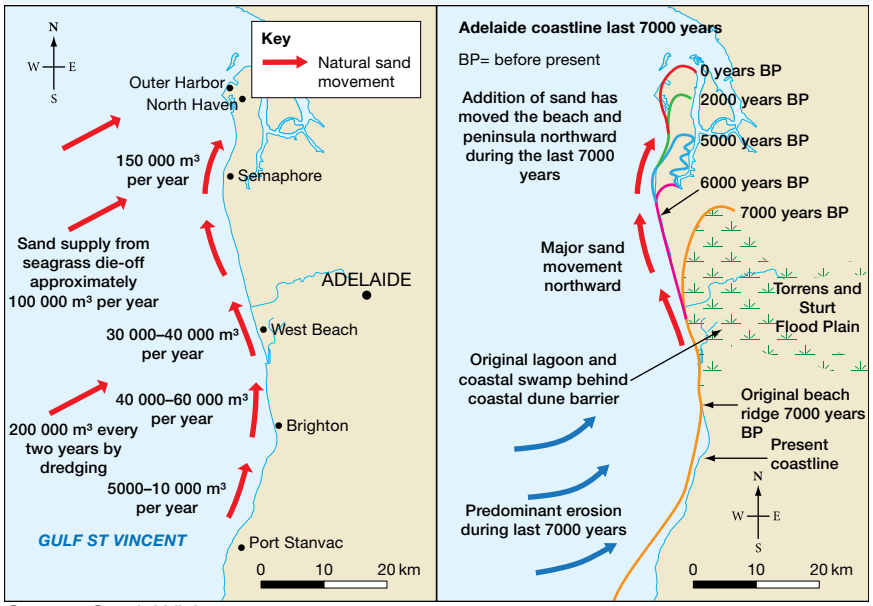
soft engineering a coastal management technique where the natural environment is used to help reduce coastal erosion and river flooding

12.5.2 CASE STUDY: Managing Adelaide's living beaches

The problem: The beautiful sandy beaches closest to Adelaide are under constant threat from erosion. **FIGURE 2** identifies the problem. For the past 7000 years the beaches south of Adelaide have been eroding, and the prevailing winds from the south-west have driven this material northwards.

This longshore drift has removed material from the south and relocated it in North Haven, where a **peninsula** has grown and a large dune system has been created. For the past 30 years the beaches in the south have been replenished by adding truckloads of sand. The plan is to find a better way to manage Adelaide's beaches by reducing the cost of moving sand.

FIGURE 2 The movement of sand northwards along the Adelaide Metropolitan coastline

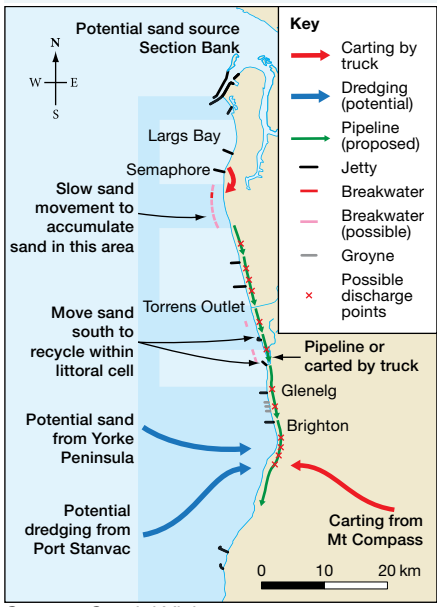


Source: Spatial Vision

The solution: Adelaide's Living Beaches Strategy. **FIGURE 3** illustrates the solution. Although sand will still need to be recycled from north to south, the plan is to use a pipeline instead of trucks to do most of the transportation. The pipeline will extend along the coast and will send sand back to the southern end of the beach. **FIGURE 4** shows sand being discharged at the southern end of the beach. A series of structures such as breakwaters and groynes will be built in several places to trap sand at important locations. Fewer trucks will be used, and it is expected that the cost of beach restoration will be reduced.

peninsula land jutting out into the sea

FIGURE 3 Adelaide's Living Beaches Strategy



Source: Spatial Vision

FIGURE 4 Piping sand from north to south along Adelaide's beaches

12.5.3 Do coastal management strategies always work?

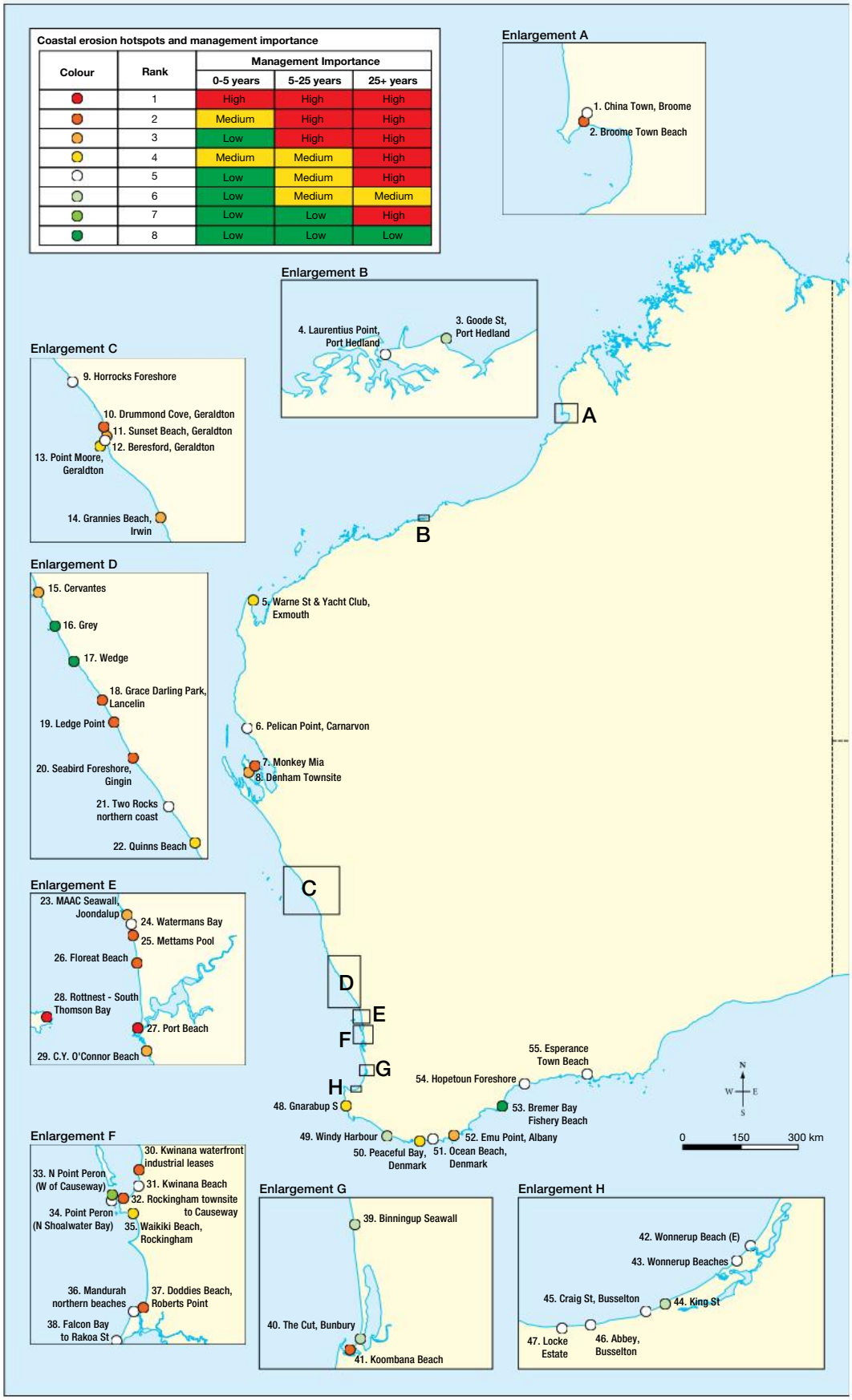
An integrated strategy like the one designed for Adelaide's beaches has a better chance of protecting existing coastal landscapes (particularly the beaches) and structures built nearby, because it has taken into account the prevailing wind conditions, as well as the movement of sand. If a structure like the groyne in **FIGURE 5** is built on a beach, it will certainly trap sand on the side that interrupts the direct flow of the longshore drift. But this structure will also reduce the flow of sand to beaches further along the coast, on the other side of the groyne. Building a sea wall or breakwater may interrupt the flow of longshore drift and actually silt up the mouth of the harbour it is protecting. A sea wall can deflect the power of waves and increase erosion on an unprotected part of the nearby coast, or reduce the erosion of material from a cliff face that had been replenishing sand on the local beaches. Coastal management is quite a tricky issue. Do you manage to protect the existing coastal landscape or do you manage to allow the action of wind and waves to create a naturally evolving landscape?

FIGURE 5 A groyne on Cottesloe Beach

DISCUSS

The impacts of so-called hard management techniques are far too severe to be used in coastal environments and only soft management techniques should be considered. Discuss this statement in small groups and then report back to the class. **General capability: Critical and creative thinking**

FIGURE 6 Western Australian coastal erosion hotspots and management importance



Source: Department of Transport, WA Government.

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions

- Investigate additional topics > Oceans and coasts > **Managing coasts**

12.5 ACTIVITIES

1. Analyse Cottesloe Beach in **FIGURE 5**. Why do you think the groyne in this image was built? Use Google Earth to examine the other major Perth beaches. Discuss how prevalent the use of groynes is to manage the amount of sand at each beach. Use examples in your response. **HASS skills: Analysing**
2. Research another example of coastal landscape management. Identify why the management strategies were put in place and comment on their success. Examples of places that would be good to research include Cape Woolamai, the Gold Coast, Melbourne bayside beaches, Polder coastline of the Netherlands, Bondi, Venice Beach in California or Waikiki in Hawaii. **HASS skills: Questioning and researching**
3. Imagine that you own a holiday house that is built on coastal dunes within 15 metres of the beach. After a powerful storm, the beach in front of your house is eroded and your house is now only five metres from the sea. What are your options? Work out a series of strategies that you could implement which may save your house from falling into the sea. Include diagrams to illustrate your plan. **HASS skills: Evaluating**
4. Examine the map in **FIGURE 6.**
   a. Describe the spatial distribution of the beaches at risk from erosion.
   b. Choose one of the beaches and research why it is at risk and discuss what is being done to manage that risk.
   c. Discuss what you think should be done to manage the beach you have chosen. **HASS skills: Analysing**
5. The three beaches with the highest management priority are all located in the south-west of the state. Locate each beach on the map and research them. Why do you think the government considers these the most significant? **HASS skills: Questioning and researching**
6. Draw a diagram to explain how groynes and sea walls help to manage or protect a coastal landscape. Refer to **FIGURE 3** in subtopic 12.4 to help with your diagram. **Geography concept: Sustainability**

12.5 EXERCISE

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

Learning pathways

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

Check your understanding

1. How do groynes and sea walls help to manage or protect a coastal landscape?
2. Discuss the two main types of coastal management techniques. Ensure that you explain how they differ.
3. What problem do sea walls usually attempt to solve?
4. Describe one situation in which you would use a hard management technique instead of a soft management technique.
5. Describe one situation in which you would use a soft management technique instead of a hard management technique.

Apply your understanding

6. Describe what will happen to Adelaide's southern beaches if they stop being replenished with trucks of sand.
7. Refer to **FIGURE 2**. Describe the ***changes*** that have occurred to Adelaide's coastline over the past 7000 years.
8. Refer to **FIGURES 3** and **4**. Describe the ***changes*** the Living Beaches Strategy has made to the Adelaide coastline and the reasons for these ***changes***.
9. Refer to **FIGURE 5** and describe the direction of the longshore drift in this image.
10. Draw a diagram to demonstrate how revegetation could be used instead of a sea wall.

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

12.6 Aboriginal and Torres Strait Islander use of coastal environments

LEARNING INTENTION

By the end of this subtopic, you will be able to explain how ancient shell middens provide an insight into Aboriginal and Torres Strait Islander lifestyles and coastal management practices.

12.6.1 How did Aboriginal and Torres Strait Islander peoples use coastal environments?

Aboriginal and Torres Strait Islander peoples have been using coastal environments for at least 65 000 years. During this time they learned to manage their resources and practised careful and deliberate environmental management techniques. Although the coastal environments we see in Australia today are dramatically different to those used by the first Australians, some archaeological evidence of Aboriginal and Torres Strait Islander coastal land use does still exist.

Scattered across coastal environments throughout Australia are thousands of fascinating archaeological sites which allow us to examine Aboriginal and Torres Strait Islander land use. These sites are called **shell middens** and contain the remains of shellfish, bones and sometimes stone tools (see **FIGURE 1**). Shell middens can be found across Australia but are particularly common in New South Wales, Victoria and Tasmania. Shell middens are usually located in scrubland behind sand dunes or in other sheltered positions along a coastline. Aboriginal people used middens to both store and cook their food, as suggested by the presence of heavy amounts of ash and charcoal at these sites. We can use the carbon in these remains to establish the age of individual sites. The oldest Victorian shell midden is located at Cape Bridgewater and was used over 12 000 years ago!

FIGURE 1 Shell midden on the Tarkine coast, Tasmania

While shell middens provide us with important archaeological evidence, they are also an important reminder for all Australians of the long and rich history of Aboriginal and Torres Strait Islander peoples in Australia. Physical links to Aboriginal and Torres Strait Islander heritage are rare in some parts of Australia, and shell middens provide us with tangible connections to the past. As shell middens are usually situated in delicate and dynamic coastal environments, it is vital that we preserve the historical and cultural significance of these sites.

shell middens Aboriginal and Torres Strait Islander archaeological sites where the debris associated with eating shellfish and similar foods has accumulated over time

12.6 ACTIVITY

Shell middens are one example of an Aboriginal and Torres Strait Islander archaeological site. Use the internet to find another type of Aboriginal and Torres Strait Islander archaeological site in Australia. Identify and describe the site and explain why it is historically and culturally significant.

HASS skills: Questioning and researching
Geography concept: Environment

12.6 EXERCISE

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

Learning pathways

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

Check your understanding

1. What is a shell midden?
2. Where can Victoria's oldest shell midden be found and how old is it?
3. Why are shell middens important to preserve?
4. In which locations were shell middens found?
5. What evidence is there in the middens that suggests Aboriginal and Torres Strait Islander peoples cooked their food?

Apply your understanding

6. Most shell middens are found within a few kilometres of a coastline. Why would this location make these sites vulnerable?
7. Suggest a way that we could protect and preserve shell middens.
8. Suggest how shell middens could be used to boost tourism in regional areas.
9. Develop a proposal to the local member for Cape Bridgewater that the shell midden site should be nominated as a location of cultural significance.
10. Some middens have been found far from current coastal areas. Suggest how this is possible.

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

12.7 Comparing coastal landforms

LEARNING INTENTION

By the end of this subtopic, you will be able to identify the processes that have created coastal landforms in different parts of the world.

12.7.1 How do coastal landforms differ?

Although coastal landforms can be similar in different parts of the world, they can also be very different. Some differences are climatic and some are geomorphic. Coastal landscapes are created by the interconnections between the sculpting power of the oceans, coastal topography and the material that is available to sculpt.

Limestone stacks, such as the Twelve Apostles in Victoria (see **FIGURE 2** in subtopic 12.2), have been shaped by the power of the Southern Ocean. Similar stacks have been formed by the erosive power of the waters off the coast of Thailand (**FIGURE 1**) and along the Portuguese and Welsh coasts. We can also compare two regions that feature coastal lake environments – Gippsland Lakes in south-eastern Victoria and the Icelandic Vatnajökull glacier.

The Gippsland Lakes are a network of coastal lakes and lagoons fed by six rivers but they are often cut off from the sea by a barrier of silt. The Gippsland Lakes are at the mouth of the Mitchell, Avon, Thompson, Latrobe, Nicholson and Tambo Rivers. When there is little rainfall, the rivers flow slowly and deposit sediment in the lakes. This, along with the longshore drifting of the sea current in Bass Strait,

creates lakes by moving sediment to seal the lakes with offshore barriers. After heavy rainfall the level of water in the Lakes rises and the barrier breaks, allowing access of fresh water to the sea and salt water into the Lakes. This lake system had an artificial entrance cut by humans in the late 1800s to allow fishing boats into and out of the Gippsland Lakes and to reduce the chance of algal blooms.

In south-eastern Iceland the melting Vatnajökull glacier (**FIGURE 2**) flows into the Atlantic Ocean through a glacial lake.

FIGURE 1 Ko Tapu rock near Phuket, Thailand

FIGURE 2 Jökulsárlón Glacier Lagoon, Iceland

This glacier once flowed directly into the sea, but a warming local climate has meant that the glacier's snout is now 1.5 kilometres inland. The melting ice has created the large 18-square-kilometre glacial lake named Jökulsárlón. Since the climate is cold and the sunshine has little heat, the large chunks of ice that fall from the glacier remain as slowly melting icebergs. These icebergs float in the lake until they become small enough to

roll down a channel into the sea. During winter the lake freezes and traps the icebergs until the summer thaw. Humans have created a narrow channel to link Jökulsárlón with the sea. This channel is designed to reduce the chance of summer floods and to protect the major highway that brings tourists to this beautiful place.

These two coastal lakes have formed in very different places, with different climates, but the geomorphic process of deposition has meant that human intervention has been required to allow their waters to flow into the sea.

12.7 ACTIVITIES

1. a. Use the internet to collect at least six images of limestone stacks from different *places* in the world.
   b. Attach these images to a Google map to create a global distribution of limestone landscapes.
   c. Describe the similarities and differences between the images. **Geography concept: Place**
2. Look at a map of the Gippsland Lakes. Predict how they might look if part of the barrier washes away during a huge storm. Draw a sketch map to explain your answer. **HASS skills: Evaluating**
3. The Bunda Cliffs found in the Great Australian Bite are over 100 km in length. Investigate and describe how they were formed. **HASS skills: Questioning and researching**

12.7 EXERCISE

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

Learning pathways

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

Check your understanding

1. What material are the Twelve Apostles and Ko Tapu rock both made from?
2. How has climate ***changed*** the entrance of the Vatnajökull glacier into the sea?
3. Describe the way that the geological process of deposition has ***changed*** the Gippsland Lakes and Jökulsárlón.
4. How was the Gippsland Lakes area formed?
5. What are the key similarities between the Gippsland Lakes and Jökulsárlón?

Apply your understanding

6. The Vatnajökull glacier is expected to have melted within 80 years. What might this ***place*** look like when there is no longer a glacier? Draw a sketch map to explain your answer.
7. Look at a map of the Gippsland Lakes. Predict how they might look if part of the barrier washes away during a huge storm. Draw a sketch map to explain your answer.
8. Explain how rainfall (or the lack of rainfall) can influence the appearance of the Gippsland Lakes region.
9. How have humans ***changed*** the Gippsland Lakes region and Vatnajökull over time?
10. What are the major threats to the two regions mentioned in this subtopic? How can these regions be managed to avoid these threats?

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

12.8 How does water form river landscapes?

LEARNING INTENTION

By the end of this subtopic, you will be able to identify the different phases of a river and describe the landform features that form from a river's source to its mouth.

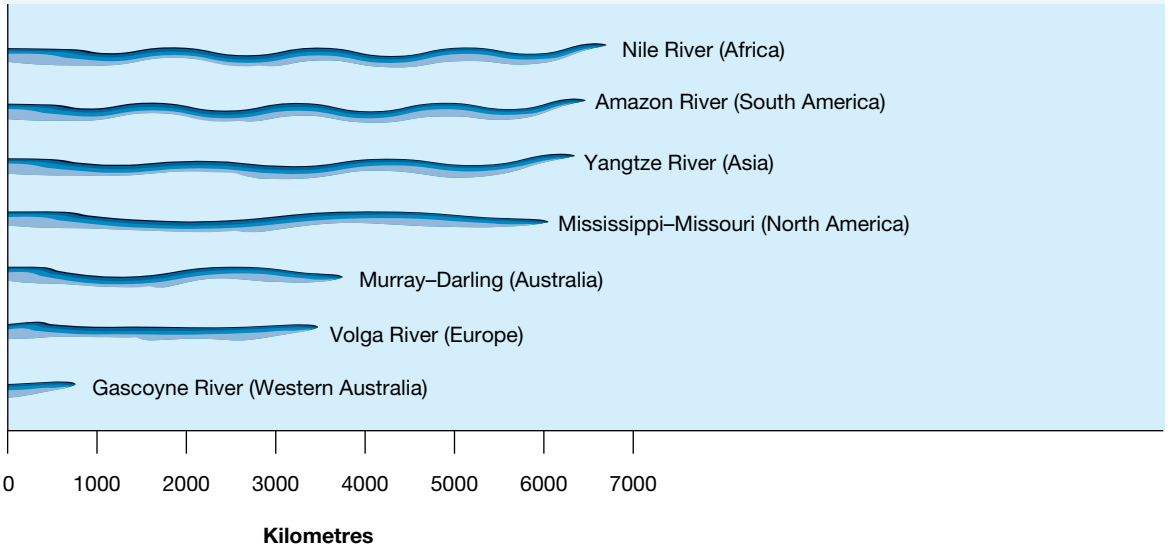
12.8.1 Moving water

Erosion, transportation and deposition are the key processes through which rivers are able to sculpt landscapes. Some rivers, such as the Gordon River in Tasmania, are **perennial**; some, such as Coopers Creek in Queensland, are **intermittent**; others, such as the Colorado River in the United States, have eroded amazing landforms like the Grand Canyon.

Water is always on the move. It evaporates and becomes part of the water cycle; it rains and flows over the surface of the Earth and into streams that make their way to a sea, lake or ocean; and it soaks through the pores of rocks and soil into **groundwater**.

Groundwater is essential for keeping rivers flowing in dry months, as it is groundwater that stops many rivers from running dry.

FIGURE 1 Rivers of the world: the longest river on each continent. How do each of these rivers compare to the Gascoyne River in Western Australia?



12.8.2 River systems and features

A river is a natural feature, and what we see is the result of the interaction of a range of inputs and processes. All parts of the Earth are related to the formation of river landscapes. This includes the lithosphere (rocks and soil), the hydrosphere (water), the biosphere (plants and animals) and the atmosphere (temperature and water cycle). Changes can happen quickly or over a very long period of time. Changes at one location along a river can have an effect at other locations along the river.

perennial describes a stream that flows all year

intermittent describes a stream that does not always flow

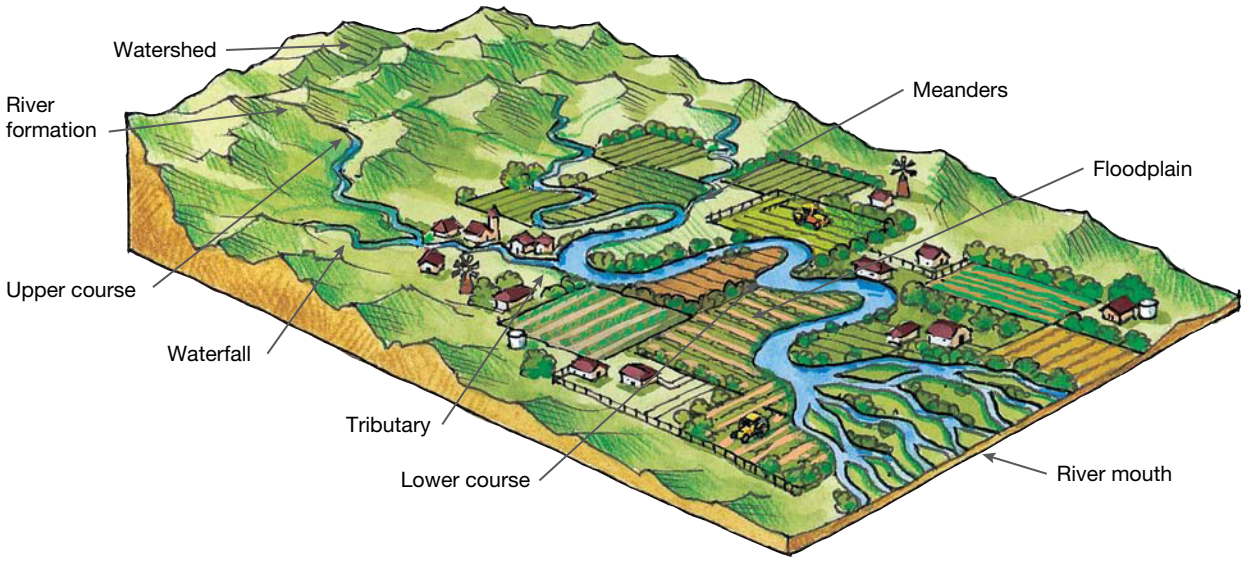
groundwater water that seeps into soil and gaps in rocks

Water flows downhill, and the source (the start) of a river will be at a higher altitude than its mouth (the end). As the water moves over the Earth's surface, it erodes, transports and deposits material.

The volume of water and the speed of flow will influence the amount and type of work carried out by a river. A fast-flowing flooded river will erode enormous amounts of material and transport it **downstream**. As the speed or volume of the water decreases, much of the material it carries will be deposited. Rivers are commonly broken into three main sections – the upper, middle and lower course. Different processes and different types of landforms can be found in each section. Let's examine these sections more closely to see exactly how rivers work.

int-7839

FIGURE 2 A river system



Upper course

A river gathers its water from a region known as a drainage basin or catchment (see **FIGURE 3**). The boundary of this region is identified by mountains, hills or any land that is higher than the surrounding area. This is often referred to as the **watershed** and it is the point that determines the direction of the river. Within this region, water collects in small depressions in the ground (rills), which eventually become larger streams. Finally, these streams (also known as tributaries) combine to form the main trunk of the river itself.

Water moves quickly along the upper course of a river is it makes its way from areas of higher elevation to areas of lower elevation. The faster the flow of a river, the more power it has and the more erosion it causes. It is common to see waterfalls, plunge pools and rapids along the upper course of a river.

downstream nearer the mouth of a river, or going in the same direction as the current

watershed an area or ridge of land that separates waters flowing to different rivers, basins or seas

FIGURE 3 The watershed and catchment, or drainage basin of a river system

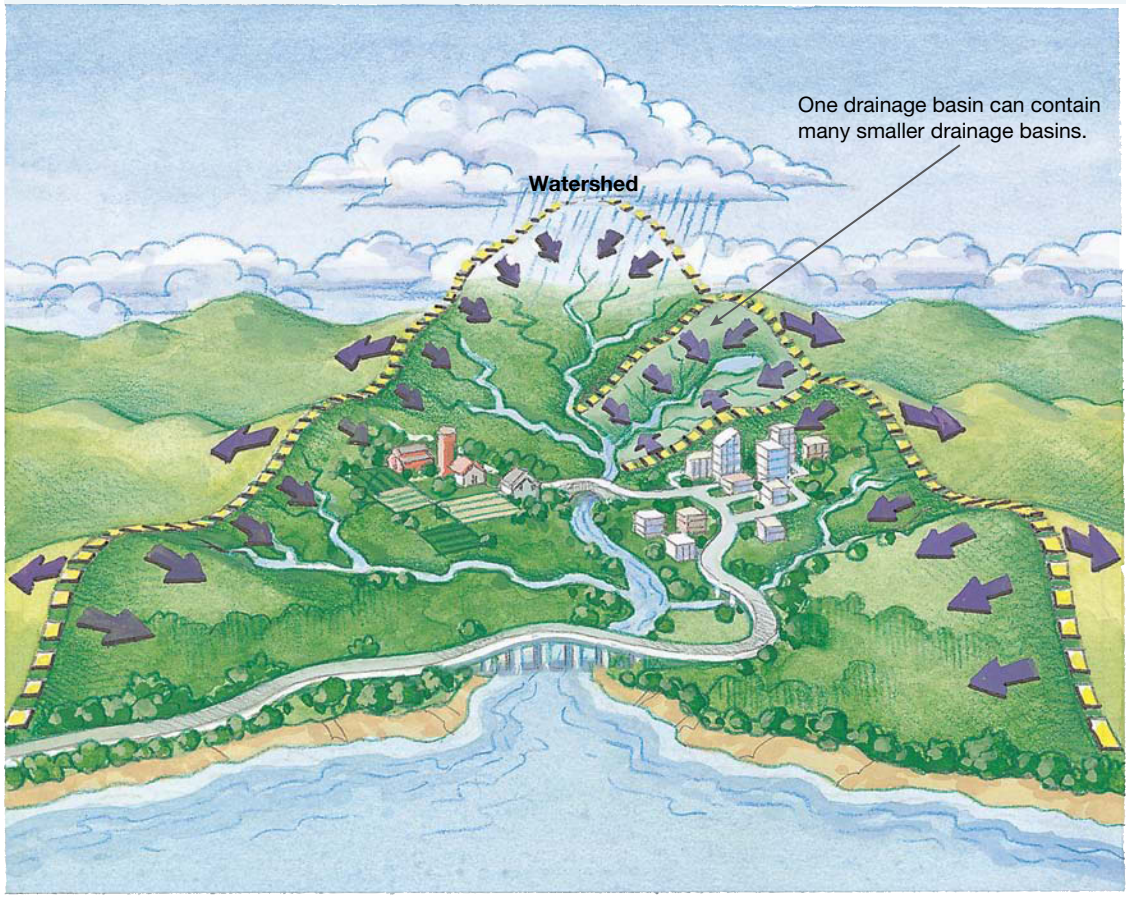
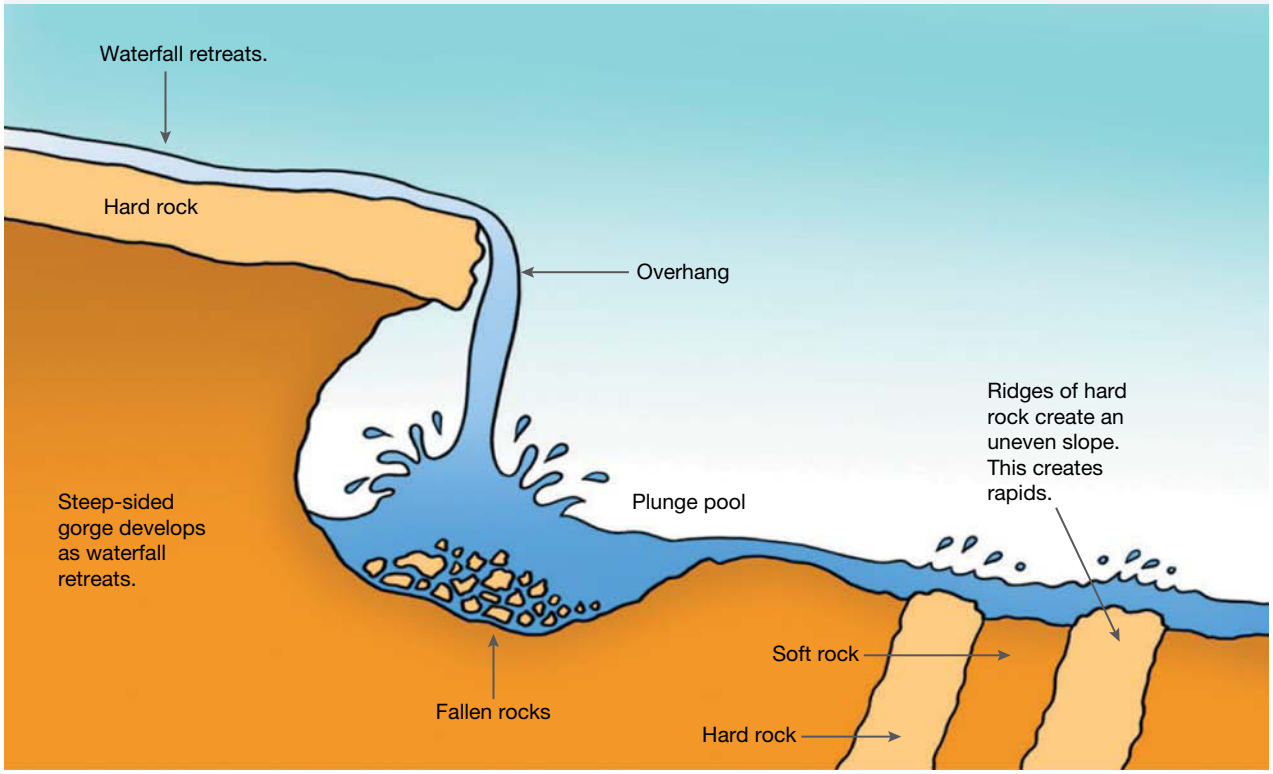


FIGURE 4 A waterfall

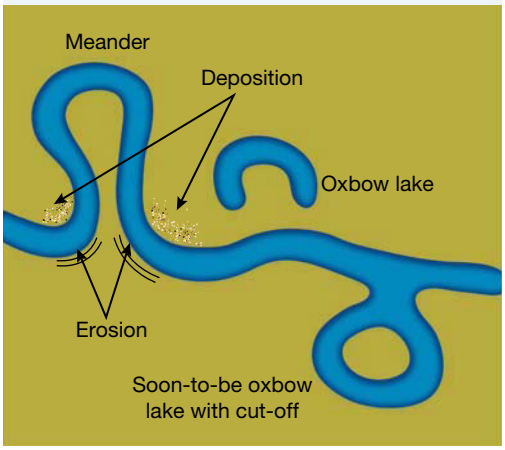


Middle course

A river will naturally follow the topography of the surrounding area. As the land flattens out, a river will stretch into long sweeping turns known as **meanders**. Here, the energy of the fast-flowing river we saw in the upper course is converted and allows the river to carve a new path through the flatter landscape of the middle course. Over time, a meandering river will change the path it follows, as some bends become more obvious and others disappear. A meander that has been cut off is called an oxbow lake. In Australia we call these billabongs.

During times of high rainfall, land on either side of the middle course can become inundated as the river struggles to contain excess water. Referred to as a **floodplain**, these areas are highly suitable for agriculture. As floodwaters subside, they leave behind the nutrient-rich sediment (alluvium) that the river had been transporting since it left the upper course.

FIGURE 5 The formation of a meander and oxbow lake



Lower course

As a river enters the lower course it slows down again, separating back into smaller streams called distributaries. The remaining sediment carried by the river is deposited in an area referred to as the delta. **River deltas** commonly take three main shapes: fan shaped, arrow shaped and bird-foot shaped. The shape of a delta is influenced by tides, waves and the volume of sediment and water carried by a river. Sometimes a river ends with a wide mouth where fresh water and salt water can mix. This is known as an **estuary**.

meanders a winding curve or bend in a river

floodplain an area of low-lying ground adjacent to a river, formed mainly of river sediments and subject to flooding

river deltas a landform created by deposition of sediment that is carried by a river as the flow leaves its mouth and enters slower-moving or stagnant water. Can take three main shapes: fan shaped, arrow shaped and bird-foot shaped.

estuary the wide part of a river at the place where it joins the sea

DID YOU KNOW?

Australia has no major river deltas as a result of the strong ocean currents surrounding the continent.

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigating Australian Curriculum topics > Year 8: Landforms and landscapes > **Fjords**

on Resources

Interactivities A river system (int-7839)
River carvings (int-3104)

Google Earth Mississippi Delta

12.8 ACTIVITIES

1. After some rain, investigate an area of bare ground on a small slope near school or home. Sketch the pattern that the rills have made. Identify the watershed and catchment for each rill. **HASS skills: Analysing**
2. Research and then sketch a diagram to show the course of the meandering Murray River. Mark in the course that the river used to take. Predict and label where the next oxbow lake, or billabong, might form. Show the possible future course of the river. **HASS skills: Evaluating**
3. Produce a flowchart or animation to explain the formation of an oxbow lake, a delta, a waterfall or rapids. **HASS skills: Communicating and reflecting**
4. Using Google Earth or an atlas, find the Nile delta, the Ebro delta and the Mississippi delta. Draw a sketch and write a short description of the shape of each delta, presenting your findings in a table. **HASS skills: Communicating and reflecting**
5. Research river deltas around the world. Discuss any common features between the different areas in which the deltas have formed. **HASS skills: Questioning and researching**
6. The Gascoyne is Australia's third longest river. Undertake some research and explain how is it different to all the other longest rivers in each state of Australia. **HASS skills: Questioning and researching**

12.8 EXERCISE

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

Learning pathways

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

Check your understanding

1. Explain why groundwater is an essential component of most rivers.
2. Refer to **FIGURE 1** and compare the ***scale*** of Australia's longest river with the world's longest river.
3. What feature, other than water, has to be present for waterfalls and rapids to form? Refer to **FIGURE 4**.
4. Explain how rivers are part of the water cycle.
5. Why do people settle and farm on floodplains?
6. Create a table that explains the positives and negatives of living in a flood plain.
7. Why doesn't Australia have any river deltas?

Apply your understanding

8. Identify a river that flows through the capital city in one state or territory in Australia. Describe its source, any tributaries, and its mouth.
9. What do you think will happen to deltas if sea levels rise?
10. Predict the ***changes*** that will occur to the waterfall in **FIGURE 4**. Justify your answer.
11. What ***changes*** will occur along a river if there is unusually high rainfall in its upper course? Think in terms of erosion and deposition.
12. Do you think that governments should stop people from living in flood plains? Justify your response.

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

12.9 Managing river landscapes

LEARNING INTENTION

By the end of this subtopic, you will be able to identify strategies for managing a river system and explain why managing a river system is complex, using the Mississippi River in the United States as an example.

12.9.1 Mississippi River

Rivers are vital. Plants and animals depend on their waters for survival. People also rely on rivers for their waters and have diverted rivers for flood control, irrigation, power generation, town water supplies, waste disposal and recreation.

The mighty Mississippi River is approximately 3700 kilometres long and is the second longest river in the United States. It flows through 10 states (see **FIGURE 1**). The drainage basin, or catchment, for the river covers 40 per cent of the country, and includes all or part of 31 states and two Canadian provinces. The drainage system is made up of thousands of rivers and streams, including the Missouri.

Importance of the river

The Mississippi has been a major contributor to the economic growth of the United States.

- It is important for transporting goods, such as fuel, coal, gravel, chemicals, steel, cement and farm produce. The **barges** on the river are able to connect to ocean shipping at Baton Rouge in Louisiana.
- It supplies water for cities and industries and irrigation for farming.
- Much of its floodplain has been cleared for farmland.
- The river basin also supports natural biodiversity. It has many species of mussels, 25 per cent of all fish species in North America, and over 300 species of birds that use the river during migration and breeding.

barges a long flat-bottomed boat used for transporting goods

FIGURE 1 The Mississippi drainage basin

Source: Spatial Vision

Floods

The river has created the geographical characteristics that have always attracted settlement. The source of the river is at an altitude of 450 metres above sea level, and the river drops in altitude very quickly. The last 1000 kilometres of the river's journey is through a wide floodplain that is the result of many floods over hundreds of years. Under natural conditions, the river had high water levels in early spring and much lower levels by early autumn.

Floods are a major issue for businesses, homes and farms. There have been many significant floods; for instance, in 1849, 1850, 1882, 1912, 1913, 1927, 1983, 1993 and 2011. After the floods of 1927, the Mississippi River and Tributaries Project was set up with the goal of preventing destructive floods and keeping the river open for navigation.

ecosystems an interconnected community of plants, animals and other organisms that depend on each other and on the non-living things in their environment

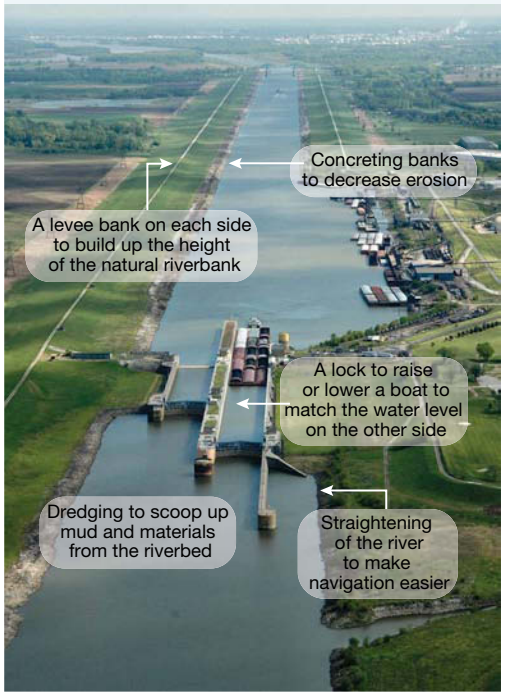
River management

The Mississippi River and Tributaries Project uses many strategies to manage the river. The aim is to satisfy the needs of farming, towns, industry, transport and **ecosystems**. There are many dams to control water levels in the river.

Management issues

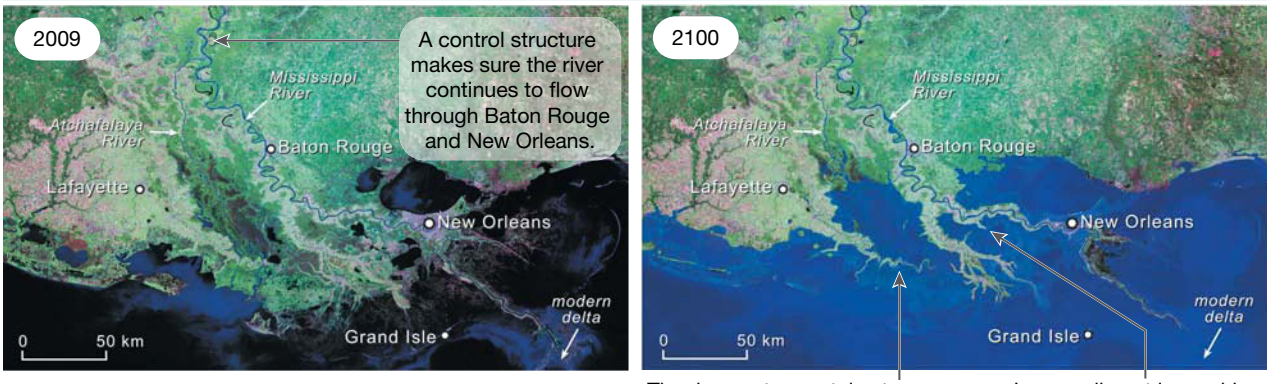
- The strategies are expensive.
- Continuous dredging is needed.
- Levees are being built higher – some now seven metres high – and it is hard work to make sure they don't leak or break.
- Water is powerful and the river still wears away at weak points along the banks.
- If a levee breaks or if water goes over the top, flood damage can be very bad.
- The floodplain does not receive much sediment from the river.
- The river water is not as clean as it used to be.
- Natural habitats are damaged by dredging or concreting.
- The delta is decreasing in size.

FIGURE 2 Examples of management strategies



int-7840

FIGURE 3 Predicted changes to the Mississippi Delta (known as a bird-foot delta), 2009 to 2100



The river water contains too many nutrients from towns and farms. This is a concern for the fishing industry.

Less sediment is reaching the delta; the delta is becoming smaller.

DISCUSS

'Should all buildings be banned from being constructed in a flood plain?' Refer to the issues map and write all the different perspectives that can be included to answer this question. Once complete, categorise these points of view into positive and negative views. **General capability: Critical and creative thinking**

on Resources

Interactivity Predicted changes to the Mississippi Delta, 2009 to 2100 (int-7840)

Weblink Mississippi

12.9 ACTIVITIES

1. Use the **Mississippi** weblink in the Resources tab to watch a video about the Mississippi River. What do you notice about the ***scale*** of the watershed and the location of the Mississippi River? **Geography concept: Scale**
2. Do you agree or disagree with the following statement? 'A strategy implemented in one part of the river will have an impact on another part of the river.' As you find evidence from this subtopic, place it in a table, or under subheadings. Write a conclusion based on your findings. **HASS skills: Evaluating**
3. Research the role the levee banks played in the flooding of New Orleans during Hurricane Katrina. Explain what occurred and discuss what has been done to ensure that this does not happen again. **HASS skills: Questioning and researching**

12.9 EXERCISE

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

Learning pathways

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

Check your understanding

1. Refer to **FIGURE 1** and name key tributaries of the Mississippi River. In which general direction does the Mississippi flow from its source to its mouth?
2. Why is the river important to the United States? Classify each reason as one or a combination of the following: social, economic or ***environmental***.
3. How long is the Mississippi River and through how many states does it flow?
4. Explain the main two uses of the Mississippi River.
5. What are the main issues that engineers face when managing flooding along the Mississippi River?
6. Refer to **FIGURE 3**. What does the formation of a bird-foot delta indicate about the type of waves in this part of the Gulf of Mexico?

Apply your understanding

7. How close will Baton Rouge be to the sea in 2100?
8. What do you think would be the main management strategies on the Mississippi River during a year of heavy rainfall? What do you think would be the main management strategies during a drought?
9. Explain how the geographic characteristics of the Mississippi River can lead to frequent flooding.
10. What kind of human activity occurs the most in the lower course of the Mississippi River? Why does this activity occur in this region?
11. What do you believe would be the best flood management strategy (or strategies) to use along the Mississippi River?
12. How might the use of pesticides and herbicides on the many farms in the Mississippi catchment impact the river system?

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

12.10 Landscapes formed by ice

online only

How can glaciers shape landscapes?

In cold parts of the world, such as the poles and high mountains, water falls as snow, is compacted and then moves more slowly than when it is a liquid. When ice deposits thicken, the same gravitational force that moves flowing water also moves ice, and it begins to flow. Glaciers trace a path downhill from permanent snowfields. The weight of snow and ice crush and scrape surface rocks to produce some distinctive landscapes. Fluctuations in climate cause glaciers to change in length, width and depth, and each change results in alterations to the glacial landscape.

Select your learnON format to access the content in this subtopic, including images, activities, questions and additional resources.

12.11 Thinking Big research project: Coastal erosion animation

Scenario

The erosive power of water is one of the strongest forces of nature. The continued pounding of waves upon rocks, cliffs and beaches has sculpted our coastal landscapes into the diverse environments that we see today. From towering cliffs to lonely sea stacks and deep, dark caves, all across the world, there are thousands of examples of the effect of erosion on coastal landscapes.

Task

Unless you are lucky enough to be watching at the *exact* moment that a sea stack tumbles into the ocean, it can be difficult to catch erosion in action. Although wave action is continuous, it can often take an extremely long time for us to see the effects of erosion. In this task, you will do what few people before you have achieved – you will capture the effect of erosion on film! You will complete this task by creating an animation (either hand-drawn or using a computer) that shows how a coastal landform is created. Your animation should be accompanied by written annotations that describe each step of the process.

Follow the steps detailed in the **Process** section to complete this task.

Process

- Open the ProjectsPLUS application for this topic. Click the **Start new project** button to enter the project due date and set up your project group. Working in pairs will enable you to share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered.
- In the **Media centre** you will find an assessment rubric to guide your work and some weblinks that will provide a starting point for your research.
- Your first step is to choose a landform as the focus of your animation. You can choose from the following coastal landforms: cliff, sea stack, arch, cave, rock-cut platform, headland, tombolo, blowhole, beach or sand dunes.
- Once you have decided on your landform, make sure that you know *exactly* how it is created. Write an explanation of this process and try to break it down into different stages. This will help you plan your animation.
  - Plan your animation by answering the following questions:
  - What format are you going to use – hand-drawn or computer-drawn?

    (Note: Whichever format you use, you will have to draw your landform in stages in order to make your animation. For example, if you are drawing by hand, you draw the first stage of your landform, then take a photograph, repeating the process until you are finished. You'll then use a computer or handheld device to put these images together to create a moving animation).
  - If you're using computer software, do you already know how to use the program, or do you need to watch some tutorials in order to learn?
  - How many separate images do you need to accurately show the creation of your landform?
  - Once you have completed your drawings/diagrams, add them to an animation maker (there are lots of excellent free programs online) or you can simply add them to Google Slides or PowerPoint in order to make a simple animation.
  - The **Google Drive** weblink in the Media centre shows you how to set up 'autoplay' on Google Slides.
  - Submit your animation to your teacher for assessment and feedback. Each animation could be played for the class.

on Resources

ProjectsPLUS Coastal erosion animation (pro-0169)

12.12 Review

12.12.1 Key knowledge summary

12.2 Landscapes formed by water

- Through the processes of erosion and deposition, water shapes the coastal landscapes of the world.
- Coastal landscapes can change on a daily, seasonal or long-term basis.

12.3 Coastal erosion

- Continued wave action from destructive waves erodes coastal environments creating a wide range of landforms.
- Erosion can also be caused by tectonic activity and by human use of coastal environments.

12.4 Which coastal landforms are created by deposition?

- Continued wave action from constructive waves deposits sand along coastal environments, creating a wide range of landforms.
- If unmanaged, depositional landforms can present challenges for the management of coastal environments.

12.5 Managing coasts

- As human and natural impacts continue to change coastal landscapes, it is vital that these environments are carefully managed.
- Coastal management can include hard and soft engineering techniques.

12.6 Aboriginal and Torres Strait Islander use of coastal environments

- Aboriginal and Torres Strait Islander communities have been using coastal environments for at least 65 000 years.
- Shell middens can be found across Australian coastal landscapes and provide archaeological evidence of Aboriginal and Torres Strait Islander life and land use.

12.7 Comparing coastal landforms

- The unique environmental and climatic conditions of different places in the world can create similar, yet different landforms.

12.8 How does water form river landscapes?

- Rivers contain incredible erosive potential, which is used to sculpt landforms along their upper, middle and lower courses.

12.9 Managing river landscapes

- People rely on rivers for a range of needs including agricultural, industrial, commercial, residential and recreational purposes.
- The human demand on rivers makes proper management essential.

12.10 Landscapes formed by ice

- The pressure of slow-moving glaciers can create unique and dynamic landscapes.
- The impacts of climate change are reducing the size and number of glaciers around the world.

12.12.2 Key terms

backwash the movement of water from a broken wave as it runs down a beach returning to the ocean

barges a long flat-bottomed boat used for transporting goods

cuspate spits projections of a beach into an enclosed or semi-enclosed lagoon.

deposition the laying down of material carried by rivers, wind, ice and ocean currents or waves

destructive waves a large powerful storm wave that has a strong backwash

downstream nearer the mouth of a river, or going in the same direction as the current

ecosystems an interconnected community of plants, animals and other organisms that depend on each other and on the non-living things in their environment

erosion the wearing away and removal of soil and rock by natural elements, such as wind and water, and by human activity

estuary the wide part of a river at the place where it joins the sea

floodplain an area of low-lying ground adjacent to a river, formed mainly of river sediments and subject to flooding

groundwater water that seeps into soil and gaps in rocks

hard engineering a coastal management technique that involves using physical structures to control the effects of natural processes

intermittent describes a stream that does not always flow

longshore drift a process by which material is moved along a beach in the same direction as the prevailing wind

meanders a winding curve or bend in a river

peninsula land jutting out into the sea

percolate of water, to filtrate through soil and rocks

physical processes continuing and naturally occurring actions such as wind and rain

prevailing wind the main direction from which the wind blows

perennial describes a stream that flows all year

river deltas a landform created by deposition of sediment that is carried by a river as the flow leaves its mouth and enters slower-moving or stagnant water. Can take three main shapes: fan shaped, arrow shaped and bird-foot shaped.

shell middens Aboriginal and Torres Strait Islander archaeological sites where the debris associated with eating shellfish and similar foods has accumulated over time

soft engineering a coastal management technique where the natural environment is used to help reduce coastal erosion and river flooding

swash the movement of water in a wave as it breaks onto a beach

watershed an area or ridge of land that separates waters flowing to different rivers, basins or seas

12.12.3 Reflection

Complete the following activities to reflect on your learning.

Revisit the inquiry question posed in the Overview:

From gentle rain to rushing rivers, how does simple water form and transform landscapes?

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

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5520)
Reflection (ewbk-5519)
Crossword (ewbk-5518)
Student Learning Matrix (ewbk-5513)

Interactivity Landscapes formed by water crossword (int-7596)

12.12 Review exercise

Multiple choice

1. A cave is formed by the process of
   A. erosion.
   B. deposition.
   C. transpiration.
   D. condensation.
2. What is the main purpose of a *groyne*?
   A. To hold the sand and grass area at the back of the beach
   B. To stop waves rushing onshore
   C. To take sand from further up the beach or another area, or to pump it from offshore
   D. To stop the sea from removing so much sand from the beach
3. What information can be shown by drawing a long profile of a river?
   A. The slope followed by the river
   B. The direction followed by the river
   C. The distance travelled by the river
   D. The speed at which the river travels
4. In which of the following places are glaciers found?
   A. Greenland and Australia
   B. New Zealand and Antarctica
   C. Chad and the Himalayas
   D. West Papua and Indonesia
5. What is the term that describes the movement of water in a wave as it breaks onto a beach?
   A. Longshore drift
   B. Swash
   C. Watershed
   D. Tributary

Short answer

6. Name four types of water features that shape the land.
7. Place each of the following features into the correct column of the table below: arch, beach, blowhole, cave, cliff, headland, lagoon, sand dune, spit, stack.

Features formed by erosion	Features formed by deposition

8. a. Why did Aboriginal and Torres Strait Islander peoples tend to live near the coast?
   b. How have coasts been used since 1788?
9. Describe two ways coasts are protected for use by people.
10. a. What is the best way to avoid a rip current when swimming at the beach?
    b. Identify two ways in which a rip current looks different from surrounding water.
11. a Refer to your fieldwork and explain the ***interconnection*** of physical processes and human activities.
    b Identify three ways in which you can record data while in the field.
12. a. What information can be shown by drawing a long profile of a river?
    b. What information can be shown by drawing a cross-section of a river?
13. Match these features to the upper, middle or lower course of a river: V-shaped valley, floodplain, estuary, waterfall, meander, delta.
14. Identify at least one economic, one ***environmental*** and one social reason for devising strategies to manage a river.
15. Name two ***places*** where glaciers are found.

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 12 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

12.1 Overview

Video eLesson
- Landscapes sculpted by water (eles-1624)

12.2 Landscapes formed by water

eWorkbook
- Landscapes created by water (ewbk-5514)

Interactivity
- Water constantly moves over and through the Earth and through the air. (int-7834)

12.3 Coastal erosion

eWorkbook
- Coastal landscapes created by erosion (ewbk-5516)

Interactivites
- Comparing constructive and destructive waves (int-7835)
- Coastal landforms created by erosion (int-7836)
- Coastal sculpture (int-3124)

Google Earth
- Twelve Apostles

myWorld Atlas
- Investigate additional topics > Oceans and coasts > **Coastal processes**

12.4 Which coastal landforms are created by deposition?

eWorkbook
- Coastal landscapes created by deposition (ewbk-5517)

Interactivities
- Depositional landforms: coastal landforms created by deposition (int-7837)
- The formation of sand dunes (int-7838)

12.5 Managing coasts

myWorld Atlas
- Investigate additional topics > Oceans and coasts > **Managing coasts**

12.8 How does water form river landscapes?

eWorkbook
- River landscapes (ewbk-5515)

Interactivities
- Coastal landforms created by erosion (int-7836)
- Depositional landforms: coastal landforms created by deposition (int-7837)
- River carvings (int-3104)

Google Earth
- Mississippi Delta

myWorld Atlas
- Investigating Australian Curriculum topics > Year 8: Landforms and landscapes > **Fjords**

12.9 Managing river landscapes

Interactivity
- Predicted changes to the Mississippi Delta, 2009 to 2100 (int-7840)

Weblink
- Mississippi

12.11 Thinking Big research project: Coastal erosion animation

ProjectsPLUS
- Coastal erosion animation (pro-0169)

12.12 Review

eWorkbook
- Reflection (ewbk-5519)
- Crossword (ewbk-5518)
- Student Learning Matrix (ewbk-5513)

Interactivity
- Landscapes formed by water crossword (int-7596)

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

12.10 Landscapes formed by ice

LEARNING INTENTION

By the end of this subtopic you will be able to explain how glaciers shape landscapes, and why they are an important part of our landscape.

12.10.1 How can glaciers shape landscapes?

In cold parts of the world, such as the poles and high mountains, water falls as snow, is compacted and then moves more slowly than when it is a liquid. When ice deposits thicken, the same gravitational force that moves flowing water also moves ice, and it begins to flow. Glaciers trace a path downhill from permanent snowfields. The weight of snow and ice crush and scrape surface rocks to produce some distinctive landscapes. Fluctuations in climate cause glaciers to change in length, width and depth, and each change results in alterations to the glacial landscape.

According to the Randolph Glacier Inventory, there are approximately 198 000 glaciers in the world. Predominately found in Antarctica (91 per cent) and Greenland (8 per cent), glaciers make up 0.5 per cent of the Earth's surface (25 million square kilometres). The closest glaciers to Australia are found in the mountains of West Papua (Indonesia) and the alps of New Zealand. There are landscapes caused by glacial activity in Tasmania, although the glaciers themselves have long since disappeared.

FIGURE 1 Franz Josef Glacier in New Zealand's South Island

During the most recent ice age, up to 30 per cent of the Earth's land surface was glaciated. Glaciers have a huge impact on landscapes, and the forces of erosion and deposition they exert are responsible for dramatic changes.

Moraine is any material carried by the glacier. This eroded material may have been picked up from the valley floor or it may have been eroded from the valley wall. Moraine comes in many sizes, from fine silt to very large boulders. As the glacier melts or retreats, it dumps its load of moraine because it no longer has the energy to push it down the slope. **FIGURES 2** and **3** illustrate the movement of the ice as it changes and shapes the environment.

moraine rocks of all shapes and sizes carried by a glacier

FIGURE 2 Three types of glacial erosion: plucking, abrasion and freeze–thaw

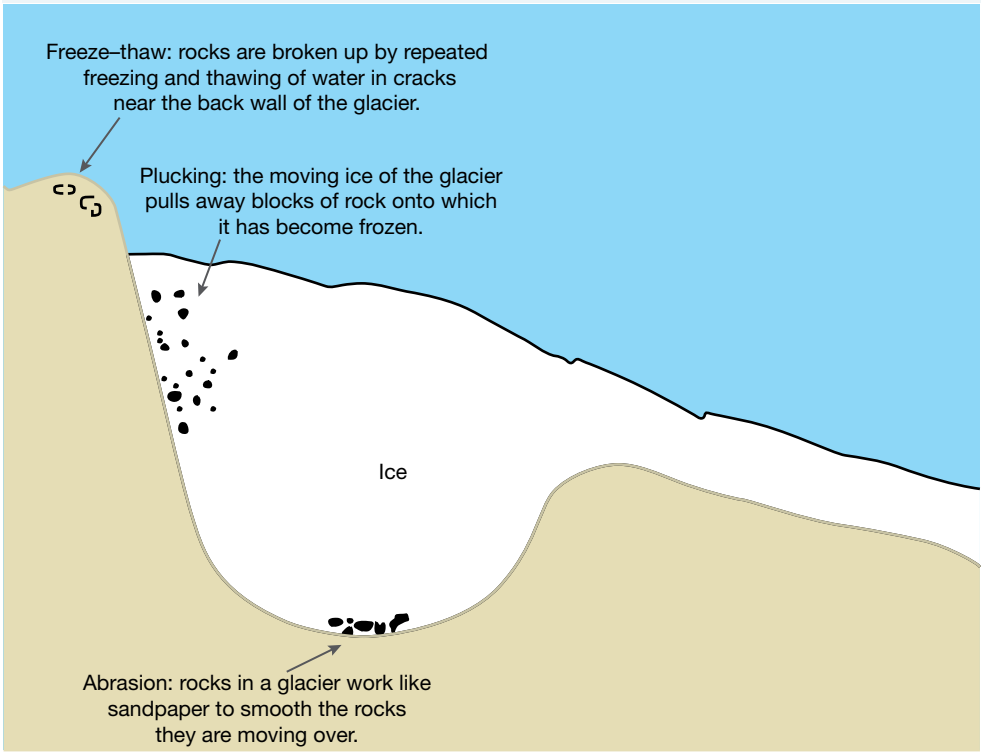
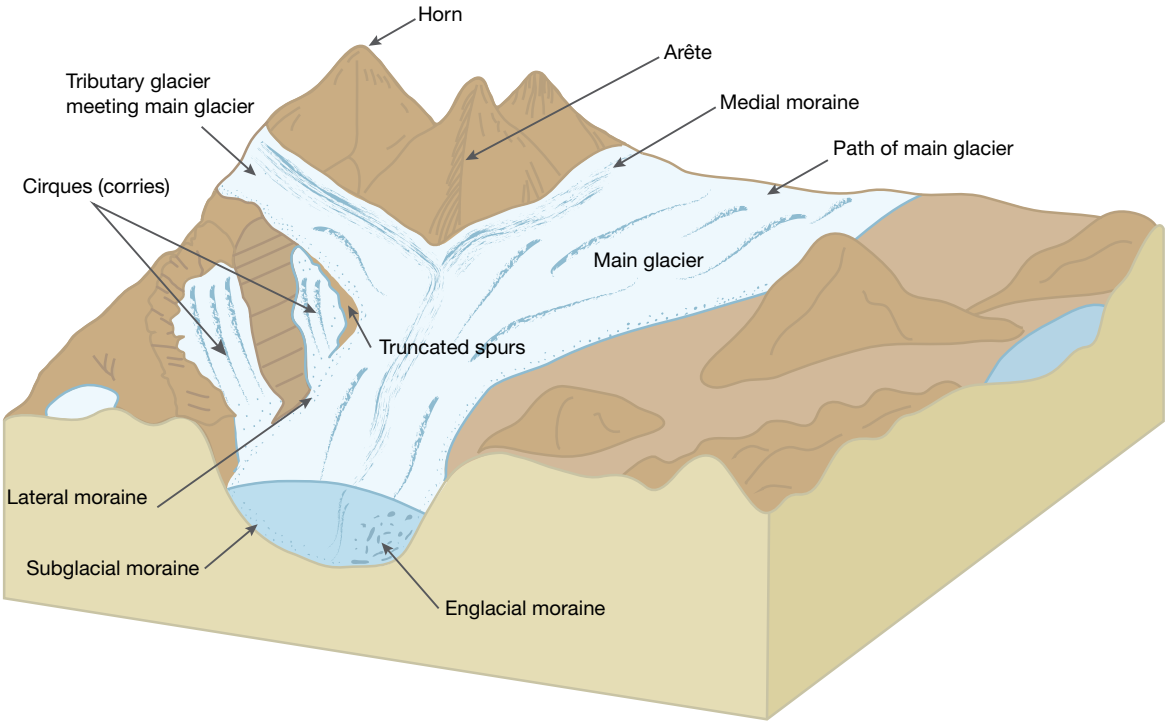


FIGURE 3 A glacier flowing from its source in a permanent ice field towards its snout, which is the point where it starts to melt



12.10.2 Why are glaciers important?

About three-quarters of the Earth's fresh water is held in ice sheets and mountain glaciers. Glaciers serve as a natural regulator of regional water supplies. During periods of warm weather, or during dry seasons or droughts, glaciers melt quite quickly. Glaciers provide a water source that feeds rivers and streams. During cold, rainy seasons, glaciers produce less meltwater. They store the rainfall as ice and reduce the chance of a **flash flood**.

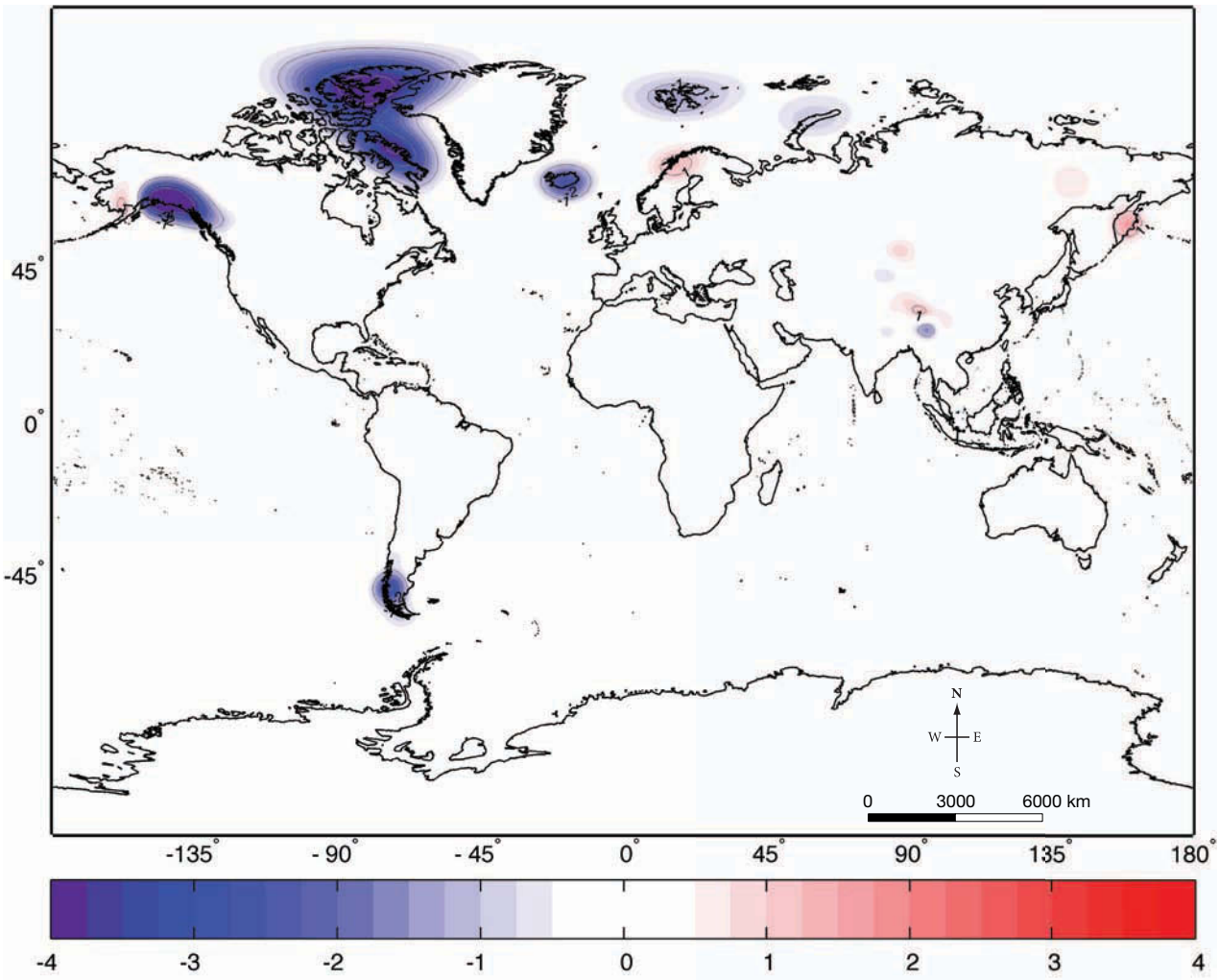
The small tropical glaciers of West Papua in the Maoke Mountains of the western central highlands are predicted to disappear between 2020 and 2025. Although these small glaciers are over 30 metres deep, they are quite short and are retreating at over seven metres per year. The loss of these glaciers will result in changes to the local environment.

Melting glaciers can affect agriculture, availability of fresh water, hydroelectric power, transportation and tourism. Over the years, settlements, farming and tourism have extended towards the edges of glaciers. If glaciers melt rapidly, then **avalanches** and flash floods will increasingly threaten lives and services in high mountain landscapes.

flash flood a flood that occurs very quickly, often without advance warning

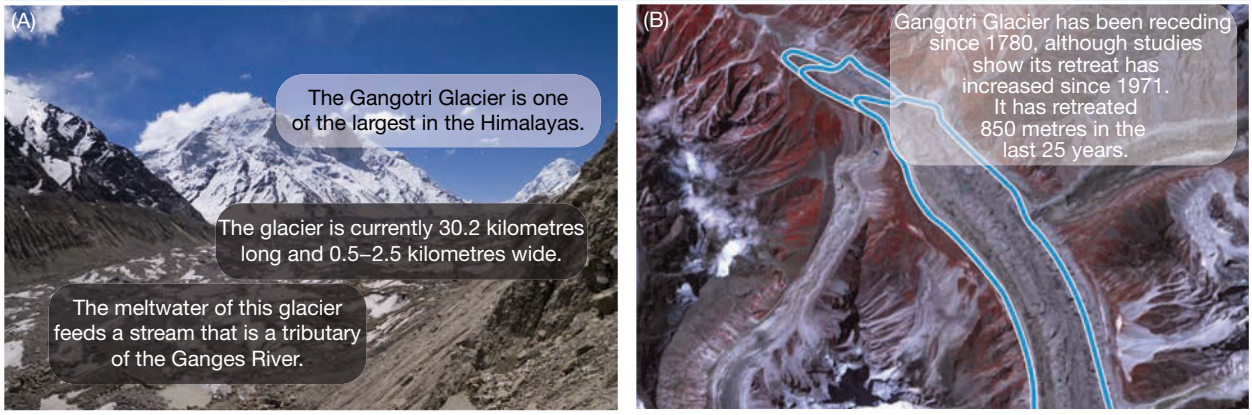
avalanches a sudden downhill movement of material, especially snow and ice

FIGURE 4 The state of the world's continental glaciers, not including polar glaciers. If their colour on the map is blue they are losing ice; if it is dark blue, they are losing a lot



Source: © NASA/JPL-Caltech/University of Colorado

FIGURE 5 Gangotri Glacier in the Himalayas in northern India



on Resources

Weblink Glacier

12.10 ACTIVITIES

1. Complete some internet research to discover how the polar glaciers of Greenland and Antarctica are ***changing***. **Geography concept: Change**
2. Use the **Glacier** weblink in the Resources tab, and watch the interactivity. Describe the changes that occurred to the glacier over the seven-year period. **Geography concept: Change**
3. With reference to the text and images within this subtopic, sketch a diagram or find a suitable image online of a glacier with at least one **tributary** and annotate the following features: terminal, medial and lateral moraines, arête, cirque, high mountain peaks, glacial stream, U-shaped valley. **HASS skills: Analysing**

12.10 EXERCISE

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

Learning pathways

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

Check your understanding

1. What is the difference between *plucking, abrasion* and *freeze–thaw*?
2. Why do glaciers move?
3. Refer to **FIGURE 4**.
   a. Describe the ***places*** where glaciers are retreating.
   b. Describe the ***places*** where glaciers are advancing.
4. Describe one major impact of increased glacial melting.
5. How do we get most of our evidence to determine that glaciers are decreasing in size?

tributary a river or stream that flows into a larger river or lake

Apply your understanding

6. Check the location of the West Papuan glaciers in your atlas. What is surprising about the ***place*** these glaciers are found? *Hint:* Look at the latitude.
7. How might the local landscape ***change*** if the glaciers of West Papua melt? How will this ***environment change*** affect the local inhabitants?
8. What can be done to prevent increased glacial melting?
9. Describe two reasons why glaciers are important for human populations.
10. According to **FIGURE 4**, which areas of the world are losing the most glaciers?

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

12.10.3 Key terms

avalanches a sudden downhill movement of material, especially snow and ice
flash flood a flood that occurs very quickly, often without advance warning
moraine rocks of all shapes and sizes carried by a glacier
tributary a river or stream that flows into a larger river or lake

13 Geomorphic hazards

13.1 Overview

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

Magma, water and tectonic plates – can they really move mountains?

13.1.1 Introduction

Mountains occupy 24 per cent of the Earth's landscape, and are characterised by many different landforms. The forces that form and shape mountains come from deep within the Earth, and have been shaping landscapes for millions of years. The Earth is a very active planet – every day, many volcanoes are erupting somewhere on the planet, and even more earthquakes are occurring. In this topic we will explore the tectonic forces that shape the world. We will also study earthquakes, tsunamis and volcanoes, and the effects they have on people and places.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5532)

Video eLesson Majestic mountains (eles-1626)

FIGURE 1 The Dolomites in Italy

13.2 How mountains are formed

LEARNING INTENTION

By the end of this subtopic, you will be able to:

- define the key terms 'continental plates' and 'continental drift'
- explain the different ways continental plates can move
- identify landforms that result from different types of plate movement
- explain how continental drift and the movement of plates has led to the formation of mountains.

13.2.1 What are the forces that form mountains?

A mountain is a landform that rises high above the surrounding land. Most mountains have certain characteristics in common, although not all mountains have all these features. Many have steep sides and form a peak at the top, called a summit. Some mountains located close together have steep valleys between them known as gorges.

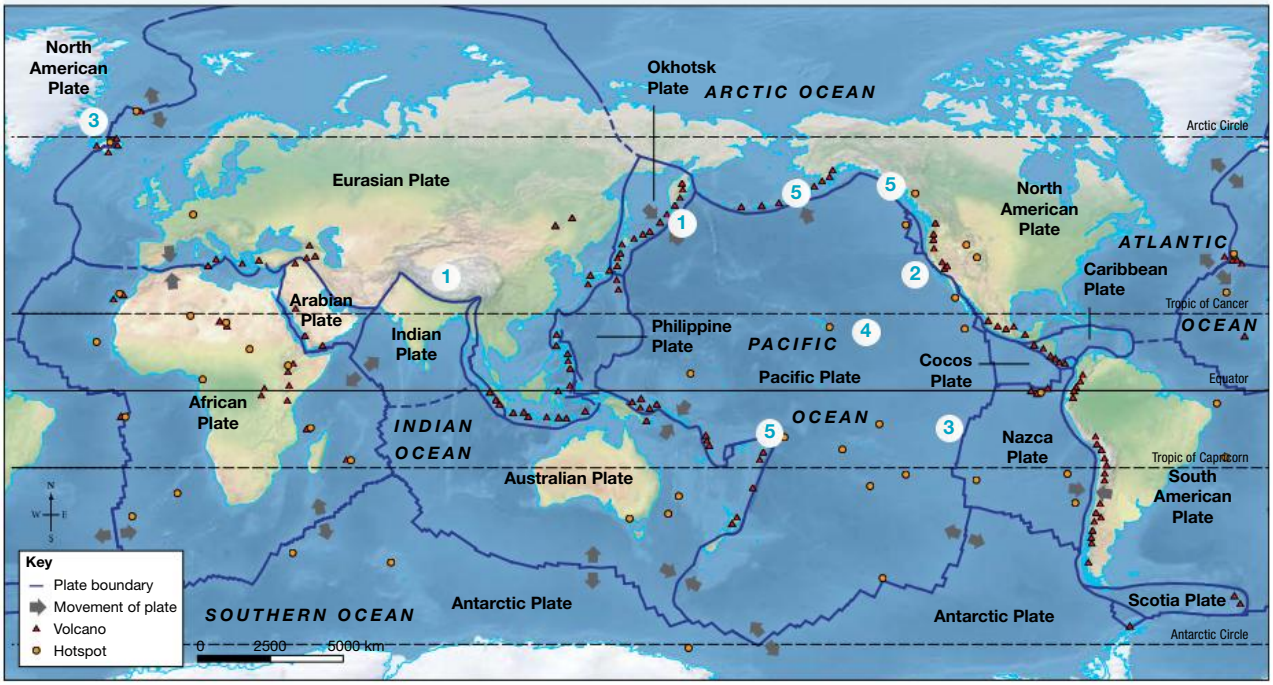
Mountains and mountain ranges have formed over billions of years from tectonic activity; that is, movement in the Earth's crust. The Earth's surface is always changing – sometimes very slowly and sometimes dramatically.

Continental plates

The Earth's crust is cracked and is made up of many individual moving pieces called continental plates, which fit together like a jigsaw puzzle. These plates float on the semi-molten rocks, or magma, of the Earth's mantle. Enormous heat from the Earth's core, combined with the cooler surface temperature, creates **convection currents** in the magma. These currents can move the plates by up to 15 centimetres per year. Plates beneath the oceans move more quickly than plates beneath the continents. Scientific evidence shows that about 225 million years ago all the continents were joined.

convection currents a current created when a fluid is heated, making it less dense, and causing it to rise through surrounding fluid and to sink if it is cooled; a steady source of heat can start a continuous current flow

FIGURE 1 World map of plates, volcanoes and hotspots



Source: Map drawn by Spatial Vision

1 Convergent plates

When two continental plates of similar density collide, the pressure of the **converging plates** can push up land to form mountains. The Himalayas were formed by the collision of the Indian subcontinent and Asia. The European Alps were formed by the collision of Africa and Europe.

Oceanic and continental plates have different densities, so when they collide the thinner oceanic plate is subducted, meaning it is forced down into the mantle. Heat melts the plate and pressure forces the molten material back to the surface. This can produce volcanoes and mountain ranges. The Andes in South America were formed this way.

Subduction can also occur when two oceanic plates collide. This forms a line of volcanic islands in the ocean about 70–100 kilometres past the subduction line. The islands of Japan were formed in this way. Deep oceanic trenches are also formed when this occurs. The Mariana Trench in the Pacific Ocean is 2519 kilometres long and 71 kilometres wide, and is 10.911 kilometres deep, making it the deepest point on Earth. If you could put Mount Everest on the ocean floor in the Mariana Trench, its summit would lie 1.6 kilometres below the ocean's surface.

2 Lateral plate slippage

Convection currents can sometimes cause plates to slide, or slip, past one another, forming **fault** lines. The San Andreas Fault, in California in the western United States, is an example of this.

3 Divergent plates

In some areas, plates are moving apart, or diverging, from each other (for example, the Pacific Plate and Nazca Plate). As the **divergent plates** separate, magma can rise up into the opening, forming new land. Iceland was formed in this way and it continues to grow today. Underwater volcanoes and islands are also formed in this way.

4 Hotspots

There are places where volcanic eruptions occur away from plate boundaries. This occurs when there is a weakness in the oceanic plate, allowing magma to be forced to the surface, forming a volcano. As the plate drifts over the **hotspot**, a line of volcanoes is formed. The Hawiian Islands are the best known example of land created by a hotspot.

5 The Pacific Ring of Fire

The most active tectonic region in the world is the Pacific Ring of Fire. It is located on the edges of the Pacific Ocean and is shaped like a horseshoe. The Ring of Fire is a result of the movement of tectonic plates. For example, the Nazca and Cocos plates are being subducted beneath the South American Plate, while the Pacific and Juan de Fuca plates are being subducted beneath the North American Plate. The Pacific Plate is being subducted under the North American Plate on its east and north sides, and under the Philippine and Australian plates on its west side. The Ring of Fire is an almost continuous line of volcanoes and earthquakes. Most of the world's earthquakes occur here, and 75 per cent of the world's volcanoes are located along the edge of the Pacific Plate.

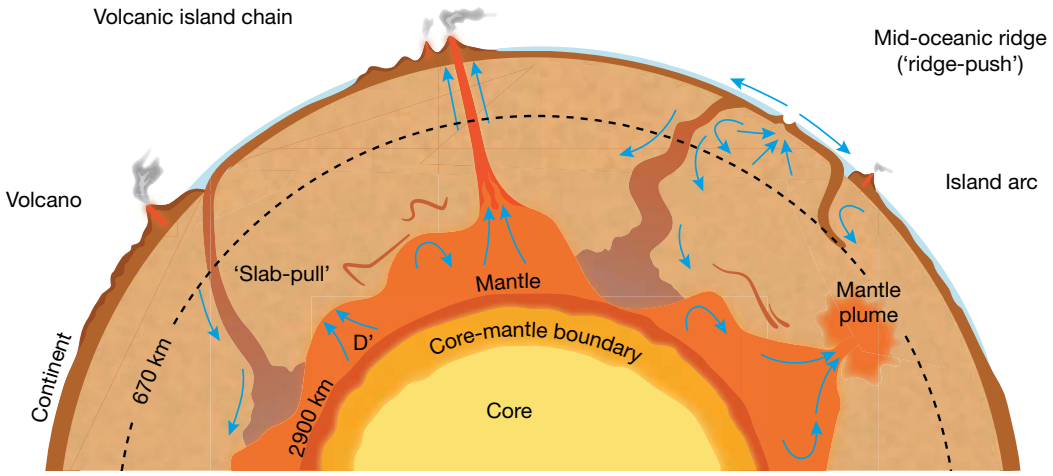
converging plates a tectonic boundary where two plates are moving towards each other

fault an area on the Earth's surface that has a fracture, along which the rocks have been displaced

divergent plates a tectonic boundary where two plates are moving away from each other and new continental crust is forming from magma that rises to the Earth's surface between the two

hotspot an area on the Earth's surface where the crust is quite thin, and volcanic activity can sometimes occur, even though it is not at a plate margin

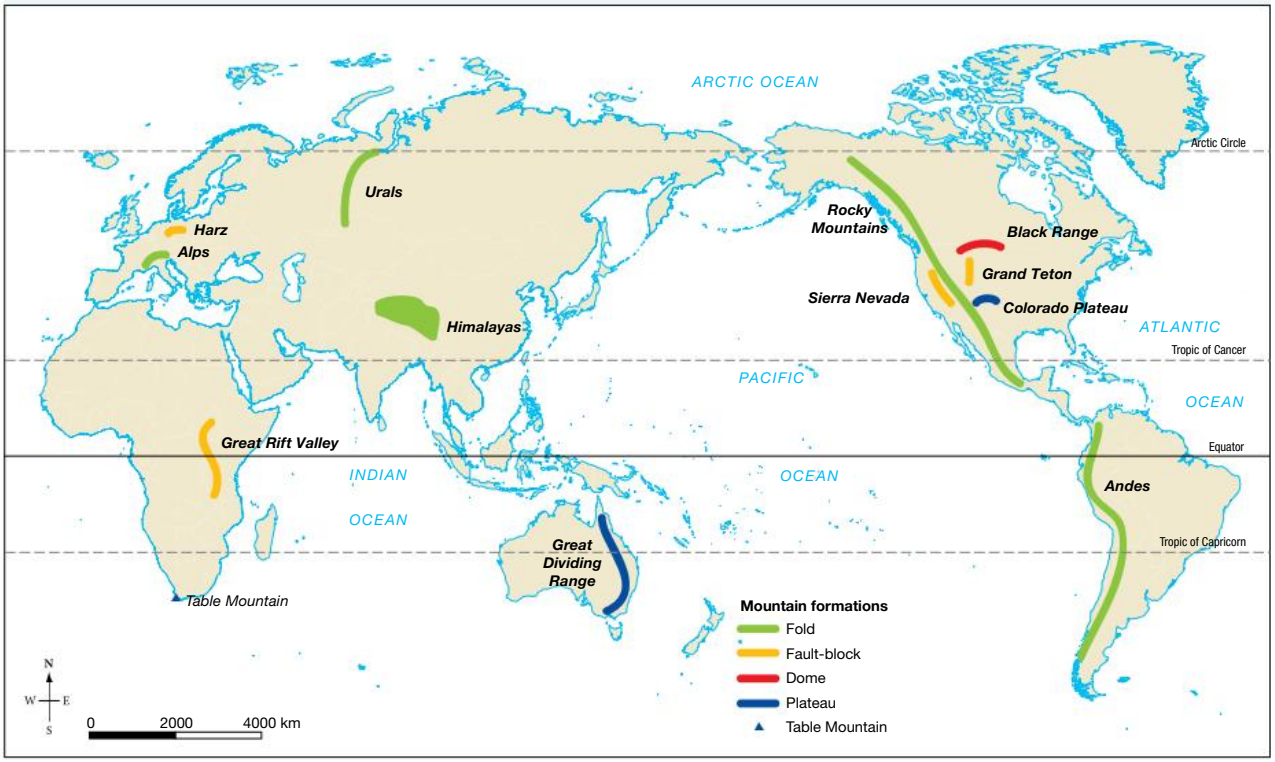
FIGURE 2 The Earth's core is very hot, while its surface is quite cool. This causes hot material within the Earth to rise until it reaches the surface, where it moves sideways, cools, and then sinks.



13.2.2 How do different types of mountains form?

The different movements and interactions of the **lithosphere** plates result in many different mountain landforms. Mountains can be classified into five different types, based on what they look like and how they were formed. These are fold, fault-block, dome, plateau and volcanic mountains. (Volcanic mountains are discussed in subtopic 13.7.)

FIGURE 3 Selected world mountains



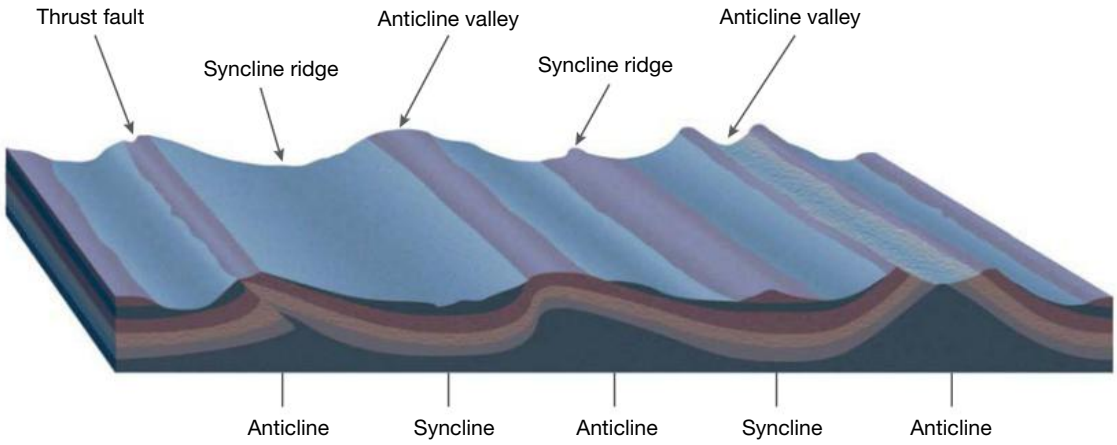
Source: Spatial Vision

Fold mountains

The most common type of mountain, and the world's largest mountain ranges, are fold mountains. The process of folding occurs when two continental plates collide, and rocks in the Earth's crust buckle, fold and lift up. The upturned folds are called anticlines, and the downturned folds are synclines (see **FIGURE 4**). These mountains usually have pointed peaks.

lithosphere the crust and upper mantle of the Earth

FIGURE 4 The formation of fold mountains



Examples of fold mountains include:

- the Himalayas in Asia
- the Alps in Europe
- the Andes in South America
- the Rocky Mountains in North America
- the Urals in Russia.

Fault-block mountains

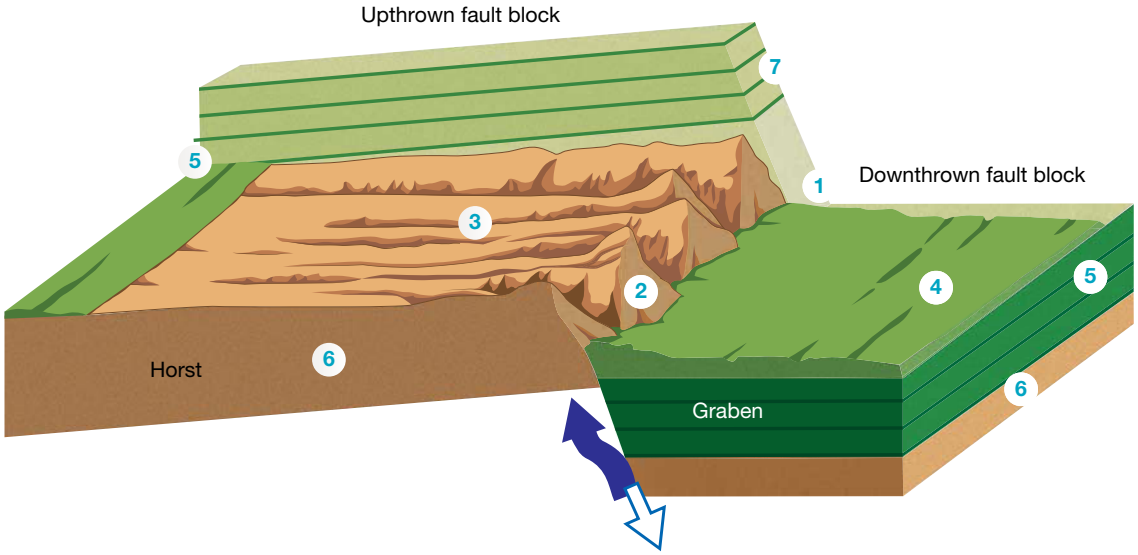
Fault-block mountains form when faults (or cracks) in the Earth's crust force some parts of rock up and other parts to collapse down. Instead of folding, the crust fractures (pulls apart) and breaks into blocks. The exposed parts then begin to erode and shape mountains and valleys (see **FIGURE 6**).

Fault-block mountains usually have a steep front side and then a sloping back. The Sierra Nevada and Grand Tetons in North America, the Great Rift Valley in Africa, and the Harz Mountains in Germany are examples of fault-block mountains. Another name for the uplifted (upthrown) blocks is *horst*, and the collapsed (downthrown) blocks are *graben*.

FIGURE 5 A cliff overlooking the Great Rift Valley in northern Tanzania, Africa. These are examples of fault-block mountains.

int-7843

FIGURE 6 The formation of fault-block mountains



1. Fault zone
2. Steep eastern face
3. Gentle western slope
4. Valley floors filled with sediments of cobbles, gravel and sand
5. Sedimentary rock layers
6. Bedrock
7. Sedimentary rock layers (5) now worn away.

Dome mountains

Dome mountains are named after their shape, and are formed when molten magma in the Earth's crust pushes its way towards the surface. The magma cools before it can erupt, and it then becomes very hard. The rock layers over the hardened magma are warped upwards to form the dome. Over time these erode, leaving behind the hard granite rock underneath (see **FIGURE 7**).

FIGURE 7 Very hot magma pushes towards the surface to form dome mountains.

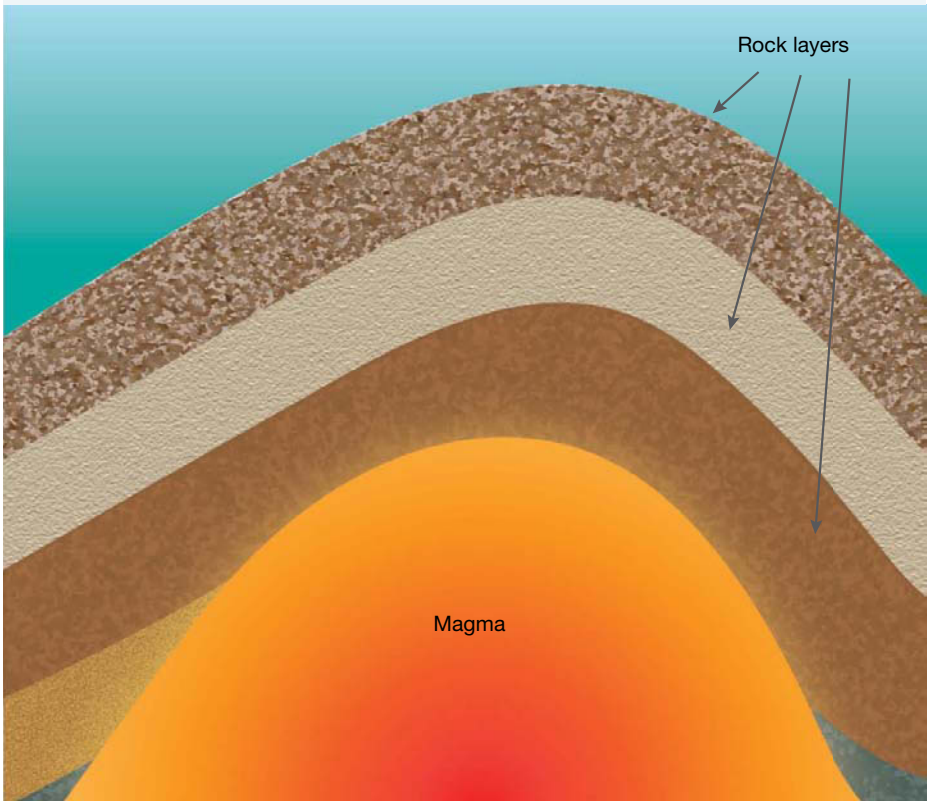


FIGURE 8 Ben Nevis in Scotland is an example of a dome mountain.

Plateau mountains

Plateaus are high areas of land that are large and flat. They have been pushed above sea level by tectonic forces or have been formed by layers of lava. Over billions of years, streams and rivers cause erosion, leaving mountains standing between valleys. Plateau mountains are sometimes known as erosion mountains.

Examples of plateau mountains include Table Mountain in South Africa (see **FIGURE 9**), the Colorado Plateau (see **FIGURE 10**) in the United States and parts of the Great Dividing Range in Australia.

FIGURE 9 The plateau of Table Mountain towers over the city of Cape Town in South Africa.

FIGURE 10 The Colorado Plateau in the United States was raised as a single block by tectonic forces. As it was uplifted, streams and rivers cut deep channels into the rock, forming the features of the Grand Canyon.

13.2.3 CASE STUDY: How were the Himalayas formed?

Before the theory of tectonic plate movement, scientists were puzzled by findings of fossilised remains of ancient sea creatures near the Himalayan peaks. Surely these huge mountains could not once have been under water?

The mystery was solved when scientists came to understand plate movements. About 220 million years ago, India was part of the ancient supercontinent we call **Pangaea**. When Pangaea broke apart, India began to move northwards at a rate of about 15 centimetres per year. About 200 million years ago, India was an island separated from the Asian continent by a huge ocean.

When the plate carrying India collided with Asia 40 to 50 million years ago, the oceanic crust (carrying fossilised sea creatures) slowly crumpled and was uplifted, forming the high mountains we know today. It also caused the uplift of the Tibetan Plateau to its current position and formed the Bay of Bengal.

Therefore, Himalayas were formed when India crashed into Asia and pushed up the tallest mountain range on the continents.

The Himalayas are known as young mountains, because they are still forming. The Indian and Australian plates are still moving northwards at about 45 millimetres each year, making this boundary very active. It is predicted that over the next 10 million years it will travel more than 180 kilometres into Tibet and that the Himalayan mountains will increase in height by about five millimetres each year. It is important to note that movement of tectonic plates is often sudden and causes earthquakes. The continents don't slide easily across the Earth's surface. Old mountains are those that have stopped growing and are being worn down by erosion.

FIGURE 11 The movement of the Indian landmass to its current location

Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

Pangaea the name given to all the landmass of the Earth before it split into Laurasia and Gondwana, which over time became the continents we know today

13.2.4 CASE STUDY: Formation of the Sierra Nevada Range, United States

The Sierra Nevada Range began to rise about five million years ago. As the western part of the block tilted up, the eastern part dropped down. As a result, there is a long, gentle slope towards the west and a steep slope to the east.

FIGURE 12 The Sierra Nevada Range was formed by fault-block tilting.

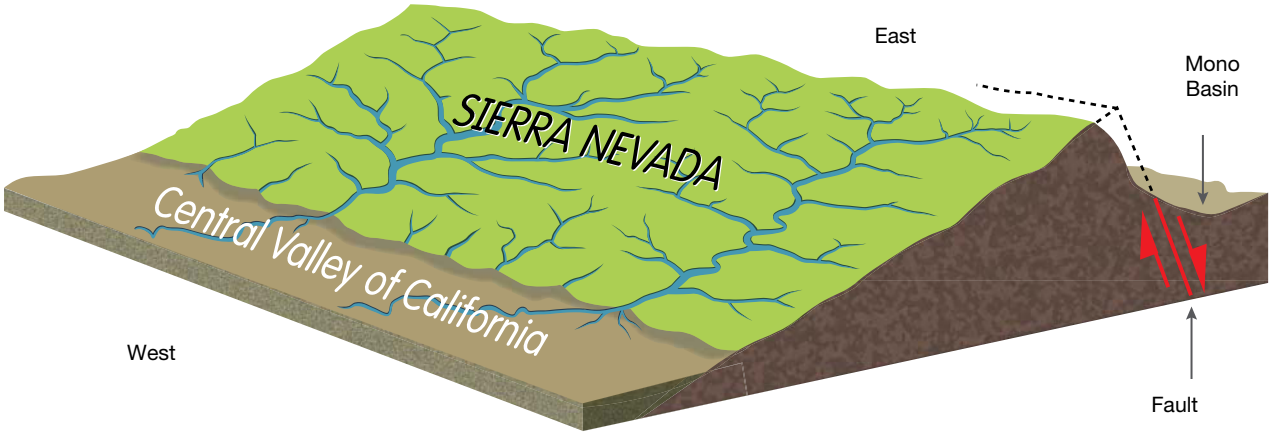


FIGURE 13 Yosemite Valley in the Sierra Nevada mountains

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Earthquakes and volcanoes > **Active Earth**

on Resources

Video eLesson	Drifting continents (eles-0129)
Interactivities	Mountain builders (int-3109) Grand peaks (int-3110)
Weblinks	Anticline and syncline Fold mountains
Google Earth	Great Rift Valley Ben Nevis Sierra Nevada mountains Table Mountain Grand Canyon

13.2 ACTIVITIES

1. Research how Plate Tectonic Theory first came to be accepted. Who came up with this theory? What evidence is now cited to prove that tectonic plates are moving?
   HASS skills: Questioning and researching
2. Use different coloured strips of plasticine to make models showing how a collision of continental and oceanic plates differs from a collision of two continental plates. Have a go at explaining this to a member of your family. **HASS skills: Communicating and reflecting**
3. Use the **Fold mountains** weblink in the Resources tab to explain the formation of fold mountains and fault-block mountains. **HASS skills: Analysing**
4. Sketch **FIGURE 5** and annotate it to show where erosion has taken place. Label ***places*** that have hard and weak rocks. **Geography concept: Place**
5. Draw a sketch of **FIGURE 12**, noting the plateau and areas of erosion and weathering.
   HASS skills: Analysing
6. Use an atlas to locate the Sierra Nevada Range. Describe where it is. Name two national parks in this mountain range. Choose one and investigate some of its geographical characteristics. Present this as a PowerPoint, Keynote or Prezi presentation. **HASS skills: Communicating and reflecting**
   Geography concept: Place

13.2 EXERCISE

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

Learning pathways

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

Check your understanding

1. Are the following statements true or false?
   a. The world's volcanoes are randomly scattered over the Earth's surface.
   b. Most of the world's volcanoes are concentrated along the edges of certain continents.

c. Island chains are closely linked with the location of volcanoes.
d. There is a weak link between the distribution of volcanoes and the location of continental plates.
e. Use the statements from parts a–d to write a summary paragraph, remembering to rewrite the false statements to make them true.

2. Explain, in your own words, the meaning of subduction when referring to plate movements. You can use a diagram to assist with your explanation.
3. Name two locations where plates are moving apart. What is happening to the sea floor in these ***places***?
4. List one example of fold, fault-block, dome and plateau mountains. Where is each located?
5. State whether the following statements are true or false.
   a. Fold mountains are the most common type of mountain in the world.
   b. The Sierra Nevada Range was formed by the eastern part of a fault-block tilting up.
6. How does the shape of each of the mountains shown in this subtopic provide clues as to how they were formed? How have the effects of erosion ***changed*** these mountains?

Apply your understanding

7. Describe the distribution of volcanoes shown in **FIGURE 1**. What does this distribution have in common with the location of plate boundaries?
8. Examine at **FIGURE 1**. How do convection currents help explain plate tectonics?
9. Refer to **FIGURE 1**. Name three ***places*** where plates are converging. What mountain ranges, if any, are located in these ***places***?
10. Draw a sketch to show what you think the world's continents will look like millions of years into the future based on the way continents move and ***change***. Justify your decisions.
11. Use **FIGURES 7** and **8** to explain the formation of dome mountains.
12. Refer to the case study in section 13.2.3, which describes the formation of the Himalayas.
    a. Provide an explanation for why scientists found ancient sea fossils on top of the Himalayas.
    b. Describe how the Himalayas were formed. How long did it take for the plate carrying India to crash into Asia? Explain why these mountains are described as 'young' mountains.
    c. Based on the movements occurring, predict what might happen to the Himalayas in the future.

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

13.3 The world's mountains and ranges

LEARNING INTENTION

By the end of this subtopic, you will be able to describe the location of the world's main mountain ranges on a world map and the effect of altitude on mountain weather.

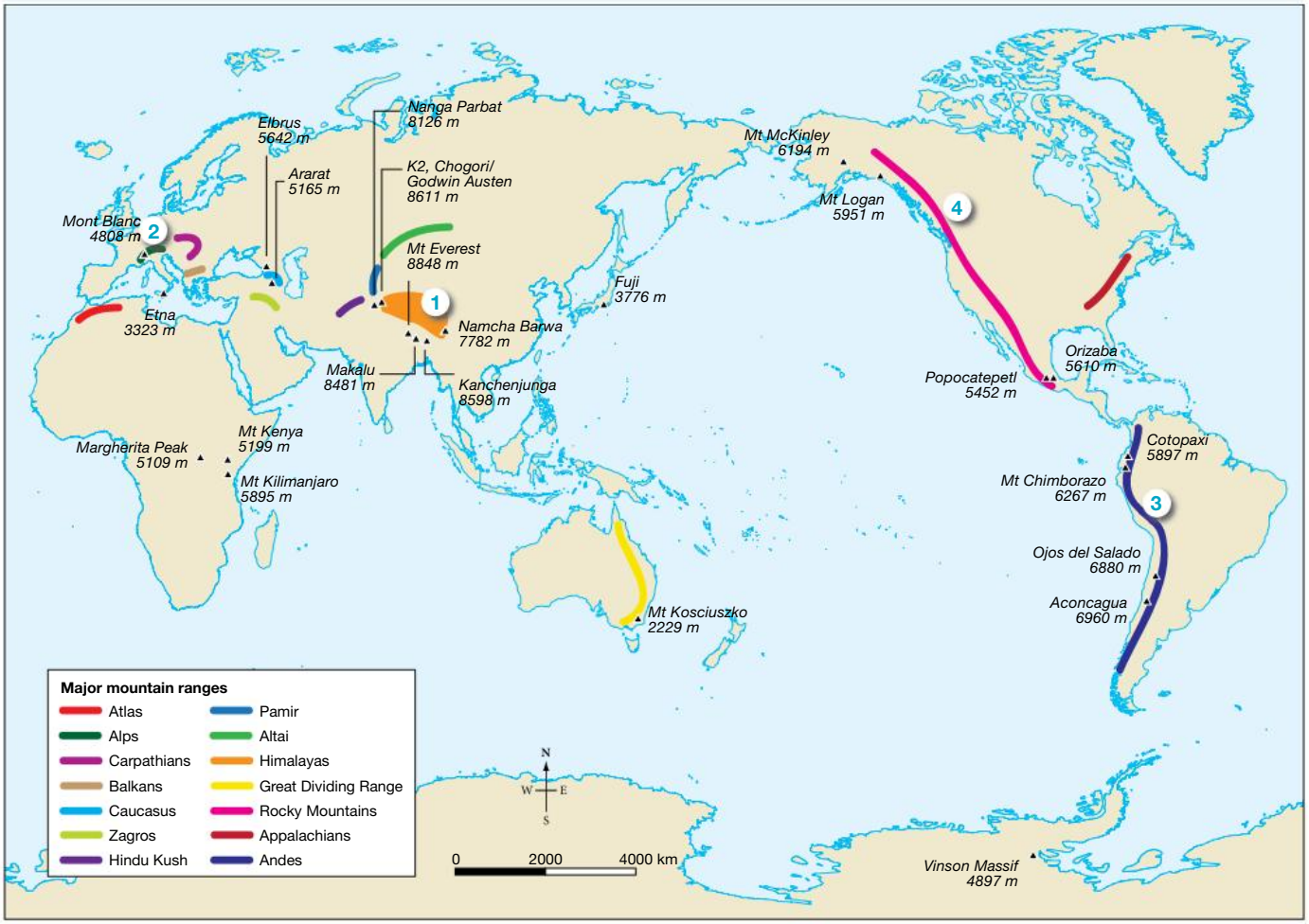
13.3.1 Where are the world's mountains?

Mountains make up a quarter of the world's landscape. They are found on every continent and in three-quarters of all the world's countries. Only 46 countries have no mountains or high plateaus, and most of these are small island nations.

Some of the highest mountains are found beneath the sea. Some islands are actually mountain peaks emerging out of the water. Even though the world's highest peak (from sea level) is Mount Everest in the Himalayas (8850 metres high), Mauna Loa in Hawaii is actually higher when measured from its base on the ocean floor. Long chains or groups of mountains located close together are called a mountain range.

int-7844

FIGURE 1 The world's main mountains and mountain ranges



Source: Map drawn by Spatial Vision

1 **The Himalayas**
Located in Asia, the Himalayas are the highest mountain range in the world. They extend from Bhutan and southern China in the east, through northern India, Nepal and Pakistan, and to Afghanistan in the west. The Himalayas is one of the youngest mountain ranges in the world and the name means 'land of snow'. The 14 highest mountains in the world – all over 8000 metres above sea level – are all in the Himalayas.

2 **The Alps**
The Alps, located in south central Europe, is one of the largest and highest mountain ranges in the world. They extend 1200 kilometres from Austria and Slovenia in the east, through Italy, Switzerland, Liechtenstein and Germany, to France in the west.

3 **The Andes**
The Andes are located in South America, extending north to south along the western coast of the continent. The Andes is the second highest mountain range in the world, with many mountains over 6000 metres. At 7200 kilometres long, it is also the longest mountain range in the world.

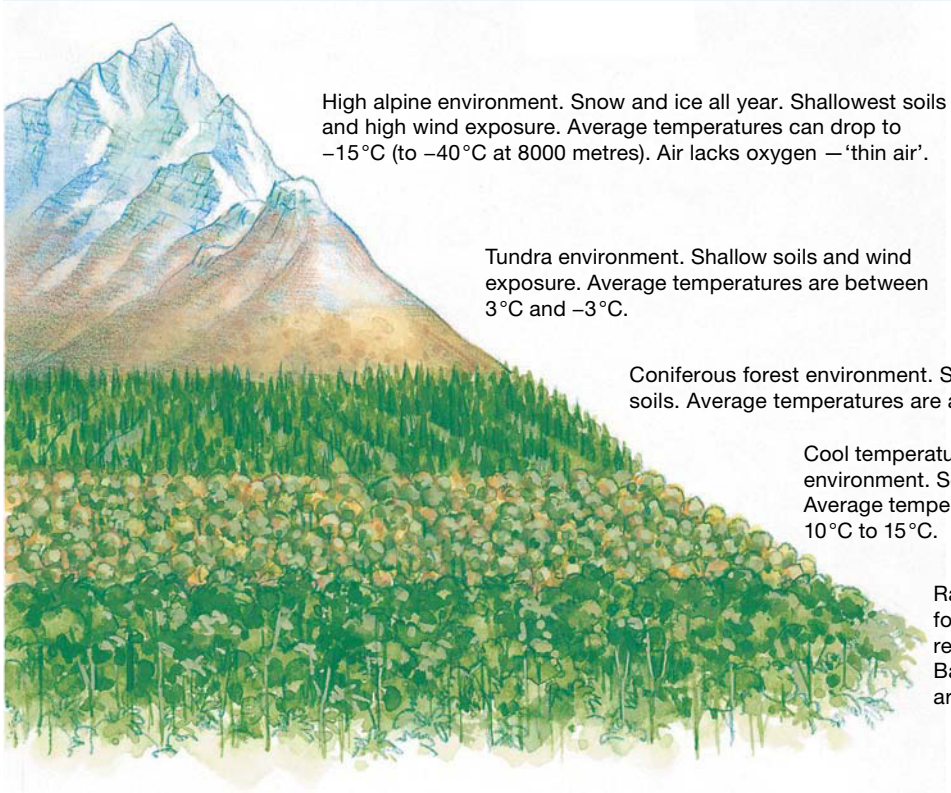
4 **The Rocky Mountains**
The Rocky Mountains in western North America extend north–south from Canada to New Mexico, a distance of around 4800 kilometres. The highest peak is Mount Elbert, in Colorado, which is 4401 metres above sea level. The other large mountain range in North America is the Appalachian Mountains, which extends 2400 kilometres from Canada in the north to Alabama in the southern United States.

13.3.2 Mountain climate and weather

It is usually colder at the top of a mountain than at the bottom, because air gets colder with **altitude**. Air becomes thinner and is less able to hold heat. For every 1000 metres you climb, the temperature drops by 6 °C.

altitude height above sea level

FIGURE 2 Ecosystems change with altitude on mountains.



on Resources

Google Earth Dolomites

13.3 ACTIVITY

Work in groups of four to six to investigate some of the following mountain ranges.

- Antarctica – Antarctic Peninsula, Transantarctic Mountains
- Africa – Atlas Mountains, Eastern African Highlands, Ethiopian Highlands
- Asia – Hindu Kush, Himalayas, Taurus, Elburz, Japanese Mountains
- Australia – MacDonnell Ranges, Great Dividing Range
- Europe – Pyrenees, Alps, Carpathians, Apennines, Urals, Balkan Mountains
- North America – Appalachians, Sierra Nevada, Rocky Mountains, Laurentians
- South America – Andes, Brazilian Highlands

Each student in the group should choose a different range and complete the following:

a. Map the location of the range in its region.
b. Describe the climate experienced throughout the range.
c. Name and provide images of a selection of plants and animals found in the range.

Present your information in Google Maps. **HASS skills: Questioning and researching**

13.3 EXERCISE

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

Learning pathways

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

Check your understanding

1. What percentage of the Earth's surface is covered by mountains?
2. Name the:
   a. highest mountain range in the world
   b. longest mountain range in the world
   c. highest mountain in western Europe
   d. second-highest mountain range in North America.
3. What name is given to long chains or groups of mountains located close together?
4. Describe the features of a high alpine environment.
5. What happens to oxygen in the atmosphere in high alpine environments?

Apply your understanding

6. Refer to **FIGURE 2**. How does vegetation ***change*** on a mountain?
7. Refer to **FIGURE 1**. Describe how the ***scale*** of the world's mountains varies across the continents.
8. Imagine you are a mountaineer, climbing to the top of Mont Blanc.
   a. Suggest the type of clothing you will need to wear for such a climb.
   b. When you begin your climb at 1500 metres, the weather is perfect; it is sunny and clear and the temperature is 8 °C. You climb 2200 metres before you set up camp. What is the elevation? What is the temperature at this elevation? The next day the weather holds, and you climb to the summit. How far did you climb to reach the top of the mountain? What is the temperature?
9. List the countries through which the European Alps extend.
10. Where are the Appalachian Mountains located?
11. Australia is the world's 'flattest' continent. Why do you think this is the case?

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

13.4 How people use mountains

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- explain how people have learned to live in and use mountain landscapes
- identify the limitations of living in mountains
- explain the importance of mountains to different cultural groups.

13.4.1 Mountain people and cultures

People have moved through and lived in mountain areas for thousands of years. But few people live in the world's highest mountain ranges, where it can be very cold and difficult to grow food and make a living. Thousands of people visit mountains, often in remote areas, for recreation and to see the spectacular scenery, plants and animals, historic and spiritual sites, and different cultures. Mountains are also vital for global water supply.

Around 12 per cent of the world's people live in mountain regions. About half of those live in the Andes, the Himalayas and the mountains of central and eastern Africa.

Usually, population density is very low in these areas. One reason for this is that mountains are very difficult to cross, as they are often rugged and covered with forests and wild animals. They can also be hard to climb and may have ice, snow or glaciers that make travel dangerous. Another reason is that soil quality is often poor and intensive farming is difficult without significant effort and expertise.

FIGURE 1 The Longshen rice terraces in China show how a mountainside can be changed to grow food.

13.4.2 Mountain landscapes in Australia

There are many Aboriginal and Torres Strait Islander Creation stories that are linked to mountain landscapes. These teachings help explain the formation and importance of each landscape and landform.

Aboriginal and Torres Strait Islander peoples are the guardians of culture and Country. Stories are passed on through the generations and explain the origin of the world and the environment.

FIGURE 2 Stirling Ranges national park

The Stirling Ranges

The mountains of the Stirling Ranges and the Porongurups are some of the oldest in the world and extend across the Great Southern region in Western Australia (see **FIGURE 2**). These mountains lie on the Menang people's land and stories passed from generation to generation tell of how these ranges were interlaced from the very beginning.

FIGURE 3 The story of the ranges, as told by Menang Elder Vern Gillies

"The Borrongup (the Porongurups) was regarded as a sacred but dangerous place, the home of the totem spirits.

Hunting was forbidden in the area. It was said that the wagyl, the snake, lived in the peaks of the mountain, and the jarnaks, or ghosts and evil spirits, lived among the rocks.

What and Watami were members of the Bronzewing Pigeon people, who lived to the west of the Porongurups.

One day What, the woman, went out into the bush to find food.

Every so often, she called out to her husband to tell him what she was looking for, and what she was finding. He wasn't happy with what she was finding.

Eventually, What found a snake which was considered to be a real delicacy, and she ate it all.

She didn't give any to her husband – all the more for her.

But when Watami found out, he became very, very angry. He struck her and broke her leg, then he walked away and left her.

What became very sick, and she dragged herself along where the King River runs, until she reached the place that we know as Green Island – she then lay down and died.

Her faithful dog then picked up her scent and followed her tracks, and when he found her he started to dig all around her.

And he dug, and dug – and as he dug, he sprayed dirt over her to cover her, to make a grave for her. He dug for a long, long time, until the sea rushed in to form what we now know as Oyster Harbour.

In the meantime, What's son found out what his father had done, and went out seeking revenge.

He caught him, and he speared him at the first mountain in the Stirling Ranges, which is what we know as Yongah Mia. Yongah means man, and Mia is the throwing stick.

Remarkably, from the air, the mountain clearly looks like a throwing stick."

Source: *ABC Great Southern WA, https://www.abc.net.au/local/stories/2014/04/15/3985939.htm*

DISCUSS

As a class, brainstorm factors that might make it difficult for people living in or visiting a place to know and understand mountain creations stories. Might there be cultural reasons why people don't understand the significance? Why might some parts of stories not be shared? What areas might have fewer stories that involve mountains and why?

General capability: Intercultural understanding

13.4.3 Sacred and special places

Mountain landscapes often have special meaning to certain groups of people. This might be because the location includes sacred sites or religious symbols; it might also be because people want to be close to nature or to feel spiritually inspired or renewed.

Mountaineers who take great risks, climbing alone or in small groups, often find a special meaning in mountain environments. They may hold deep spiritual, **cultural** and aesthetic (relating to beauty) values and ideas, and these will often inspire such people to care for and protect mountain environments.

The following list gives examples of mountains that are connected to various beliefs and religions.

- Hindus and Buddhists have beliefs about Mount Kailash in the Himalayas.
- Hindus in Bali, Indonesia, have a special connection with Mount Gunung Agung.
- Tibetan Buddhists revere Chomolungma (Mount Everest).
- The landscape of Demojong in the Himalayas is sacred to Tibetan Buddhists.
- Nanda Devi in the Himalayas is a sacred site for both Sikh and Hindu communities, and is a UNESCO World Heritage site.
- Mount Fuji, in Japan, is a place of spiritual and cultural symbolism to Japanese people.
- Saint Katherine Protectorate in South Sinai, Egypt, is in an area holy to Jews, Christians and Muslims.
- Jabal La'lam is a mountain that is sacred to the people of northern Morocco.

For the indigenous groups of the north-eastern American plains, the Sioux, or Dakota as they are sometimes referred to, and the indigenous Scandinavian people, the Sami, nature is recognised as sacred. The sacred places were not man-made temples or churches, but particularly spectacular or prominent features of the natural landscape. For the Sami, these sacred places tended to be large rocks (called *sieidi*), the sides of lakes, rocky crevasses or caverns or mountaintops. These sacred mountains were somewhat isolated and had a jutting tall peak. A sacred mountain named Haldi, which rests among a group of mountains near Alta, and an 814-metre-tall conical sacred hill named Tunnsjøguden in central Norway are examples. In general, the word *saivu* is applied to sacred mountains in the south while the terms *bassi, ailigas* and *haldi* are used for sacred mountains by northern Sami. Similarly, mountaintops, such as Harney Peak in modern-day South Dakota, were also of spiritual importance to Sioux groups who lived in their regions.

Source: www.utexas.edu/courses/sami/diehtu/siida/religion/paralellism.htm

13.4.4 Skills to survive

It can be hard to make a living in mountain regions. People living in small, isolated mountain communities have learned to use the land and resources sustainably. Many practise shifting cultivation, migrate with grazing herds, and have terraced fields.

Some of the world's oldest rice terraces (see **FIGURE 1**) are over 2000 years old. Rice and vegetables could be grown quite densely on the terraces. This enabled people to survive in a region with very steep slopes and high altitude.

On very high ranges, below the snowline, there is a treeless zone of alpine pastures that can be used in summer to graze animals. Elsewhere, in the valleys and foothills, agriculture often occurs, with fruit orchards and even vineyards on some sunny slopes.

Mountains supply 60 to 80 per cent of the world's fresh water. This is due to orographic rainfall (caused by warm, moist air rising and cooling when passing over high ground, such as a mountain; as the air cools, the water vapour condenses and falls as rain). Where precipitation falls as snow, water is stored in snowfields and glaciers. When these melt, they provide water to people when they need it most.

cultural relating to the ideas, customs and social behaviour of a society

Resources

Weblinks Climate change and water shortage

13.4 ACTIVITIES

1. Choose one of the mountains linked to Hindu or Buddhist beliefs from section 13.4.3. Use the internet to find out details of this ***connection***. Present your information as a print or electronic brochure.
Geography concept: Interconnection
2. Research where your water supply comes from. Which mountains, if any, are located near your water supply?
HASS skills: Questioning and researching
3. Draw a consequence chart to show how and why mountains are important for water supply. Now add information to your chart about what might happen if this was reduced for some reason; for example, through climate change. Use the **Climate change and water shortage** weblink in the Resources tab to help you with this task. **HASS skills: Evaluating**
4. Choose one of the world's great rivers and trace it back to its source. Which mountain range is involved? How much rainfall on average falls at the headwaters of your chosen river? Share your findings with the class. **HASS skills: Questioning and researching**

13.4 EXERCISE

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

Learning pathways

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

Check your understanding

1. List the geographical characteristics of mountains that limit the number of people who live there.
2. What type of work and recreation can people undertake in mountain regions? Present this information in words or in a diagram.
3. Explain why mountains are vital for global water supply.
4. Describe how different groups of people value mountainous ***places***.
5. Use the internet to locate the Jamison Valley in the Blue Mountains. Describe its location.

Apply your understanding

6. How has the natural mountain ***environment*** in **FIGURE 1** been ***changed*** by people? Sketch the photo and make notes to show the ***changes***.
7. Imagine you work as a park ranger in the Blue Mountains or Stirling Ranges. How can the Creation stories of the region help other people understand this ***environment***?
8. How does the story in **FIGURE 3** help explain the formation of the Stirling Ranges?
9. Why is population density in mountain ***environments*** usually low?
10. Think of a mountain you have visited or seen. Do you feel inspired by mountain ***environments?*** How can spiritual or religious beliefs linked to mountain landscapes help in protecting them?

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

13.5 Earthquakes and tsunamis

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- explain how earthquakes occur
- identify and explain the interconnection between earthquakes and tsunamis
- describe the effects of earthquakes on people and the environment
- explain why some people are more vulnerable than others.

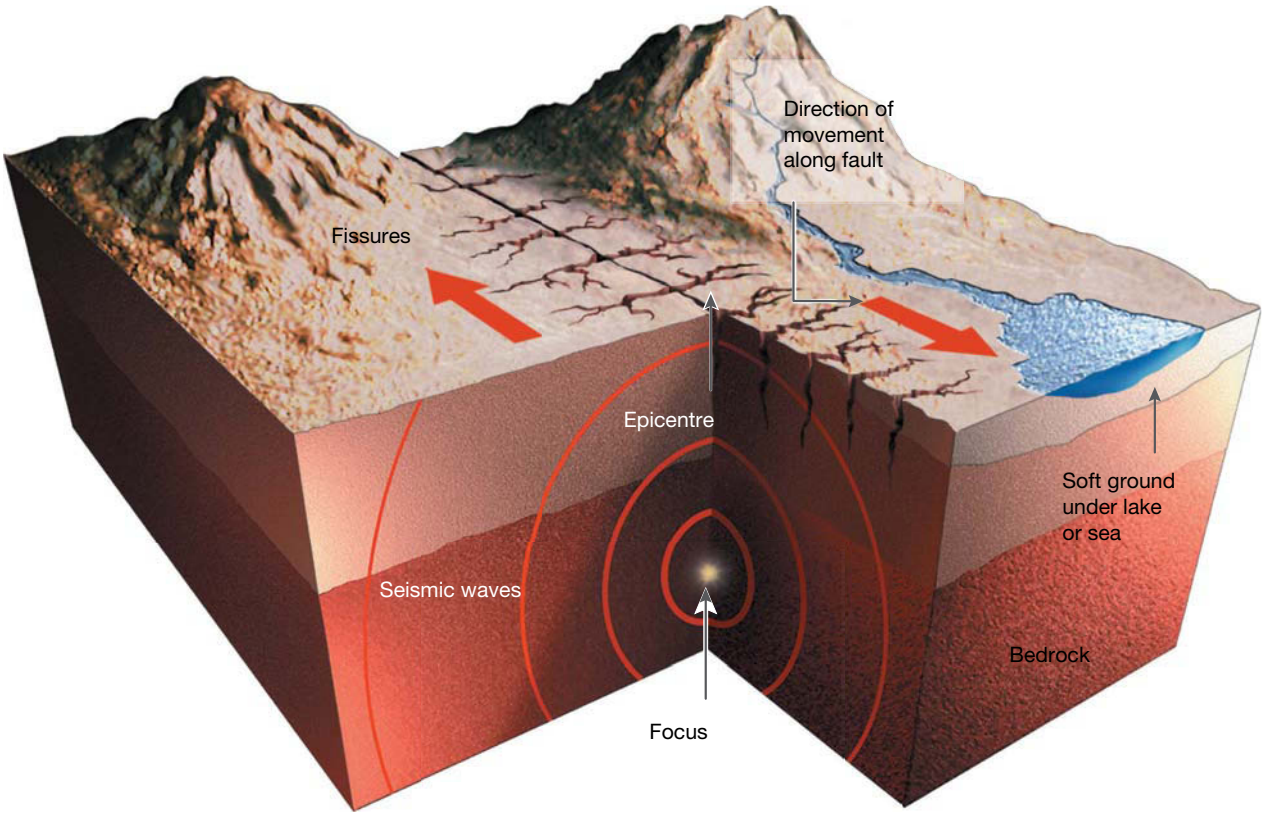
13.5.1 What are earthquakes and tsunamis?

Earthquakes and tsunamis are frightening events and they often strike with little or no warning. An earthquake can shake the ground so violently that buildings and other structures collapse, crushing people to death. If an earthquake occurs at sea, it may cause a tsunami, which produces waves of water that move to the coast and further inland, sometimes with devastating effects.

13.5.2 Earthquakes

Earthquakes occur every day somewhere on the planet, usually on or near the boundaries of tectonic plates. **FIGURE 1** in subtopic 13.2 shows a strong relationship between the location of plate boundaries and the occurrence of earthquakes. Weaknesses and cracks in the Earth's crust near these plate boundaries are called faults. An earthquake is usually a sudden movement of the layers of rock at these faults.

FIGURE 1 What happens during an earthquake?



The point where this earthquake movement begins is called the **focus** (see **FIGURE 1**). Earthquakes can occur near the Earth's surface or up to 700 kilometres below. The shallower the focus, the more powerful the earthquake will be. Energy travels quickly from the focus point in powerful **seismic waves**, radiating out like ripples in a pond. The seismic waves decrease in strength as they travel away from the **epicentre**. The strength of an earthquake is measured on the Richter scale.

The energy released at the focus can be immense, and it travels in seismic waves through the mantle and crust of the Earth. **Primary waves**, or P-waves, are the first waves to arrive, and are felt as a sudden jolt. Depending on the type of rock or water in which they are moving, these waves travel at speeds of up to 30 000 kilometres an hour.

Secondary waves, or S-waves, arrive a few seconds after the P-waves and travel at about half the speed. These waves cause more sustained up-and-down movement.

Surface waves radiate out from the epicentre and arrive after the main P-waves and S-waves. These move the ground either from side-to-side, like a snake moving, or in a circular movement.

Even very strong buildings can collapse with these stresses. The energy that travels in waves across the Earth's surface can destroy buildings many kilometres away from the epicentre.

Measuring earthquakes

Earthquakes are measured according to their magnitude (size) and intensity. Magnitude is measured on the Richter scale, which shows the amount of energy released by an earthquake. The scale is open-ended because there is no upper limit to the amount of energy an earthquake might release. An increase of one in the scale is 10 times greater than the previous level. For example, energy released at the magnitude of 7.0 is 10 times greater than the energy released at 6.0.

Earthquake intensity is measured on the Modified Mercalli scale, and indicates the amount of damage caused. Intensity depends on the nature of buildings, time of day and other factors.

DISCUSS

'The strongest earthquakes result in the worst disasters.' Work in pairs or groups of three to agree, partially agree, or disagree with this statement. Use the data in this subtopic and particular examples in your response.

General capability: Critical and creative thinking

13.5.3 CASE STUDY: What caused the 2015 Nepal earthquake?

On 25 April 2015, a 7.8-magnitude earthquake struck Nepal at around midday. The epicentre of this earthquake was quite shallow – only 15 kilometres below the Earth's surface. It occurred approximately 80 kilometres to the north-west of Kathmandu, Nepal's capital.

At this location, the Indian Plate to the south is subducting under the Eurasian Plate to the north (see **FIGURE 1** in subtopic 13.2). This is occurring at a rate of approximately 45 millimetres per year and is causing the uplift of the Himalayas (see the case study in section 13.2.3).

During the Nepal earthquake event, nearly 9000 people were killed and nearly 18 000 were injured (see the case study in section 13.5.8).

FIGURE 3 shows that the earthquake released a large amount of energy and caused large slips of up to four metres of the Earth's surface. There were severe aftershocks immediately after the main earthquake and the aftershocks continued for many weeks – up to 100 in total. The shaking from this earthquake was felt in China, India, Bhutan and much of western Bangladesh.

focus the point where the sudden movement of an earthquake begins

seismic waves waves of energy that travel through the Earth as a result of an earthquake, explosion or volcanic eruption

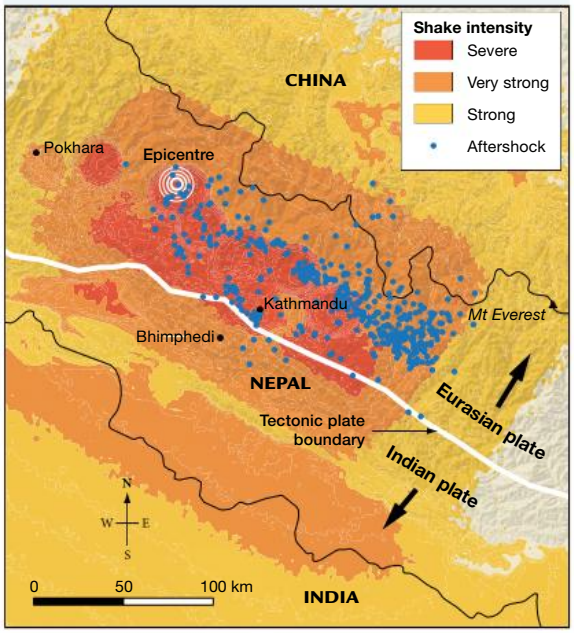
epicentre the point on the Earth's surface directly above the focus of an earthquake

primary waves also known as P-waves; the first waves to hit an area during an earthquake, which cause a sudden jolt

secondary waves also known as S-waves; the waves that arrive at an area after the P-waves, which cause a sustained up-and-down movement

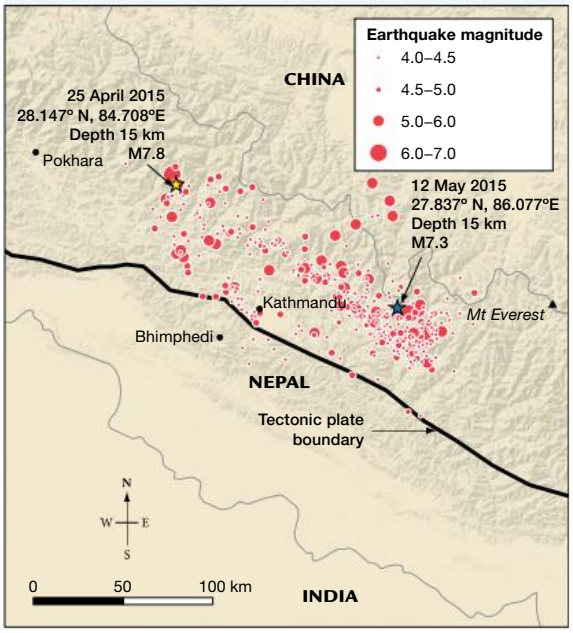
On 12 May 2015, a huge aftershock with a magnitude of 7.3 occurred near the Chinese border with Nepal (between Kathmandu and Mount Everest). More than 160 people died and more than 2500 were injured as a result of this aftershock.

FIGURE 2 The shake intensity and the tectonic plate boundary involved in the Nepal earthquake



Source: USGS

FIGURE 3 Magnitudes of earthquake and aftershocks in Nepal, 2015



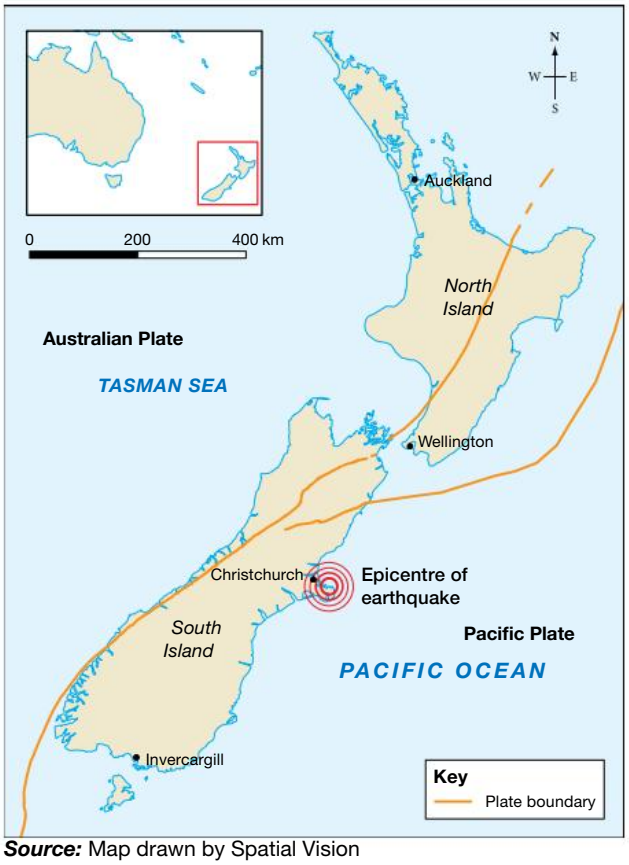
Source: USGS

13.5.4 CASE STUDY: What caused the 2011 Christchurch, New Zealand earthquake?

A 6.3-magnitude earthquake struck Christchurch, New Zealand, on 22 February 2011. The city was badly damaged, 185 people were killed and several thousand were injured. The earthquake epicentre was 10 kilometres south-east of Christchurch's central business district, and was quite shallow – only five kilometres deep, which meant the shaking was particularly destructive. The earthquake is considered to be an aftershock of an earthquake that occurred five months earlier in September 2010. Many buildings in the city had already suffered damage in the 2010 earthquake and either collapsed in the 2011 earthquake or had to be demolished afterwards.

New Zealand is located between two huge moving plates – the Australian Plate and the Pacific Plate – and it experiences thousands of earthquakes every year. Most are very small, but some have caused a lot of damage. These movements continue to shape and form New Zealand and its dramatic mountain landscapes.

FIGURE 4 Location of the Christchurch earthquake in New Zealand, 2011



Source: Map drawn by Spatial Vision

FIGURE 5 Earthquake damage in Christchurch

13.5.5 Tsunamis

A tsunami is a large ocean wave that is caused by sudden motion on the ocean floor. The sudden motion could be caused by an earthquake, a volcanic eruption or an underwater **landslide**. About 90 per cent of tsunamis occur in the Pacific Ocean, and most are caused by earthquakes that are over 6.0 on the Richter scale.

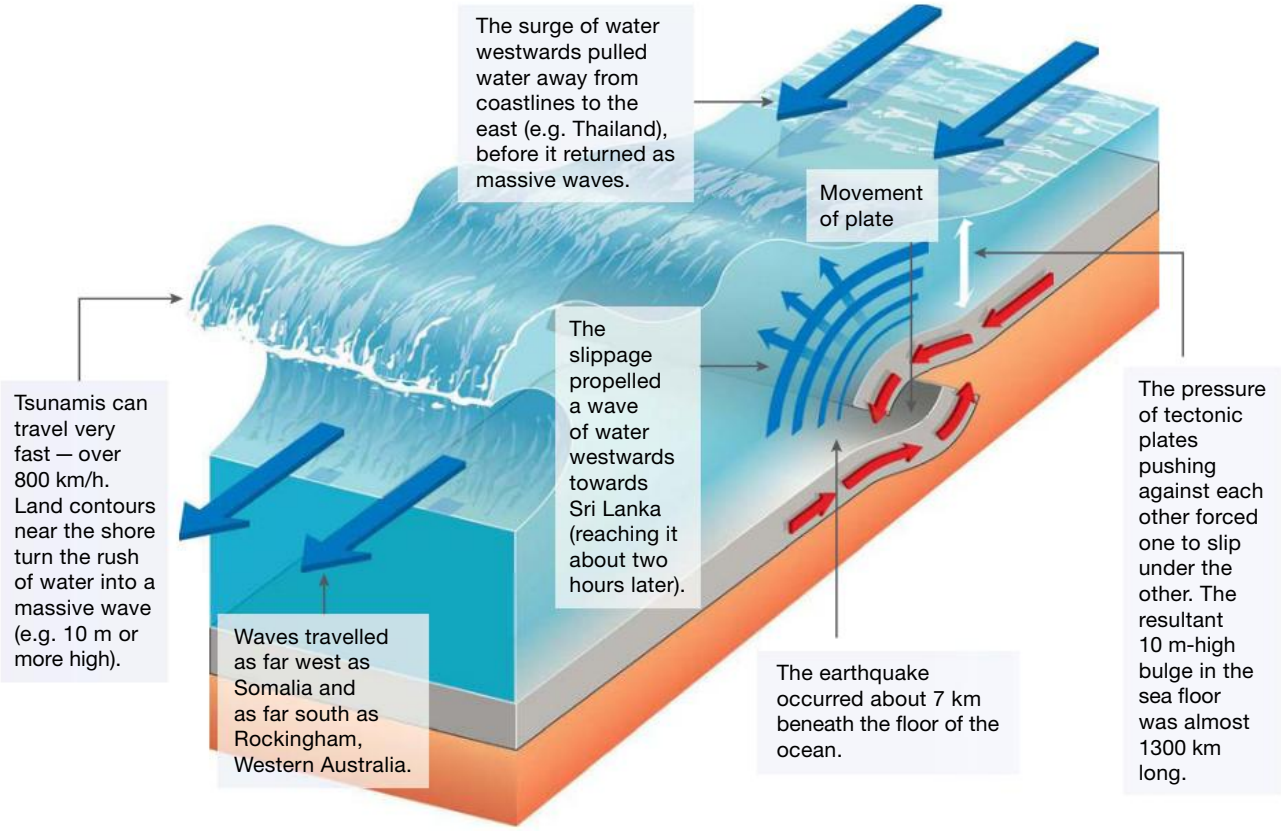
A tsunami at sea will be almost undetectable to ships or boats. The reasons for this are that the waves travel extremely fast in the deep ocean (about 970 kilometres per hour – as fast as a large jet) and the wavelength is about 30 kilometres, yet the wave height is only one metre.

When tsunamis reach the continental slope, several things happen. The wave slows down and, as it does, the wave height increases and the wavelength decreases; in other words, the waves get higher and closer together. Sometimes, the sea may recede quickly, very far from shore, as though the tide has suddenly gone out. If this happens, the best course of action is to head to higher ground as quickly as possible.

A tsunami is not a single wave. There may be between five and 20 waves altogether. Sometimes the first waves are small and they become larger; at other times there is no apparent pattern. Tsunami waves will arrive at fixed periods between 10 minutes and two hours.

landslide a rapid movement of rocks, soil and vegetation down a slope, sometimes caused by an earthquake or by excessive rain

FIGURE 6 An earthquake and subsequent tsunami in the Indian Ocean in 2004 occurred along the boundary between tectonic plates.



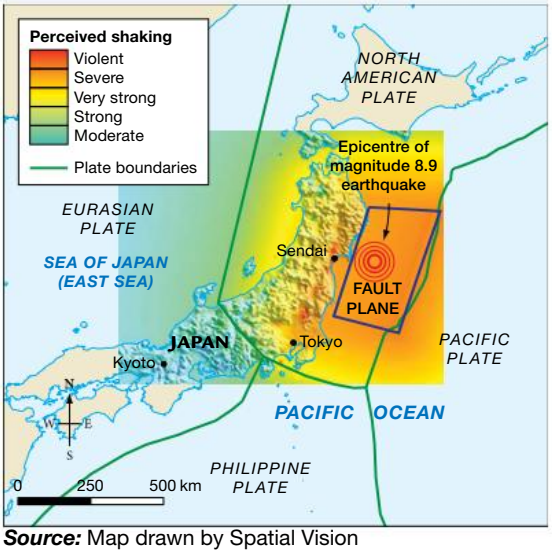
13.5.6 CASE STUDY: The Japanese tsunami, 2011

The region of Japan is seismically active because four plates meet there: the Eurasian, Philippine, Pacific and North American. Many landforms in this region are influenced by the collision of oceanic plates. Chains of volcanic islands called island arcs are formed, and an ocean trench is located parallel to the island arc (see **FIGURE 1** in subtopic 13.2).

int-7847

On 11 March 2011, an 8.9-magnitude earthquake struck near the coast of Japan. The earthquake was caused by movement between the Pacific Plate and the North American Plate. It occurred about 27 kilometres below the Earth's surface along the Japan Trench, where the Pacific Plate moves westwards at about eight centimetres each year. The sudden upward movement released an enormous amount of energy and caused huge displacement of the sea water, causing the tsunami. When the tsunami reached the Japanese coast, waves more than six metres high moved huge amounts of water inland. Strong aftershocks were felt for a number of days. Nearly 16 500 people were killed and 4800 were reported missing.

FIGURE 7 The location and magnitude of the earthquake that caused the Japanese tsunami



Source: Map drawn by Spatial Vision

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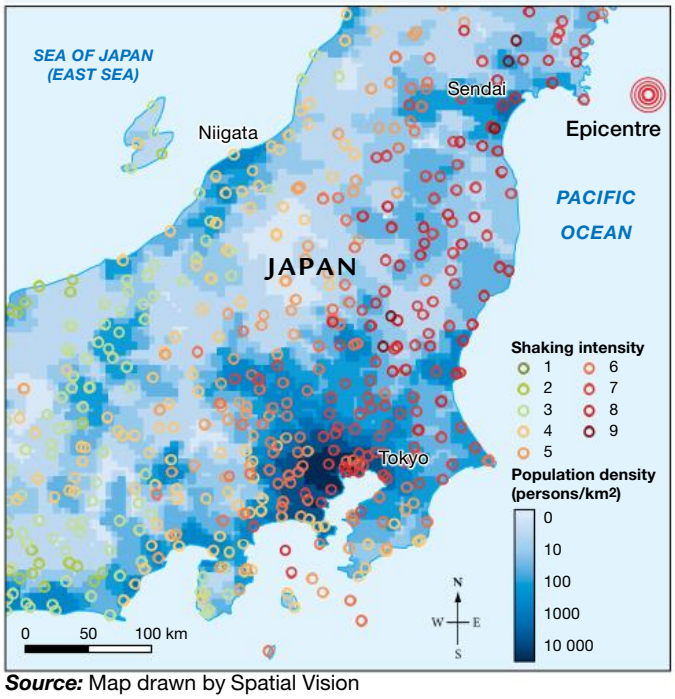
FIGURE 8 This map shows the ground motion and shaking intensity from the earthquake across Japan.



Source: Map drawn by Spatial Vision

FIGURE 9 The tsunami caused by the 8.9-magnitude earthquake in March 2011 swept over the coastline at Sukuiso and inland, carrying debris with it.

13.5.7 What are the impacts of earthquakes and tsunamis?

Earthquakes and tsunamis can have an enormous impact. The degree of impact can be affected by several factors: the size of the quake; its location; the density of the population near the epicentre; and whether there are any densely populated areas nearby. Poverty also plays a role, because it can increase a country's or region's vulnerability to such disasters. Measuring an event by the impact can be difficult. Should it be measured by the number of people killed and made homeless (social impact); the cost of recovery (economic impact); or the effect on the surroundings (environmental impact)?

Impact on people

The data in **FIGURE 11** show some of the worst earthquake and tsunami disasters that have occurred. The amount of damage and death they cause does not always relate to the magnitude of the earthquake. Some smaller magnitude earthquakes can have a devastating impact. Likewise, to measure the impact of a tsunami, we have to look at its effect on people, not at the magnitude of the earthquake (or volcano) that caused it, and not at the size of the waves, which are difficult to measure.

Less developed countries often do not have the resources to prepare adequately for an earthquake. Often, many people are housed in badly constructed buildings in densely populated areas on poor land. When a disaster strikes, poorer countries often do not have the resources to act quickly and get help for relief efforts. More developed countries have strict building codes and better infrastructure to withstand disasters. They have warning systems and better communication. Usually, help is quick to arrive, with army and police personnel sent in to help with rescue efforts.

Analysis of EM-DAT (The International Disaster Database) data also shows how income levels have an impact on disaster death tolls. On average, more than three times as many people died per disaster in low-income countries (332 deaths) than in high-income nations (105 deaths). A similar pattern is evident when low- and lower-middle-income countries are grouped together and compared to high- and upper-middle-income countries. Taken together, higher-income countries experienced 56 per cent of disasters but lost 32 per cent of lives, while lower-income countries experienced 44 per cent of disasters but suffered 68 per cent of deaths. This demonstrates that levels of economic development, rather than exposure to hazards, are major determinants of mortality.

FIGURE 10 This landslide was caused by an earthquake in June 2008 in Honshu, Japan.

Impact on the environment

The impact of an earthquake or tsunami on a human environment can be catastrophic. It can damage and destroy entire settlements. Landslides can be triggered by earthquakes, permanently changing the landscape.

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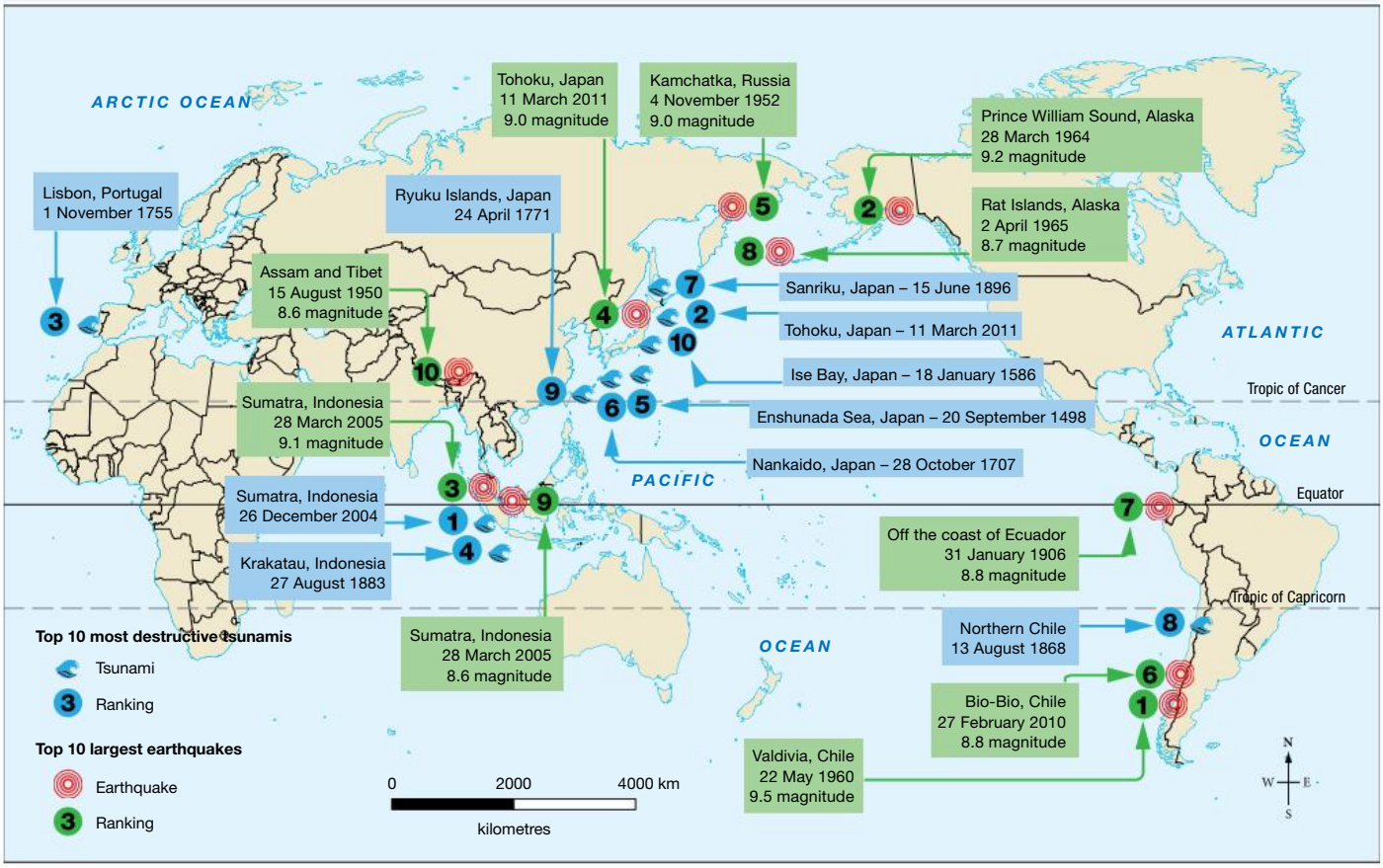
FIGURE 11 The 10 largest earthquakes and 10 most destructive tsunamis in recorded history



Source: Map drawn by Spatial Vision

TABLE 1 Tsunamis

No. on map and cause		Description and impact
1	9.1 earthquake	Tsunami 50 metres high, reaching 5 km inland near Meubolah. 230 000 people died. Estimated damages of US$10 billion.
2	9.0 earthquake	Tsunami waves of 10 metres swept over the east coast of Japan. 19 000 people died. Caused nuclear emergency at Fukushima Daiichi nuclear power plant. US$235 billion in damage.
3	8.5 earthquake	Waves up to 30 metres high struck towns along western Portugal and southern Spain. Earthquake and tsunami killed 60 000 in Portugal, Morocco and Spain.
4	Volcano	Tsunami linked to the explosion of the Krakatau volcano. Waves as high as 37 metres demolished the towns of Anjer and Merak. Killed 40 000 people, with 2000 deaths caused by the volcanic eruptions rather than the tsunami.
5	8.3 earthquake	Homes were flooded and swept away; 31 000 people killed.
6	8.4 earthquake	Waves up to 25 metres high struck the Pacific coasts of Kyushyu, Shikoku and Honshin. Nearly 30 000 buildings were damaged in the affected regions and about 30 000 people were killed.
7	7.6 earthquake (estimated)	Tsunami was reported to have reached a height of 38.2 metres, causing damage to more than 11 000 homes and killing around 22 000 people. Reports were also found of a corresponding tsunami hitting the east coast of China, killing around 4000 people and doing extensive damage to local crops.

(continued)

(continued)

No. on map and cause		Description and impact
8	Two 8.5 earthquakes	Waves up to 21 metres high affected the entire Pacific Rim for two or three days. Tsunami registered by six tide gauges as far away as Sydney, Australia. 25 000 deaths and estimated damages of US$300 million were caused along the Peru–Chile coast.
9	7.4 earthquake	Tsunami waves around 11–15 metres high destroyed 3137 homes, killing nearly 12 000 people in total.
10	8.2 earthquake (estimated)	Waves of 6 metres caused more than 8000 deaths and a large amount of damage to a number of towns.

TABLE 2 Earthquakes

No. on map and magnitude of earthquake		Description and impact
1	9.5	Killed 1655 people, injured 3000 and displaced two million. Caused US$550 million in damage. Two days later, Puyehue volcano erupted, sending ash and steam into the atmosphere for several weeks.
2	9.2	Resulting tsunami killed 128 people and caused US$311 million in damage.
3	9.1	Killed 227 900 people, displaced 1.7 million in south Asia and east Africa. On 28 December, a mud volcano began erupting near Baratang, Andamar Islands.
4	9.0	Earthquake caused tsunami that killed 19 000 people and injured 6000. Caused US$ tens of billions in damage. Economic impacts huge, especially with the shutting down of a nuclear reactor.
5	9.0	Generated a tsunami that caused damage of US$1 million in Hawaiian Islands. Some waves over 9 metres high at Kaena Point, Oahu. None killed.
6	8.8	Killed at least 521 people, with 56 missing and 12 000 injured. More than 800 000 people displaced, with a total of 1.8 million people affected across Chile, where damage was estimated at US$30 billion.
7	8.8	Earthquake caused tsunami that was reported to have killed between 500 and 1500 people in Ecuador and Colombia.
8	8.7	Generated a tsunami about 10 metres high that caused damage on Shemya Island, plus US$10 000 in property damage from flooding on Amchitka Island. No deaths or injuries reported.
9	8.6	Killed 1313 people, with more than 400 people as far away as Sri Lanka injured by the tsunami.
10	8.6	This inland earthquake caused widespread damage to buildings as well as large landslides. 780 people were killed in eastern Tibet.

Liquefaction

Liquefaction occurs when soil suddenly loses strength and, mixed with groundwater, behaves like a liquid. This usually occurs as a result of ground shaking during a large earthquake. The types of soils that can liquefy include loose sands and silts that are below the water table, so all the space between the grains is filled with water. Dry soils above the water table will not liquefy.

Once a soil liquefies, it cannot support the weight of the dry soil, roads, concrete floors and buildings above it. The liquefied soil comes to the surface through cracks and widens them.

liquefaction transformation of soil into a fluid, which occurs when vibrations created by an earthquake, or water pressure in a soil mass, cause the soil particles to lose contact with one another and become unstable; for this to happen, the spaces between soil particles must be saturated or near saturated

FIGURE 12 Cars swallowed by liquefied soil on a road in Christchurch, New Zealand, 2011

Source: © Photography by Mark Lincoln

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Earthquakes and volcanoes > **Haiti earthquake**
- Investigate additional topics > Earthquakes and volcanoes > **Banda Aceh tsunami**

on Resources

Interactivity	Anatomy of a tsunami (int-3111)
Weblinks	Nepal earthquake: before and after photos Earthquake-vulnerable cities World's biggest tsunami Liquefaction
Google Earth	Christchurch, New Zealand

13.5 ACTIVITIES

1. Use an atlas or Google Earth to locate Lituya Bay. Draw a map to show the location. Use the **World's biggest tsunami** weblink in the Resources tab to listen to eyewitness accounts of the tsunami that occurred there. How does this help give you a sense of the ***scale*** of this event? **Geography concept: Scale**
2. Use the **Liquefaction** weblink in the Resources tab to view a video of liquefaction occurring. Then, write a paragraph describing what liquefaction is and why it occurs. **HASS skills: Analysing**

3. Use the **Nepal earthquake: before and after photos** weblink in the Resources tab to look at before and after images of the area. Choose and sketch one of the after images, providing annotations that show the impact on people and/or the ***environment***. **Geography concept: Change**
4. Use the **Earthquake-vulnerable cities** weblink in the Resources tab to read more about cities that are most at risk from earthquakes. Use an atlas to locate these cities. Where are they located in relation to plate boundaries and, in particular, to the Pacific Ring of Fire? **HASS skills: Analysing**

13.5 EXERCISE

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

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions	Questions	Questions
1, 3, 7, 10, 13, 15	2, 4, 8, 11, 14, 16	5, 6, 9, 12, 17

Check your understanding

1. What are the focus and epicentre of an earthquake?
2. How does an earthquake occur?
3. What does the Richter scale measure? How much more powerful is the magnitude of an earthquake at 7.0 than at 5.0? How does a 7.0 compare to a 5.0?
4. List the factors that combine to cause an earthquake or tsunami to turn into a disaster.
5. List the different impacts that earthquakes and tsunamis can have.
6. Geophysicists and other experts have warned for decades that Nepal was vulnerable to a deadly earthquake. Theorise why you think Nepal was not better prepared for this event.
7. How does poverty in Nepal increase vulnerability to disasters?
8. What is the relationship between income and disaster risk? Why is the risk of earthquakes and tsunamis higher in poor countries?

Apply your understanding

9. Conduct some research to see how Japan has recovered from the 2011 tsunami and then how Nepal has recovered from the 2015 earthquake. How can you account for any differences in the recovery process?
10. Study **FIGURE 11** in this subtopic and **FIGURE 1** in subtopic 13.2.
    a. Describe the ***interconnection*** between the distribution of earthquakes and tsunamis and the distribution of tectonic plates.
    b. Why might Japan experience so many destructive earthquakes and tsunamis?
11. Study **FIGURE 6**. Use your own words to explain how a tsunami occurs.
12. Study **FIGURE 2**.
    a. In which direction is the Indian Plate moving? Is it moving under or over the Eurasian Plate?
    b. Describe the location of the highest intensity shaking. How close was it to the epicentre? To the tectonic plate boundary?
13. Study **FIGURE 3**. Are the following statements true or false? If they are false, rewrite them to make them true.
    a. The earthquake and aftershocks were between 4.0 and 6.0 in magnitude.
    b. The furthest earthquake and aftershocks were 100 kilometres apart.
    c. The earthquake on 12 May was the same intensity as the earthquake on 25 April.
    d. Most of the aftershocks were felt to the east of the main earthquake on 25 April.
14. How does the earthquake event in Nepal support the idea that the Himalayas are a young mountain range that is still forming?
15. Study **FIGURE 7**. Describe where the most violent shaking occurred as a result of the earthquake. How many plates meet in this region? What impact does this have?

16. Study **FIGURE 8**.
    a. Where in Japan was the greatest intensity felt?
    b. What is the population density for Sendai, Tokyo and Niigata? How would this increase the impact of the earthquake?
17. Study the photo of the Japanese tsunami in **FIGURE 9**.
    a. Imagine you are a radio news reporter. Describe what you see and what might be happening to people in the area.
    b. Imagine you were a Sendai resident. Describe what you would have done to take care of yourself during the tsunami.

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

13.6 Volcanic mountains

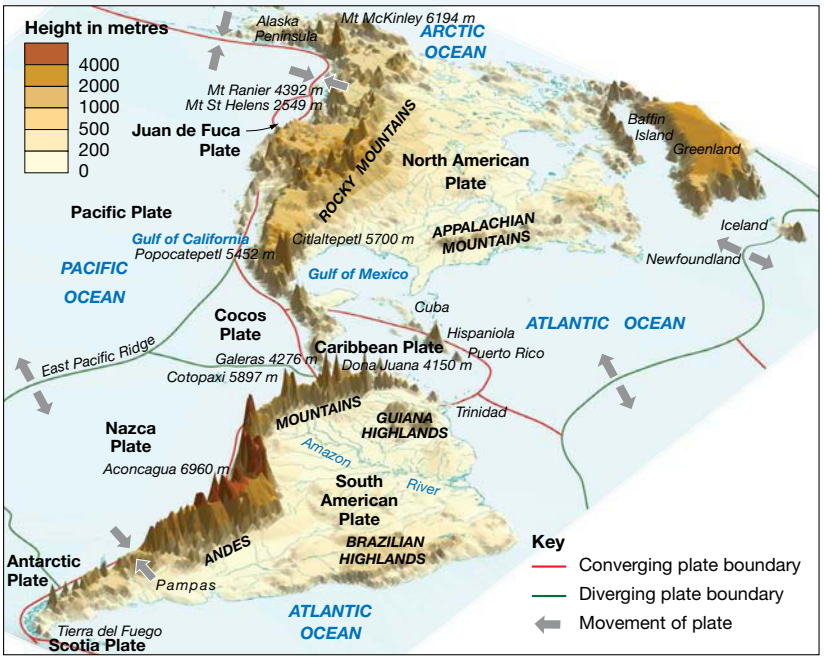
LEARNING INTENTION

By the end of this subtopic, you will be able to:
- explain how volcanoes are formed
- describe the relationship between plate boundaries and the processes that cause volcanic eruptions
- explain the term 'volcanic hotspot'
- investigate Mount Taranaki in New Zealand and interpret a topographic map.

13.6.1 How are volcanoes formed?

A volcano is a cone-shaped hill or mountain formed when molten magma in the Earth's mantle is forced through an opening or vent in the lithosphere. Almost all active volcanoes occur at or near plate boundaries. Some occur where two plates converge, and others occur where the plates are pulling apart, or diverging (see **FIGURE 1**). There is another group of volcanoes that are formed when plates move over hotspots.

FIGURE 1 Landforms of North, Central and South America (not to scale)



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

Subduction zones

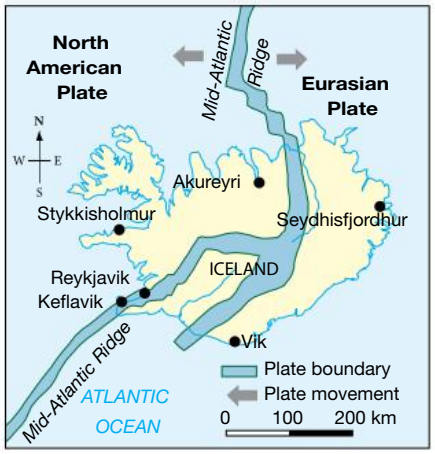
Some volcanoes are formed when an oceanic plate is pulled underneath a continental plate (see subtopic 13.2). As the crust is forced down, it heats up and becomes magma. It can then rise to the Earth's surface through a magma chamber.

Volcanoes in rift zones

The longest mountain range in the world is underwater, between the African and American continents, and is 56 000 kilometres long. It is called the Mid-Atlantic Ridge, and is made up of many volcanic mountains. The

volcanoes are formed where two plates move away from each other in **rift zones**. The molten lava rises to the surface in the space between the plates, and the largest volcanoes appear above the water as islands. Examples of rift islands are Iceland, the Azores, Ascension Island, Gough Island and Bouvet Island. The rifting, or spreading apart, can occur on land or on the seabed.

FIGURE 2 Rifting in Iceland



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

The rifting of Iceland

The Mid-Atlantic Ridge passes through Iceland, where the island is splitting in two different areas (see **FIGURE 2**). This can be seen where Iceland's volcanoes are located, at the point where the North American Plate is drifting to the west and the Eurasian Plate is drifting to the east (see **FIGURE 3**). New crust is being formed in a rift below the sea, and eventually water from the Atlantic Ocean will fill the widening and deepening gaps between the separated parcels of land.

The Great Rift Valley, Africa

The Great Rift Valley is in Africa (see **FIGURE 4**). It is about 5000 kilometres long, and stretches from Syria in the north to Mozambique in the south. The valley varies in width from 30 kilometres at its narrowest point to 100 kilometres at its widest. In some places it is a few hundred metres deep; in others it can be a few thousand metres deep.

rift zones a large area of the Earth in which plates of the Earth's crust are moving away from each other, forming an extensive system of fractures and faults

FIGURE 3 A chain of volcanoes in Iceland

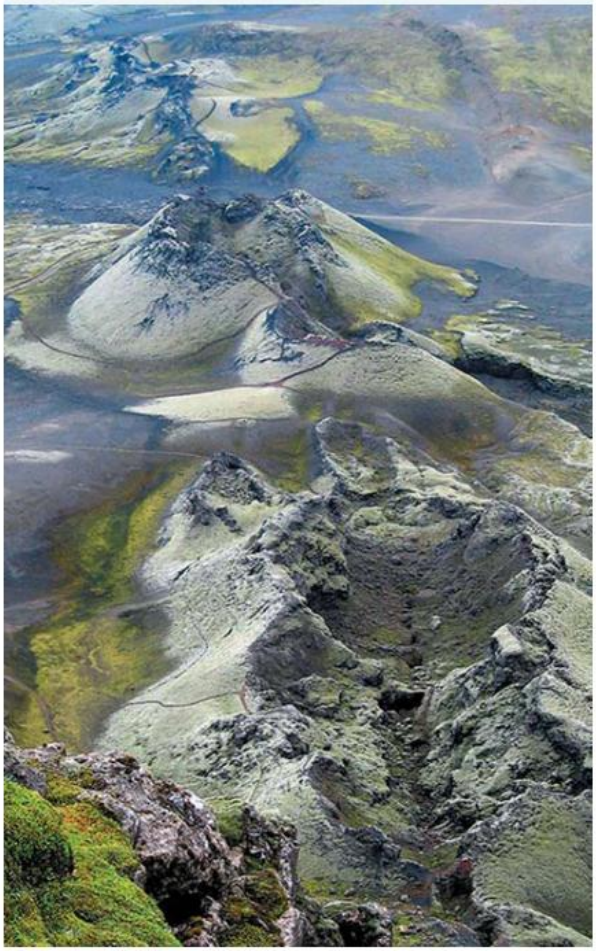
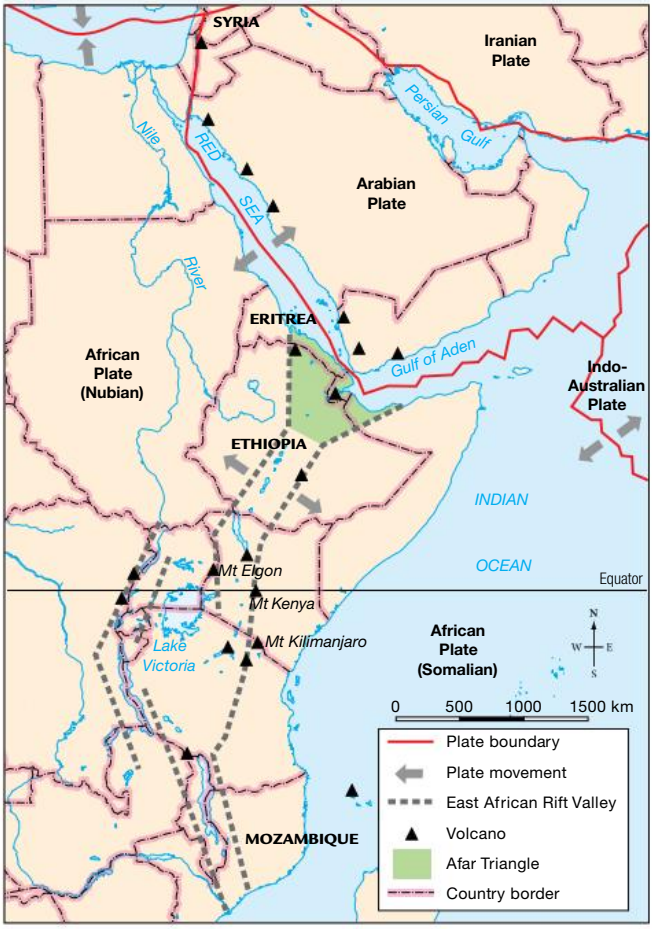


FIGURE 4 The Great Rift Valley, Africa



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

The Great Rift Valley was created through separation that began 35 million years ago, when the African and Arabian plates began pulling apart in the northern region. About 15 million years ago, east Africa began to separate from the rest of Africa along the East African Rift. The volcanic activity in this region has produced many volcanic mountains, such as Mount Kilimanjaro, Mount Kenya and Mount Elgon.

As these rifts continue to grow, new ocean waters will flow into the valleys, separating the landmasses.

13.6.2 Volcano hotspots

Although most volcanoes are formed on plate boundaries, some are located in the middle of plates, a long way from plate boundaries. These volcanoes have formed above a hotspot – a single plume of rising mantle. Volcanoes form as the plates slowly move over the hotspot and, over time, a chain of volcanoes can form. Hotspots are found in the ocean and on continents. Examples include the Hawaiian Islands and many of Australia's extinct volcanoes. In Hawaii, the location of the volcanoes gives a clue to the direction and speed of the plate movement.

13.6.3 Mount Taranaki, New Zealand

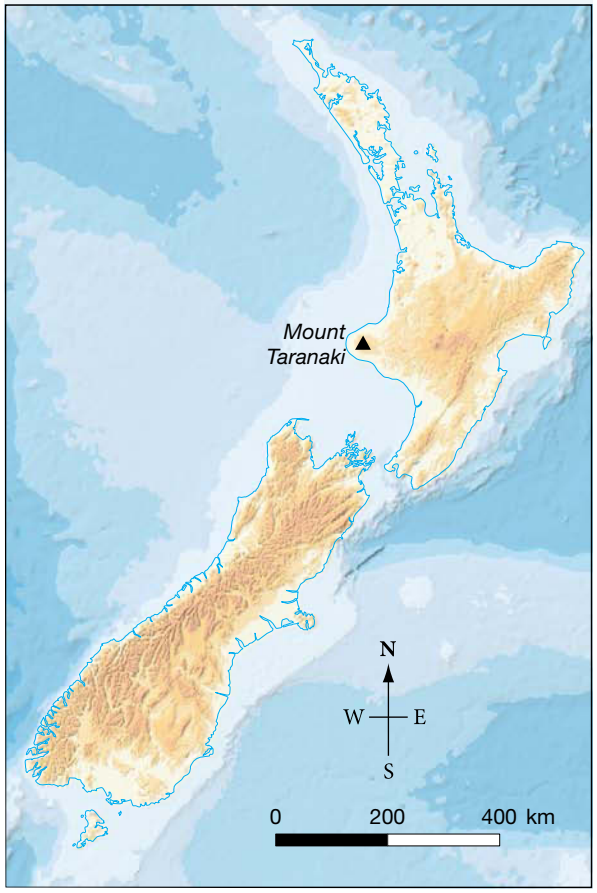
New Zealand's Mount Taranaki is named after the Māori terms *tara* meaning 'mountain peak' and *ngaki* meaning 'shining' (because the mountain is covered with snow in winter).

Mount Taranaki is 2518 metres high and is the largest volcano on New Zealand's mainland. It is located in the south-west of the North Island (see **FIGURE 5**).

Mount Taranaki was formed 135 000 years ago by subduction of the Pacific Plate below the Australian Plate. It is a stratovolcano (composite cone) – a conical volcano consisting of layers of pumice, lava, ash and tephra. Mount Taranaki is symmetrical, looking the same on both sides of a central point. It is the only active volcano in a chain in this region. The other volcanoes were once very large but have been eroded over time.

The summit of Mount Taranaki is a lava dome in the middle of a crater that is filled with ice and snow. The mountain is considered likely to erupt again. There are significant potential hazards from lahars (mudflows containing volcanic debris), avalanches and floods. A circular plain of volcanic material surrounding the mountain was formed from lahars (see **FIGURE 7**) and landslides. In the past, some of these flows reached the coast The volcano's lower flanks are covered in forest and are part of the national park. There is a clear line between the park boundary and surrounding farmland.

FIGURE 5 Location of Mount Taranaki on the North Island of New Zealand



Source: Map drawn by Spatial Vision

FIGURE 6 Mount Taranaki has a near-perfect conical shape.

FIGURE 7 Aerial photo of Mount Taranaki

13.6.4 Volcanic eruptions

Volcanic mountains are formed when magma pushes its way to the Earth's surface and then erupts as lava, ash, rocks and volcanic gases. These erupting materials build up around the vent through which they erupted.

A volcanic eruption can be slow or spectacular, and can result in a number of different displays (see **FIGURE 8**).

13.6.5 Volcanic shapes

Volcanoes come in a variety of shapes and sizes, forming different landforms. There are four main types and each depends on:

- the type of lava that erupts
- the amount and type of ash that erupts
- the combination of lava and ash.

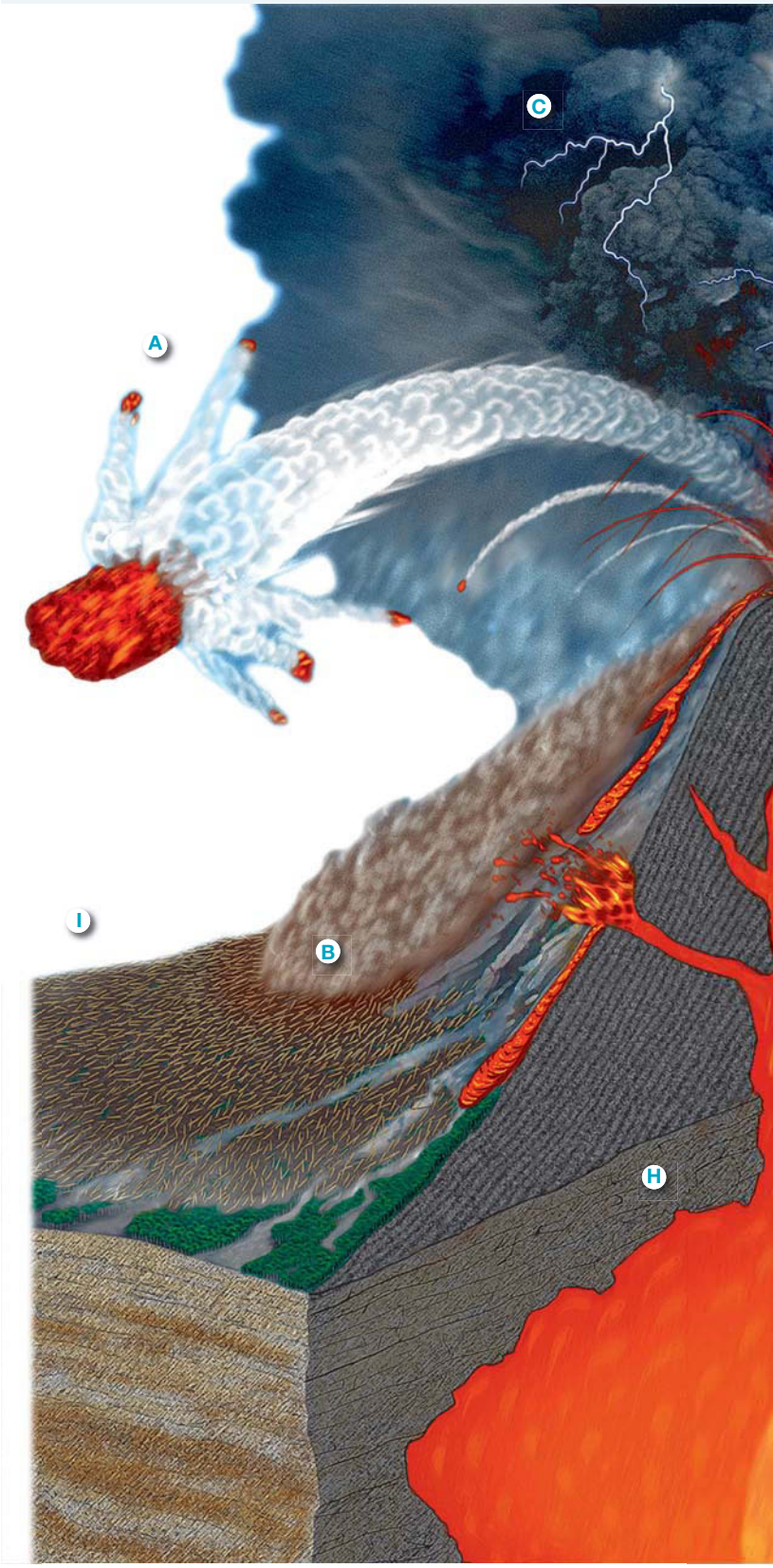
Lava that is rich in silica (a mineral present in sand and quartz) is highly viscous and is thick and slow moving. If the lava is low in silica, it tends to be very runny and may flow for many kilometres before it cools and hardens to become rock. Volcanoes that erupt runny lava tend to have broad, flat sides (shield volcanoes). Those that erupt thick, treacle-like lava tend to have much steeper sides (dome volcanoes).

Heavy ash material, like volcanic bombs, settles close to the crater while lighter ash is carried further away. Volcanoes that are built up through falls of ash are steep-sided cinder cones.

The most common type of volcano is one built up of both ash and lava; this is called a composite volcano.

int-3620

FIGURE 8 The anatomy of a volcano



A A fragment of lava greater than 64 millimetres in diameter is called a volcanic bomb. They are often solid pieces of lava from past eruptions that formed part of the cone.

B A pyroclastic flow is a superheated avalanche of rock, ash and lava that rushes down the mountain with devastating effects. The flow can travel at up to 240 kilometres per hour and reach temperatures of 800 °C. When Mount Pelée erupted in 1902, on the island of Martinique in the Caribbean, a pyroclastic flow covered the town of Saint-Pierre, killing all but two of the town's 30 000 inhabitants.

C Lightning is often generated by the friction of swirling ash particles.

D As rock is pulverised by the force of the eruption, it becomes very fine ash, and is carried by wind away from the crater as an ash cloud. Volcanic ash may blanket the ground to a depth of many metres. In the eruption of Mount Vesuvius in 79 CE, volcanic ash completely covered two large towns: Pompeii and Herculaneum.

E A volcanic cone is made up of layers of ash and lava from previous eruptions. If the volcano has not erupted for thousands of years (i.e. is dormant), these layers will be eroded away.

F Lava may be either runny or viscous, and can flow for many kilometres before it solidifies, thereby building up the Earth's surface.

G Pressure may force magma through a branch pipe or side vent. In the eruption of Mount St Helens, in Washington in the United States, in the 1980s, the side of the mountain collapsed and the side vent became the main vent.

H Where two plates move apart, molten rock from the mantle flows upward into a magma chamber. More rock is melted and erupts violently upwards. Magma is generally within the temperature range of 700 °C to 1300 °C.

I When pyroclastic flows melt snow and ice, and mix with rocks and stones, a very wet mixture called a lahar can form. Lahars can flow quickly down the sides of volcanoes and cause much damage. One lahar that formed in 1985 on the Nevado del Ruiz volcano in Colombia, travelled at up to 50 kilometres per hour and was up to 40 metres high in some places. A wall of mud, water and debris travelled 73 kilometres to the town of Armero, devastating it. More than 23 000 people died that night and 5000 homes were destroyed.

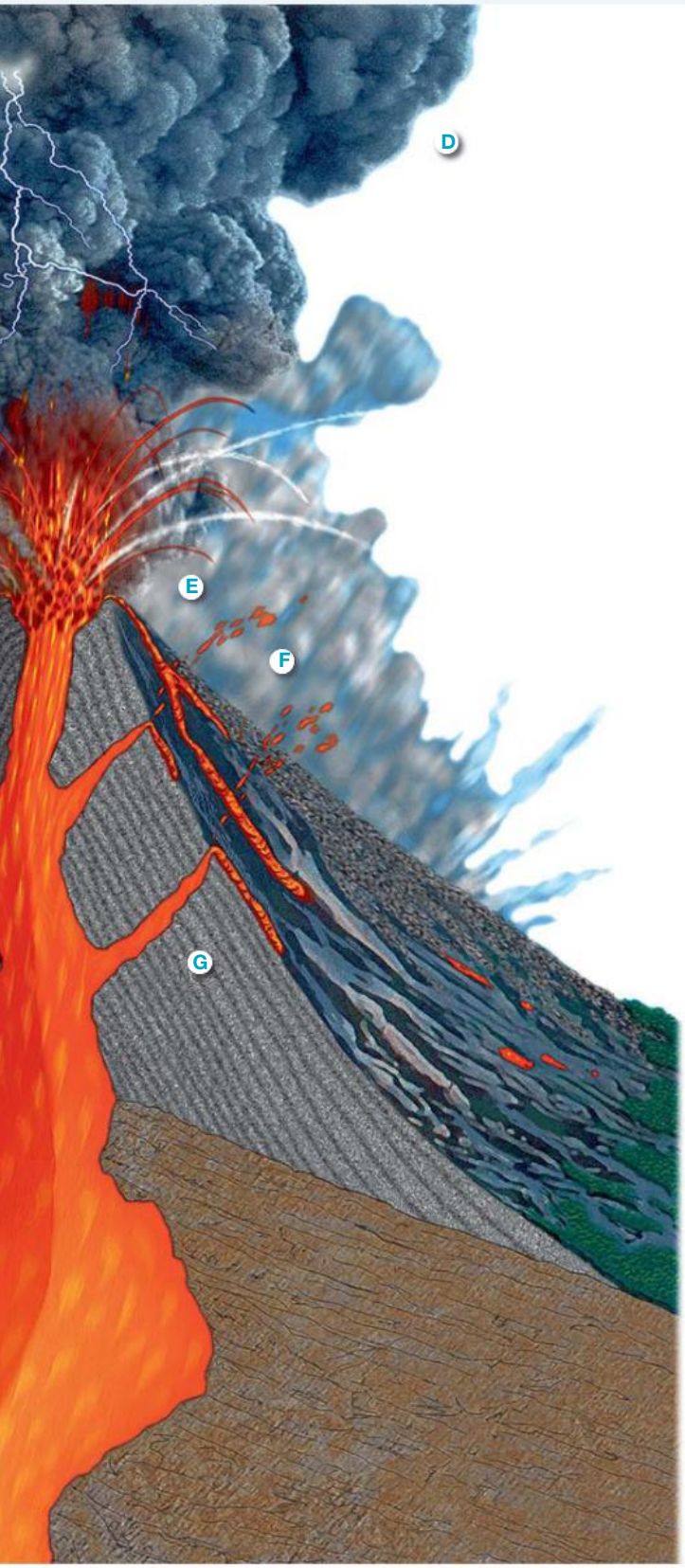


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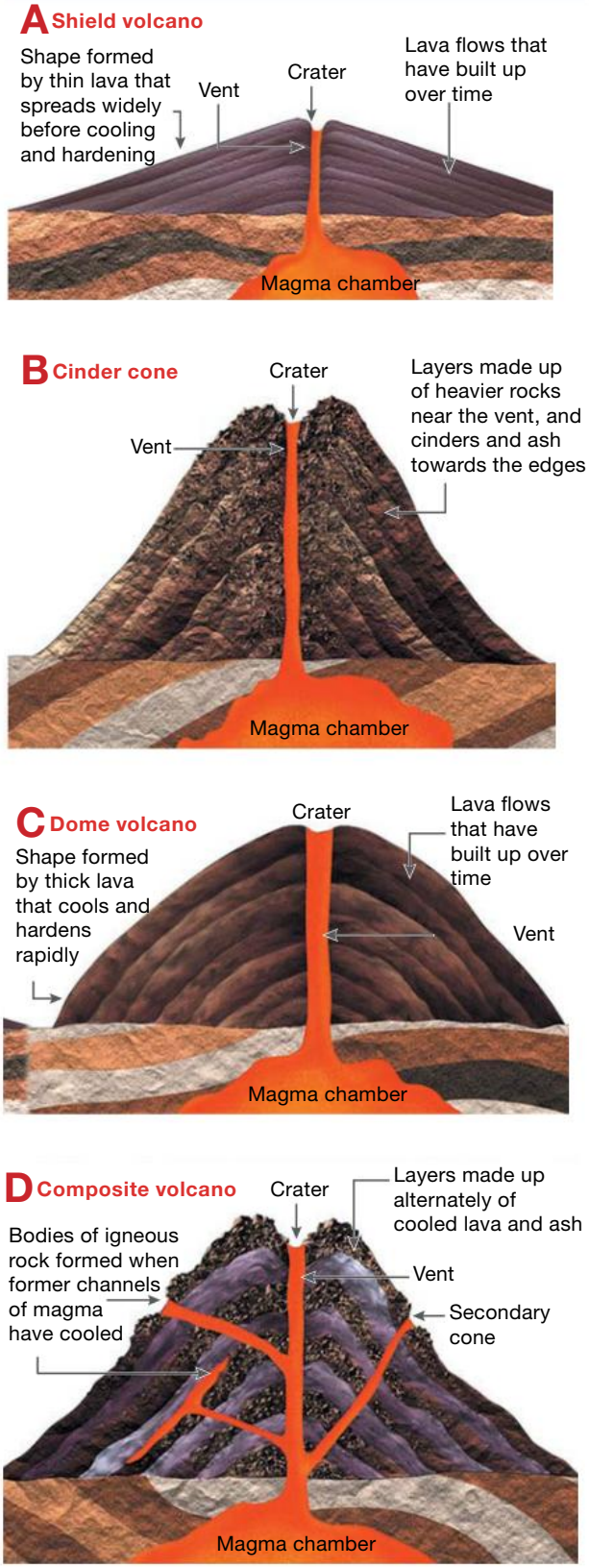
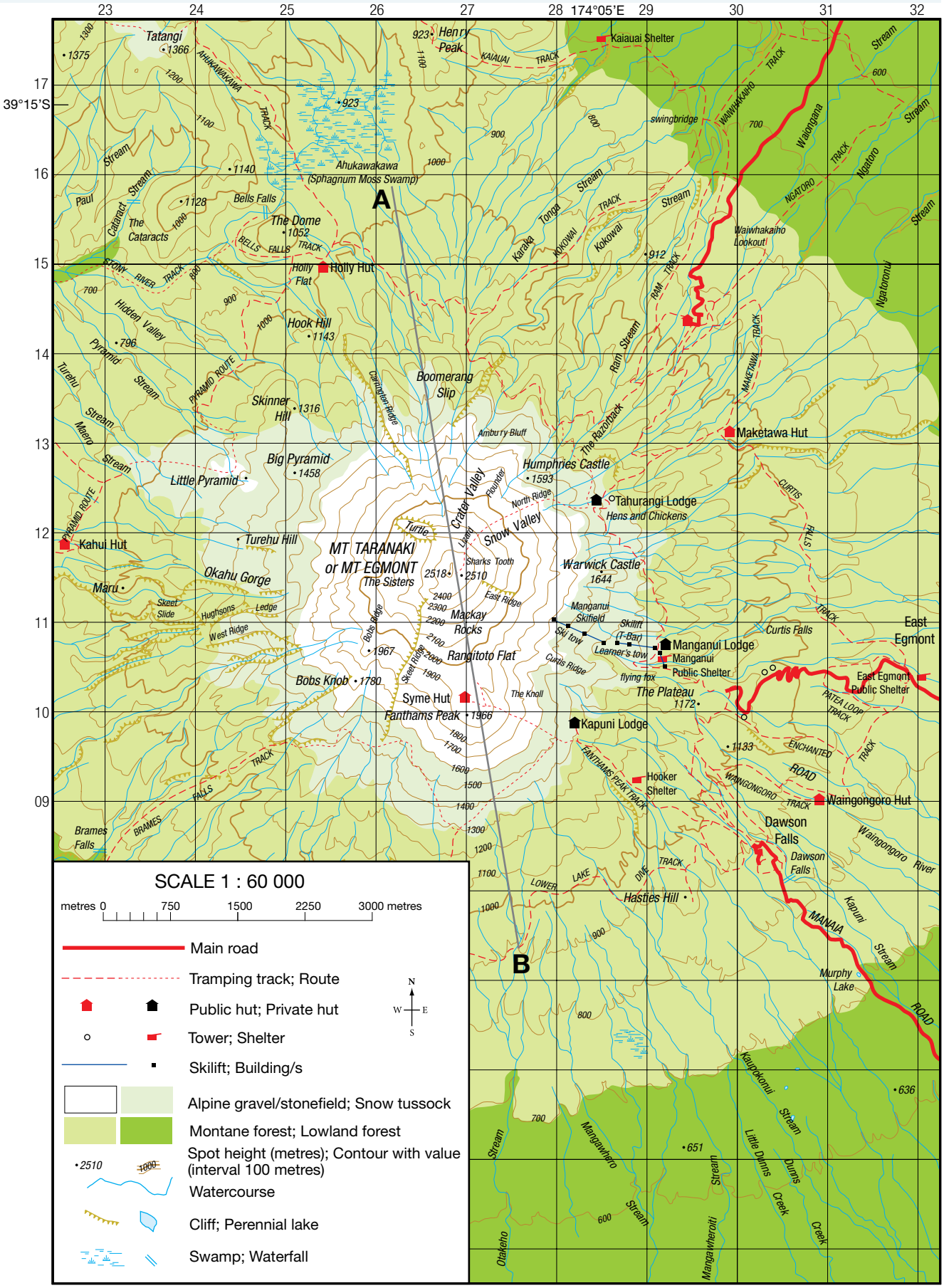
FIGURE 9 Four volcanic landforms



int-3619

FIGURE 10 Topographic map of Mount Taranaki



Source: Topographic Map 273-09 Egmont. Crown Copyright Reserved. Map drawn by MAPgraphics Pty Ltd, Brisbane

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Deepen your understanding of this topic with related case studies and questions.

- Investigating Australian Curriculum topics > Year 8: Landforms and landscapes > **Lahars**
- Earthquakes and volcanoes > **Hawaii's hotspot**

on Resources

Digital document	Topographic map of Mount Taranaki (doc-32264)
Interactivities	Topographic map of Mount Taranaki (int-3619) The anatomy of a volcano (int-3620)
Weblinks	Hawaii's hotspot Mt Taranaki Live
Google Earth	Iceland Great Rift Valley

13.6 ACTIVITIES

1. Go to the **Hawaii's hotspot** weblink in the Resources tab and explain how hotspot volcanoes form.
HASS skills: Analysing
2. Use the internet to locate the volcano Erta Ale. Where is it located? Refer to **FIGURE 4**, and explain why this location is significant. Describe why this volcano is so unusual. **HASS skills: Analysing**
3. Use an atlas or Google Earth to locate the islands on the Mid-Atlantic Ridge. Give the latitude and longitude for three locations. Describe the ***interconnection*** between the location of the ridge and the location of islands and volcanoes. **Geography concept: Interconnection**
4. Use the internet to find pictures of volcanic landforms and materials. These include crater lakes, geysers, calderas, fields of ash deposits, volcanic plugs, lava tubes, hummocks and pumice. You could also find pictures of the two types of lava: a'a and pahoehoe. Use your pictures to put together a field guide to volcanic landforms. Each page should contain a picture of the landform, a brief description and a ***place*** where it can be found– sometimes they are tourist attractions.
HASS skills: Communicating and reflecting

13.6 EXERCISE

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

Learning pathways

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

Check your understanding

1. Refer to an atlas map of Africa and look at the shape of the island of Madagascar. Try to imagine fitting this island back into the mainland. Using plate tectonic terms, write a paragraph to describe how Madagascar's location has ***changed*** over time.
2. Describe the ***changes*** occurring that are causing volcanoes to form in:
   a. the Great Rift Valley
   b. Iceland.
3. How is the ***scale*** of the ***changes*** happening in Iceland different from the ***scale*** of ***change*** happening in the Great Rift Valley?

4. Explain how the different shapes of volcanoes shown in **FIGURE 9** are the results of different materials being ejected.
5. Where is Mount Taranaki located?
6. What is a stratovolcano?
7. Mount Taranaki receives between 3200 millimetres and 6400 millimetres of rainfall each year. How would this contribute to the shape of this landform?

Apply your understanding

8. Refer to **FIGURES 2 and 3**. Explain why a chain of volcanoes, like the one in **FIGURE 3**, forms in Iceland. What is happening to the plates?
9. Draw what you imagine Iceland will look like many thousands of years in the future after further rifting. Provide new names for each of the smaller islands. In which direction, and towards which continent, will each island drift? Describe key ***changes***.
10. Draw a series of sketches to show what you predict will happen to the African landmass as the Great Rift Valley continues to rift. Include a map of Africa showing the ***change*** in shape that might occur. You need to annotate your sketches to justify the predictions you have made.
11. Refer to **FIGURE 10**.
    a. What is the grid reference for the spot height of Mount Taranaki?
    b. Calculate the number of private huts and public huts.
    c. Name the ski field.
    d. How many ski tows and lifts are there at the ski field? Calculate the length of each.
    e. Name and give the grid reference of a lodge in which skiers could stay.
    f. Name the other two lodges on the map.
12. Describe evidence from the aerial photo in **FIGURE 7** that the national park has protected forests around the volcano.
13. Use **FIGURES 6**, **7** and **10** to describe where you think lava would flow if Mount Taranaki erupted. Describe the potential ***changes*** to the human and natural ***environment***.
14. Refer to **FIGURE 9**.
    a. Describe, in detail, the ***changes*** to the ***environment*** that volcanic eruptions can cause.
    b. Which ***changes*** would impact on a small ***scale*** and which would impact on a larger ***scale***?

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

13.7 How do volcanic eruptions affect people?

LEARNING INTENTION

By the end of this subtopic, you will be able to describe the impact of volcanoes on people and the environment, and identify strategies to reduce the impact of a volcanic eruption.

13.7.1 The worst volcanic eruptions

Volcanic eruptions both create and destroy landscapes. Most volcanic eruptions do not strike randomly but occur in specific areas, such as along plate boundaries. In some places there are high concentrations of people living near volcanoes.

Most of the world's active above-sea volcanoes are located near convergent plate boundaries where subduction is occurring, particularly around the Pacific basin. This is also the location of settlements across many countries. Over many years, volcanic eruptions have caused deaths and great damage.

How can the worst volcanoes be measured? Should it be based on the number of people killed or the cost of the damage and destruction? Or should it be the size of the explosion?

TABLE 1 The worst volcanoes based on number of deaths

Volcano	Location	Date	Number of deaths
Mt Tambora	Indonesia	5–10 April 1815	71 000+
Mt Pelee	West Indies	25 April–8 May 1902	30 000
Mt Krakatoa	Indonesia	26–28 August 1883	36 000+
Nevado del Ruiz	Colombia	13 November 1985	23 000
Mt Unzen	Japan	1792	12 000–15 000
Mt Vesuvius	Italy	24 April 79 CE	13 000+
Laki Volcanic System	Iceland	8 June 1783–February 1784	9350
Mt Kelud	Indonesia	1586	10 000
Mt Kelud	Indonesia	19 May 1919	5110

Source: EM-DAT, CRED / UCLouvain, Brussels, Belgium, www.emdat.be (D. Guha-Sapir), 14 April 2020 version

TABLE 2 The worst volcanoes based on economic impact

Volcano	Location	Date	Estimated loss (million US$)
Nevado del Ruiz	Colombia	1985	1000
Mount St Helens	USA	1980	860
Calbuco	Chile	2015	600
Mount Pinatubo	Philippines	1991	211
Galunggung	Indonesia	1982	160
Tungurahua	Ecuador	2006	150
Gamalama	Indonesia	1983	149
El Chichon	Mexico	1982	117
Rabaul	Papua New Guinea	1994	110
Puyehue-Cordon Caulle	Chile	2011	104

Source: EM-DAT, CRED / UCLouvain, Brussels, Belgium, www.emdat.be (D. Guha-Sapir), 14 April 2020 version

13.7.2 Why do people live near volcanoes?

Geoscience Australia (a national organisation that provides geographic information to the government) estimates that 180 million people in the Asia–Pacific region live within 50 kilometres of a dangerous volcano. There is also a strong relationship between the location of volcanoes and resources such as fertile soils, ore deposits and **geothermal energy**.

Fertile soils

Some of the most fertile soils on Earth have come from volcanic deposits of ash that is rich in nutrients, and from the physical breakdown of volcanic rocks over thousands or millions of years.

Fertile volcanic soils have been very important for rice growing in Japan and large areas of the Indonesian archipelago, especially on the islands of Java and Bali. There is also prime agriculture located in regions of rich soil; for example, around Naples, southern Italy, which generally has poor soils.

Another region of fertile volcanic soil is the agricultural area of the North Island of New Zealand. **Volcanic loam** in this area helps produce crops and pasture. Other regions include the western plains of the United States and the Hawaiian Islands. There is a small percentage of rich basalt soils in Australia, including the volcanic plains in Victoria, the north coast of New South Wales, the Scenic Rim of south-east Queensland, parts of Tasmania, and the Atherton Tablelands in north Queensland.

geothermal energy energy derived from the heat in the Earth's interior

volcanic loam a volcanic soil composed mostly of basalt, which has developed a crumbly mixture

FIGURE 1 Agriculture and settlement near Mayon Volcano in the Philippines

Geothermal energy

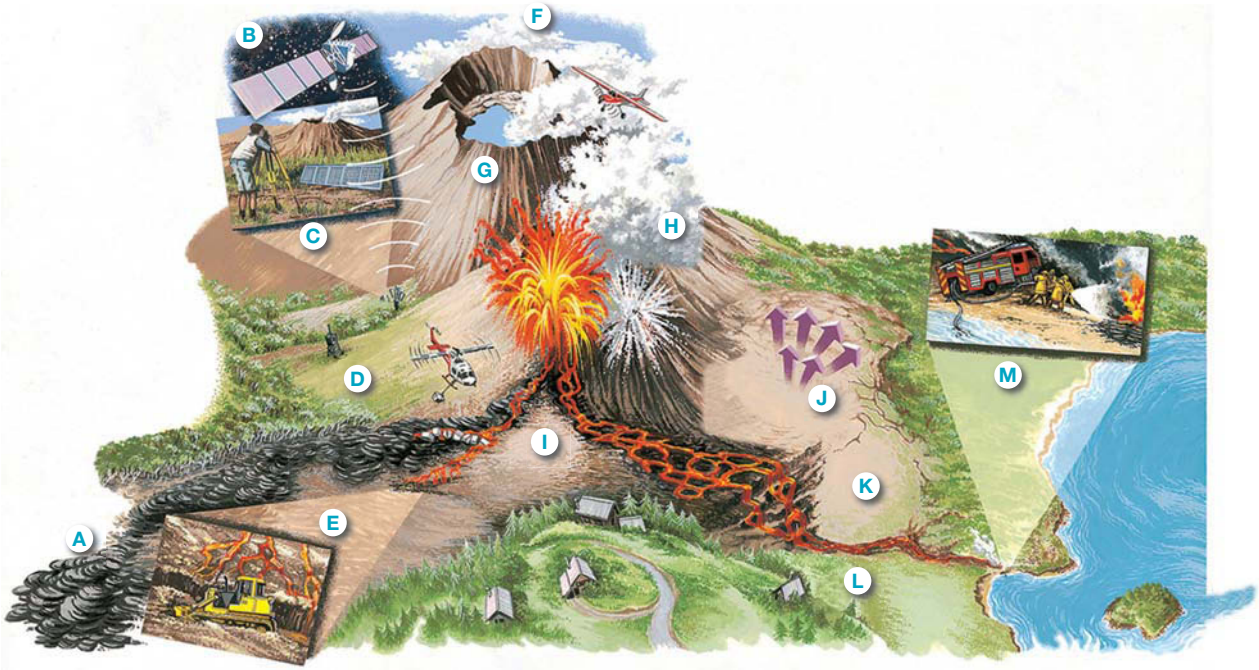
Geothermal energy can be used in locations where there are active or dormant volcanoes still producing heat deep under the Earth's surface. High-temperature hot springs and geysers produce steam, which can be used to drive turbines and generate electricity. At lower temperatures, the hot water can be used for home heating or to develop hot or warm springs at resort spas. Over one quarter of Iceland's electricity is generated from geothermal energy, and it provides heating for more than 85 per cent of its homes. The other main countries that make use of geothermal energy are the United States (in California), Italy, New Zealand and Japan.

13.7.3 How to prepare for volcanic eruption

Can volcanic eruptions be predicted? What are the warning signs? How can the risk of death, injury and damage be reduced?

With about 500 million people living close to active volcanoes, it is important to watch for changes and try to predict an eruption, hopefully giving nearby residents time to evacuate.

FIGURE 2 Predicting volcanic eruptions



- **A** Geologists study records of past eruptions by examining flow patterns of mud, lava and ash. From these patterns they can draw danger maps that pinpoint dangerous areas.
- **B** Satellites monitor changes in gas emissions and in the shape of the volcano. Specialised equipment can also measure heat increases.
- **C** Seismographs can detect the small earthquakes caused by rising magma. These are linked by transmitters to computers so that scientists can quickly detect changes.
- **D** Sound-measuring equipment was used to accurately predict an eruption in Mexico in 2000.
- **E** In 1983, an attempt was made to divert a lava flow away from the towns of Rocco and Rogalna on Mount Eina. A channel was dug and barriers erected. The lava slowed and solidified before reaching the towns.
- **F** Samples of gas can be collected and analysed. An increase in the amount of sulfur dioxide (SO_2) may indicate that magma is moving upwards.
- **G** A rise in the temperature of a crater lake often precedes an eruption.
- **H** It has been suggested that explosives could be used to breach crater walls, sending lava away from towns. This was first tried in Hawaii in 1935.
- **I** Helicopters have been used to drop concrete blocks in front of flowing lava.
- **J** As magma rises and collects in the magma chambers, the cone may bulge outwards, warning of possible eruptions. Sensitive tiltmeters on the ground and on satellites can detect this bulging.
- **K** Any bulging can also cause tiny cracks to appear.
- **L** Buildings in areas prone to ash eruptions should have steeply sloping roofs so ash does not accumulate.
- **M** In 1973, sea water was sprayed onto lava that was threatening a town in Iceland. The lava cooled quickly and solidified.

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Earthquakes and volcanoes > **Mount Vesuvius**

Resources

Weblink Timeline

13.7 EXERCISE

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

Learning pathways

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

Check your understanding

1. Make a list of the advantages and disadvantages of living near a volcano.
2. Is geothermal energy a renewable energy? Explain. How is this energy related to volcanic activity?
3. Refer to an atlas map showing world population density, settlements and the location of volcanoes. Write two statements that describe the relationship between population density, settlements and volcano locations. How does this relate to people's risk?
4. What data is collected to decide which volcanic events are the worst?
5. What is volcanic loam and where is it found?

Apply your understanding

6. Draw a table like the following, summarising the measures required for living with volcanoes.

Predicting eruptions	Preparing for eruptions	Lessening the effects of eruptions

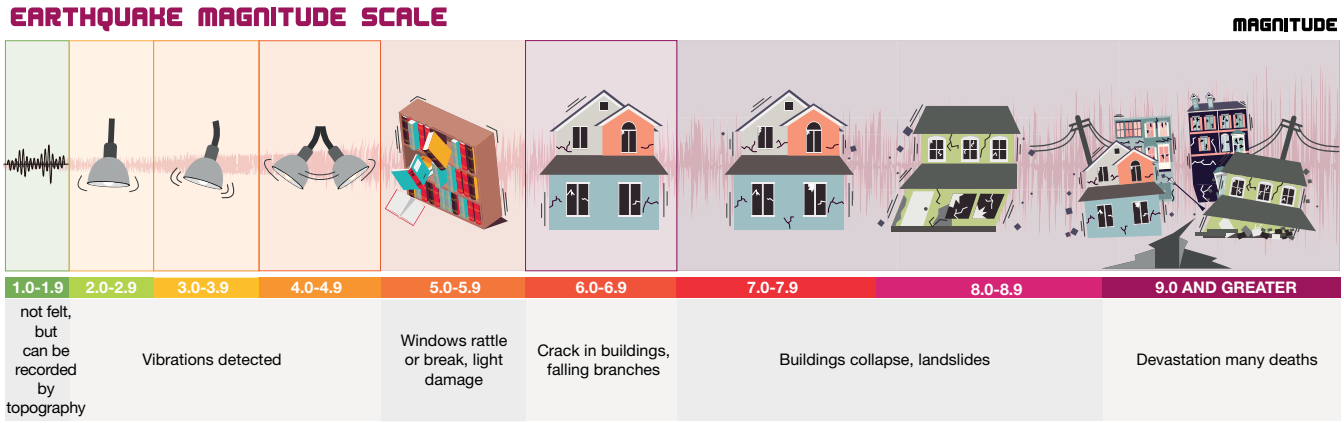
   a. Use the table to help you classify the information in **FIGURE 2**.
   b. Which of these measures do you think is most effective? Give three reasons for your answer.
7. Draw a photo sketch of **FIGURE 1** and label the following: volcano, volcanic plain, lava flows, farmland, settlement.
8. What is geothermal energy? What do you think could be some of the benefits of using this type of energy?
9. How can seismographs be used to warn of a possible volcanic eruption?
10. Study **FIGURE 2**. List the different techniques that have been used to try to stop the flow of lava. Which technique do you think is the most effective and why?

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

13.8 Thinking Big research project: Earthquakes feature article

Scenario

Congratulations! You have been promoted to feature writer of the *Weekly Rattle*, a leading geographical magazine. Your first brief is to write a feature about the strongest earthquakes that occur in the world over a 1-week period.



Task

Your audience includes very keen geographers and Earth scientists who like to have detailed information about earthquakes. You work in a team of three with two researchers to help you. You need the following information to write your feature article:

- a spreadsheet recording the following information for each earthquake over a magnitude of 4:
  - date of earthquake
  - country location
  - latitude and longitude for each location
  - earthquake depth
- a map of the location of the earthquakes
- a special case study of all earthquakes that occured in Australia in the same week
- a selection of photos showing the places where the earthquakes occurred
- a picture of a seismogram for one of the Australian earthquakes
- text to describe the location and severity of the earthquakes during one week – include largest, deepest and most shallow
- description of the earthquakes in Australia for the same week – all magnitudes.

Follow the steps detailed in the **Process** section to complete this task.

Process

- Open the ProjectsPLUS application for this topic. Click the **Start new project** button to enter the project due date and set up your project group. Working in groups of three will enable you to share responsibility for the project. Save your settings and the project will be launched.

- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered.
- In the **Media centre** you will find an assessment rubric to guide your work and some weblinks that will provide a starting point for your research. Use the weblinks each day over one week to record the earthquakes that occur over a magnitude of 4.
- Your group will need to research the information listed in the **Task** section – divide the tasks between you and add your findings to the Research forum.
- Complete the earthquake spreadsheet. You can use the one supplied in the Media centre.
- Create a world map showing the location of the earthquakes recorded in your spreadsheet. Download the blank world map from the Media centre.
- Choose some locations to conduct a photo search – you may find news services that carry images of the event. Select appropriate photos for your selected earthquake.
- When you have gathered all your information, you can begin writing your article.
- Once your article is complete, you can design the layout of your article. Research ideas for the design elements using the weblinks provided.
- Proofread and check thoroughly to ensure correct spelling and grammar, and that you have completed all elements listed in the Task section. When happy with your work, submit your article to your teacher for assessment.

on Resources

ProjectsPLUS Earthquake feature article (pro-0171)

13.9 Review

13.9.1 Key knowledge summary

13.2 How mountains are formed

- The earth is made up of continental plates that are constantly moving slowly.
- Some plates converge; others diverge and others again slide past one another.
- This tectonic activity (moving plates) is a process for forming mountains.
- Mountains are classified by what they look like and how they were formed.
- The most common formations are fold mountains.
- Other mountain formations include fault-block, dome and plateau.

13.3 The world's mountains and ranges

- Mountains are found on every continent on Earth.
- There are major chains of mountains – mountain ranges – on all continents.
- Vegetation, climate and weather change as the altitude on mountains increases.

13.4 How people use mountains

- Mountains can be remote but often support low population densities.
- Specific mountain landforms are sacred and special places to indigenous and other groups of people.

13.5 Earthquakes and tsunamis

- Earthquakes are a common occurrence each day across the Earth.
- There is a strong relationship between the location of plate boundaries (weaknesses in the Earth's crust) and the location of earthquakes.
- A tsunami can result if a large earthquake occurs on the ocean floor.
- Earthquakes and tsunamis can affect people and result in deaths, injuries and damage to homes and infrastructure.
- The impact of the same magnitude earthquake can vary depending on a country's level of income.
- The environment can be affected through landslides, erosion and liquefaction.

13.6 Volcanic mountains

- Volcanoes are formed when molten magma in the Earth's mantle is forced through an opening in the Earth's surface.
- Volcanoes can be formed in rift valleys and over hotspots.
- Mount Taranaki is the largest volcano on New Zealand's mainland, on the North Island.
- Mount Taranaki is a dormant stratovolcano that is likely to erupt in the future.
- Volcanic mountains form when magma erupts to the Earth's surface.
- The shapes and sizes of volcanic landscapes depend on the type of lava, the amount of ash and the speed of the eruption.

13.7 How do volcanic eruptions affect people?

- Volcanic eruptions can destroy landscapes and kill people.
- Large numbers of people across the world live near volcanoes because of the location of fertile soils, ore deposits and geothermal energy.

13.9.2 Key terms

altitude height above sea level

convection currents a current created when a fluid is heated, making it less dense, and causing it to rise through surrounding fluid and to sink if it is cooled; a steady source of heat can start a continuous current flow

converging plates a tectonic boundary where two plates are moving towards each other

cultural relating to the ideas, customs and social behaviour of a society

divergent plates a tectonic boundary where two plates are moving away from each other and new continental crust is forming from magma that rises to the Earth's surface between the two

epicentre the point on the Earth's surface directly above the focus of an earthquake

fault an area on the Earth's surface that has a fracture, along which the rocks have been displaced

focus the point where the sudden movement of an earthquake begins

geothermal energy energy derived from the heat in the Earth's interior

hotspot an area on the Earth's surface where the crust is quite thin, and volcanic activity can sometimes occur, even though it is not at a plate margin

landslide a rapid movement of rocks, soil and vegetation down a slope, sometimes caused by an earthquake or by excessive rain

liquefaction transformation of soil into a fluid, which occurs when vibrations created by an earthquake, or water pressure in a soil mass, cause the soil particles to lose contact with one another and become unstable; for this to happen, the spaces between soil particles must be saturated or near saturated

lithosphere the crust and upper mantle of the Earth

Pangaea the name given to all the landmass of the Earth before it split into Laurasia and Gondwana, which over time became the continents we know today

primary waves also known as P-waves; the first waves to hit an area during an earthquake, which cause a sudden jolt

rift zones a large area of the Earth in which plates of the Earth's crust are moving away from each other, forming an extensive system of fractures and faults

secondary waves also known as S-waves; the waves that arrive at an area after the P-waves, which cause a sustained up-and-down movement

seismic waves waves of energy that travel through the Earth as a result of an earthquake, explosion or volcanic eruption

volcanic loam a volcanic soil composed mostly of basalt, which has developed a crumbly mixture

13.9.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

Magma, water and tectonic plates – can they really move mountains?

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

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5532)
Reflection (ewbk-5531)
Crossword (ewbk-5530)
Student Learning Matrix (ewbk-5522)

Interactivity Mountain landscapes crossword (int-7598)

13.9 Review exercise

Multiple choice

1. Most active, above-sea volcanoes are associated with what type of plate boundary?
   - A. Convergent
   - B. Divergent
   - C. Hotspots
   - D. Lateral plate slippage
2. Volcanoes are not evenly distributed, but are often clustered. Which plate boundary is spatially associated with the largest number of active volcanoes?
   - A. Eurasian
   - B. African
   - C. Pacific
   - D. Caribbean
3. The eruption of Mount Eyjafjallajökull, Iceland, in April 2010, caused an estimated loss of US$1.7 billion dollars. Much of this was in the form of losses to the airline industry as airports across much of Europe were closed.
   - A. Ash
   - B. Lava
   - C. Steam
   - D. Pyroclastic flows
4. While volcanoes can bring death and destruction, they can also benefit people. From the list, select three benefits that volcanoes bring to people.
   - A. Fertile soils from the gradual breakdown of mineral-rich lava
   - B. Ash build up in rivers
   - C. Geothermal energy
   - D. Pyroclastic flows
   - E. Spectacular scenery and tourist destinations
5. When referring to a volcano, what is the red zone?
   - A. The area that lava will cover during an eruption
   - B. The area immediately surrounding the volcano
   - C. The area with the most people in it at the time of an eruption
   - D. The area that can only be accessed by helicopter
6. The epicentre of an earthquake is:
   - A. The point below the Earth's surface where an earthquake occurs
   - B. The point on the Earth's surface directly above the focus of the earthquake
   - C. The area affected directly by an earthquake
   - D. The centre of the Earth.
7. The lithosphere is:
   - A. the crust of the Earth
   - B. the Earth's upper mantle
   - C. the crust and lower mantle of the Earth
   - D. the crust and upper mantle of the Earth.
8. Volcanic loam is:
   - A. the plume of smoke and ash arising from a volcano
   - B. the fiery centre of a volcano
   - C. a volcanic soil
   - D. hot molten ash created by a volcano.

9. Altitude is:
   A. the height of a mountain
   B. height measured in metres
   C. height above sea level
   D. height above ground level.
10. Geothermal energy is:
   A. energy derived from waves.
   B. energy derived from the sun.
   C. energy derived from rocks.
   D. energy derived from heat within the Earth's interior.

Short answer

11. Write your own definition and explanation of *continental drift* and *plate tectonics*. Use your own sketched and labelled diagrams to help with your explanation.
12. What is the relationship between the location of mountains and mountain ranges and plate tectonics? Choose three examples from different ***places*** for your explanation.
13. How did the Himalayas form?
14. Describe the general location and distribution of the world's earthquakes and volcanoes. What is the relationship between this distribution and the location of plate boundaries?
15. Explain the terms *subduction, convergent plate, divergent plate* and *focus*. How is each involved in mountain building?
16. How can a hotspot create a chain of islands? What other tectonic activity can result in a chain of islands?
17. The earthquakes in table 1 below are not the largest that have ever occurred, but they have resulted in enormous loss of life and damage.

TABLE 1 Eight earthquakes that have been especially destructive

Place	Date	Magnitude	Number of deaths	Cost
Ercis, Turkey	October 2011	7.2	More than 600	Not known
Christchurch, New Zealand	February 2011	6.3	181	$US20 billion
Pakistan, India, Afghanistan	October 2005	7.6	80 300	More than $US5 billion
Sichuan, China	May 2008	7.9	84 000	$US85 billion
Bam, Iran	December 2003	6.6	30 000	About $US1 billion
Izmit, Turkey	August 1999	7.4	30 000	$US6.5–10 billion
Papua New Guinea	July 1998	7, followed by tsunami	More than 2000	Whole villages, lagoon
Port-au-Prince, Haiti	January 2010	7.3	230 000	$8.5 billion

   a. Do you think that earthquakes and tsunamis should be measured by their size on the Richter scale, by the number of people killed, or by the cost of the damage caused?
   b. Locate these earthquakes on a world map that shows plate boundaries (for example, **FIGURE 1** in subtopic 13.2). What is the relationship between these earthquakes and the plate boundaries?
   c. Compare the size of these earthquakes with the largest ones described in table 2 of section 13.5.7. What are all the factors that contribute to large loss of life and to the amount of damage in an earthquake?
18. 'If people are well prepared for earthquakes and volcanic eruptions, there will be fewer deaths and injuries and less destruction and damage.' What is your opinion about this statement? Justify by using some examples.

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 13 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

13.1 Overview

Video eLesson
- Majestic mountains (eles-1626)

13.2 How mountains are formed

eWorkbook
- Mountain formations (ewbk-5524)
- Movement of continental plates (ewbk-5525)

Video eLesson
- Drifting continents (eles-0129)

Interactivities
- Mountain builders (int-3109)
- Grand peaks (int-3110)

Weblinks
- Anticline and syncline
- Fold mountains

Google Earth
- Great Rift Valley
- Ben Nevis
- Sierra Nevada mountains
- Table Mountain
- Grand Canyon

myWorld Atlas
- Investigate additional topics > Earthquakes and volcanoes > **Active Earth**

13.3 The world's mountains and ranges

Google Earth
- Dolomites

13.4 How people use mountains

eWorkbook
- Mountain formations (ewbk-5523)

Weblinks
- Climate change and water shortage

13.5 Earthquakes and tsunamis

eWorkbook
- What causes earthquakes and tsunamis (ewbk-5526)
- Impacts of earthquakes and tsunamis (ewbk-5527)

Interactivity
- Anatomy of a tsunami (int-3111)

Weblinks
- Nepal earthquake: before and after photos
- Earthquake-vulnerable cities
- World's biggest tsunami
- Liquefaction

Google Earth
- Christchurch, New Zealand

myWorld Atlas
- Investigate additional topics > Earthquakes and volcanoes > **Haiti earthquake**
- Investigate additional topics > Earthquakes and volcanoes > **Banda Aceh tsunami**

13.6 Volcanic mountains

eWorkbook
- Formation of volcanic mountains (ewbk-5528)

Digital document
- Topographic map of Mount Taranaki (doc-32264)

Interactivities
- Topographic map of Mount Taranaki (int-3619)
- The anatomy of a volcano (int-3620)

Weblinks
- Hawaii's hotspot
- Mt Taranaki Live

Google Earth
- Iceland
- Great Rift Valley

myWorld Atlas
- Investigating Australian Curriculum topics > Year 8: Landforms and landscapes > **Lahars**
- Earthquakes and volcanoes > **Hawaii's hotspot**

13.7 Preserving and managing landscapes

eWorkbook
- The impact of volcanic eruptions (ewbk-5529)

Weblink
- Timeline

myWorld Atlas
- Investigate additional topics > Earthquakes and volcanoes > **Mount Vesuvius**

13.9 Thinking Big research project: Earthquakes feature article

ProjectsPLUS
- Earthquakes feature article (pro-0171)

13.10 Review

eWorkbook
- Reflection (ewbk-5531)
- Crossword (ewbk-5530)
- Student Learning Matrix (ewbk-5522)

Interactivity
- Mountain landscapes crossword (int-7598)

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

14 Urbanisation and migration

14.1 Overview

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

Why do millions of people choose to live so close to other people in busy urban areas?

14.1.1 Introduction

There are many advantages to living in large cities, such as the economic benefit brought about by sharing the costs of providing fresh water, electricity or other energy sources, health care facilities and public transport between many people. There may be social benefits, because cities provide a wider choice of sporting, recreational and cultural events. However, there are also disadvantages to living in a large city environment. In this topic we will explore and compare urbanisation around the world

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5544)

Video eLesson Our urban world (eles-1628)

FIGURE 1 Perth city skyline at night over the Swan River

14.2 Where do Australians live?

LEARNING INTENTION

By the end of this subtopic, you will be able to describe the settlement patterns of Australia's first people and suggest reasons for these settlement patterns.

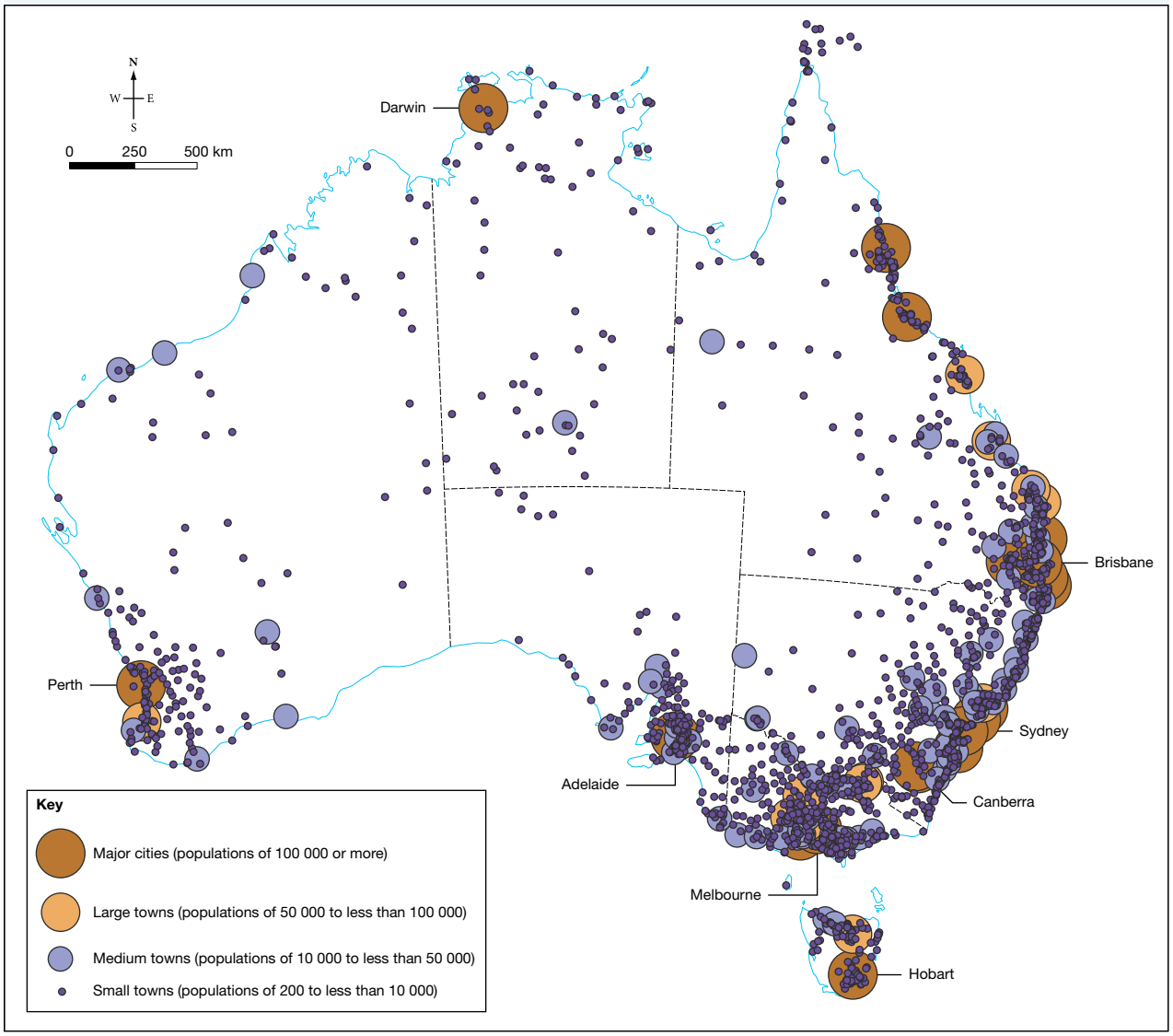
14.2.1 Where do most Australians live?

Australians live on the smallest continent and in the sixth largest country on Earth. With an estimated population of 25.5 million in 2020 and an area of 7 690 000 square kilometres, our **population density** is 3.3 people per square kilometre. Western Australia has a population density of approximately 0.9 people per square kilometre, with 89 per cent of Western Australians living in urban centres. We may think of ourselves as an outback-loving, farming nation, but we mostly live near the coast.

population density the number of people living within one square kilometre of land; it identifies the intensity of land use or how crowded a place is

int-7826

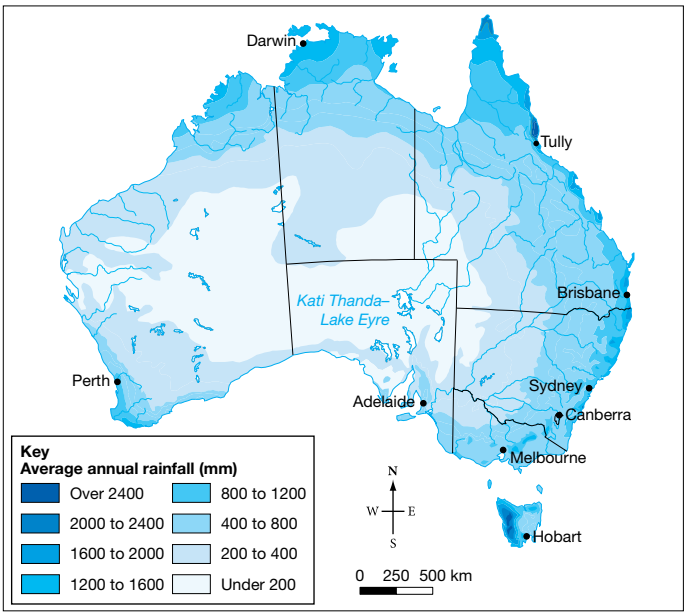
FIGURE 1 Distribution of Australia's towns by population size, 2016



Source: Australian Bureau of Statistics

Most Australians currently live within a narrow coastal strip that extends from Brisbane in the north to Adelaide in the south. While 71 per cent of Australians live in major cities, one in ten people live in small towns of less than 10 000 people. In 2016 there were just over 1000 towns with populations of fewer than 1000. About 85 per cent of Australians live within 50 kilometres of the coast. Many Australians love the beach, but is it just a coastal location that can explain this uneven **population distribution** pattern?

FIGURE 2 The distribution of annual rainfall in Australia



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

FIGURE 2 shows the distribution of rainfall within Australia. When comparing **FIGURES 1** and **2**, it is apparent that there is a strong interconnection between the availability of more than 800 millimetres of rainfall per year and population distribution in the east, south-east and south-west of Australia. It would be easy to say that Australians live in places where rainfall is higher, but if you look at these maps carefully there are major exceptions to this spatial pattern. What is the relationship between population distribution and total rainfall in the north of Australia? Is the population distribution high in the regions of high rainfall in Queensland and the Northern Territory?

Coastal locations and rainfall are not the only reasons Australians live where they do. The availability of mineral resources, irrigation schemes to enhance farm production, and remote and stunning tourist destinations are **geographical factors** that draw people to live in a particular place.

FIGURE 3 A remote town in northern Australia, which has a very low population density

population distribution the pattern of where people live; population distribution is not even – cities that have high population densities and remote places such as deserts usually have low population densities

geographical factors reasons for spatial patterns, including patterns noticeable in the landscape, topography, climate and population

14.2.2 Comparing population densities

FIGURE 1 shows Australia's population distribution in 2016. To better understand this data, we need to compare Australia's population density with that of other places in the world. This map shows that small areas around the major state capital cities have population densities of over 100 people per square kilometre of land. **TABLE 1** shows that the average population density for Australia is well below the global average, and is easily the lowest of any of the permanently inhabited continents.

TABLE 1 The average population density for each continent

Continent	Average population density (people per km^2)
Asia	100
Europe	55
Africa	36
North America	20
South America	32
Australia	3
Antarctica	0.00007

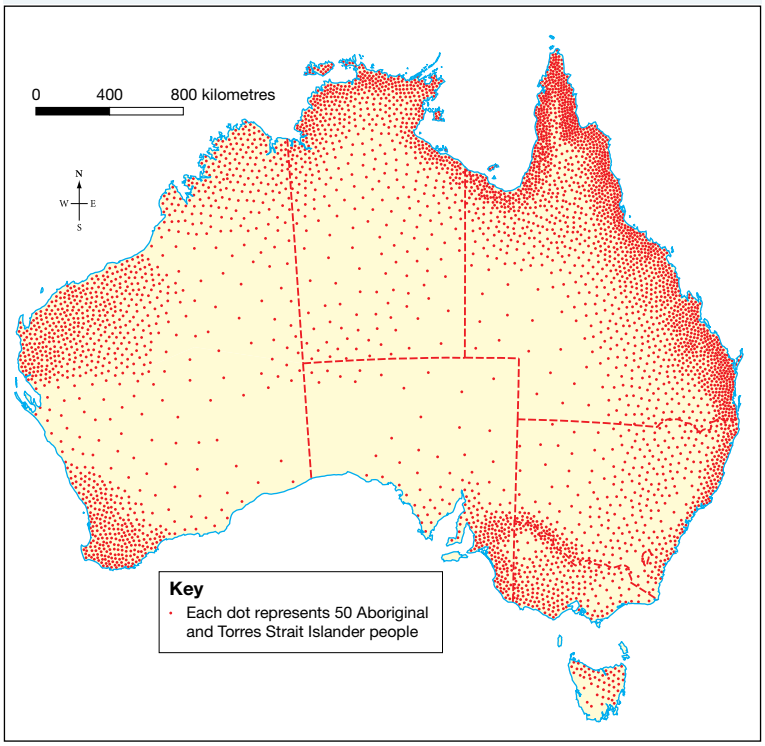
The population density of Australia is similar to that of Canada (3 people per square kilometre), but much lower than that of New Zealand (15 people per square kilometre), the United States (33 people per square kilometre) or China (145 people per square kilometre). Consider the geographical factors that Australia might share with Canada but not New Zealand, the United States or China that could explain the significant difference between their population densities.

country the area of land, river and sea that is the traditional land of each Aboriginal language group or community; the place where they live

14.2.3 Where have Australians lived in the past?

Until 1788, Aboriginal and Torres Strait Islander peoples inhabited all parts of Australia (see **FIGURE 4**). The most densely populated areas, with 1–10 square kilometres of land per person, were the south-east, south-west and far north coastal zones, the north of Tasmania and along the major rivers of the Riverina region (south-western New South Wales).

FIGURE 4 Where Aboriginal and Torres Strait Islander peoples lived in 1788



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

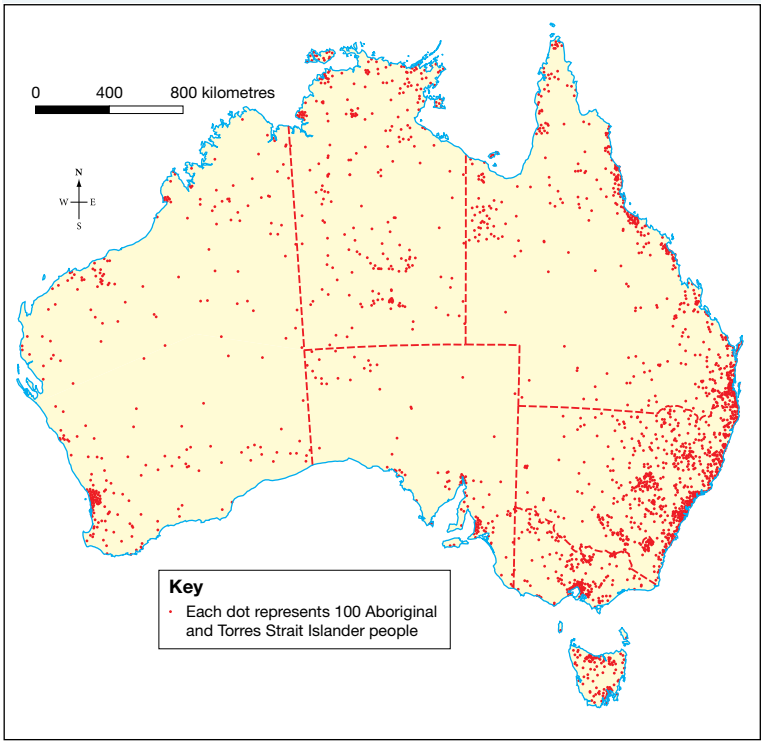
The population density of Aboriginal and Torres Strait Islander peoples was highest in places close to coastal and river environments. These places had the best availability of food and other resources. In a location such as Port Jackson, New South Wales, food was abundant, meaning that the inhabitants needed to spend only about four hours each day searching for food and water. In places where rainfall was unreliable, such as central Australia, the local peoples found it harder to survive. They often needed more than half a day to find enough to satisfy their basic needs. When food resources ran low or with changing seasons, communities moved on to another part of their **country**. Aboriginal and Torres Strait Islander peoples managed their environment by not over-using the resources available at any one site.

14.2.4 Where do Aboriginal and Torres Strait Islander peoples live today?

It is believed that in 1788 there were between 350 000 and 700 000 Aboriginal and Torres Strait Islander peoples in Australia. Within 50 years this population had been greatly reduced by disease and British colonists. In 2016, there were 649 200 Aboriginal and Torres Strait Islander peoples, making up about 2.8 per cent of Australia's population.

The Australian environment has changed significantly since 1788. Much land has been cleared, shaped and blasted for cities, farms and mines. Other than the management of vegetation by fire, prior to European colonisation the landscape of Australia had not been greatly altered by its human inhabitants. By the twenty-first century, little of Australia's environment remained significantly unchanged by human occupation.

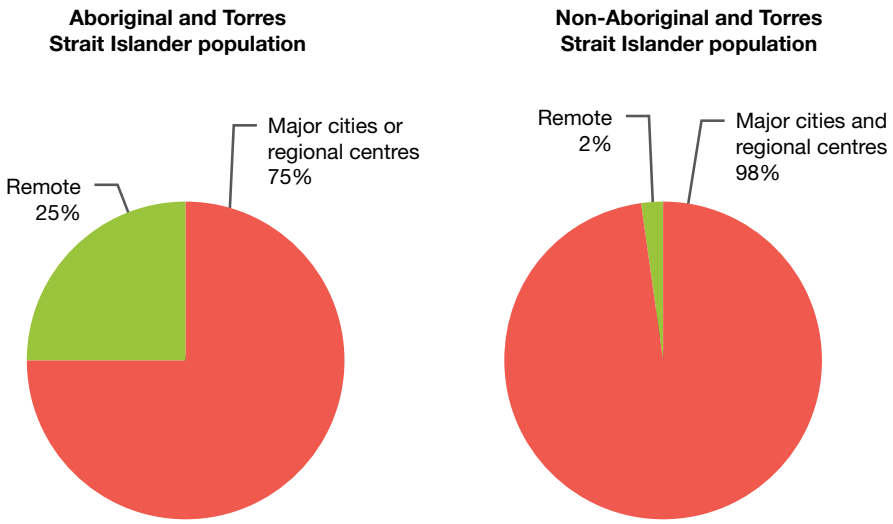
FIGURE 5 Where Aboriginal and Torres Strait Islander peoples live today



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane

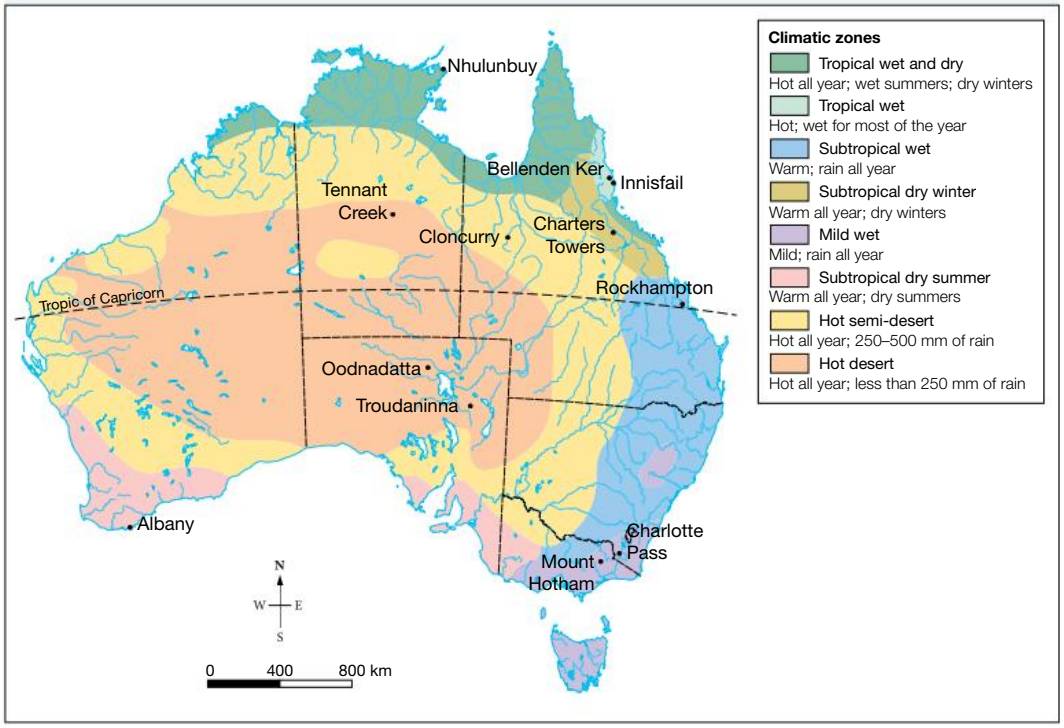
The patterns in **FIGURES 4** and **5**, showing the distribution of Aboriginal and Torres Strait Islander populations in 1788 and today, have some similarities but there are clearly some major differences. More of these communities now live in the major population centres around Australia, including Sydney, Perth and Melbourne. Areas such as the north-west of Western Australia, along the banks of the Murray River and the coast of northern Queensland have had a dramatic reduction in population density.

FIGURE 6 Regional distribution of Aboriginal and Torres Strait Islander peoples and the non-Aboriginal and Torres Strait Islander population of Australia



int-7859

FIGURE 7 The eight main climatic zones of Australia



Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Population > **Population of Australia**
- Investigate additional topics > Population > **Aboriginal and Torres Strait Islander peoples**

on Resources

Interactivites Australia's population distribution and density (int-7826)
The eight main climatic zones of Australia (int-7859)

Weblink ABS: Aboriginal and Torres Strait Islander health

14.2 ACTIVITIES

1. Use your atlas to identify and list:
   a. geographical landforms or climatic features that are common to Australia and Canada. Hint: Look for large regions that have an extreme climate. Explain why.
   b. reasons New Zealand, the United States or China may have a higher population density than Australia. Explain.

   HASS skills: Analysing
2. Refer to **FIGURES 1** and **2** to produce an overlay map that identifies the interconnection between the distribution of population and the distribution of rainfall within Australia.
   a. Describe areas where there are strong similarities between these two features, i.e. high population distribution and high rainfall, or low population distribution and low rainfall.
   b. Describe places that have a high population distribution but low rainfall or vice versa.

   Geography concept: Interconnection

3. Use various theme maps of Australia in your atlas to identify at least four possible ***place*** or ***environmental*** explanations for the pattern of distribution and density of Australia's population. Discuss your findings with the class. **Geography concepts: Place, Environment**
4. Refer to **FIGURE 6**. Living so far away from major cities means that 25 per cent of Aboriginal and Torres Strait Islander communities have limited access to many of the services and opportunities that cities offer their residents. In a small group, brainstorm the lifestyle and service difficulties that may be associated with living so remotely. **HASS skills: Communicating and reflecting**
5. Collect some statistics that identify the health, wealth and educational inequalities that exist between Aboriginal and Torres Strait Islander peoples and non-Aboriginal and Torres Strait Islanders. For example, Aboriginal males have a life expectancy 17 years lower than that of non-Aboriginal males born in the same year. Use the **ABS: Aboriginal and Torres Strait Islander health** weblink in the Resources tab to start your research. Write a paragraph or produce a series of graphs to comment on the inequalities you have discovered. **HASS skills: Questioning and researching**
6. Conduct research to find which country in the world has the highest average population density. Find one country with a lower average population density than Australia. Why do you think this is the case? **HASS skills: Questioning and researching**

14.2 EXERCISE

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

Learning pathways

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

Check your understanding

1. Use **FIGURE 1** and an atlas to describe where most people in Australia live.
2. What is the difference between population density and population distribution?
3. What geographical factors other than rainfall may lead to the uneven distribution of population in Australia?
4. How many Aboriginal and Torres Strait Islander peoples:
   a. lived in Australia in 1788
   b. live in Australia today?
5. How many Aboriginal and Torres Strait Islander people live in urban areas today compared to rural areas?
6. Use **FIGURE 7** and an atlas to list the climate zones Australia's major cities are located in.

Apply your understanding

7. Write a paragraph to explain the possible change in the distribution of Australia's predominantly urban population over the next 50 years if one of the following situations occurs.
   a. The coastal urban areas become adversely affected by loss of land due to rising sea levels.
   b. A 20-year-long drought occurs in south-eastern Australia.
8. Use information from **FIGURE 2** to explain why, in the future, there may be significant movement of people from the southern states of Australia to places in the tropical north. Your answer must refer to specific information from the map.
9. What does **FIGURE 4** tell you about the potential for population growth in north-western Western Australia? Do you think this region will grow in the future? Justify your response.

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

14.3 What is urbanisation?

LEARNING INTENTION

By the end of this subtopic, you will be able to define urbanisation and describe global patterns of urbanisation.

14.3.1 Global urbanisation

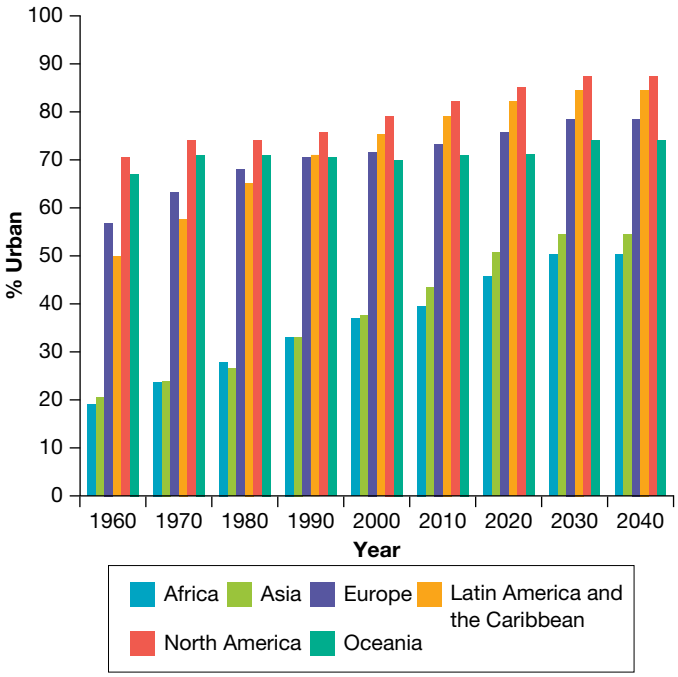
As the world's population increases, **urban** areas continue to grow. In some regions, people are moving from rural to urban areas at very high rates.

int-7857

Urbanisation is the growth and expansion of urban areas and involves the movement of people to towns and cities. The earliest cities emerged about 5000 years ago in Mesopotamia (part of present-day Iran, Iraq and Syria). Originally these cities depended on agriculture. In 1800, 98 per cent of the global population lived in rural areas and most were still dependent upon farming and livestock production – only 2 per cent of people lived in urban areas.

However, as cities grew, primarily as a result of the Industrial Revolution and trade developing, urban areas became centres for merchants, traders, government officials and craftspeople. By 2008, the proportion of people living in urban areas had increased to 50.1 per cent, and in 2018 the figure had risen again to approximately 56 per cent. The rate of growth has varied in different regions (see **FIGURE 1**).

FIGURE 1 The growth in urban populations over time



14.3.2 Uneven urbanisation

Urbanisation has not occurred evenly across the world. Some countries are predominantly rural, such as Cambodia and Papua New Guinea (populations 77 per cent and 87 per cent rural respectively), whereas others are almost completely urban, such as Belgium and Kuwait (98 per cent urban for both). In fact, some countries have 100 per cent urbanisation, including Bermuda, Cayman Islands, Hong Kong, Macau, Monaco, Vatican City and Singapore. South America is becoming one of the most urbanised regions in the world and currently has a population of around 385 million people. It is estimated that by 2050, 91.4 per cent of its population will be residing in urban areas.

Coastal urbanisation

People have lived on coastlines for thousands of years. Often at the mouth of rivers, coastal settlements became centres of trade and commerce and quickly grew into cities. Today, about half the world's population lives along or within 200 kilometres of a coastline. According to the European Commission, 95 per cent of the world's population lives on only 10 per cent of the Earth's land area.

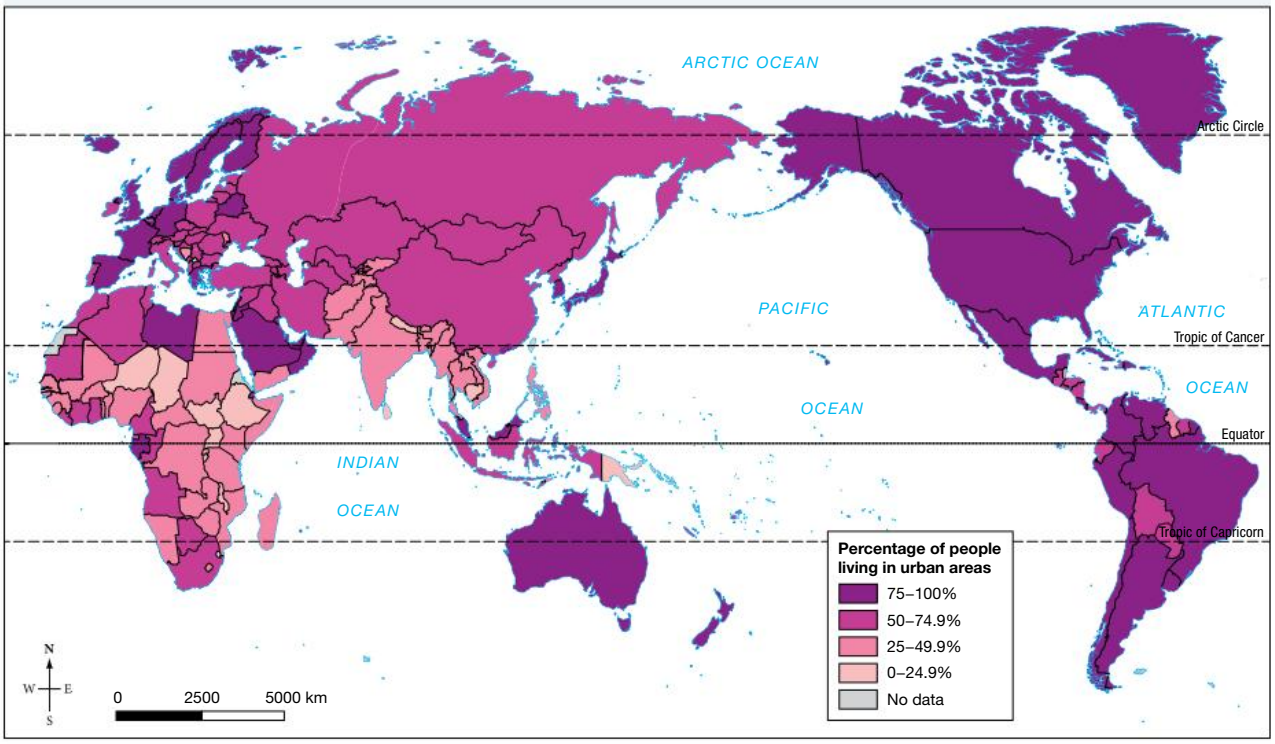
urban relating to a city or town; the definition of an urban area varies from one country to another depending on population size and density

urbanisation the growth and expansion of urban areas

Countries that have over 80 per cent of their population living within 100 kilometres of a coastline include the United Kingdom, Senegal, Portugal, Belgium, the Netherlands, Sweden, Norway, Tunisia, Greece, Oman, the United Arab Emirates, Kuwait, Qatar, Sri Lanka, Japan, Singapore, Indonesia, Malaysia, the Philippines, Australia and New Zealand.

int-7868

FIGURE 2 Percentage of population living in urban centres, 2017



Source: World Bank Data

FIGURE 3 Urban housing in Kuwait

FIGURE 4 Perth in Western Australia is an example of a coastal city.

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Urbanisation > **World urbanisation**

on Resources

Interactivities The growth in urban populations over time (int-7857)
Percentage of population living in urban centres, 2017 (int-7868)
Urban Indonesia (int-3115)

Google Earth Perth
Indonesia

14.3 ACTIVITIES

1. Refer to a world population density map in your atlas or online. Make a list of the five most densely populated and the five least most densely populated countries and then look up the GDP for those nations. Is there a pattern? Theorise as to the reasons why/why not. **HASS skills: Evaluating**
2. Look at a physical map in an atlas to locate the countries with more than 80 per cent of their population located on the coast. Study the location of each country and create a table to record possible reasons for this pattern. **Geography concept: Place**

14.3 EXERCISE

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

Learning pathways

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

Check your understanding

1. Define *urbanisation* in your own words.
2. How has urbanisation changed from 1960 to the present? How is this different around the world?
3. What is expected to happen with urbanisation in the future?
4. Explain how **FIGURE 1** shows that urbanisation has varied in different regions of the world. Which two regions have the greatest rural population?
5. Look at **FIGURE 1**. Which region's urbanisation rate has consistently been the highest over time?

Apply your understanding

6. Look at **FIGURE 2**, which shows the population in urban areas. Identify and name the three countries with the highest and the three with the lowest percentage of people living in urban areas. Write a description of the general pattern shown on the map. Include patterns within different continents in your description.
7. Most food is produced in rural areas. What are two possible outcomes for food production if urbanisation continues?
8. Draw a sketch of the photograph of Perth in **FIGURE 4**. Annotate the sketch, identifying the possible advantages and disadvantages to the natural ***environment*** when cities and towns are located on the coast.
9. Theorise as to why so many Western Australians live in on the coast.
10. Look at **FIGURE 1**. Which two continents have the lowest urbanisation rates?

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

14.4 Is Australia an urbanised country?

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- determine whether Australia is an urbanised country
- identify consequences of urbanisation in Australia
- define the term 'ecological footprint'.

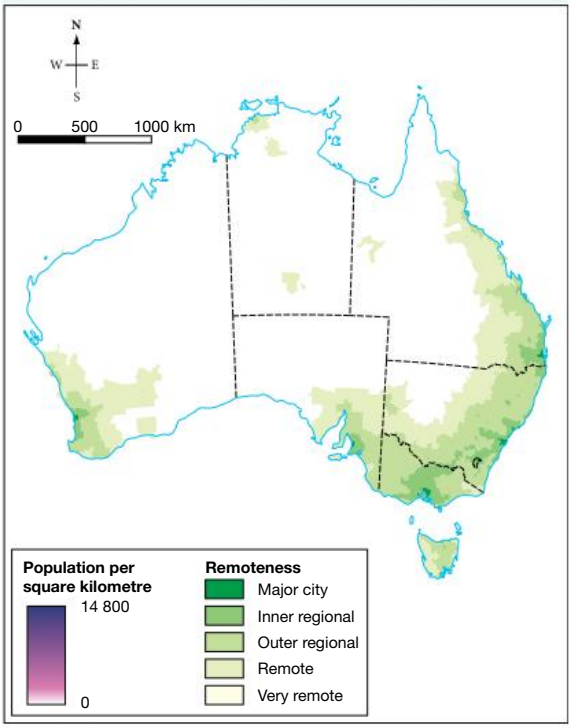
14.4.1 Urbanisation in Australia

With a population of nearly 25 million people in 2019 and a very large landmass, Australia has an average population density of only 3.3 people per square kilometre. Yet 85 per cent of people live within 50 kilometres of the coast, and most of these people – in 2018, 90 per cent of Australians – live in urban areas.

Australia is one of the most urbanised and coastal-dwelling populations in the world and the level of urbanisation is increasing. From Federation (1901) until 1976, the number of Australians living in capital cities increased gradually from a little over one-third (36 per cent) to almost two-thirds (65 per cent). Since 1977, the population in capital cities has grown to 66 per cent. It is estimated that by 2053 this will have grown to 72 per cent (with an estimated 89 per cent in the four largest capital cities).

All of Australia's capital cities have grown over time, as have many regional urban areas, such as the Gold Coast and Moreton Bay regions. This growth is expected to continue in the future (see **TABLE 1**).

FIGURE 1 A map of Australia's population distribution shows that it is highly urbanised and coastal.



Source: © Australian Bureau of Statistics

TABLE 1 Australian capital city 2019 populations and projected 2036 and 2066

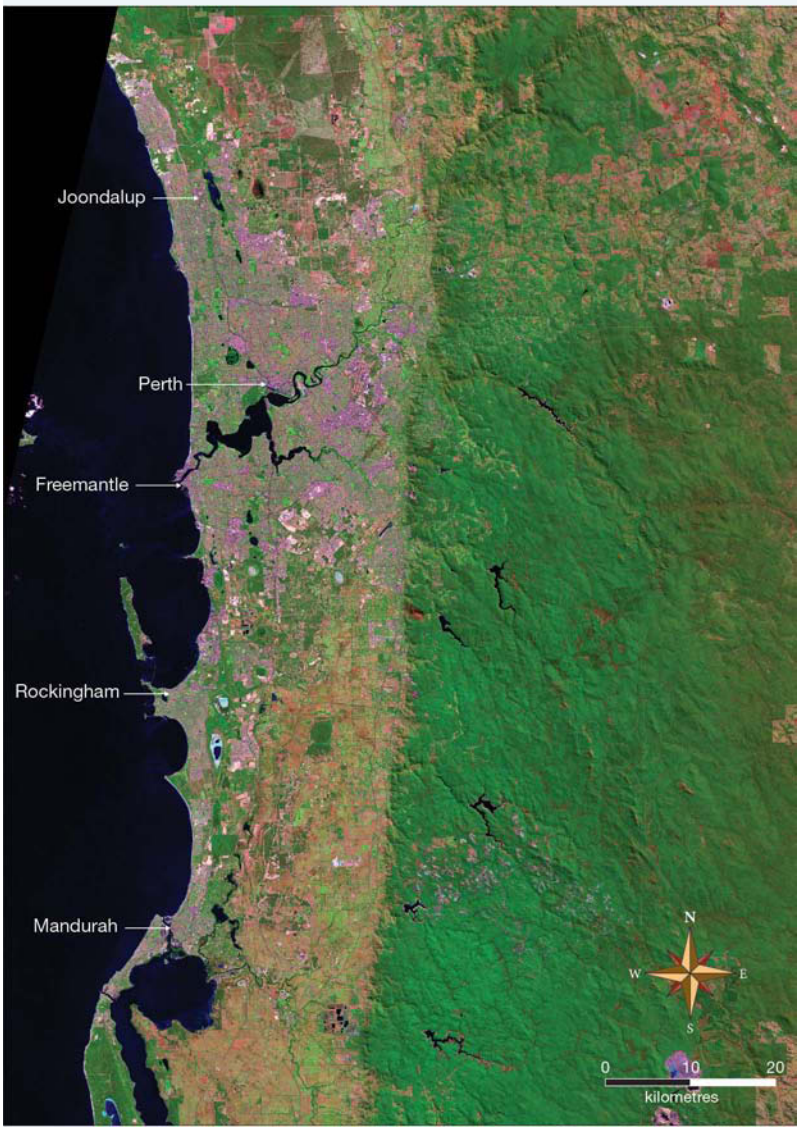
City	2019 population	Projected 2036	Projected 2066
Sydney	5 312 163	7 379 976	11 240 860
Melbourne	5 078 193	7 520 830	12 235 490
Brisbane	2 514 184	3 596 431	5 782 256
Perth	2 085 973	2 798 994	4 330 509
Adelaide	1 359 760	1 605 335	2 068 550
Hobart	236 136	297 085	466 752
Darwin	147 255	195 082	295 458
Total	16 140 773	23 393 733	36 419 875

Source: © Australian Bureau of Statistics

14.4.2 What are the consequences of a highly urbanised Australia?

When cities expand, the urban landscape invades the surrounding land, changing or removing natural ecosystems and swallowing up farmland. This expansion is known as **urban sprawl**. Perth in Western Australia is a very good example of a sprawling city. The metropolitan area of Perth extends approximately 120 kilometres from Alkimos in the north to Mandurah in the south (see **FIGURE 2**).

FIGURE 2 Perth's urban sprawl



As Perth has grown outwards, the coastal sand dune systems have been cleared of vegetation. Sand dunes are easy to shape for residential development, and this has led to rapid and extensive north–south expansion along the coast. Inland from the sand dunes, wetland areas – where intensive agriculture such as market gardening (vegetables) and viticulture (grapes) once dominated – have also been absorbed by urban growth. These wetlands have often been reshaped to capture water run-off from new housing developments. The fertile soil has been lost forever.

Historically, urban areas were settled where the land was flat, the water and soil were good and the climate was temperate – in other words, where good farmland is located. When cities spread, the sprawl takes over arable land (land able to be farmed for crops). Urban sprawl has long-term effects, because it is very difficult to bring the soil back to its former state once the predominant land use has been for buildings.

Many of Australia's cities, including Perth, have been called 'car cities' due to the reliance on private motor vehicles and road networks for transport. Perth's north to south morphology (shape) is reflected in its freeway system, which can become very congested. This has an impact on distances and commuting times for people travelling to and from workplaces.

urban sprawl the spreading of urban areas into surrounding rural areas to accommodate an expanding population

14.4.3 Ecological footprint

The amount of productive land needed on average by each person (in the world or in a country, city or suburb) for food, water, transport, housing and waste management is known as an **ecological footprint**. It is measured in hectares per person per year. In 2016, the World Wide Fund for Nature (WWF) reported that the average global ecological footprint was 2.8 hectares per person. In 2014, Australia had an ecological footprint of 6.9 hectares per person. The United States had an ecological footprint of 8.4 hectare per person in 2014.

TABLE 2 Ecological footprints of Australian capital cities

City	Ecological footprint value (hectares/person/year)
Perth	7.66
Canberra	7.09
Darwin	7.06
Brisbane	6.87
Sydney	6.82
Adelaide	6.72
Melbourne	6.33
Hobart	5.50

ecological footprint the amount of productive land needed on average by each person in a selected area for food, water, transport, housing and waste management

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigate additional topics > Urbanisation > **Urbanisation in Australia**

on Resources

Weblink UAE ecological footprint

14.4 ACTIVITIES

1. Use your atlas or online research to find an urban growth map for the capital city in your state or territory. Describe the ***change*** that has taken place over time. Using this map and a physical map of your state or territory, predict where future growth might occur. Justify your responses. **HASS skills: Evaluating**
2. Use internet sources (such as the **UAE ecological footprint** weblink in the Resources tab) to find out how the ecological footprint in the United Arab Emirates compares to that of Australian cities. What would happen if all cities had such a high footprint? **HASS skills: Analysing**

14.4 EXERCISE

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

Learning pathways

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

Check your understanding

1. What percentage of Australians live in urban areas? Of these, what percentage live in urban areas close to the coast?
2. What is meant by 'urban sprawl'?
3. List the disadvantages of urban sprawl.
4. Why has Perth grown rapidly to the north and south?

Apply your understanding

5. Refer to **FIGURE 1** and describe the population distribution of Australia.
6. Refer to **TABLE 1**. Draw a bar graph to show the predicted change in the populations of Australia's capital cities. What does your graph reveal?
7. Describe why the expansion of Perth inland could pose a long-term problem.
8. How could the expansion of Perth along a relatively narrow strip along the coast pose a problem for transport in the future?
9. a. What is an ecological footprint?
   b. Refer to **TABLE 3**. How does the ecological footprint data compare for Australian cities?
   c. How do these figures compare with the average global ecological footprint?

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

14.5 Comparing urbanisation in the United States and Australia

LEARNING INTENTION

By the end of this subtopic, you will be able to describe the similarities and differences in urbanisation between the United States and Australia, and identify the consequences on urbanisation in both places.

14.5.1 Urbanisation in the United States and Australia

Both the United States and Australia are very large countries that are highly urbanised. In fact, both are among the world's most urbanised nations.

The United States and Australia have some similarities and some differences in terms of how urbanised they are, as revealed in **TABLE 1** and **FIGURE 1**.

14.5.2 Causes of urbanisation

The causes of urbanisation are similar for both Australia and the United States. In each case, since the country was founded:

- fewer people were needed to work in rural areas as technology reduced the demand for labour on farms
- more jobs and opportunities were available in factories, which were located in urban areas
- the development of railways allowed goods produced in one city to be transported to rural and urban areas
- cities could grow and develop thanks to new technologies (steel-framed skyscrapers) and utilities (for example, electricity and water supply).

TABLE 1 A comparison of urbanisation in the United States and Australia

	United States	Australia
Population	326 700 000 in 2018	24 530 000 in 2018
Population distribution	Over 81% live in urban areas, and 19.5% in rural areas.	Over 89% live in urban areas, less than 11% in rural areas.
People living in large cities	The United States has 10 cities that have a population of more than 1 million people.	Australia has 5 cities that have a population of more than 1 million people.
	Approximately 1 of every 10 people in the United States live in either the New York or Los Angeles metropolitan areas.	Approximately 4 of every 10 people in Australia live in either Melbourne or Sydney.

14.5.3 Consequences of urbanisation in Australia and the United States

Conurbations

Sometimes there are so many cities in a particular region that they seem to merge almost into one city as they expand. A conurbation is made up of cities that have grown and merged to form one continuous urban area. Both the United States and, to a lesser extent, Australia have conurbations.

FIGURE 1 Population of the top 10 urban settlements in (a) the United States (2018) and (b) Australia (2019)

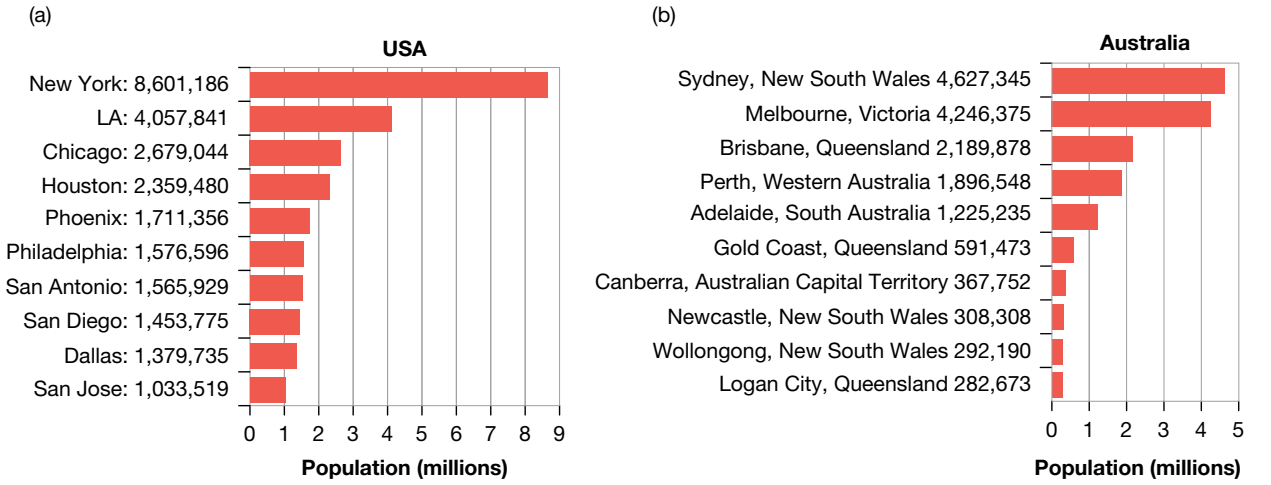
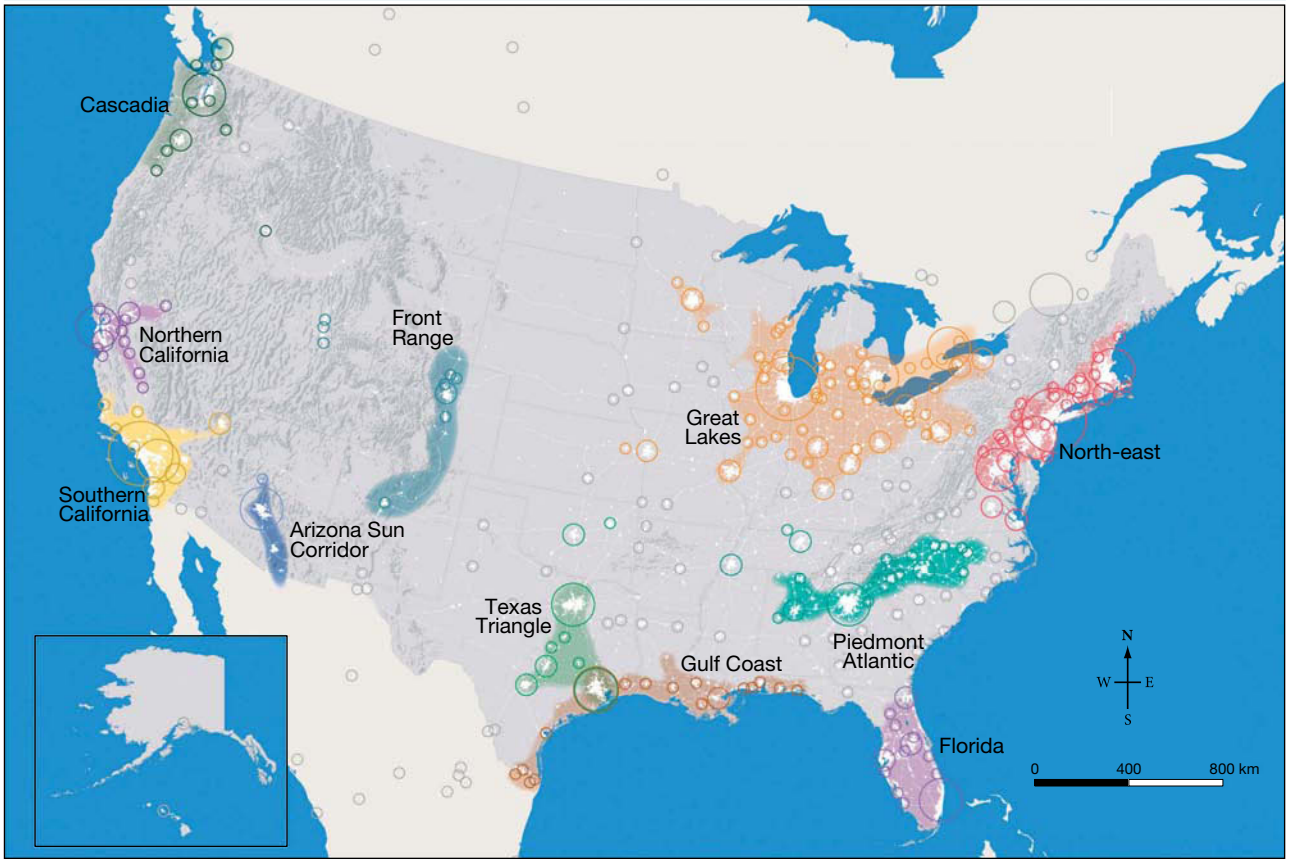


FIGURE 2 Conurbations in the United States



Source: Adapted with permission from Bernard Salt

United States

Eleven conurbations have been identified in the United States (see **FIGURE 2**). The major conurbation is in the north-east region. It is often called BosNYWash because it covers the area from Boston in the north, through New York to Washington D.C. in the south. This region is home to more than 50 million people (17 per cent of the US population) and accounts for 20 per cent of the gross domestic product (GDP) of the United States.

Australia

Australia, on the other hand, has four conurbations (see **FIGURE 3**). One is in south-east Queensland, one joins Melbourne and Geelong, one is from Perth to Mandurah. The Newcastle–Wollongong conurbation stretches for over 250 kilometres and is home to almost six million people.

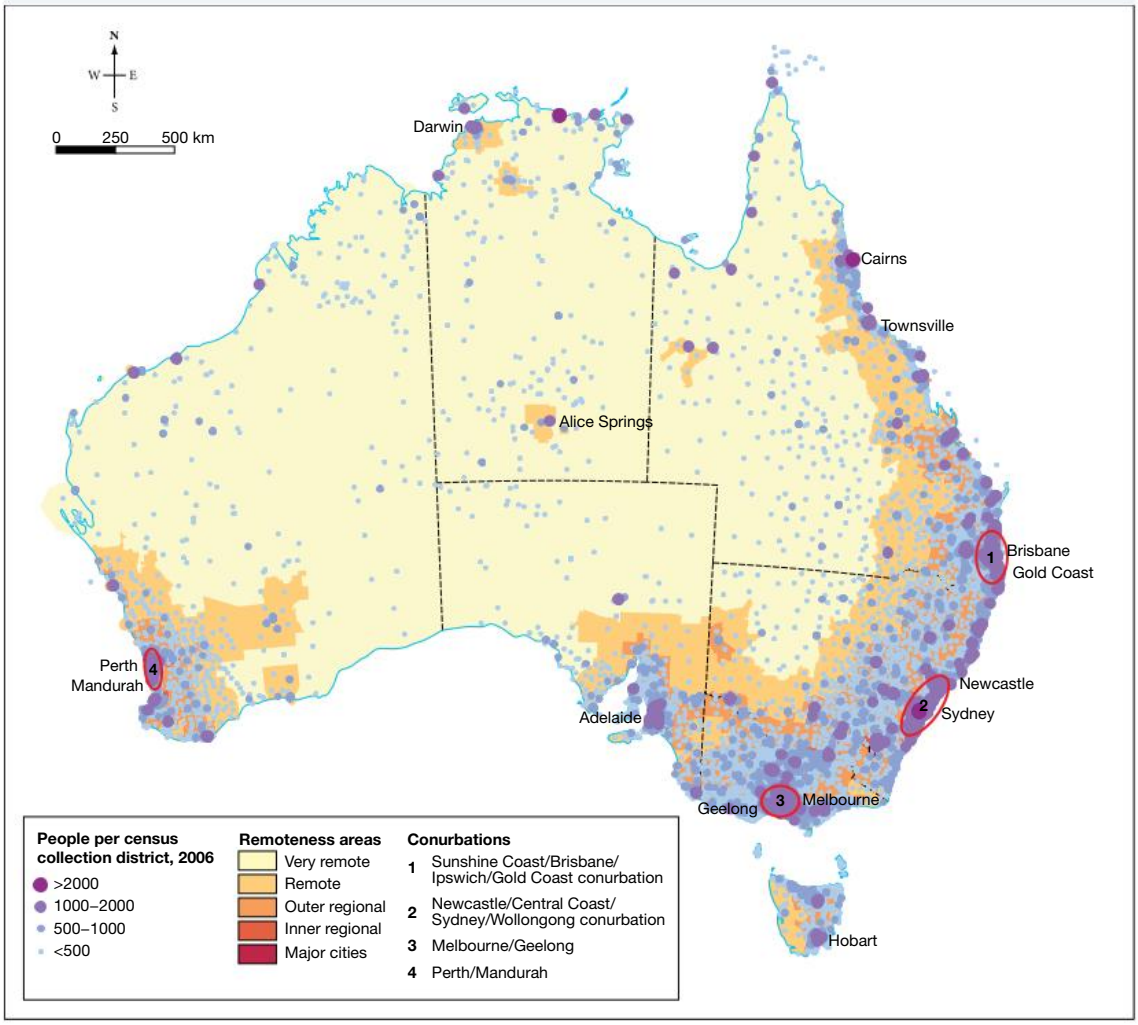
14.5.4 Other consequences of urbanisation

Homelessness

According to the US National Alliance to End Homelessness, as of 2018 there were around 553 000 homeless people in the United States on a given night. This represents 17 people in every 10 000. Although the trend has been downwards from 2007–17, there was a slight rise in 2018. The five states with the highest homeless counts in 2018 were California (129 972), New York State (91 897), Florida (31 030), Texas (25 310) and Washington State (22 305).

int-7860

FIGURE 3 Australia's population centres and conurbations



Source: Australian Bureau of Statistics

In comparison, census data shows that the number of homeless people in Australia increased by more than 15 000 (14 per cent) over five years to 2016. According to the Australian Bureau of Statistics, 116 000 people were homeless on census night in 2016, representing 50 homeless people per 10 000. This was an increase of 13.7 per cent from the 2011 census.

Health issues

High population densities in urban areas make it easier for diseases to be transmitted, especially in poor neighbourhoods. The urban poor suffer health issues caused by reduced access to sanitation and hygiene facilities and health care.

Pollution

Air pollution from cars, industry and heating affects people who live in cities. A study in the United States showed that more than 3800 people die prematurely in the Los Angeles Basin and San Joaquin Valley region of southern California because of air pollution. Generally, Australia has a fairly high level of air quality. Cars and industry are the main factors influencing air quality in urban areas.

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigating Australian Curriculum topics > Year 8: Changing nations > **Urbanisation in Australia and the USA**

on Resources

Interactivities Australia's population centres and conurbations (int-7860)
City folk (int-3117)

14.5 ACTIVITY

Choose one of the conurbations in the US and another in Australia. Draw up a table and choose five of the following headings and complete a comparison of the two cities:

- Population
- Pollution levels
- Health care (accessibility of medical care)
- Unemployment levels
- Minimum wage
- Quality of water supply
- Percentage of people with a tertiary education
- Population density
- Modes of public transport
- Traffic congestion

For your report you will need to look at both statistics and news reports in order to complete a comprehensive overview.

Geography concept: Sustainability

14.5 EXERCISE

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

Learning pathways

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

Check your understanding

1. Explain, in your own words, the causes of urbanisation in the United States and Australia.
2. What is a conurbation?

3. Why do you think both Australia and the United States have conurbations?
4. Why might there be more conurbations in the United States than in Australia?
5. Name the largest conurbation in the United States and in Australia.
6. How does Australia compare to the United States in regards to levels of homelessness?

Apply your understanding

7. How does the population of the United States compare to that of Australia? How many times larger (approximately) is one than the other?
8. Refer to **FIGURES 2** and **3**. Describe the distribution of the population in the United States and in Australia.
9. Refer to **TABLE 1**.
   a. Compare the ***scale*** of urbanisation in the United States and in Australia.
   b. Compare the numbers of people living in large cities in the United States and in Australia.
10. Refer to **FIGURE 1**.
   a. Compare the size of the 10 largest cities in the United States and in Australia.
   b. What might explain the differences you noticed?
11. What are the main causes of urbanisation in the United States and in Australia?

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

14.6 Effects of international migration on Australia

LEARNING INTENTION

By the end of this subtopic, you will be able to identify the main sources of international migration to Australia and outline the effects of international migration.

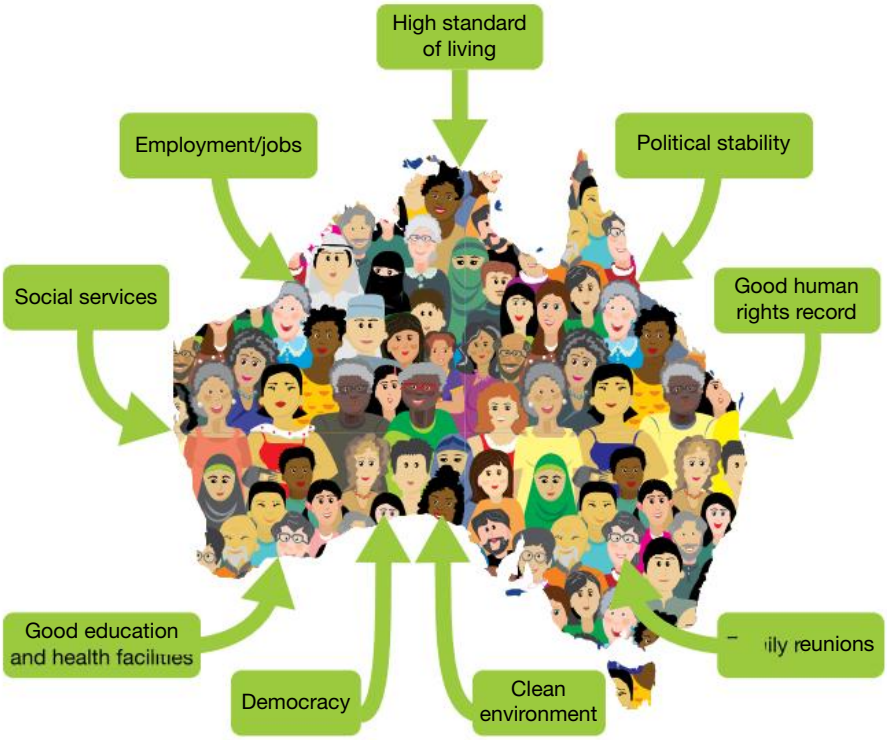
14.6.1 Why have people migrated to Australia?

migrant a person who leaves their own country to go and live in another

Australia is a land of **migrants**. In a way, all non-Aboriginal and Torres Strait Islander Australians are migrants – at some stage in the past, our ancestors came to this country to live. In 2016, nearly half of Australia's population was born overseas or had at least one parent who was born overseas.

Since the earliest times, people have moved from one part of the world to another in search of places to live. Migrants have come to Australia for many reasons (see **FIGURE 1**).

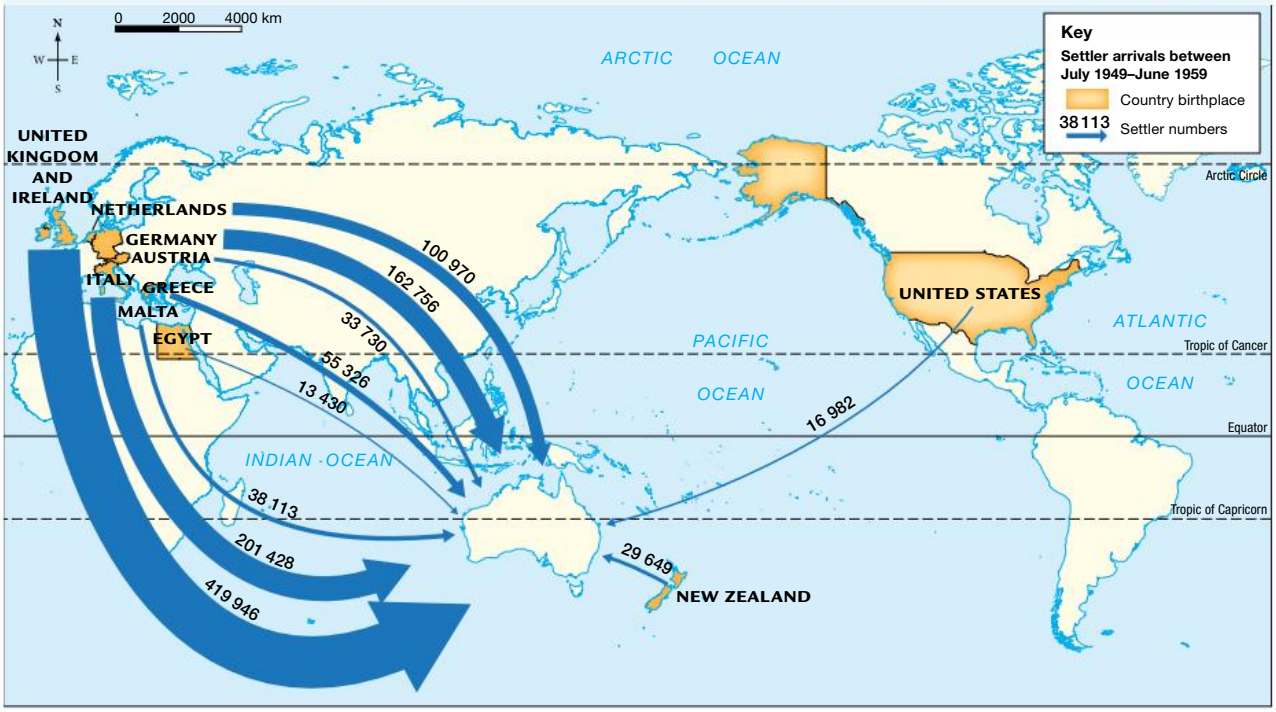
FIGURE 1 Reasons for immigration to Australia



14.6.2 Where have our migrants come from?

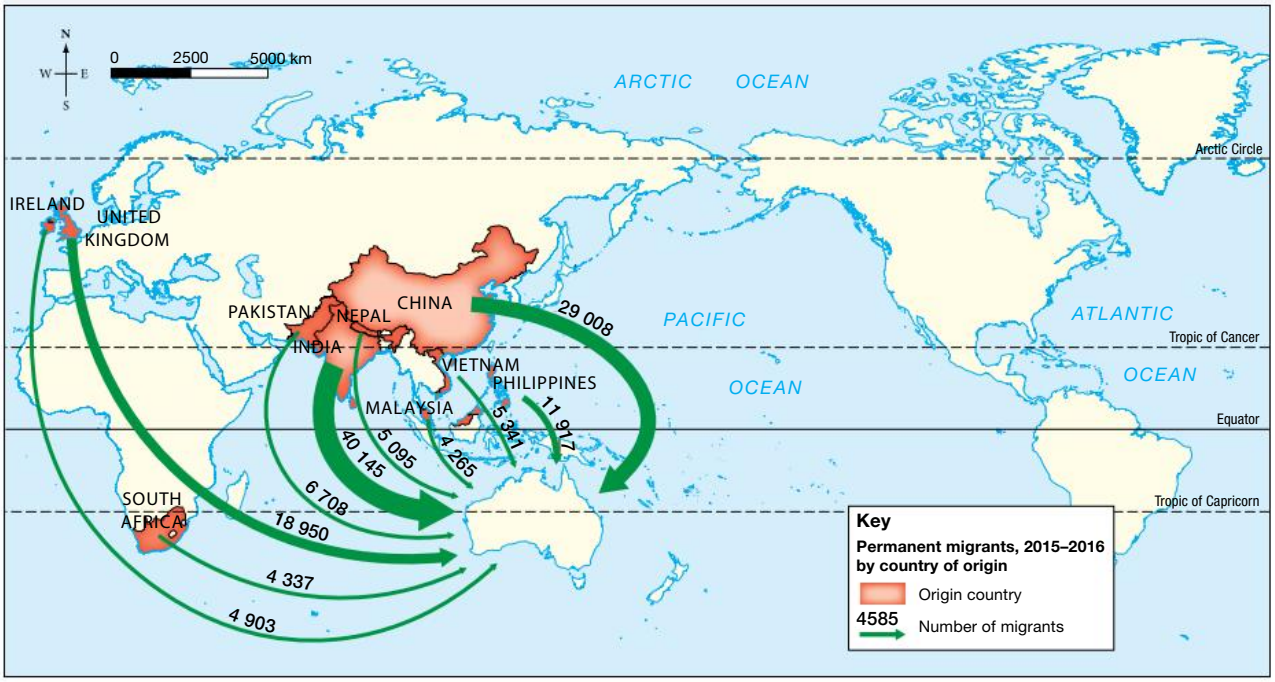
Between 1851 and 1861 more than 600 000 people came to Australia. While the majority were from Britain and Ireland, 60 000 came from Continental Europe, 42 000 from China, 10 000 from the United States and just over 5000 from New Zealand and the South Pacific. However, since 1975, the country has attracted more immigrants from Asia (see **FIGURE 3** and **TABLE 2**). Despite this, the most common ancestries today are still English, Australian, Irish, Scottish and Italian (see **TABLE 1**).

FIGURE 2 Origin of Australia's migrants, 1949–59



Source: Map drawn by Spatial Vision

FIGURE 3 Settler arrivals by country of birth according to the 2016 census



Source: Department of Immigration and Border Protection

TABLE 1 Ancestry by birthplace of parents, 2016

Ancestry (top responses)	Number of Australians	Percentage
English	7 852 224	33.6
Australian	7 298 243	31.2
Irish	2 388 058	10.2
Scottish	2 023 470	8.6
Chinese	1 213 903	5.2
Italian	1 000 006	4.3
German	982 226	4.2
Indian	619 164	2.6
Greek	397 431	1.7
Filipino	304 015	1.3
Vietnamese	294 798	1.3
Lebanese	230 869	1.0

Source: © Australian Bureau of Statistics, licensed under a Creative Commons Attribution 2.5 Australia licence

Where have our migrants settled?

When they arrive, migrants tend to live in capital cities because of the greater availability of jobs and to be near family members, friends and people from the same country (see **TABLE 2**). In 2016, 83 per cent of the overseas-born population in Australia lived in capital cities. Migrants around the world have tended to live in close proximity to each other when they first arrive in a new country/city. In most major cities there are suburbs that have a very definite cultural association and affiliations with distinctive ethnic groups. In Perth, suburbs that have sizable communities from one particular background include Baldivis (11.7 per cent English), Winthrop (7.7 per cent Malaysian) and Mindarie (7.5 per cent South African). Most cities in Australia have a 'Little Italy' or 'China Town'. In London, the suburb Earl's Court has been referred to by locals as 'Kangaroo Valley' because of the large number of Australians that live there.

About one-third of the population in our large cities was born overseas. Overseas-born migrants who arrived in the past 20 years are more likely to live in a capital city than those who arrived before 1992 (85 per cent compared to 79 per cent). Migrants from certain countries tend to be attracted to certin Australian states of territories more than others (see **TABLE 3**).

TABLE 2 Top 10 birthplaces of Australians, 2016

Country of birth	Number of people	Percentage of state population	Percentage of state population living in capital city
United Kingdom	1 087 749	4.6%	5.0
New Zealand	518 466	2.2%	2.3
China	509 563	2.2%	3.1
India	455 388	1.9%	2.7
Philippines	232 397	1.0%	1.2
Vietnam	219 349	0.9%	1.4
Italy	174 051	0.7%	1.0
South Africa	162 450	0.7%	0.8
Malaysia	138 371	0.6%	0.8
Sri Lanka	109 841	0.5%	0.7

Source: © Australian Bureau of Statistics

TABLE 3 Top five countries of birth by state or territory ('000), 2016

ACT	NSW	NT	Qld	SA	TAS	VIC	WA
England (13.3)	China (256.0)	England (6.7)	New Zealand (200.4)	England (103.7)	England (20.5)	England (192.7)	England (213.9)
China (11.9)	England (250.7)	Philippines (7.0)	England (219.9)	India (29.0)	New Zealand (5.4)	India (182.8)	New Zealand (87.4)
India (10.9)	India (153.8)	New Zealand (5.6)	India (53.1)	China (26.8)	China (3.3)	China (176.6)	India (53.4)
New Zealand (5.0)	New Zealand (127.9)	India (4.2)	China (51.6)	Italy (20.2)	India (2.1)	New Zealand (102.7)	Philippines (33.4)

Source: © Australian Bureau of Statistics

For example:

1. In 2016, Western Australia had the highest proportion of residents that were born in England of any state or territory (8.4 per cent), more than twice the Australian proportion of 4.1 per cent.
2. Western Australia recorded the highest proportion of the population born overseas at 35 per cent (895 400 persons).
3. Victoria recorded the second highest proportion with 30.7 per cent of its residents born overseas (1 892 500 persons).
4. Queensland had the highest proportion of the population that were born in New Zealand (4.5 per cent).
5. New South Wales had a higher proportion of residents born in China (3.3 per cent) and South Korea (0.8 per cent) than any other state or territory.
6. Victoria had the highest proportions of residents born in India (3.0 per cent), Vietnam (1.5 per cent), Italy (1.3 per cent), Sri Lanka (1.0 per cent) and Greece (0.9 per cent).
7. The Northern Territory had the highest proportion of people born in the Philippines (2.8 per cent).

Not only have immigrants tended to settle in larger cities, they have settled in particular suburbs and regions within the capital cities. For example, many migrants have settled in inner Sydney and especially in Sydney's western suburbs (see **FIGURE 4**).

14.6.3 Effects of international migration

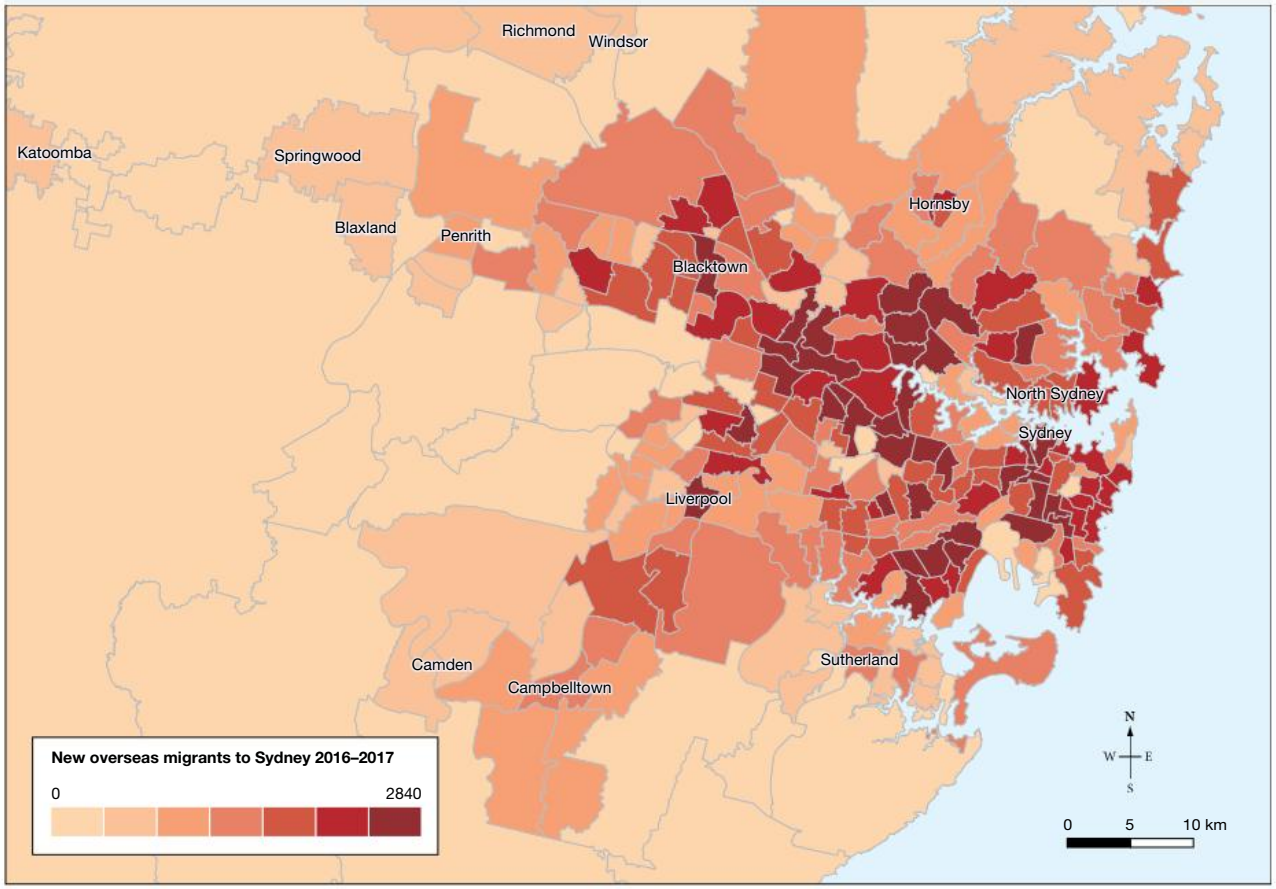
Social effects

Migration has helped increase Australia's population. The increase in population from only seven million at the end of World War II to more than triple that now is caused by both the arrival of migrants and increased birth rates since then (see **FIGURE 5**).

Migrants to Australia have contributed to our society, culture and prosperity. Many communities hold festivals and cultural events where we can all share and enjoy the foods, languages, music, customs, art and dance.

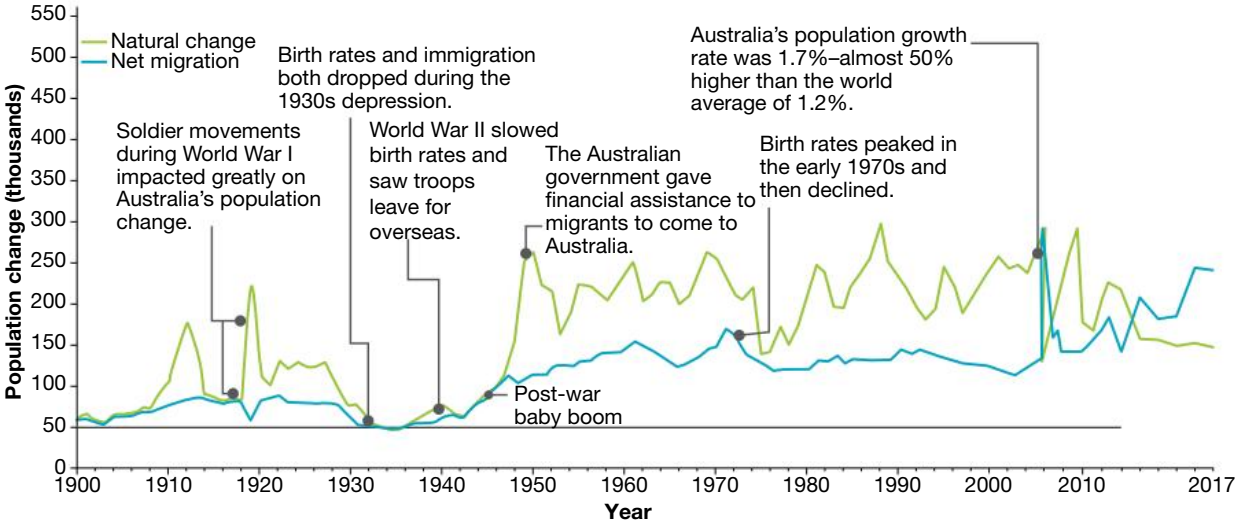
Australian society is made up of people from many different backgrounds and origins. People have come from more than 200 countries to live here. Therefore, we are a very multicultural society, which needs to respect and support differences, and the rights of everyone to have their own culture, language and religion.

FIGURE 4 Distribution of new overseas migrants to Sydney, 2017



Source: The Sydney Morning Herald

FIGURE 5 Australia's population growth, 1900–2017

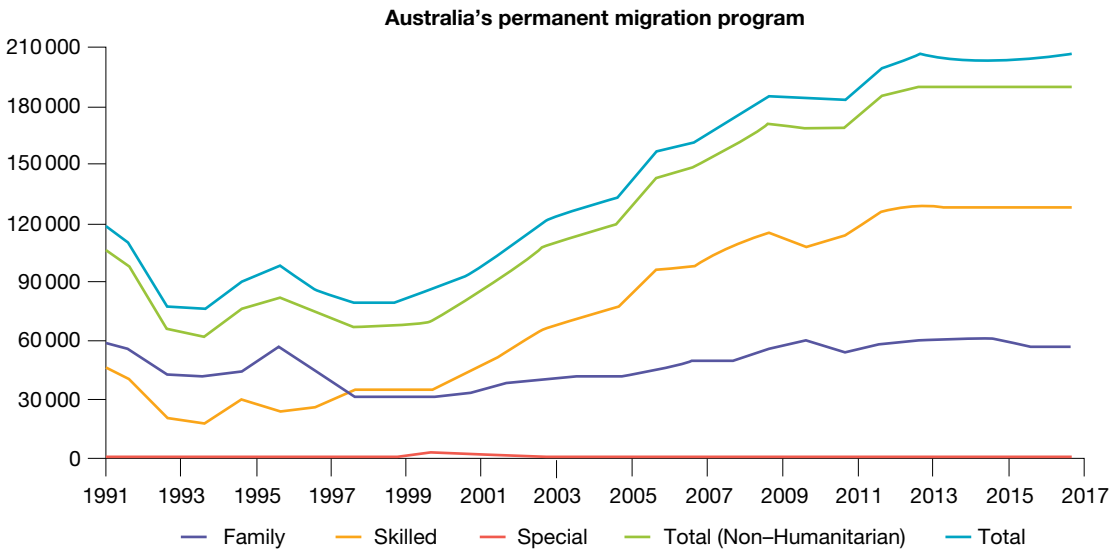


Economic effects

An increased population also means a greater demand for goods and services, which stimulates the economy. Migrants need food, housing, education and health services, and their taxes and spending allow businesses to expand. Apart from labour and capital (money), migrants also bring many skills to Australia (see **FIGURE 6**).

Migrants generate more in taxes than they consume in benefits and government goods and services. As a result, migrants as a whole contribute more financially than they take from society.

FIGURE 6 Types of migrants to Australia, 1991–2017



Source: Department of Immigration

Environmental effects

In the past, people argued that immigrants put pressures on Australia's environment and resources by increasing our population and the need for water, energy and other requirements. However, today many people believe that Australia's environmental problems are not caused by migration and population increase, but by inadequate planning and management.

14.6.4 The future

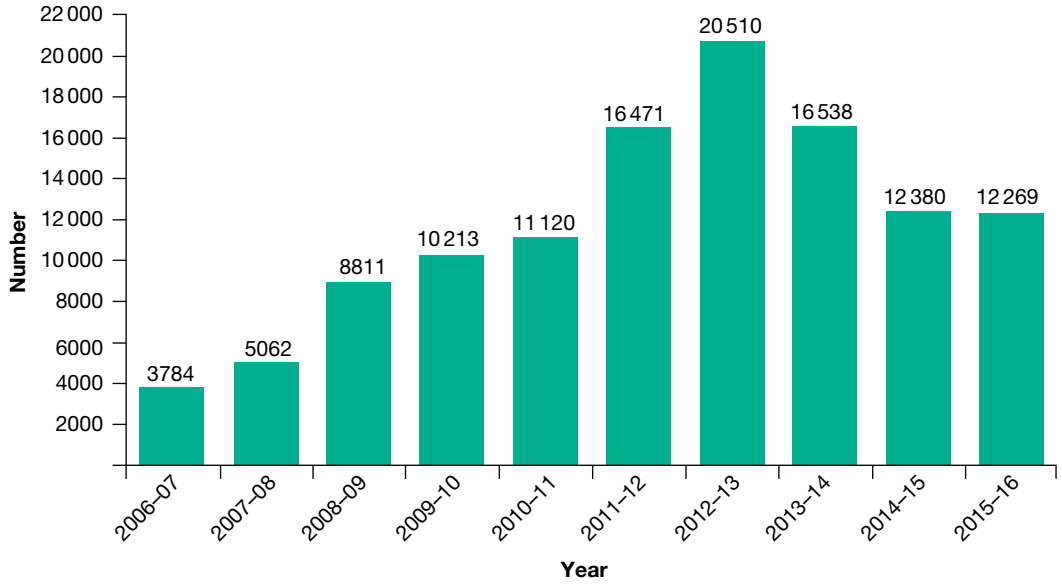
Since 1995, the Australian government has been working to encourage new migrants to settle in regional and rural Australia. The Regional Sponsored Migration Scheme (RSMS) allows employers in areas of Australia that are regional, remote or have low population growth to sponsor employees to work with them in those regions (see **FIGURE 7**). This takes the pressure off large cities and also provides regional employers with skilled workers. As we have seen, it has always been the case that most immigrants settle first in our cities, especially the state capitals. In 2017–18, 101 255 migrants arrived in Australia and of these, 6637 settled in regional Australia. There are many regional locations that want to attract migrants.

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigating Australian Curriculum topics > Year 8: Changing nations > **International migration and Australian cities**

FIGURE 7 Migrants arriving in Australia under the Regional Sponsored Migration Scheme, 2006–16



Source: Australian Government, Department of Immigration and Border Protection, *2015–16 Migration Programme Report*

14.6 EXERCISE

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

Learning pathways

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

Check your understanding

1. Using statistics, describe how Australia is truly a land of migrants.
2. Refer to **FIGURES 2** and **3**. Describe how the origins of our migrants have ***changed*** since 1949.
3. Refer to **FIGURE 7**. Describe how the number of migrants coming into Australia under the Regional Sponsored Migration Scheme ***changed*** between 2006 and 2016.
4. Refer to **FIGURE 5**. Describe how important migration has been in terms of Australia's population growth.
5. Look at **FIGURE 6**. Which two categories provide the greatest number of migrants to Australia?

Apply your understanding

6. Refer to **TABLE 3** and **FIGURE 4**. Describe how the distribution of the areas of settlement by migrants varies within Australia.
7. What do you consider to be the main reasons for why people would migrate to Australia?
8. What do you believe are the two main benefits of migration to Australia? Give reasons for your answer.
9. Study **FIGURE 5**. What impact did World War II have on Australia's birth rate and why?
10. Study **FIGURE 5**. In which year was Australia's birth rate almost 50 per cent more than the world average? Suggest a reason for this.
11. Why do think many new migrants tend to live in close proximity to each other when they arrive in a new country?

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

14.7 People on the move in Australia

LEARNING INTENTION

By the end of this subtopic, you will be able to explain why people living in Australia move to other places both domestic and international.

14.7.1 What makes Australians move?

In the United States, it is common for young people to leave home and travel to a university in another state or on the opposite side of the country. This is less common in Australia.

People move for many reasons. The average Australian will live in 11 houses during their lifetime – this means that many people will live in more. You may move to live in a larger house, or a smaller house as your family size or income changes. On retirement you may want to live near the mountains or the sea.

Thirty-nine per cent of Australians changed the place where they lived in the five years between 2006 and 2011. Most of the moves were limited to local areas, especially within capital cities. About 4.4 per cent of moves involved a change of state or territory.

The major movements of Australians since 1788 are shown in **FIGURE 1**. The Great Australian Divide separates Australia into two regions, known as the Heartland and the Frontier. The Heartland is home to more than 19 million people who live in a modern, urbanised, industrial state. The Frontier is a sparsely populated region of around three million people who live in a place that is remote but rich in resources.

Sea change or tree change

The population movement caused by '**sea change**' or '**tree change**' – a move from an urban environment to a rural location – is a national issue affecting coastal and forested mountain communities in every state in Australia. The movement involves people who are searching for a more peaceful or meaningful existence, who want to know their neighbours and have plenty of time to relax. Local communities in high-growth coastal and mountain areas often cannot afford the services and increased infrastructure, such as roads, water and sewerage, that a larger population requires. Geelong, Bussleton, Wollongong, Cairns and the Gold Coast are all popular places for sea changers to settle.

Not every sea changer loves their new life, and many return to the city. Factors such as distance from family, friends, cultural activities and various professional or health services may pull people back to their previous city residences.

Fly-in, fly-out workers

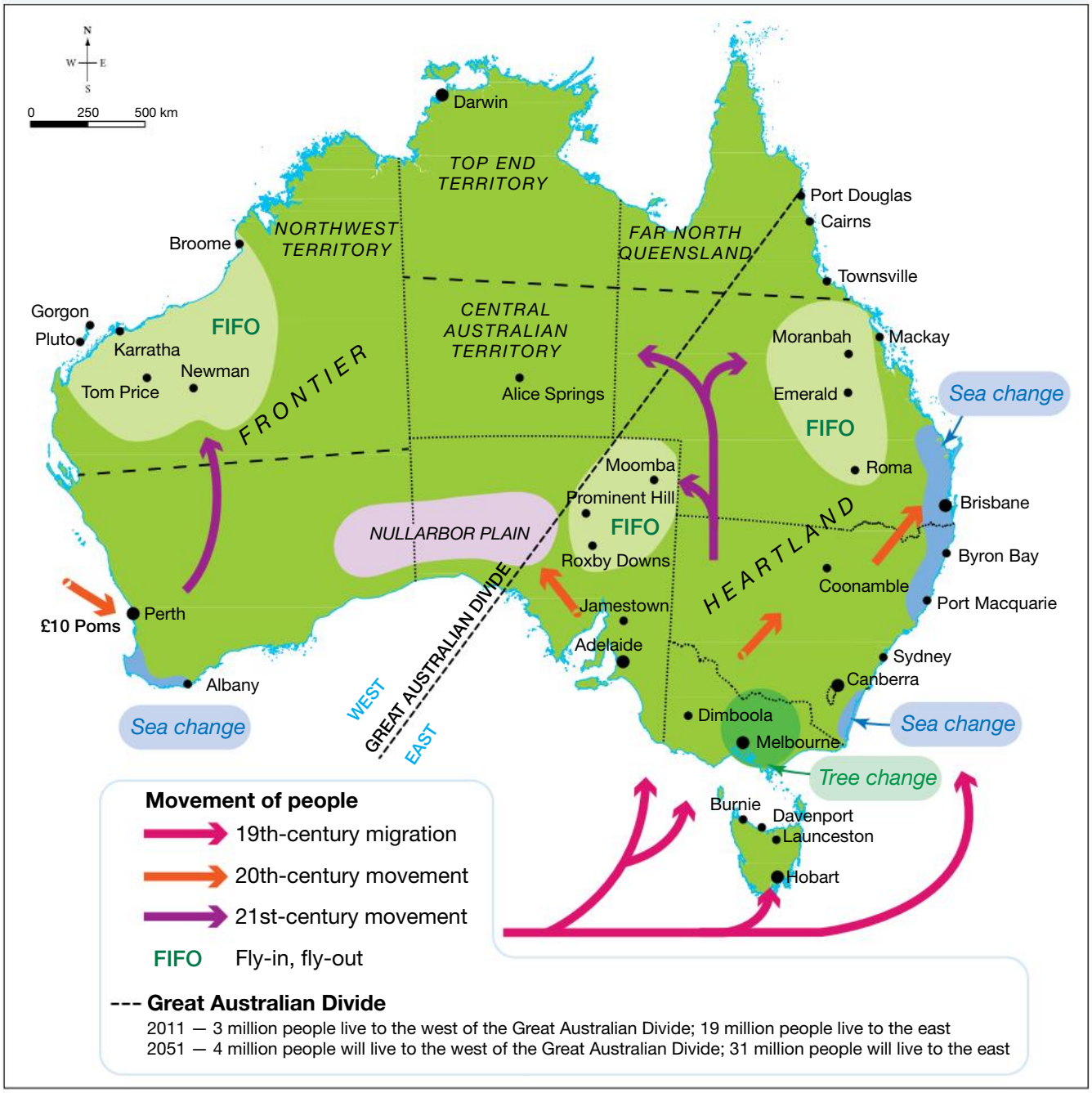
Employment opportunities have grown within the mining industry in places such as the Pilbara in northern Western Australia. However, local towns do not have the infrastructure, such as water, power and other services, to support a large population increase. Rental payments for homes can be as high as $3000 per week. One way to attract workers to these regions is to have a **fly-in, fly-out (FIFO)** workforce. FIFO workers are not actually 'settlers', because they choose not to live where they work. Some mine workers from the Pilbara live in Perth or even Bali, and commute to their workplace on a weekly, fortnightly or longer-term basis. The permanent residents of these remote towns are uneasy with the effects of the FIFO workforce because they change the nature of the town but choose not to make it their home. By not living locally, their wages leave the region and are not invested in local businesses and services.

sea change movement of people from major cities to live near the coast to achieve a change of lifestyle

tree change movement of people from major cities to live near the forest to achieve a change of lifestyle

fly-in, fly-out (FIFO) a system in which workers fly to work, in places such as remote mines, and after a week or more fly back to their home elsewhere

FIGURE 1 Australia's moving population



Source: Map drawn by MAPgraphics Pty Ltd, Brisbane; most recent data available at time of publishing

Seasonal agricultural workers

Many jobs in rural areas are seasonal, such as the picking and pruning of grapes and fruit trees, which requires a large workforce for only a few months each year. Many children born in rural areas leave their homes and move to the city for education, employment or a more exciting lifestyle than the one they knew in the country. This means that there are not enough agricultural workers to cover the seasonal activities.

Backpackers and people from Asia and the Pacific Islands on short-term work visas often provide the seasonal workforce in these regions. Country towns such as Robinvale in northern Victoria now have Asian grocery stores, an Asian bakery and a shop selling Tongan canned goods, providing the seasonal farm workforce with a taste of home. Robinvale has many people from different nationalities living as both permanent residents and seasonal workers. These include people from a wide variety of countries, including Italy, Tonga, Vietnam, Malaysia, New Zealand, China and Greece.

FIGURE 2 Newman, a mining town in the Pilbara region of Western Australia, provides accommodation for FIFO miners.

14.7 ACTIVITY

Research what has happened to real estate prices in your suburb or town over the last fifteen years. Do you think housing prices have contributed to an increased number of 'sea changers'? **Geography concept: Change**

14.7 EXERCISE

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

Learning pathways

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

Check your understanding

1. What does FIFO mean?
2. What is the difference between a tree changer and a sea changer?
3. Where do the majority of Australians live?
4. List the positive and negative factors of making a tree change or sea change as a:
   a. family with young children
   b. retired couple.

Apply your understanding

5. Look carefully at **FIGURE 1** and explain how the gap between Australia's east and west is predicted to alter over the next 40 years.
6. A more recent population migration is towards high-rise apartment living in the centre of major cities. How might this trend impact on these new residents and the sustainability of the environment their migration is creating? Use examples to justify your stance.
7. Refer to **FIGURE 1**. Explain the difference between Australia's Heartland and its Frontier.
8. What factors do you think initially led to people leaving rural areas for life in the city?

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

14.8 People on the move in China

LEARNING INTENTION

By the end of this subtopic, you will be able to describe the rural–urban migration patterns in China.

14.8.1 China's urban population

China has been experiencing a changing population distribution. In 2012, the country's urban population became larger than that of rural areas for the first time in its history, as rural people moved to towns and cities to seek better living standards. China has become the world's largest urban nation.

Chinese labourers from the provinces have been moving to coastal cities in search of job opportunities, following reforms in 1978 that opened up China to foreign investment. Until then, rural–urban migration was strictly forbidden in China. Since then, more than 150 million peasants have migrated from the inner provinces to cities, mainly on the east coast. About half of rural migrants moved across provinces. This is the largest migration wave in human history (see **FIGURE 1**).

FIGURE 1 People from Chinese inland provinces with lower wages and Human Development Index (HDI) values have moved to cities and provinces with higher HDIs and incomes.

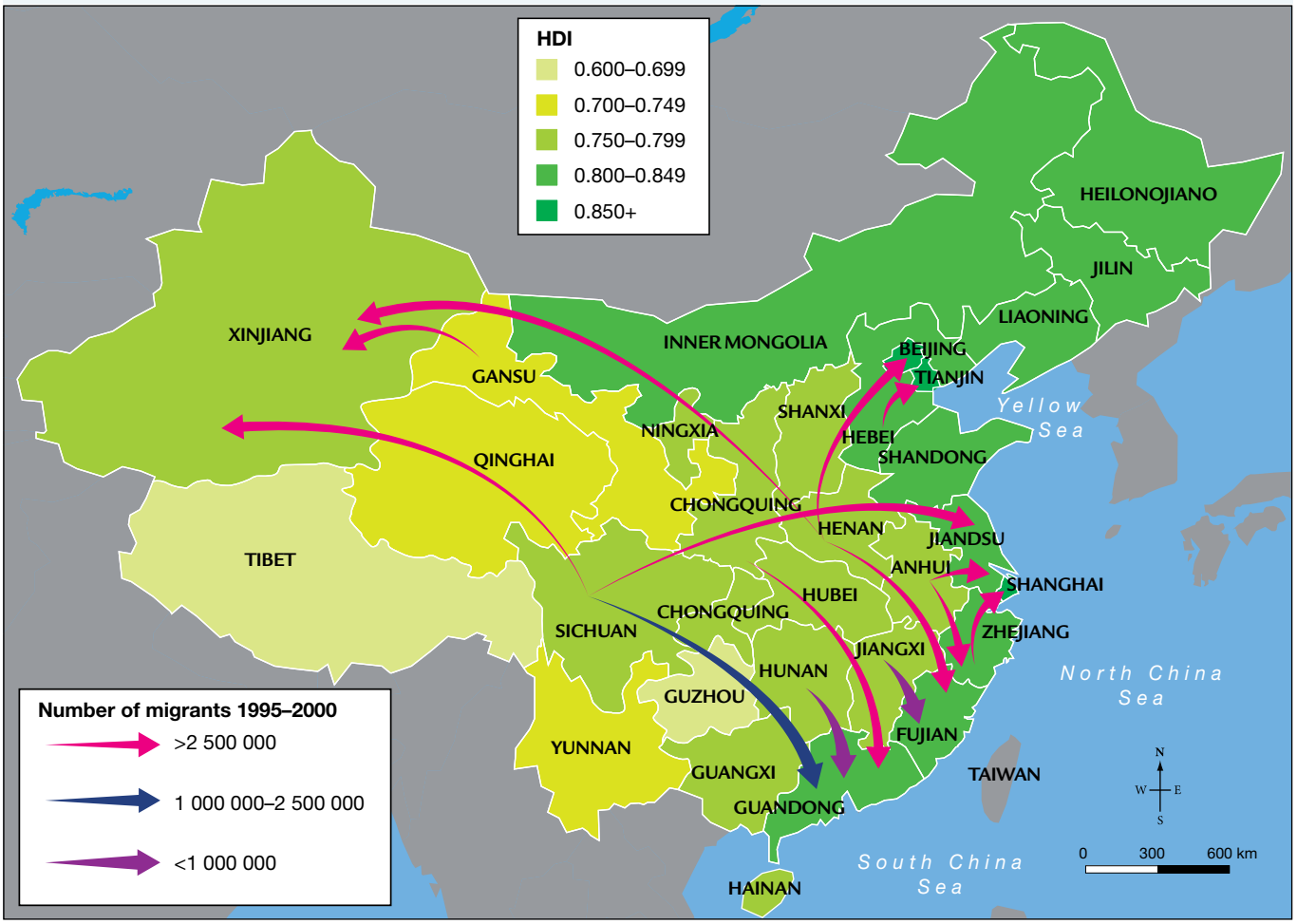


FIGURE 2 A dramatic rural–urban migration shift has been occurring in China.

Pull factors

int-7861

Pull factors are factors about a place that attract people to move to them. Migrants from rural areas are attracted to urban regions largely for economic reasons – a higher income is achievable in a city. The average income of rural residents is about one-fifth that of urban residents on the east coast of China. Social factors are also important, with more opportunities for career development being available in cities. Many people also desire a more modern urban lifestyle, with the benefits brought about by access to improved infrastructure and technology.

Push factors

int-7862

Push factors are factors that encourage people to move away from a place. Increasing agricultural productivity since the late 1970s has resulted in fewer labourers being needed on farms and thus a huge surplus of rural workers. These people have been forced to move to more urban areas in order to find employment. Agricultural production has meanwhile become less profitable, so workers have again been driven to cities to try to improve their economic situations.

Political factors are also influential. China's central planners have encouraged local leaders in poor regions to encourage people to move to the cities. Their slogan was 'the migration of one person frees the entire household from poverty'.

FIGURE 3 In 2017, Shanghai's population was estimated to be 24.21 million.

14.8.2 Consequences of rural–urban migration

There are several positive and negative consequences of the rural–urban migration in China. These include:

- China's urban population rose from around 170 million people in 1978 to 540 million in 2004, and then to nearly 839 million in 2018.
- In 1949, 89 per cent of people lived in rural areas; by 1979 this figure had dropped to 81 per cent. In 2018 it was 59.3 per cent.
- It is expected that by 2050, only 25 per cent of China's population will be living in rural areas, while the number of city-dwellers will reach 940 million people.
- Some people predict that by 2025, China will have 19 super-cities (extremely large cities that house millions of people) with an average population of 25 million people each.
- Labourers from rural regions working in cities have to leave their families for months at a time or more.
- Tens of millions of people are classified as rural dwellers, even though they spend most or all of their time working in the cities. These people are denied access to social services, including subsidised housing, income support and education for their children.
- A shift to an increased urban population results in reduced population pressures on the land.
- Up to 40 per cent of rural income comes from urban workers sending money to their families at home.

DISCUSS

If 'a shift to an increased urban population results in reduced population pressures on the land', discuss what pressures might be added to urban areas. **General capability: Critical and creative thinking**

Explore more with myWorldAtlas

Deepen your understanding of this topic with related case studies and questions.

- Investigating Australian Curriculum topics > Year 8: Changing nations > **China**

on Resources

Interactivities	Examples of push factors (int-7861) Examples of pull factors (int-7862) Urban/rural China (int-3116)
Weblink	China's urban growth
Google Earth	Shanghai

14.8 ACTIVITIES

1. Use internet sources (such as the **China's urban growth** weblink in the Resources tab) to respond to the following:
   a. Describe population ***changes*** in the various cities in China.
   b. 'The largest population growth has occurred in cities on China's coastline.' How true is this statement? Explain your answer using figures from the website.
2. Creatively (using a graphic or diagram) present some of the dramatic statistics in this subtopic to inform others of the ***scale*** of the ***changes*** happening to the distribution of China's population.

Geography concepts: Change, Scale

14.8 EXERCISE

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

Learning pathways

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

Check your understanding

1. How has the percentage of people living in China's rural areas changed since 1949? What is this number expected to be in the future?
2. Why is 2012 a significant moment in China's history?
3. Describe the main ***changes*** that have occurred within China's urban population since 1978.
4. Describe some of the pull factors that led rural peasants to leave their homes for the cities.
5. Describe some of the push factors that led rural peasants to leave their homes for the cities

Apply your understanding

6. Explain in your own words the main reasons for the dramatic ***change*** in China's population distribution.
7. Classify each of the various consequences of this ***change*** as positive or negative.
8. What does the population shift described say about the changes in the Chinese economy?
9. What potential problems could occur as a consequence of China's unprecedented population shift?
10. Why would the Chinese government encourage this mass movement of people from the country to the cities?

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

14.9 Thinking Big research project: Multicultural Australia photo essay

Scenario

Australia is celebrating a new national holiday – Multicultural Australia Day – to acknowledge the fact that Australia is made up of people from many backgrounds and origins. You are entering the inaugural photo essay competition, which aims to show aspects of Australia's rich multicultural heritage.

Task

Create a photo essay (a story told through a series of photographs with some accompanying text). The purpose of this photo essay is to inform people of the rich and diverse cultures that make up Australian society. The Multicultural Australia Day competition has a few rules:

- The photo essay must reflect the current top five migrant groups in Australia.
- It must also reflect a selection of migrant heritage from your Geography class.
- Aboriginal and Torres Strait Islander peoples must also be included in the essay.

You will conduct research on the cultural groups and provide a series of photos with captions that reflect these cultural practices.

Follow the steps detailed in the **Process** section to complete this task.

Process

- Open the ProjectsPLUS application for this topic. Click the **Start new project** button to enter the project due date and set up your project group. Working in pairs will enable you to share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered.
- In the **Media centre** you will find an assessment rubric to guide your work and some weblinks that will provide a starting point for your research
- Your teacher will help you conduct a survey to establish the migrant heritage of your class. Once this survey has been completed, choose three migrant groups from your class to research in addition to the top five migrant groups in Australia (do not repeat groups). Your photo essay will therefore include a total of eight migrant groups, plus Aboriginal and Torres Strait Islanders.
- Once your migrant groups have been decided, you must conduct research on the following for each group (see the weblinks in the Media centre for some starting sites):
  - current number of each migrant group in Australia
  - cultural heritage – festivals, foods, music and dance
  - language and religion.
- If you can take some of the photos yourself, do so. Otherwise, use photo sites to search for and select the images for your photo essay. Keep a record of the source of your photos and the photographer and include them at the end of your photo caption.
- Carefully plan your photo essay. Sequence the images to tell your story. Use the Storyboard template weblink in the Media centre to help you organise the sequence of photos.
- Add text to each photo in the form of a caption. The captions do not need to be short and can help explain facts that the photo does not show. This information will come from the research you conducted earlier and should include facts about the migrant group.
- The last photo will include a concluding caption on the importance and significance of a multicultural Australia.
- Submit your photo essay to your teacher for assessment and feedback.

on Resources

ProjectsPLUS Multicultural Australia photo essay (pro-0173)

14.10 Review

14.10.1 Key knowledge summary

14.2 Where do Australians live?

- Australia's population is mostly distributed along the eastern coastline.
- There is a strong relationship between population distribution in Australia and the distribution of rainfall and availability of water.
- Australia has a low population density overall but this is unevenly distributed.
- There is a different population distribution between Australia's current population and the Aboriginal and Torres Strait Islander population prior to Euopean settlement.
- The number and distribution of Aboriginal and Torres Strait Islander peoples has changed significantly over time.

14.3 What is urbanisation?

- Urbanisation is the growth and expansion of urban areas and involves the movement of people from rural to urban areas.
- Patterns of urbanisation across the world are uneven.
- Coastal settlements are often highly urbanised.

14.4 Is Australia an urbanised country?

- Australia is a highly urbanised country.
- Urban sprawl, especially in the larger cities of Sydney, Melbourne and Brisbane, is a characteristic of urbanisation in Australia.

14.5 Comparing urbanisation in the United States and Australia

- Australia and the United States are both countries with large land areas and are very urbanised.
- The two countries share patterns of growing urbanisation and consequences such as homelessness and pollution.
- The United States has a much larger population and many more large cities than Australia.

14.6 Effects of international migration on Australia

- Australia is a migrant nation with people from many nations.
- There are people with many different ancestries that make up the Australian population.
- Migrants predominantly settle in large cities, especially capital cities.

14.7 People on the move in Australia

- Australians move homes and states much more than people from many other countries.
- The eastern seaboard is the most attractive place for Australians to move.

14.8 People on the move in China

- China's population is rapidly becoming more urban.
- Large numbers of surplus agricultural workers move to urban areas to find work.

14.10.2 Key terms

country the area of land, river and sea that is the traditional land of each Aboriginal language group or community; the place where they live

ecological footprint the amount of productive land needed on average by each person in a selected area for food, water, transport, housing and waste management

fly-in, fly-out (FIFO) a system in which workers fly to work, in places such as remote mines, and after a week or more fly back to their home elsewhere

geographical factors reasons for spatial patterns, including patterns noticeable in the landscape, topography, climate and population

migrant a person who leaves their own country to go and live in another

population density the number of people living within one square kilometre of land; it identifies the intensity of land use or how crowded a place is

population distribution the pattern of where people live; population distribution is not even – cities that have high population densities and remote places such as deserts usually have low population densities

sea change movement of people from major cities to live near the coast to achieve a change of lifestyle

tree change movement of people from major cities to live near the forest to achieve a change of lifestyle

urban relating to a city or town; the definition of an urban area varies from one country to another depending on population size and density

urbanisation the growth and expansion of urban areas

urban sprawl the spreading of urban areas into surrounding rural areas to accommodate an expanding population

14.10.3 Reflection

Reflect on your learning using the activities and resources provided.

Revisit the inquiry question posed in the Overview:

Why do millions of people choose to live so close to other people in busy urban areas?

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

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5544)
Reflection (ewbk-5543)
Crossword (ewbk-5542)
Student Learning Matrix (ewbk-5534)

Interactivity Urbanisation and people on the move crossword (int-7600)

14.10 Review exercise

Multiple choice

1. What places in Australia tend to have the greatest population densities?
   - **A.** Regional areas
   - **B.** Rural areas
   - **C.** Capital cities
   - **D.** Central Australia

2. What places in Australia tend to have the lowest population densities?
   A. Inland regional and remote areas
   B. Capital cities
   C. Along the coast
   D. Eastern Australia
3. Generally, there is a strong interconnection between locations of regions with high population density and:
   A. lower rainfall in Australia
   B. higher rainfall in Australia
   C. higher temperatures in Australia
   D. lower temperatures in Australia.
4. In Australia, if rainfall increases, it would be expected that there would be:
   A. lower population density
   B. higher population density
   C. no change in population density
5. What does the term 'urbanisation' mean?
   A. Movement of people from urban to rural areas
   B. Growth and expansion of rural areas
   C. Lower population densities in urban areas
   D. Growth and expansion of urban areas
6. Today, _____ of the world's population lives along or within 200 kilometres of a coastline.
   A. none
   B. a quarter
   C. half
   D. all
7. What is the Australian government encouraging regarding migration to Australia in the future?
   A. For migrants to continue to settle in capital cities
   B. For fewer migrants to settle in regional and rural Australia
   C. For more migrants to settle in regional and rural Australia
   D. For migrants to move from rural Australia to more densely population cities

Short answer

8. Study **FIGURE 1**. Brainstorm and make a list of all the effects that urban growth might have on this coast.
9. Describe the term 'conurbation'.
10. Identify two factors influencing the uneven distribution of Australia's population over **space**.
11. One feature of any large urban area is the concentration of high rise buildings. Give one reason for this feature.
12. Explain what is meant by the term 'fly-in fly-out (FIFO) worker'.
13. Explain the difference between population distribution and population density.
14. Define the term 'pull factor' and give one example from the place that you live.
15. Define the term 'push factor' and give one example from the place that you live.

FIGURE 1 Urban growth on the coast of Tel Aviv, Israel

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 14 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

14.1 Overview

Video eLesson
- Our urban world (eles-1628)

14.2 Where do Australians live?

eWorkbook
- Urban places (ewbk-5537)
- Sustainable cities in Australia (ewbk-5541)

Interactivities
- Australia's population distribution and density (int-7826)
- The eight main climatic zones of Australia (int-7859)

Weblink
- ABS: Aboriginal and Torres Strait Islander health

myWorld Atlas
- Investigate additional topics > Population > **Population of Australia**
- Investigate additional topics > Population > **Aboriginal and Torres Strait Islander peoples**

14.3 What is urbanisation?

eWorkbook
- Urbanisation (ewbk-5535)
- Population of South American cities (ewbk-5540)

Interactivities
- The growth in urban populations over time (int-7857)
- Percentage of population living in urban centres, 2017 (int-7868)
- Urban Indonesia (int-3115)

Google Earth
- Perth
- Indonesia

myWorld Atlas
- Investigate additional topics > Urbanisation > **World urbanisations**

14.4 Is Australia an urbanised country?

Weblink
- UAE ecological footprint

myWorld Atlas
- Investigate additional topics > Urbanisation > **Urbanisation in Australia**

14.5 Comparing urbanisation in the United States and Australia

Interactivities
- Australia's population centres and conurbations (int-7860)
- City folk (int-3117)

myWorld Atlas
- Investigating Australian Curriculum topics > Year 8: Changing nations > **Urbanisation in Australia and the USA**

14.6 Effects of international migration on Australia

eWorkbook
- Impacts of international migration (ewbk-5536)

myWorld Atlas
- Investigating Australian Curriculum topics > Year 8: Changing nations > **International migration and Australian cities**

14.8 People on the move in China

eWorkbook
- Why do people move to urban places? (ewbk-5538)
- How to urban areas affect people's way of life? (ewbk-5539)
- The causes and consequences of urbanisation in Indonesia (ewbk-6715)

Interactivities
- Examples of push factors (int-7861)
- Examples of pull factors (int-7862)
- Urban/rural China (int-3116)

Weblink
- China's urban growth

Google Earth
- Shanghai

myWorld Atlas
- Investigating Australian Curriculum topics > Year 8: Changing nations > **China**

14.9 Thinking Big research project: Multicultural Australia photo essay

ProjectsPLUS
- Multicultural Australia photo essay (pro-0173)

14.10 Review

eWorkbook
- Reflection (ewbk-5543)
- Crossword (ewbk-5542)
- Student Learning Matrix (ewbk-5534)

Interactivity
- Urbanisation and people on the move crossword (int-7600)

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

HISTORY

HISTORY CONCEPTS AND SKILLS

15 History concepts and skills 512

OVERVIEW

16 From the ancient to the modern world 538

DEPTH STUDY 1: INVESTIGATING MEDIEVAL EUROPE (C. 590–1500)

17 Investigating medieval Europe 595

DEPTH STUDY 2: INVESTIGATING THE BLACK DEATH IN ASIA, EUROPE AND AFRICA (14TH CENTURY PLAGUE)

18 Investigating the Black Death in Asia, Europe and Africa 670

15 History concepts and skills

15.1 Overview

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

15.1.1 Links with our times

The period of medieval Europe spanned approximately one thousand years (from 500 CE to 1500 CE) and included a range of events that have helped to shape our modern way of life. Many of the foundations of modern western society were laid in medieval times.

During the Middle Ages, the nature and organisation of society experienced fundamental changes under the laws of feudalism. The rise of Islam saw the growth of a new religion that would clash horribly and violently with Christianity for decades. In our modern-day society, elements of social hierarchy are still very visible and differing religions continue to clash over some issues.

The later medieval period saw many advances in technology and learning that continue to influence our lives today. These include the invention of gunpowder, advancements in agriculture and construction, the early models of the printing press and the establishment of universities and higher education.

By the end of the Middle Ages, advancements in technology and agriculture, the discovery of a world beyond what was previously known, the movement of peoples and new knowledge relating to the human body and medicine had given way to a new, perhaps easier way of life.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-6423)

Video eLesson Investigating the past (eles-1057)

SOURCE 1 These people are in costume to re-enact a medieval battle. Their costumes may be familiar from the many movies and books written about this time.

15.2 Concepts in history

LEARNING INTENTION

By the end of this subtopic, you will be able to explain how and why we study history, and describe the key historical concepts.

15.2.1 How and why do we study history?

History is an amazing journey of discovery. As you move through the different time periods and learn about how past societies operated, you will meet people whose lives functioned completely differently to your own. You may be confused or amazed at how these people could live in such a manner. You will also meet people whose lives share similar ideas, events and characteristics to your own life. You may find that you connect with these people, though they lived long before you existed!

SOURCE 1 A woodblock ukiyo-e print by Utagawa Kunisada II of a puppet in kimono being manipulated by two bunraku puppeteers, c. 1850

What is a historian?

In our own times, there are still many obvious links with the past. For example, many people in modern society live in cities and towns that were built during medieval times. Countless places throughout Europe have managed to retain much of their medieval architecture and charm. Research into past civilisations, cultures and societies is the work of historians. They try to build up a picture of how people in other times lived and behaved. Historians try to make sense of past ideas, customs and beliefs, the ways people were ruled and how they made their living. Historians inquire into the past by examining sources. From the grand city of Prague, to the tiny island of Mont Saint Michel, there are many places where we can examine sources to help tell us about how people lived in times gone by. Historians also try to understand and explain how people's lives were shaped by other people and events, what they thought about their times and how they brought about changes in their own world.

In this topic we will become familiar with the following concepts:

- Sources – Refers to any written or non-written materials that can be used to investigate and provide information about the past
- Evidence – The information obtained from sources that are valuable to investigations
- Continuity and Change – Aspects of life or society that have remained the same or changed over a period of time
- Cause and Effect – Examining the relationship between historical events or actions, where one event or action occurs as a result of the other
- Perspective – A person's point of view; the position from which they see and understand events going on around them
- Empathy – Understanding the past from the point of view of an individual or group
- Significance – The importance that is assigned to aspects of the past
- Contestability – When interpretations about the past are open to debate, for example, as a result of a lack of evidence or different perspective.

DID YOU KNOW?

Bunraku puppetry was founded in Osaka, Japan, in the seventeenth century. The puppets are life-sized and hand-carved. Visible puppeteers manipulate them to perform a play.

15.2.2 The value of history

Many people question why we should value the ability to gain a comprehensive understanding of our past. The answer is that there are many valuable reasons for studying history. Knowledge of history helps us to understand our **heritage**. We begin to gain an understanding of where our ideas, languages, laws, customs and other aspects of our lives came from. We can also develop more open minds about different ways of living and learn to appreciate cultures that are different from our own. Preservation of the past is also of great importance and conservation work similar to that shown in **SOURCE 2** is one of the key responsibilities of archaeologists.

SOURCE 2 Conservation work on Bodiam Castle, in East Sussex, England. The moated castle was built during the medieval period in 1385 CE.

History, the present and the future

Human civilisation did not appear in the present as if from nowhere. It developed over many thousands of years, with each time period bearing its own advancements, knowledge and events. By understanding the past we might be able to avoid repeating past mistakes and make our world a better place in the future. How can we ever hope to understand the time we live in now or what the future may hold if we do not understand the journey that has brought us to this point?

History, work and leisure

Historical concepts and skills are transferable to many different kinds of careers and jobs. They will help you to:

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

A knowledge of history is important in our everyday lives, and gives many people great personal pleasure. How much more enjoyment do people experience from travel, books and movies when they know about the history that shaped the places involved!

History and democracy

The origins of modern democracy hail from the times of ancient societies, when only men who owned land were able to have a say in the running of the country. Modern day Australia is a democratic country. This means we have the right to choose our political representatives and leaders through voting. We have evolved democracy to the point where every citizen over the age of 18 is able to cast their vote, and all votes have the same value. We cannot vote responsibly unless we can make our own judgements about the ideas that leaders put forward, nor can we have an accurate understanding of how democracy has evolved unless we understand our past.

heritage everything that has come down to us from the past

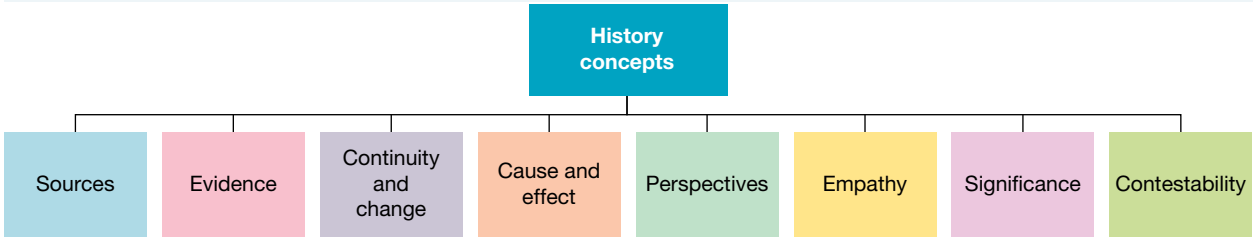
DISCUSS

How may understanding our past help us avoid repeating mistakes? **General capability: Ethical understanding**

15.2.3 What are historical concepts?

There are eight historical concepts, as shown in **SOURCE 3**, that you will learn throughout your History unit. You will become familiar with these concepts by investigating how the world transitioned from ancient to modern society. You will investigate how societies evolved socially, politically and economically by looking at the lives of the people who lived throughout that time. You will become more proficient with these concepts as you work through other history units in subsequent years.

SOURCE 3 The eight historical skills



15.2.4 Sources

Historians use sources to gather information about the past. A source is any written or non-written material that can be used to investigate and provide information about the time they are studying. It is important to analyse sources from the time we are studying to judge how reliable they are and explore the different points of view, or perspectives, of people from the past. This also involves questioning later sources that are interpretations of that time.

Primary and secondary sources

There are two types of sources that historians can use to investigate events, ideas or people from the past. **Primary sources** were created or written in the period of time that the historian is investigating. **Secondary sources** are reconstructions or interpretations of the past written or created by people living after the period of study.

Depending on the event and place, primary sources might include bones, stone tools, letters, newspapers, art, photographs or many other traces. For most periods of history we can divide primary sources into written and archaeological sources. Written primary sources can include such things as poems, songs, letters, myths and legends. They might have been written on paper, painted on stone walls or inscribed in stone, metal or clay in ancient languages. Archaeological sources are objects that were made in the past. They include many kinds of **artefacts** such as tools, weapons, pottery, coins, games, toys and jewellery. Some artefacts have written sources inscribed on them. Archaeological sources also include works of art such as sculptures and paintings, and constructions such as tombs, temples and sometimes entire cities.

Secondary sources are often books and articles. They can also include 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.

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

artefact an object made or changed by humans

15.2.5 Evidence

Evidence refers to the facts and information available to the historian that they can use to make judgements about the past. Historians also use evidence to prove or disprove a particular theory about events or people from the past. Evidence can come from both primary and secondary sources. Historians use evidence from a range of sources to discover when events happened, how they happened, why they happened and how different events are connected.

Analysing evidence

Historians analyse sources as evidence to discover information about events from the past. In order to do this effectively, the historian needs to question the sources to ensure that they are accurate and reliable. Sources can be factual, or they can be the opinion of an individual or of a group of people and opinions can be **biased**. When we use sources to try to find out about the past, we have to ask questions such as:

- 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?

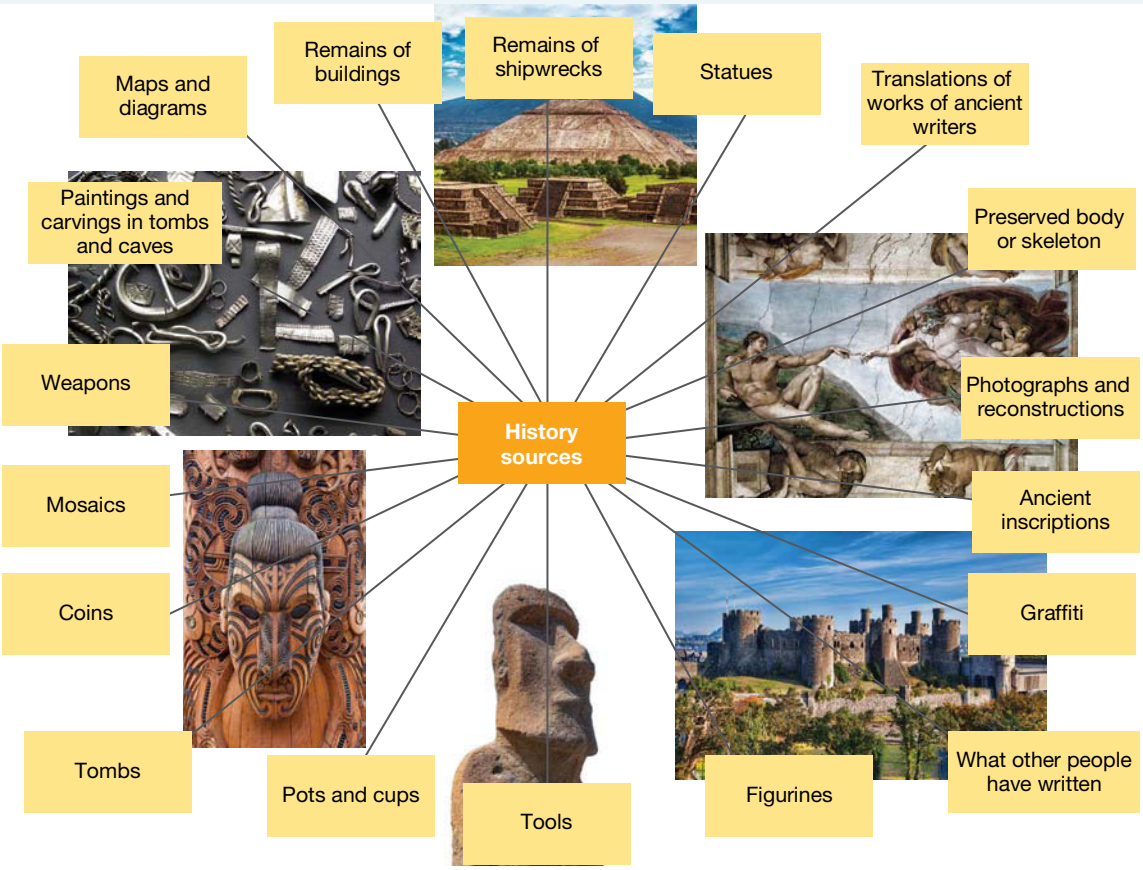
One way to test sources for reliability is to compare them with other sources. If this evidence leads to the same conclusion, we call it supporting evidence. If it leads to different conclusions, we have contradictory evidence.

Using evidence from sources, historians form a **hypothesis** (a possible theory to explain what happened). To test the hypothesis we look for evidence that supports it.

biased one-sided or prejudiced, seeing something from just one point of view

hypothesis (plural: **hypotheses**) a theory or possible explanation

SOURCE 4 Some types of primary sources



We also look for other evidence that contradicts it. To do this, historians needs to ask: what other information do I need to support my theory? Do I have all the available information about the events or people that I am investigating? This way, when historians come to a final interpretation of the past, they can be reasonably sure that they are correct.

Think about the investigation of a crime. Investigators look at what contributed to an event and how the different pieces of evidence that they find fit together. They ask questions that begin with who, what, where, when, why and how. Historians follow much of the same process. In this way, history is like any other kind of investigation, but it is more difficult because there are often gaps in our evidence. We usually cannot find all the clues we need. It can be like trying to solve a jigsaw puzzle when many pieces have been lost.

Wherever historians find sources and whatever methods they use to test their hypotheses and interpret the past, there will always be differing interpretations that are debated and contested. The issue of **contestability** is a very important concept in the study of history. Historical debates are ongoing. They occur when, for example, there is a lack of evidence or when different perspectives lead to different conclusions. There are ongoing debates on many things, including the causes of particular wars and the roles of particular individuals, groups and ideas in bringing about significant changes.

15.2.6 Continuity and change

Historians investigate the past for many reasons. One of these reasons is to see how society has changed socially, politically and economically over various periods of time. 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 **continuity and change**.

Continuity refers to the things that endure, relatively unchanged, over time. In the case of some societies, many things have remained the same across long periods of time in history. Sometimes these continuities have stayed with us into the modern world.

Change refers to something that is different from what has previously occurred. The change may have been gradual, and occurred over a long period of time, or it may have been sudden, and the change has happened very quickly. In the case of gradual change, it can be difficult to detect the precise moment of change. It could be that many small events have led to a larger change. In the case of sudden change, the moment of change is obvious and definitive. Often this is associated with single events, that are sometimes referred to as turning points in history. It is also important for historians to differentiate between short- and long-term change.

contestability when particular interpretations of the past are open to debate

continuity and change the concept that while many changes occur over time, some things remain constant

SOURCE 5 Edinburgh Castle located on Castle Rock, in Edinburgh, Scotland. The buildings of the castle date from the twelfth to the twenty-first centuries.

SOURCE 6 Modern townhouses in Perth. Today, most of us do not live in castles or need their protection. However, some things do stay the same.

Historians study changes, as well as the things that have remained the same because it is important to be able to identify when and why a change has occurred and when and why things have continued unchanged.

We can make comparisons between and among historical events occurring at the same time, between and among historical periods, and between the present and the past.

15.2.7 Cause and effect

There is much more to history than putting events in order and understanding the sequence and flow of events. Historians use sequencing and timelines to study continuity and change, which then assists them to investigate the relationships that exist between events.

Historical events do not just happen spontaneously, without reason. Every event will have a cause, and every event is also likely to be the cause of subsequent events, effects or consequences. Explaining how and why things in the past have happened is often the result of the historian being able to confidently identify patterns of **cause and effect**. This is an essential concept to assist in explaining the past, but can also make it possible to predict what may take place in the future.

Causes may include actions by people or 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. It is important to understand that not all causes leading to a specific event are as equally significant as each other – some causes may have more influence than others.

The ability to analyse cause and effect requires a good understanding of sequencing chronology. We can identify a series of historical events and developments over time, both in the short- and long-term. Some causes occur immediately before an event began, while others may have existed for several years, decades or centuries before they caused the event. Some effects occur immediately after an event or action, while others may occur years, decades or centuries following the event or action.

SOURCE 7 An illustration featuring medieval peasants. Peasants were at the bottom of the feudal social order in medieval Europe.

Feudalism was the social order established in medieval Europe. This system involved the king owning all the land in a kingdom and a hierarchy of members of society, arranged in order of importance. After the king, the next most powerful class were the nobles. In return for the right to land and control over peasants who worked it, the nobles gave the king their loyalty, and provided him with a portion of taxes collected from their peasants. Below the nobles were the knights who, in return for land, gave loyalty to their lord, fought for him and provided him with taxes from their peasants. Peasants were at the bottom of the feudal hierarchy.

Feudalism had a number of causes. Following the collapse of the Roman Empire in 476 CE, tribal groups such as the Vikings increasingly invaded Western Europe. Common people who had no protection moved onto the land of wealthy and powerful landowners. In return for working the land, they received protection.

Feudalism also resulted in a number of effects. The nobles became responsible for the people lower down in the hierarchy. The peasants sustained the land and therefore drove the economy. However, most of the peasants were bound to the land and were unable to obtain their freedom. Their lives were dictated by the landowner.

cause and effect the concept that every historical event will have a cause, and every event or action is likely to be the cause of subsequent effects or consequences

15.2.8 Perspective

Understanding how people thought and felt

No two people see one event in exactly the same way. This is because of perspective, which is the point of view that someone may have of an event. As now, people in the past may have had different points of view about an event, depending on their age, gender and social position, as well as their beliefs and values. Historians have a wide range of primary and secondary sources available to use when investigating events from the past. In many cases, as in the Crusades, the evidence portrays many different versions of the same event. The sources present different versions of the events depending on who they were written by (king, knight, villager), what religion they were affiliated with (Christian or Muslim), or even where they lived (geographical location). We try to understand the **perspectives** of people in the past by exploring their points of view, attitudes, values and culture. Historians also have perspectives and this can influence their interpretation of the past. Often, we can get a sense of the way people thought and felt by examining primary sources, such as diaries, or visiting museums and historical sites.

15.2.9 Empathy

In order to gain a meaningful insight into the past, historians need to display empathy. This means trying to understand how people thought and felt at different times in the past. Using empathy, we work with all the evidence we have in order to imagine what the past was like for people who were living in that time. We need to ask questions such as:

- Who were these people?
- Where did they live?
- How did they live?
- What mattered to them?
- What did they believe in?
- What did they see, hear, taste, smell and feel?
- What did they fear and what did they hope for?
- Did they have feelings similar to or different from ours?
- Did they all think and feel the same as one another, or did they have differing perspectives?

When you put yourself in the shoes of someone who lived in a different time, it is often easy to judge their actions in a negative manner. To show empathy means that the historian can understand the past from the point of view of a particular individual or group, taking into account the unique circumstances of that person or group. It is also important to understand their motivations, their values and attitudes that are causes of their actions.

perspective point of view or attitude

How should we judge people in the past?

When we learn about some of the things people did in the past, it is natural that we make moral judgements. For example, it would be easy to dismiss the Vikings as bloodthirsty raiders. Viking raids began in England at the end of the eighth century; raids, attacks and then invasions in Britain and Ireland continued for more than 200 years. The behaviour of pillaging and looting Vikings might be considered to be cruel, violent or ruthless by today's standards. However, we should try to avoid judging people in the past by beliefs or standards that did not exist in their time. There are a number of possible reasons why Vikings raided and colonised other regions. These reasons include the pressure of growing population and limited farmland, fighting among different Viking groups and an awareness of the availability of great wealth in foreign lands.

SOURCE 8 An artist's impression of Vikings raiding the coast from their beached longship

SOURCE 9 The Oseberg ship (a well-preserved Viking ship discovered in a large burial mound in 1903) on display at the Viking Ship Museum in Oslo, Norway

It is also worth noting that Vikings were explorers, farmers, fishermen, poets and traders. They were spiritual people and their society was governed by a primitive form of democracy. We should remember that in the future, people may think that many kinds of behaviour we consider normal will be wrong, by their standards.

SOURCE 10 A reconstructed Viking Age harbour settlement at Bork Vikingehavn, a living history museum in Denmark

DISCUSS

Working in small groups, think of something that happens in our time that some people believe is wrong. An example could be the way some countries are wealthy while in others children die of starvation and preventable diseases. Do you think that at some time in the future people might consider ours to have been an unjust age?

General capability: Ethical understanding

15.2.10 Historical significance

Determining if something is significant means deciding if something is important or not. Historical **significance** means deciding how important particular aspects of the past are. These aspects may include events, individuals or groups, developments in the past, ideas or movements, and historical sites. There is far too much history to study or learn all of it. We need to make judgements about what is most important and what is less important. For this reason, this is an essential, but challenging, historical concept.

As historians, we need to make judgements about what is more or less important in relation to the period of time that we are studying. When we try to establish the significance of an aspect of the past, we have to consider a number of questions. These include:

- 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?

Once we know the answers to some of these questions, we can put ourselves in the shoes of those we are studying and try to understand why or why not an aspect might be significant. Remember that aspects that happen quickly or that do not last a long time can still be significant.

significance the importance assigned to particular aspects of the past, for example, events, developments, movements and historical sites

SOURCE 11 A statue of emperor Charlemagne (Charles the Great) in Germany

SOURCE 12 A line engraving by Theodor de Bry showing Spanish conquistadors leading Native American slaves on an expedition, c. 1590

15.2.11 Contestability

Wherever historians find sources and whatever methods they use to test their hypotheses and interpret the past, there will always be differing interpretations that are debated and contested. The issue of contestability is an important concept in the study of history.

Historical debates are ongoing. They occur when, for example, there is a lack of evidence or when different perspectives (points of view) lead to different conclusions. In some cases, there may be a lack of evidence of an event and the historian has had to use the evidence that is available to fill in the gaps with what could have reasonably happened. This means that their interpretation of the event could be contested or debated.

In other cases there are several different perspectives of the same event that are available to historians, and all the perspectives could have some evidence to support them. In this case, the historian needs to examine the evidence available and make a reasonable judgement as to what events occurred and how they occurred, but this could still be contested. There are ongoing debates on many things, including the causes of wars and the roles of particular individuals, groups and ideas in bringing about significant changes.

DISCUSS

Why could the Viking Raids be considered to be a contestable event or issue? What things about the raids could be debated and why? **History concept: Contestability**

15.2 ACTIVITY

Use the internet and/or other information sources to find the meaning of the word 'sympathy'. Explain how empathy is different from sympathy. **History concept: Empathy**

15.2 EXERCISE

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

Learning pathways

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

Check your understanding

1. What is history?
2. Fill in the spaces in the following passage by choosing from the following words:

civilisations	beliefs	cultures	events	research

Historians conduct _____ into past _____, _____ and societies. Historians try to build up a picture of the ideas and _____ of people in the past, how they lived and acted and how their lives were shaped by _____.

3. What can we gain from understanding our heritage?
4. Identify the eight historical concepts.
5. Describe the difference between primary sources and secondary sources.
6. 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 _____.
7. Explain what a historian is doing when identifying continuity and change.
8. What does it mean to empathise with people you study?
9. Why could it be wrong to judge people from past times by the standards of our times?

Apply your understanding

10. Bunraku, as seen in **SOURCE 1**, was created towards the end of the Tokugawa Shogunate (1600–1868). What might you be able to understand about Japan under the Shoguns just by using this source as evidence?
11. Look closely at **SOURCE 2**. The United Kingdom's National Trust relies on memberships and donations to preserve the remains of this medieval castle. Why do you think so much effort goes into conserving such traces of the past?
12. Suggest what we might learn about the past from one of the types of primary sources listed in **SOURCE 4**.
13. Compare **SOURCES 8** and **9**. What are the similarities between these sources? What are the differences?
14. Examine **SOURCE 9**.
    a. Imagine that you are living in the past and can see this ship sailing towards your home in England. Describe how you feel.
    b. How do you think that modern visitors to the Viking Ship Museum in Oslo feel when looking at the ship?
    c. How would you explain any changes in attitudes over time?

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

15.3 Skills in history

15.3.1 What skills will you build this year?

This year you will continue to build your ability to use the four broad categories of skills in the Humanities and Social Sciences. The summaries below are to remind you of these four key skills.

1. Questioning and researching involves locating relevant and detailed information and/or data from a range of appropriate sources. In Year 8 History this includes looking at primary and secondary sources related to Medieval Europe and the Black Death, such as paintings, diagrams, maps, personal reflections and some very early photographs.
2. Analysing 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. In Year 8 History this includes looking for patterns of change over time, such as looking at the enormous changes that shaped the world from about 650 to 1750 CE. You will also build your ability to identify the causes and effects of historical events such as the Black Death and how this event shaped attitudes towards medicine, religion and society.
3. Evaluating means examining your interpretations of information to draw evidence-based conclusions. It requires considering ambiguities and multiple perspectives in a source and proposing potential responses to contemporary challenges or issues. In Year 8 History this includes drawing conclusions about the impacts of the Black Death on different parts of a community; for example, the experiences of the lower class peasants was very different to that of the higher classes.
4. Communicating your ideas means presenting information in a range of formats to suit the intended audience and purpose. This includes essays, oral presentations, debates, tables and cartoons. Reflecting on your skills is also an important part of the process. In Year 8 History this might include writing from the perspective of someone living during the height of the Black Death and creating posters, brochures and news articles to communicate your work.

15.3.2 SkillBuilders in the topic

In addition to these broad HASS skills, there is a range of essential practical skills that you will learn as you study History. The SkillBuilder topics will tell you about the skill, show you how to apply the skill and let you practise the skill with tasks related to the topics covered in this subject.

The SkillBuilders you will use in Year 8 are:

- SkillBuilder: Recognising different perspectives
- SkillBuilder: Explaining different historical interpretations
- SkillBuilder: Interpreting medieval art as sources.

15.4 SkillBuilder: Recognising different perspectives

LEARNING INTENTION

By the time you have completed this SkillBuilder, you will be able to analyse different historical perspectives by asking questions about different sources.

15.4.1 Tell me

What is perspective in history?

It is said that history is written by the victors. In many cases, this is true. In the case of the Mongol expansion, however, it is important to remember that the Mongols were mostly illiterate. Therefore, much of the empire's written history was created by their literate enemies and allies.

Why is it important to recognise different perspectives?

When you are trying to understand historical events, places or people, it is important that you find a balance of sources. When investigating the world of the Mongols, these sources may include written accounts, pictures and other artwork, and artefacts. Some sources might have been created by the Yuan dynasty and others by the people they came into contact with at the time. History texts can also be reliable sources because their authors have the benefit of hindsight.

15.4.2 Show me

How to recognise different perspectives

When using sources, it is essential that you determine how reliable they are. You can do this by asking a number of questions. Note that not all of these questions will apply to all sources.

- When was this source created?
- Who created this source and why?
- Who was the intended audience of this source, and how might this have affected its construction?
- In what ways does this source confirm or refute what I already know?
- How reputable was its creator(s)?
- How might the political/social/cultural pressures of the time have influenced the creation of this source?

Only after you have found a number of sources, and assessed their strengths and weaknesses, can you say you have a balanced picture of history.

An example

SOURCE 1, an excerpt from a book written by the Franciscan Friar John of Plano Carpini, is used as an example of how the previous questions could be answered.

SOURCE 1 In the thirteenth century, a Franciscan friar named John of Plano Carpini was sent to Mongolia by Pope Innocent IV, who, like many other European rulers, was worried by the rapid expansion of the Mongol Empire. The friar met with Khan Kuyuk to ask him to stop attacking Christian land. The friar's book, *History of the Mongols*, outlines some of the Mongol beliefs and customs, which the friar viewed as threatening and primitive.

Although they have no law concerning the doing of what is right or the avoidance of sin, nevertheless there are certain traditional things, invented by them or their ancestors, which they say are sins; for example to stick a knife into a fire, or even in any way to touch fire with a knife, or to extract meat from the cauldron with a knife, or to chop with an axe near a fire; for they believe that if these things were done, the fire would be beheaded... On the other hand, to kill men, to invade countries of other people, to take the property of others in any unlawful way, to commit fornication, to revile other men, to act contrary to the prohibitions and commandments of God, is considered no sin by them.

1. *When was this source created?* This book was based upon the friar's journey in 1245–1247.
2. *Who created this source and why?* Friar John of Plano Carpini wrote this book after visiting Khan Kuyuk to plead, on the Pope's behalf, for him to cease his attacks on lands occupied by Christians. The book focuses on the Mongols' customs, religion and culture, as well as the best way to resist their army.
3. *Who was the intended audience of this source, and how might this have affected its construction?* Pope Innocent IV was the primary audience. The fact that he perceived the Mongols as a threat to the Christian way of life seems to have coloured many of the Friar's descriptions.
4. *In what ways does this source confirm or refute what I already know?* This source highlights the often brutal practices of the Mongols, particularly during times of war. However, from other sources, we know they were often tolerant of people of other religious persuasions, including Christians.
5. *How reputable was its creator(s)?* This is hard to say for certain without further research. The book is noted for being one of the more accurate books of its sort written during this period; however, the friar's Christian beliefs and loyalty to the Pope may have affected his depiction of the Mongols' way of life.
6. *How might the political/social/cultural pressures of the time have influenced the creation of this source?* The Pope, like many other world leaders, was afraid of the khan's power and his apparent disregard towards Christians. The friar seems to have responded to this by highlighting the more threatening aspects of Mongol culture.

15.4.3 Let me do it

Complete the following activities to practise this skill.

15.4 ACTIVITIES

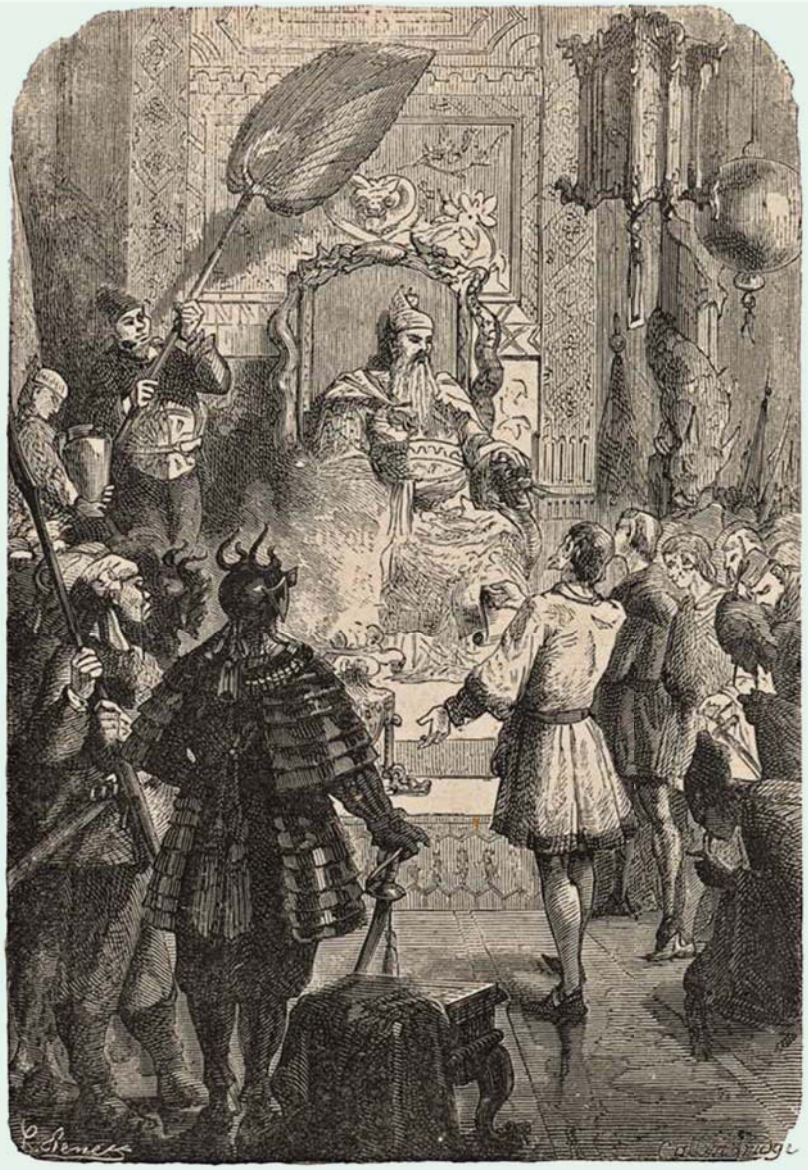
1. Examine **SOURCE 2**, from the writings of Marco Polo, and answer the following questions.
   a. When was this source created?
   b. Who created this source and why?
   c. Who was the intended audience of this source, and how might this have affected its construction?
   d. In what ways does this source confirm or refute what I already know?
   e. How reputable was its creator(s)?
   f. How might the political/social/cultural pressures of the time have influenced the creation of this source?

SOURCE 2 An excerpt from *The Travels of Marco Polo*, written in the thirteenth century. Marco Polo was an employee of the Yuan dynasty and one-time governor of a major Chinese city.

The great khan, lord of lords, named Kublai, is of a fine middle size, neither too tall nor too short; he has a beautiful fresh complexion, and well-proportioned limbs. His colour is fair and vermeil like the rose, his eyes dark and fine, his nose well formed and placed... He maintains also a number of concubines. There is a race of Tartars who are called Migrat or Ungrat, and are a very handsome people. From them are selected 100 girls — the most beautiful in all their country, who are conducted to court... It may be asked, if the people of this province do not feel aggrieved by having their children thus forcibly taken away. Assuredly not; on the contrary, they regard it as a favour and an honour; and the fathers feel highly gratified when their daughters are thus selected. If, says one, my daughter is born under an auspicious planet, his majesty can best fulfill her destiny by marrying her more nobly than I can do. On the contrary, if the young lady, by bad conduct or any misfortune, be found disqualified, he attributes the disappointment to her malignant stars.

2. Based on your work interpreting sources on the Mongol expansion, answer the following questions.
   a. Explain why most of the Mongol history has been recorded by their enemies.
   b. What are some of the questions to ask of a text to check whether it is reliable or not?
   c. Explain how we can best gain a balanced picture of a historical period.
   d. How can you work out who the intended audience of a text might be?
   e. What do you know about how reputable the writer of Marco Polo's history was?

SOURCE 3 An illustration from the thirteenth century showing Marco Polo in the grandeur of Kublai Khan's court



15.5 SkillBuilder: Explaining different historical interpretations

LEARNING INTENTION

By the time you have completed this SkillBuilder, you will be able to explain a historian's interpretation and understand why it is important.

15.5.1 Tell me

What is a historical interpretation?

To explain a past event or change, a historian forms a hypothesis (a possible theory to explain what happened and why it happened). The historian uses evidence from historical research to test the hypothesis.

The hypothesis is then presented as an interpretation of the past. Through questioning interpretations, you will understand that they may be open to debate.

Why is it important to analyse and explain a historian's interpretation?

To explain an interpretation we need to analyse it. That means to see how its different parts contribute to its general idea. You now know that there is almost always more than one way of interpreting any past event.

This is because of gaps in evidence, because sources can be biased and because historians themselves bring different viewpoints or perspectives to most issues.

Differing interpretations in history are similar to what happens in a court of law. In courts, even though all members of a jury are presented with the same evidence, they can come to different conclusions. If we analyse a historian's interpretation and are then able to explain it we are in a better position to judge it and compare it with other interpretations.

It is not always easy to analyse and explain a historian's interpretation. Often the main argument will be developed over several pages along with a discussion of the evidence used for each supporting point. In the examples used here, the points that support the main argument are included but much of the specific evidence for them is not included.

15.5.2 Show me

How to explain a historian's interpretation

When you read a historian's interpretation, you need to:

1. identify the main point of the historian's argument
2. identify the points that are used to support the main argument.

maritime trade the trading of goods via sea
New World the Americas

An example

SOURCE 1 A historian's argument about the significance of the achievements of Spain and Portugal in their voyages of discovery and conquests, from C. H. Haring, The Spanish Empire in America, Harcourt, Brace & World, New York, 1963, pp. 1–2

One of the most... spectacular movements in the history of civilisation has been... the Expansion of Europe... [It] saw the rise and fall of great colonial empires..., the expansion of **maritime trade** into a world commerce, and the extension of Christian missionary propaganda to the four corners of the world...

In this process Spain and Portugal played the most dramatic role and pointed the way for other nations to follow. Their connection with the **New World** began with the initial voyage of Columbus, and for a century they

pre-empted virtually all of the western hemisphere as well as the seas eastward to China and the Philippines. Before the seventeenth century they were the great... colonial powers. Not until after 1600 did the English, Dutch and French seriously challenge their **supremacy**. Portugal's **imperial** greatness was to be displayed chiefly in the **Orient**; Spain reserved to herself the greater part of the two American continents... Within three generations Spaniards discovered, subdued and colonised the most extensive territorial empire the world had ever seen...

To analyse and explain the interpretation in **SOURCE 1**:

1. first look for the main point of the argument
2. then look for the supporting points or details used to support the argument.

The sentences or parts of sentences that state the main point have been highlighted in blue; the main words that provide supporting details have been highlighted in green.

One of the most... spectacular movements in the history of civilisation has been... the Expansion of Europe... [It] saw the rise and fall of great colonial empires..., the expansion of maritime trade into a world commerce, and the extension of Christian missionary propaganda to the four corners of the world...

In this process Spain and Portugal played the most dramatic role and pointed the way for other nations to follow. Their connection with the New World began with the initial voyage of Columbus, and for a century they pre-empted virtually all of the western hemisphere as well as the seas eastward to China and the Philippines. Before the seventeenth century they were the great... colonial powers. Not until after 1600 did the English, Dutch and French seriously challenge their supremacy. Portugal's imperial greatness was to be displayed chiefly in the Orient; Spain reserved to herself the greater part of the two American continents... Within three generations Spaniards discovered, subdued and colonized the most extensive territorial empire the world had ever seen...

In this example we can say:

1. The main argument is that Spain and Portugal played the leading role in Europe's expansion.
2. The supporting points are:
   - Spain conquered most of the Americas well before other colonisers.
   - Portugal was dominant in the seas towards Asia.
   - Spain created the world's biggest empire in the Americas.
   - The Dutch, English and French were not able to challenge them before 1600.

pre-empted to take ownership of something before someone else
supremacy having the highest power or authority
imperial relating to an empire
Orient a historical word for the East, particularly China
subjugate to subdue or conquer

15.5.3 Let me do it

Complete the following activities to practise this skill.

15.5 ACTIVITIES

1. Using the example in the Show me section as a model, try to analyse and explain the interpretation in **SOURCE 2**. Before you read **SOURCE 2**, look at **SOURCE 3** to find the location and extent of the Inca empire.
   a. Identify the main argument in **SOURCE 2**.
   b. Identify the points that the author of **SOURCE 2** has used to support that interpretation.

SOURCE 2 A historian's argument about the motives of the Spanish conquistadores for their conquests, their methods and the reasons for their success, from Niall Ferguson, Civilization, Penguin Books, London, 2011, pp. 98–101

... landing in northern Ecuador in 1532, were fewer than 200 Spaniards accompanying the man who already claimed the title 'Governor of Peru' [Francisco Pizarro]. Their ambition was to conquer the Inca Empire for the King of Spain and to secure a large share of its reputed wealth for themselves...

By the time they reached the Peruvian highlands, Pizarro had just sixty horsemen and ninety footsoldiers at his command... The population of the empire they intended to **subjugate** was somewhere between 5 and 10 million.

On the conquistadores' side, however, was an invisible ally: the European diseases to which South Americans had no resistance — the smallpox, influenza, measles and typhus. At the same time, the Spaniards' horses, guns and crossbows were weapons far superior to anything in the Inca armoury; they gave the invaders a terrifying extra-terrestrial aspect. And the Inca themselves were divided. Since the death of Inca Huayna Capac, his sons Atahualpa and Huascar had been battling for the succession, while subject tribes scented a chance to throw off the Inca yoke. The Battle of Cajamarca (14 November 1532) was thus scarcely a battle at all. As Pizarro's brother Hernando described it, Atahualpa walked into a trap when he accepted the Spaniards' invitation to dinner:

'... I had arranged with the captain of the artillery that, when a sign was given, he should discharge his pieces, and that, on hearing the reports, all the troops should come forth at once. This was done, and as the Indians were unarmed they were defeated without danger to any Christians.'

In the words of the sixteenth-century Andean chronicler Waman Poma, the Spaniards killed the panic-stricken Indians 'like ants'...

SOURCE 3 A map showing the major Central and South American civilisations — Aztec, Maya and Inca — just before the time of the Spanish conquests

2. Based on what you have learned in this SkillBuilder, apply your skills to explain how the interpretation in **SOURCE 2** differs from the interpretation in **SOURCE 1**. Support your answers with examples and quotes from each source.
   a. Do they differ about the facts?
   b. Have they used different sources?
   c. Do they have different perspectives? Or do they each focus on a different aspect of the Spanish conquests?

15.6 SkillBuilder: Interpreting medieval art as sources

LEARNING INTENTION

By the time you have completed this SkillBuilder, you will be able to analyse a piece of art from the medieval period.

15.6.1 Tell me

What are works of art?

Works of art may be one type of primary source. Throughout this topic we have examined various primary sources: artworks, monuments, buildings and written sources. Artworks include paintings, sculptures, bas reliefs and mosaics. Art styles changed significantly throughout the Middle Ages, and differed from kingdom to kingdom.

Why is analysing artwork useful?

Artwork can tell us a great deal about a particular period or event. It may also tell us what ideas, beliefs or activities people felt were important enough to express in artwork. For example, an elaborately carved altarpiece in a church tells us that much attention was given to expressing the Christian faith during the Middle Ages.

15.6.2 Show me

How to analyse a work of art

A useful way to approach the task of analysing a work of art is remembering to use 'the three Cs' – content, context and comment.

Content

The content is what the artwork actually shows. Look at it very carefully and make sure you note all the details. For example, you might need to look for particular symbols or gestures. Think about how you would describe the image to someone who has not seen it; that way you can be sure you have looked at it thoroughly.

Context

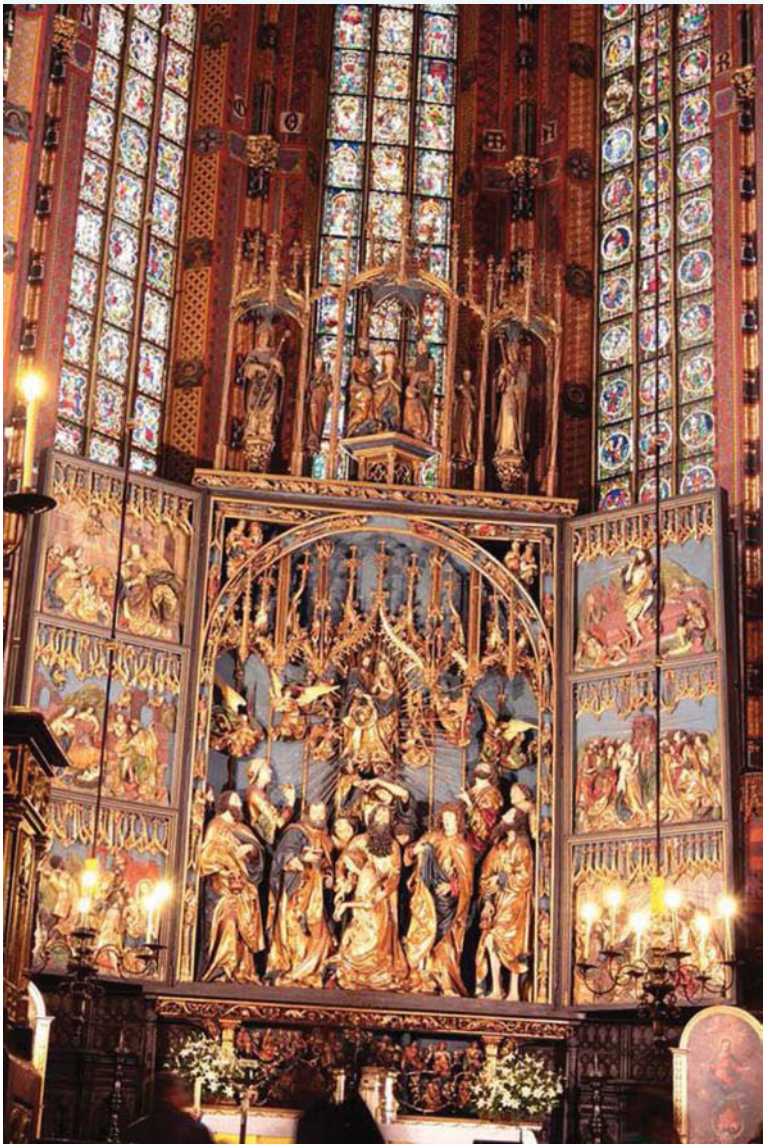
Context refers to what was happening at the time the artwork was created – the historical background. Try to find out about the origin and purpose of the artwork: who created it, and why? Is it a primary or a secondary source? Knowing this can reveal as much as the artwork itself. The detail from the Mariacki altar in **SOURCE 1** was created by an artist called Wit Stwosz. The artist and his team were commissioned to create this altarpiece for the Church of Our Lady in Krakow, Poland. During the Middle Ages, artists were frequently employed to create artworks with religious themes. This altarpiece shows various saints, the ascension of the Virgin Mary into Heaven and scenes from the life of Jesus. At the time of its creation in the Late Middle Ages, it was the largest altarpiece in the world.

Comment

You should question the value of every source. Why is it useful? Does it give you raw information or does it show only a particular point of view? Are there any limitations to the source – that is, is there anything the illustration cannot tell you? Do you think it is a reliable source? Why or why not? Remember, the origin and purpose of any historical source will always influence its value and limitations.

If you ask these questions each time you analyse an artwork, you'll be on your way to becoming an effective historian. In the following example, the three Cs have been applied to **SOURCE 1**.

SOURCE 1 A detail from the Mariacki altar in the Church of Our Lady in Krakow, Poland, showing the arrest of Jesus. It was carved by Wit Stwosz in the late fifteenth century.



Content. One of the scenes on this altarpiece shows the arrest of Jesus. Except for the central figure of Jesus, the figures have the sort of attire that would have been familiar to the artist. In short, they are dressed like people from late fifteenth-century Europe, not like people from the time of Jesus in the Roman Empire almost 1500 years earlier. The soldier does not look like a Roman soldier of the first century CE.

He is a knight of the Late Middle Ages. The buildings in the background are also from the late fifteenth century. Before modern times, and before the science of archaeology, little was known of how people in past societies dressed, or how artefacts looked. So if an artist created a scene from a past era, he showed the clothes and objects as they were in his own time and place.

Context. The Church was a powerful and important institution in medieval Europe. Great expense went into embellishing churches with works of art such as this. Artists were commissioned to undertake such projects and employed people to help them in their task.

Comment. Can we trust this image? We can clearly trust that it represents how important religious artworks were to the Church in the Middle Ages. We cannot trust that it is an accurate image of how things looked at

the time of Jesus. However, as students of the Middle Ages, we can trust that the artist used models from his own time to create these images. Thus we can say that, for the most part, it is an accurate image of how people looked in late medieval Europe. It shows knights' armour, head-dresses, coats, belts and other attire common to the time and place where the artist lived and worked..

15.6.3 Let me do it

Complete the following activities to practise this skill.

15.6 ACTIVITIES

1. Look at **SOURCE 2** and analyse it by completing the tasks below.

SOURCE 2 A French illustration depicting nuns looking after the sick

   a. Describe what is happening in the artwork.
   b. What impression is the artist trying to make about the subject of the artwork (the nuns)?
   c. What are the figures doing? What are the various activities? Can you identify the different roles among the figures?
   d. What sort of problems in dealing with historical sources do your answers to the above questions highlight?
2. You have learnt some of the history behind **SOURCE 1** and the sort of information it presents. This helped assess its usefulness as a source. You should now be able to think about the effectiveness of **SOURCE 2** as a historical source by answering the following questions.
   a. It is fairly certain that **SOURCE 2** was created under the direction of Church authorities. Perhaps members of the clergy created it. How might that influence the way the nuns are presented?
   b. If this was the only source available on the role of nuns in the medieval Church, what conclusions might you draw? Would all your findings be accurate?
   c. Why must historians be careful when looking at sources such as this?
   The types of questions you have asked about **SOURCE 2** can be used for any medieval artwork — in fact, they can be used to analyse artwork from any era. Keep them in mind whenever you are looking at history through artwork.
3. Based on your work interpreting sources on medieval Europe, answer the following questions.
   a. What types of artworks are categorised under the term 'medieval artworks'?
   b. What does it mean to explore the content of an artwork?
   c. Explain what exploring the context of a medieval artwork requires historians to do.
   d. How can analysing medieval artwork be useful to historians?

15.7 Review

15.7.1 Key knowledge summary

15.2 Concepts in history

- Historians investigate and interpret the past.
- History helps us to understand our heritage and appreciate other cultures.
- History helps us to understand the present and what the future may hold.
- History provides us with essential skills.

Sources

- A source is any written or non-written materials that can be used to investigate and provide information about the past.
- There are two types of sources: a primary source comes directly from the time of the event and a secondary source is one that is written or created after the event has already happened.

Evidence

- Using historical sources as evidence relates to analysing sources to judge how reliable they are and exploring the different points of view, or perspectives, of people from the past.
- Using evidence from sources, historians can form a hypothesis (a possible theory to explain what happened).

Continuity and change

- Identifying continuity and change is the ability to recognise that, while many changes occur over time, some things remain constant.
- Historians often use sequencing of events and create timelines in order to study the changes that have happened over time.
- Historians divide the past into ages and periods.
- In Australia we count time using a system that was developed in Christian countries, but there are other systems.

Cause and effect

- Using chronological order and timelines helps us to recognise cause and effect.
- Analysing cause and effect relates to understanding that every historical event will have a cause, and every event or action is likely to be the cause of subsequent effects or consequences.

Perspective

- Perspective is the different point of view that different people may have of an event.
- We try to understand the different perspectives of people in the past by exploring their points of view, attitudes and values.
- Historians also have their own perspectives, which can influence the way that they see the past.

Empathy

- Historians try to discover how people thought and felt in the past.
- We should avoid judging people from the past by the standards of our own age.
- Using historical imagination requires using your imagination, but basing your ideas on evidence.

Historical significance

- Determining historical significance is the ability to make judgements about the importance assigned to particular aspects of the past, for example, events, developments, movements ad historical sites.
- Historians will often have differing opinions about how significant certain events are.

Contestability

- When attempting to interpret the past, there will always be differing interpretations that are able to be debated and contested.
- Sometimes there is evidence available that supports different versions of events and in this case, historians must make a judgement based on the evidence.

15.3 Skills in history

The key skills used in Year 8 are:

- Recognising different perspectives
- Explaining different historical interpretations
- Interpreting medieval art as sources.

on Resources

eWorkbook	Customisable worksheets for this topic (ewbk-6423) Reflection (ewbk-6422) Student Learning Matrix (ewbk-6418)
Interactivity	History skills and concepts crossword (int-7583)

15.7.2 Key terms

artefact an object made or changed by humans

biased one-sided or prejudiced, seeing something from just one point of view

cause and effect the concept that every historical event will have a cause, and every event or action is likely to be the cause of subsequent effects or consequences

contestability when particular interpretations of the past are open to debate

continuity and change the concept that while many changes occur over time, some things remain constant

evidence information that indicates whether something is true or really happened

heritage everything that has come down to us from the past

hypothesis (plural: **hypotheses**) a theory or possible explanation

imperial relating to an empire

maritime trade the trading of goods via sea

New World the Americas

Orient a historical word for the East, particularly China

perspective point of view or attitude

pre-empted to take ownership of something before someone else

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, for example, events, developments, movements and historical sites

subjugate to subdue or conquer

supremacy having the highest power or authority

15.8 Review exercise

Multiple choice

1. What is heritage?
   - A. An object made or changed by humans
   - B. Everything that has come down to us from the past
   - C. Predictions of things that will happen in the future
   - D. A point of view or attitude
2. Chronological order means:
   - A. a timeline
   - B. in order from the beginning to the end
   - C. any random order
   - D. from the end to the beginning.
3. The work of historians can be described like that of detectives because:
   - A. historians solve crimes.
   - B. historians are always right.
   - C. historians never make mistakes.
   - D. historians gather evidence from sources and interpret that evidence.
4. What are primary sources?
   - A. Sources that were created during the time being studied
   - B. Written sources
   - C. Secondary sources
   - D. Books
5. Which of the following concepts of history refers to the facts and information available to historians?
   - A. Perspective
   - B. Evidence
   - C. Cause and effect
   - D. Empathy
6. The concept of history 'continuity and change' refers to:
   - A. the study of aspects of history that have remained relatively unchanged and the aspects that have changed dramatically
   - B. studying written or non-written materials that can be used to provide information about the past
   - C. historians trying to discover how people thought and felt in the past
   - D. the ability to make judgements about the importance assigned to particular aspects of the past
7. 'We should avoid judging people from the past by the standards of our own age.' When addressing this statement, which concept of history are you applying?
   - A. Significance
   - B. Sources
   - C. Empathy
   - D. Cause and effect
8. 'Orient' is a historical word used for which one of the following countries?
   - A. France
   - B. New Zealand
   - C. Vietnam
   - D. China

9. An artefact is an object made or changed by:
   A. animals
   B. humans
   C. plants
   D. the weather.
10. Maritime trade is the trading of good via:
   A. horse and cart
   B. airplane
   C. train
   D. sea.

Short answer

11. In your own words, explain what the term 'supporting evidence' means.
12. What is a hypothesis?
13. Archaeologists search for historical sources to help them understand the past. Name four examples of archaeological sources.

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 15 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

15.1 Overview

Video eLesson
- Investigating the past (eles-1057)

15.4 SkillBuilder: Recognising different perspectives

eWorkbook
- SkillBuilder: Recognising different perspectives (ewbk-6419)

15.5 SkillBuilder: Explaining different historical interpretations

eWorkbook
- SkillBuilder: Explaining different historical interpretations (ewbk-6420)

15.6 SkillBuilder: Interpreting medieval art as sources

eWorkbook
- SkillBuilder: Interpreting medieval art as sources (ewbk-6421)

15.7 Review

eWorkbook
- Reflection (ewbk-6422)
- Student Learning Matrix (ewbk-6418)

Interactivity
- History skills and concepts crossword (int-7583)

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

16 From the ancient to the modern world

16.1 Overview

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

Ideas, religion and exploration. How did the changes of the Middle Ages reshape the world?

16.1.1 Links with our times

In this topic we will examine the enormous changes that shaped the world from about 650 to 1750 CE. Following the fall of the Western Roman Empire, new forces reshaped the old civilisations of Europe, western Asia and North Africa. Change also came to the old civilisations of East and South Asia, while newer civilisations emerged in Africa, the Americas and other parts of Europe and Asia.

Great changes began in the fifteenth century, as Europeans rediscovered the learning of the ancient world and made great advances in arts and sciences. This period was called the Age of Exploration. It was a time when voyages of discovery brought into contact peoples who had not known of each other's existence.

SOURCE 1 Trajan's Forum, Rome. Examining ancient ruins can tell us a lot about how people in the past lived.

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5558)

Video eLesson From the ancient to the modern world (Part 1) (eles-1059)

SOURCE 2 A timeline from the Ancient to the Modern World

CE: 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1050, 1100, 1150, 1200, 1250, 1300, 1350, 1400, 1450, 1500, 1550, 1600, 1650, 1700, 1750 CE

630
Muslims conquer much of the Middle East.

793
The Vikings begin attacking Christian settlements. Attacks continue until the Vikings convert to Christianity c. 1000.

1066
The Normans conquer England.

1100–1199
Feudal lords dominate Japan.

1218–1260
The Mongols invade Afghanistan, Persia, Russia, parts of eastern Europe and China.

1280
The Mongol Empire reaches its peak.

1368
The Ming dynasty is founded in China.

1410
The first portable clock is invented.

1446
By this year, Portuguese explorers have mapped Africa's north-west coast.

1498
Vasco da Gama sails from Portugal to India.

1543
Nicolaus Copernicus publishes his theory that the Earth is not the centre of the universe.

1606
Dutch sailors first land in Australia.

1608
Hans Lippershey makes the first telescope.

1756
The Seven Years' War begins between Britain and France.

600–799
Christianity spreads throughout much of Europe.

800
Charlemagne is crowned as 'Emperor of the Holy Roman Empire'.

c. 802
The Khmer Empire is founded in Cambodia.

1099
The First Crusade captures Jerusalem from the Muslims.

1206
The Delhi Sultanate spreads Islam in India.

1291
The Last Crusade fails.

1405–33
Chinese admiral Zheng-He leads a fleet from China to eastern Africa.

1453
The Christian city of Constantinople falls to the Muslim Turks.

1492
Christopher Columbus sails from Spain and reaches the Americas.

1517
Martin Luther takes the first steps in the Protestant Reformation.

1534
Jacques Cartier of France makes his first voyage to North America.

1600
By this year, about one million African slaves have been transported to the Americas.

1607
The first British colony in North America is founded.

1681
The French sail the Mississippi River and claim a vast territory in North America.

16.2 Examining the evidence

LEARNING INTENTION

By the end of this subtopic, you will be able to identify sources of evidence for the period 650 to 1750 CE and explain why some evidence cannot be trusted.

16.2.1 How do we know about the world between c. 650 and 1750?

Generally we know more about the period between ancient and modern times than about many ancient societies because more evidence has survived. However, we know less about many medieval societies than we know about some ancient societies such as China and Rome. As you know, history is based on evidence from primary sources. There are gaps in our evidence because some societies in the period from around 650 to 1750 did not keep written records, some sources have been lost and most people could not read or write.

Can we always trust written sources from this period?

We have to be very careful about what written sources we trust. Very often we only have the recorded evidence of one side in a conflict. Also, the people who made written records usually came from the privileged groups in a society. For example, in China during this time, most written records were made by scholars who served as government officials. In Europe, especially during the Dark Ages, most written records were made by monks and other church people. Although such people did not all see things the same way, we need to look out for bias.

Archaeological sources

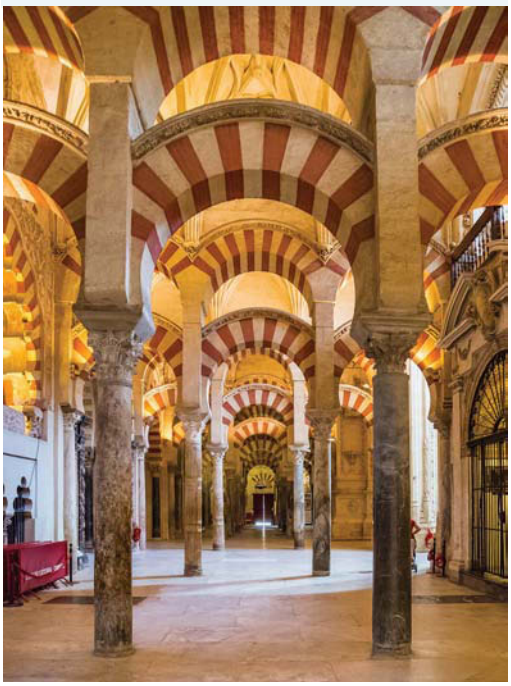
We have many archaeological sources from these times. Some medieval sources have been discovered by archaeologists. Some medieval buildings still stand where they were built. Many of them tell us about religious beliefs. There are Christian churches, Muslim mosques, Buddhist and Hindu temples, Jewish synagogues, the

SOURCE 1 Medieval stocks at Stow-on-the-Wold, England. As punishment for small crimes during the Middle Ages, people had their feet locked in stocks like these.

SOURCE 2 The Tha Phae Gate is one of five original gates still in the walls of the city of Chiang Mai. This city was founded in northern Thailand in 1296.

sacred sites of other religions and the art that represents the ideas of these faiths. Other remains tell us about everyday life, work and trade. These include towns, their walls and marketplaces, and traces of medieval villages. Sources such as castles, weapons and armour tell us about war, which was a constant feature of these times.

SOURCE 3 The Great Mosque of Cordoba



Unsolved mysteries

There are still unsolved mysteries about these times and you will encounter some of these in other subtopics. Perhaps in time we will know more through the discovery of lost archaeological traces, but we will probably never know the answers to some questions. Here are a few examples of mysteries or problems that historians have continued to investigate and debate:

- Why were the followers of a new religion, Islam, able to conquer huge areas during the seventh century?
- Why was western Europe backward in terms of the arts and science compared with the Byzantine and Islamic Empires during the Early Middle Ages?
- What happened in societies where there were no written records, such as in Australia, parts of Asia and Europe, and most of Africa, the Americas and the Pacific?
- Why was western Europe able to begin to dominate the world from the sixteenth century?

SOURCE 4 From the journal of Christopher Columbus, written for the King and Queen of Spain during Columbus's voyage of 1492, during which he accidentally discovered North America

Your Highnesses, as Catholic Christians, and princes who love and promote the holy Christian faith, and are enemies of the **doctrine of Mahomet**, and of all **idolatry** and **heresy**, determined to send me, Christopher Columbus, to . . . India to see the said princes, people, and territories, and to learn their disposition and the proper method of converting them to our holy faith; and furthermore directed that I should not proceed by land to the East, as is customary, but by a Westerly route, in which direction we have . . . no certain evidence that any one has gone. So after having expelled the Jews from your dominions, your Highnesses, in the same month of January, ordered me to proceed with a sufficient armament to the said region of India . . .

Using the sources

You will begin to gain an understanding of these times from just a few sources. Remember that to analyse a source you need to ask historical questions, for example:

- What is this source?
- When was it made, built or created?
- Where is it from?
- Who created this source?
- Why did it exist?

doctrine of Mahomet the religion of Islam; the Muslim faith, which follows the teachings of Mohammed

idolatry worship of idols

heresy any religious opinion that differed from that of the Roman Catholic Church

16.2 EXERCISE

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

Learning pathways

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

Check your understanding

1. Why do we know less about many medieval societies than we do about some ancient societies such as China and Rome?
2. History is based on evidence from primary sources. Why are there gaps in our evidence about some ancient societies?
3. Explain why written sources from the period 650 to 1750 CE are quite likely to be biased.
4. How can archaeological sources provide us with information about the period from 650 to 1750 CE and in many cases provide evidence of aspects of the period?
5. There are still unsolved mysteries about the period from 650 to 1750 CE. What are historians doing about this?

Apply your understanding

6. Analyse **SOURCE 1** using the following questions.
   a. What is it?
   b. What was it used for and how would it have been used?
   c. Where is it located?
   d. During what period of history was it used?
   e. What conclusions about that time can you draw from this source?
7. Using question 6 as a model, frame at least three questions that you could use to analyse **SOURCE 2**.
8. Read **SOURCE 4**.
   a. Who instructed Columbus to make this voyage?
   b. What was their attitude to Muslims, Jews and other non-Christians?

c. When did the voyage take place?
d. In which direction was Columbus ordered to sail to reach India?
e. Refer to a world map to find out what undiscovered continent would have stood in his way.

9. What evidence do we have about medieval societies?
10. What do we need to be careful of when analysing sources from the medieval period?

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

16.3 People on the move

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- identify the great empires of fifth century CE
- identify the nomadic enemies that threatened and attacked these great empires
- explain how Europe and Asia were changed by invasions and migrations.

16.3.1 Civilisations under attack

During the fourth century CE, great empires existed in Europe, Asia and North Africa. These were the Roman Empire, the Sassanian Empire of Persia, the Gupta Empire of India and the states that replaced the Han Empire of China. These civilisations were based on farming. Most of their people were peasants whose work supported the ruling classes of nobles, warriors and priests. Outside these empires, most people were **nomadic** herders. Migrations of nomads would cause centuries of chaos and bring enormous changes to the empires.

India and China

The Gupta Empire was founded in India in 320 CE when Prince Chandragupta defeated his rivals. His son went on to create an empire stretching across northern India. This great civilisation was destroyed at the end of the fifth century by the White Huns, barbarian nomads from Central Asia who massacred entire populations.

In China, the Han dynasty had controlled a vast empire that had trading links with Rome and Persia, but the Han were overthrown in 220 CE. It took more than 360 years of civil wars between the Chinese states, and invasions by Turkish and Mongolian nomads, before China was restored under the Sui dynasty (580–618 CE) and the Tang dynasty (618–907 CE).

DID YOU KNOW?

The time of the Gupta Empire was considered a golden age in India. It saw great advances in art, literature, mathematics and science. Indian scholars revolutionised mathematics by developing a symbol for zero and the numerals we now use in place of Roman numerals. They knew the Earth was round and that it orbited the Sun.

Printing was invented in China under the Tang dynasty. The earliest printed book was produced in 868 CE, long before printing was first used in Europe.

The fall of the Western Roman Empire

The Roman Empire weakened from about 180 CE. Over the following three centuries, Rome's power collapsed as people the Romans called barbarians swept into its territories. In 476 CE, a German chieftain named Odoacer deposed the last Western Roman emperor. Historians often use this event to mark the end of the ancient world and the beginning of the Middle Ages.

The Byzantine and Persian empires

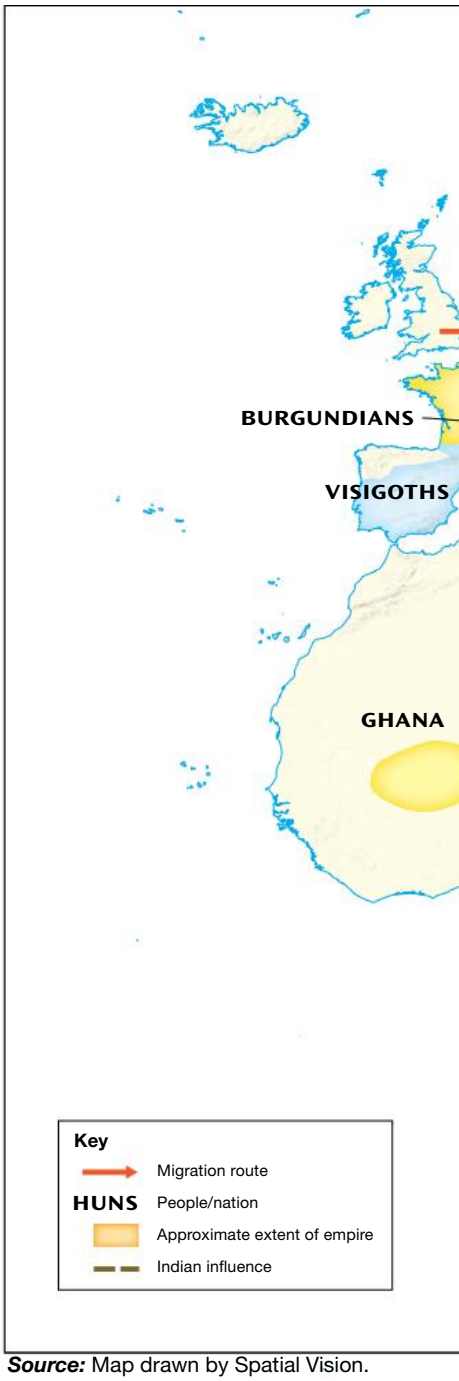
Despite constant attacks by their nomadic enemies, two great empires remained. These were the Eastern Roman (Byzantine) Empire in Europe and the Sassanian

nomadic moving around from place to place

Empire in Persia. The Goths, Franks and others who formed kingdoms in the former lands of the Western Roman Empire regarded themselves as Roman and acknowledged the authority of the Eastern Roman emperor in the Byzantine capital, Constantinople (modern-day Istanbul) (see **SOURCE 1**).

For centuries the Byzantine Empire kept ancient Roman culture alive. For a short time in the sixth century it managed to regain territories of the Western Roman Empire. But the Persian and Byzantine empires were weakened by destructive wars with each other. Persia was conquered by Muslim Arabs in 651 CE. A shrinking Byzantine Empire survived until 1453 CE when Constantinople was overrun by the Turks.

SOURCE 1 A relief sculpture in the Hippodrome of Constantinople. The Hippodrome was the centre of Byzantine political, social and sporting life. This sculpture, erected in 390 CE, portrays Roman Emperor Theodosius I among his court.



Source: Map drawn by Spatial Vision.

16.3.2 Invaders and migrations

The Early Middle Ages was a time of conflict caused by violent invasions by nomadic tribes who burst out of the **steppes** of Central Asia, the deserts of the Arabian peninsula and the cold lands of northern Europe. Among the invaders were groups fleeing others who had invaded their homelands. Land occupied by significant groups is shown in **SOURCE 2**.

Germanic peoples

The Goths, Vandals, Burgundians and Franks were Germanic peoples. The Goths migrated south to the Black Sea coast in the third century. Invasion by the Huns in 372–5 CE forced the Goths to flee into Roman territory. From the fifth century, the Goths divided into Ostrogoths and Visigoths while the Vandals and Burgundians occupied Roman territories. In the following century the Franks conquered most of **Gaul**.

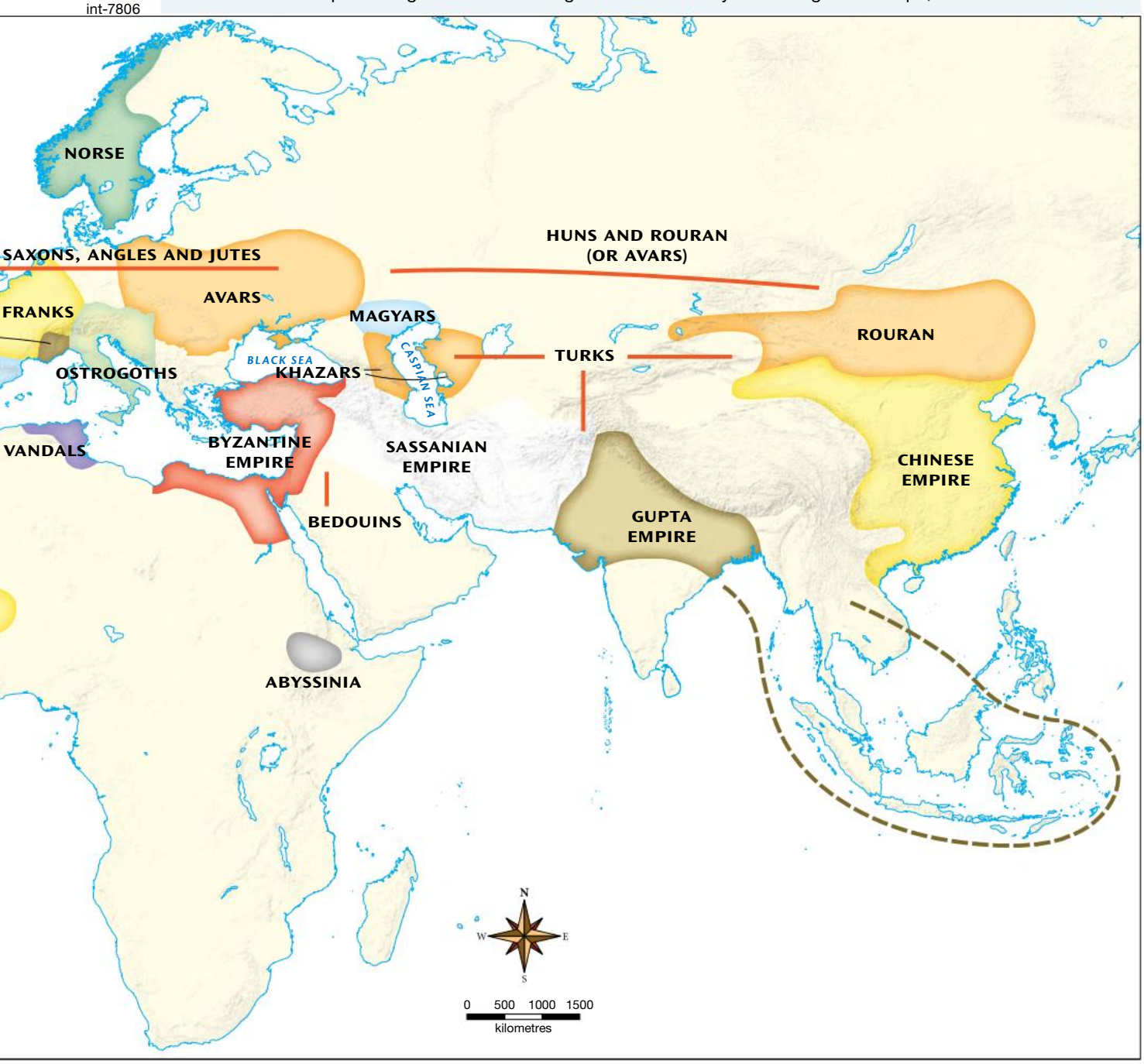
Huns

From about 370 CE, Central Asian nomads called Huns invaded eastern Europe. These ferocious fighters attacked their enemies by firing arrows from horseback. They carved out a huge empire that stretched from Central Asia to Germany before an alliance of Romans, Visigoths and Burgundians defeated them in 455 CE.

steppe a vast plain without trees
Gaul most of present-day France and Belgium

int-7806

SOURCE 2 A tmap showing invasions and migrations in the Early Middle Ages in Europe, Africa and Asia



Celts

Celtic tribes had spread to Britain and Ireland after 500 BCE. Following the Roman invasion of Britain in 43 CE, the Celts (Britons) lived under Roman rule until the Roman army left Britain in 410 CE. The Britons were then overrun by invading Saxons, Angles and Jutes.

Saxons, Angles and Jutes

These tribes from Germany and Denmark invaded Britain in the fifth century. The Britons fought back but were steadily driven into the western corner of their island. In most of Britain, the invaders destroyed every trace of Roman civilisation.

The word 'England' comes from a phrase meaning 'Angle people's land', and the invaders came to be known as Anglo-Saxons. They lived in villages in small kingdoms. Each Anglo-Saxon king was a war leader who ruled with the help of thanes (nobles) and the Witan (a kind of early parliament or council of advisers). Anglo-Saxon England united as a nation in the tenth century after it was almost completely conquered by Danish Vikings.

The Anglo-Saxons spoke the earliest form of English, which is now called Old English. However, they had no written language until they became Christians in the seventh century. Among their few written records is the *Anglo-Saxon Chronicle*, a year-by-year record of events in their kingdoms. It was commenced four centuries after the invasions. Another famous Anglo-Saxon text is the epic saga *Beowulf*. This legend of a Scandinavian warrior was handed down by word of mouth until it was written down between the eighth and eleventh centuries.

Rouran (also called Juan-Juan) and Avars

The Rouran were nomadic tribes who raided China's northern borders from the fourth century to the sixth century. They expanded westwards, causing other tribes to flee before them. In 552 CE, their power was broken by Turkish tribes, who revolted against them, and northern Chinese armies. It is possible that the Avars, who moved into eastern Europe around this time, were the Rouran. The invading Avars caused Slavic peoples (Serbs and Croats) to flee south. They, in turn, pushed the Greeks further down the Balkan Peninsula. The Avar state was destroyed by Franks and Bulgarians in 796 CE.

Turks

In the sixth century, the Turks spread south almost to India and west to the **Caucasus**, where they became known as Khazars. From the eighth century, their ruling classes adopted **Judaism** as their religion. In the tenth century, the Russians destroyed the Khazar Empire.

Bedouins

In the seventh century, following the rise of Islam, Bedouin nomads poured out of the deserts of the Arabian Peninsula, conquering all before them.

Norse (or Vikings)

From the eighth century to the eleventh century, the Norse peoples from Sweden, Norway, Denmark and Finland created new terrors. They plundered and settled coastal areas as far apart as Ireland, Russia, the Byzantine Empire and Italy.

Magyars

In the ninth and tenth centuries, Hungarian nomads called Magyars attacked central and western Europe. In 955 CE, German forces inflicted such a massive defeat upon them that the Magyars fled back to Hungary.

Caucasus the region where Europe meets Asia between the Black Sea and the Caspian Sea

Judaism the religion of the Jewish people

on Resources

Interactivity A map showing invasions (int-7806)

Explore more with myWorldHistoryAtlas

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

- Expanding contacts > **China: the Middle Kingdom**
- Overview > **Transformation of the Roman World**
- Overview > **Byzantine Empire**
- Overview > **Invasion of Britain**

16.3 EXERCISE

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

Learning pathways

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

Check your understanding

1. Which Asian empires suffered invasions from nomadic peoples?
2. What event do historians often use to mark the end of the ancient world?
3. What developments caused the collapse of the Persian and Byzantine empires?
4. In the civilisations that suffered invasions, the peoples' way of life was based on farming. How did the way of life of the invading tribes differ from that?
5. Identify three geographical regions that invading tribes came from.

Apply your understanding

6. Look closely at **SOURCE 1**. Explain why it is useful as evidence of the continuity of Roman culture through the Byzantine Empire.
7. Using information from **SOURCE 2**, the text in this subtopic and a modern map, draw up two columns. In the first column place the names of each invading or migrating group. In the second column, write down the place that each group threatened, invaded or occupied.
8. Describe the main changes brought to the world by invasions and migrations between the fifth century and the eleventh century CE.
9. Explain why the fall of the Roman Empire is regarded as an event that is of great historical significance.
10. Explain why the history of the Byzantine Empire can be regarded as an example of continuity in a period of great changes.

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

16.4 Religions on the move

LEARNING INTENTION

By the end of this subtopic, you will be able to:

- identify the two dominant religions of the early Middle Ages
- identify the regions dominated by these religions
- explain why each religion became dominant in particular regions
- explain how each religion contributed to shaping the world we live in today.

16.4.1 Islam's spread

The spread of Islam and Christianity in the Early Middle Ages shaped the world we live in today. From the seventh century, the rise of Islam in the Arabian Peninsula created a powerful new civilisation that expanded into three continents while Christianity gradually spread throughout Europe.

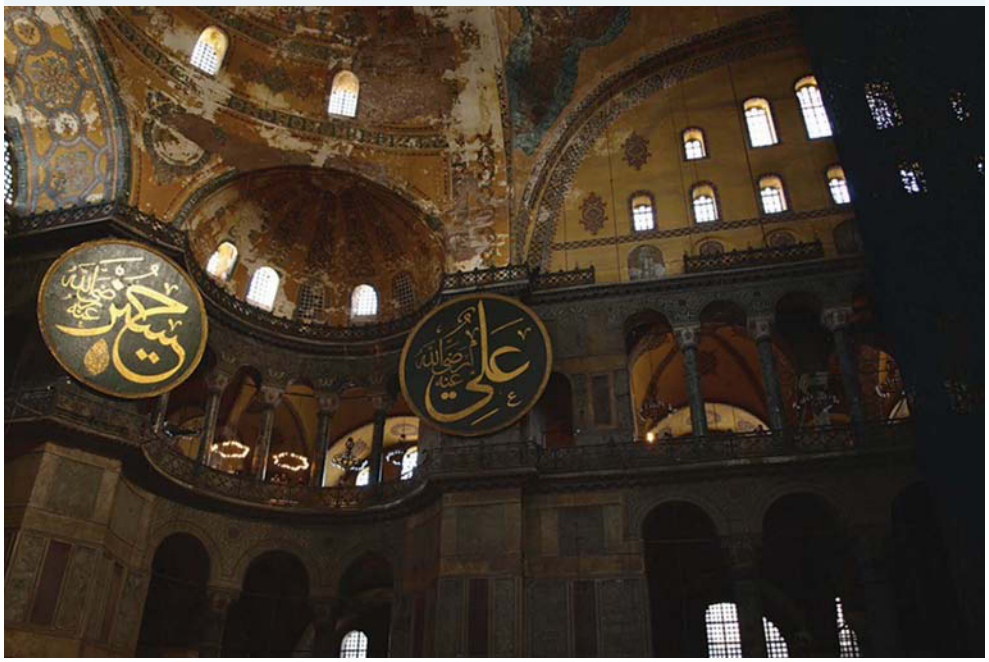
The religion of Islam was founded in Mecca (modern-day Saudi Arabia) by the prophet Mohammed (570–632 CE). Its followers were called Muslims, and by the time of Mohammed's death all the Arabian tribes had converted to Islam. Within just over one hundred years, Muslim Arabs conquered vast areas of Asia, Africa and even south-western Europe.

- Between 630 CE and the early eighth century, the Muslims conquered Syria, Jordan, Palestine and Iraq. They took Egypt from the Byzantine Empire and overthrew the Sassanian Empire in Persia. Muslims came to rule most of Spain and Central Asia up to the borders of China.
- Generally, conquered peoples were not forced to become Muslims. Many continued to practise other religions.
- Muslim expansion threatened Christian states. Constantinople, the capital of the Byzantine Empire, withstood Arab sieges during the 670s and in 717. In 718, the Bulgarians blocked Arab advances into south-eastern Europe and, in 732, the Franks stopped the Muslim advance into France.
- In the ninth century, Muslim armies pushed into southern Italy. The Muslim Turks conquered Constantinople in the fifteenth century, ending the Byzantine Empire.

DID YOU KNOW?

In 607 CE, the Bishop of Rome, Boniface III, became the first leader of the Christian Church to use the title 'Pope'. The Byzantine Empire did not recognise his authority and held that the Byzantine Emperor was the Church's head.

SOURCE 1 The Byzantine Christian church of Hagia Sophia was converted to a mosque by Constantinople's Turkish Muslim conquerors.



16.4.2 Spreading Christianity

Christianity became the state religion of the Roman Empire in 391 CE. It had spread throughout the Roman Empire and into Ethiopia and Nubia (now known as Sudan) in Africa by the time Rome fell. Islam overwhelmed Christian rule in the Middle East and North Africa but Christianity was to spread through Europe during the Early Middle Ages.

- The Germanic kingdoms that replaced Roman rule all became Christian, beginning with the Goths in the fourth century and ending with the Franks, whose king, Clovis I, was converted in 479 CE.
- Christianity had been brought to Britain during the Roman occupation, and Ireland was converted in the fifth century.
- Christian missionaries began converting Anglo-Saxons in England and the Frisians in the Netherlands in the late seventh century.
- Christianity expanded further when Charles the Great, known as Charlemagne, became king of the Franks in 768 CE. He defeated the Saxons in Germany and forced them to become Christians, defeated the Lombards in Italy, attacked the Muslim Moors in Spain and crushed the Avars.
- Charlemagne united much of France, Italy and Germany under the Carolingian Empire. In 800 CE, the Pope crowned him 'Emperor of the Holy Roman Empire'. However, Charlemagne's empire broke up quickly after his death in 814 CE.
- From 793 CE, Vikings attacked Christian settlements. They sacked **monasteries** and churches and carried off Christian prisoners to be sold as slaves.
- By the end of the Early Middle Ages, Europe was almost completely Christian. The Bulgarian Empire adopted Christianity in 864 CE. Byzantine priests converted the Russians of Kiev Rus in about 990 CE. In approximately 1000 CE, the Magyars and Vikings became Christians and Viking raids ended.

monasteries where Christian monks lived

SOURCE 2 A map of Europe in 1000 CE. By this time, most of Europe had converted to Christianity.

Source: Map drawn by Spatial Vision.

SOURCE 3 A high cross at a Christian monastery site founded in 547 CE at Drumcliffe, Ireland. The carved Bible scenes were originally painted in bright colours.

SOURCE 4 The broken round tower of a monastery at Drumcliffe, Ireland. Monks used such towers for storage, as bell towers, and as lookouts and refuges during Viking raids.

Explore more with myWorldHistoryAtlas

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

- Overview > **Spread of Islam**
- The Western and Islamic world > **Medieval Christendom**
- The Western and Islamic world > **Holy Roman Empire**

16.4 EXERCISE

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

Learning pathways

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

Check your understanding

1. When and by whom was Islam founded?
2. What areas did Muslims conquer between the seventh and ninth centuries?
3. Which Muslim invaders destroyed the Byzantine Empire in the fifteenth century?
4. Who was Charlemagne and why did the Pope crown him ‘Emperor of the Holy Roman Empire’ in 800 CE?
5. Make a list of European peoples who had converted to Christianity by 1000 CE.

Apply your understanding

6. Look closely at **SOURCE 1**. What clues does it provide for the conversion of this church to a mosque?
7. Examine **SOURCE 2**. What part of Europe was still under Muslim rule in 1000 CE?
8. Explain why the Christian high cross in **SOURCE 3** would have been brightly painted with Bible scenes.
9. Look closely at the features of the round tower in **SOURCE 4**. Explain how the design of this tower would have helped to protect Irish Christian monks from Viking raiders.
10. Describe the changes brought to the world by the spread of Islam and Christianity.
11. How was the spread of Islam and Christianity in the Early Middle Ages was significant for the modern?

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

16.5 A different way of life

LEARNING INTENTION

By the end of this subtopic, you will be able to describe the changes to the way of life that occurred between ancient and modern times.

16.5.1 Life in the countryside

In Europe during the Early Middle Ages, smaller, weaker states replaced the Roman Empire. A new kind of **self-sufficient** society developed. Some big cities declined while others grew and population levels changed. There was less trade and learning, wars were frequent and destructive, and plagues could be devastating.

As the Roman Empire collapsed, landowners could no longer prevent their slaves from leaving. The huge plantations worked mostly by slaves broke down and, about 500 CE, the amount of farmed land shrank. But between 700 and 1000 CE, farm production grew. Warmer weather during those centuries probably helped. From about 800 CE, a new way of farming, known as the **three-field system**, developed on the manors of big landowners.

A new social system

Local power and loyalties replaced the central power of the former Western Roman Empire. The new states did not have ancient Rome's power to collect taxes and to keep professional armies, so kings depended on local landowners to fight for them. This made big landowning families increasingly powerful and local rulers weaker. With such changes came feudalism. Under the feudal social system, peasants worked land and received protection in return for serving a landowner – usually a lord or a knight. The landowner held land in return for serving a king (see topic 17 Investigating medieval Europe).

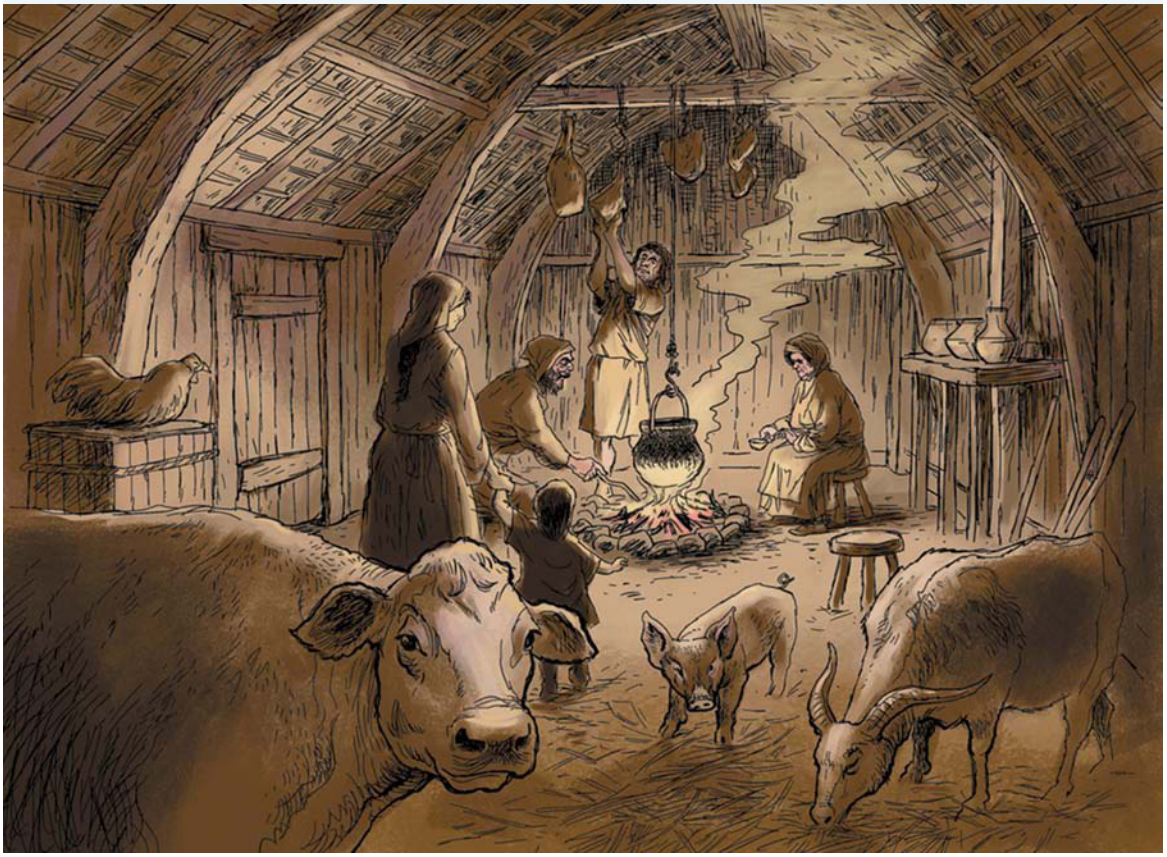
16.5.2 Population, learning, cities and trade

At the beginning of the Early Middle Ages, population levels fell because of wars, shrinking food production, epidemics and loss of jobs in manufacturing and trade. In 542 CE, more than 230 000 people died of a plague in Constantinople. This same epidemic may have killed 100 million people worldwide. However, from the sixth century, the population rose and continued to rise until the early fourteenth century.

self-sufficient able to provide for its own needs

three-field system where two fields were planted with different crops at different times of year, and a third field was left unplanted

SOURCE 1 A modern artist's reconstruction of a typical medieval peasant family house



Literacy and learning

Charlemagne (see **SOURCE 2**) was the first 'Emperor of the Holy Roman Empire' (see subtopic 16.4 Religions on the move). He made his capital, Aachen, a great centre of learning. However, in most of western Europe during much of the Early Middle Ages, learning survived only in monasteries.

In contrast, literacy and the learning of ancient Greece and Rome were kept alive in the Byzantine Empire. In the same period, Islamic societies experienced a golden age of learning as ancient books from Egypt, Greece, Rome, Persia and India were translated into Arabic. This helped the Islamic world to advance further in science and medicine than Europe, which was mostly Christian.

SOURCE 2 A statue of Charlemagne in Vatican City

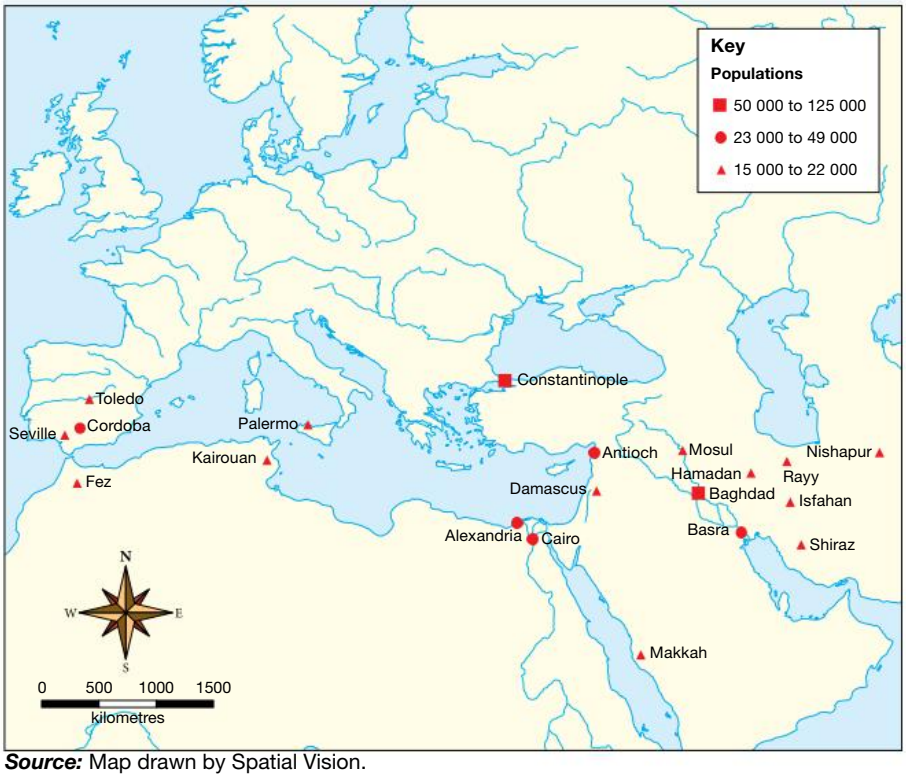
Cities and trade

Under the Roman Empire, cities had administered provinces, raised taxes and been centres for trade and the production of goods. Cities no longer served these purposes, and so their populations declined. However, by the tenth century, many European cities were growing again. Trade became difficult because there was no longer a big and powerful central state to construct and maintain roads. Wars and lawlessness also made it dangerous to travel or transport goods over long distances. By the eighth century, Europe's trade had fallen to a tiny fraction of the level of the first century. This was partly because Muslim expansion had cut Europe's trade routes to the east. In contrast, Islam's network of caravan trade routes was huge.

SOURCE 3 A map of cities in Europe, western Asia and North Africa in 528 CE

Source: Map drawn by Spatial Vision.

SOURCE 4 A map of cities in Europe, western Asia and North Africa in 1000 CE



Source: Map drawn by Spatial Vision.

DID YOU KNOW?

Arab conquests in Central Asia and Africa gave Muslims control of gold and silver mines. Some of this wealth was used to purchase weapons, timber, furs and slaves from Europe. Vikings supplied the slaves by kidnapping people during raids. European merchants did the buying and selling that delivered the slaves to the Arabs.

16.5 EXERCISE

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

Learning pathways

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

Check your understanding

1. What happened to the ancient Roman system of farming on plantations worked by slaves?
2. Why were the new local rulers weak compared to those who once held power in the Roman Empire?
3. Explain what epidemics are and what effects they could have.
4. What role did monasteries play in preserving learning?
5. List reasons why population levels fell in the first centuries of the Early Middle Ages.

Apply your understanding

6. What can you tell about the way of life of medieval peasants from **SOURCE 1**?
7. Look at **SOURCE 2**.
   a. Describe the way Charlemagne is portrayed in this statue.
   b. What were his achievements that would have led to him being considered worthy of such a statue? (You may need to refer to subtopic 16.4 Religions on the move to answer this question.)
8. Compare **SOURCES 3** and **4** and check them against **SOURCE 2** in subtopic 16.4.
   a. List the cities with populations over 23 000 people in the year 528 CE.
   b. List the cities with populations over 23 000 in the year 1000 CE.
   c. Which of the second group of cities were under Christian control?
   d. Which of the second group of cities were under Muslim control?
   e. As cities were centres of trade and learning, what conclusions can you draw about changes in trade and learning in the Muslim and Christian worlds during the Early Middle Ages?
9. Create a mind map to demonstrate the main changes in Europe between the fall of the Roman Empire and around 1000 CE in:
   a. farming
   b. population levels
   c. learning
   d. cities
   e. trade.
10. Identify and describe the reasons why the Muslim world was more advanced than the Christian world during the Early Middle Ages.

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

16.6 Rulers, religion and the changing map of medieval Europe

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- identify who had power and who had none in medieval societies
- explain how later medieval societies were unequal
- explain the role of religion in the inequalities in medieval societies
- describe how the map of Europe changed in later medieval times.

16.6.1 Rulers and the people

Later medieval times saw the growing power of rulers and big landowners, increased inequality, the further spread of major religions and an increase in the scale and destructiveness of warfare.

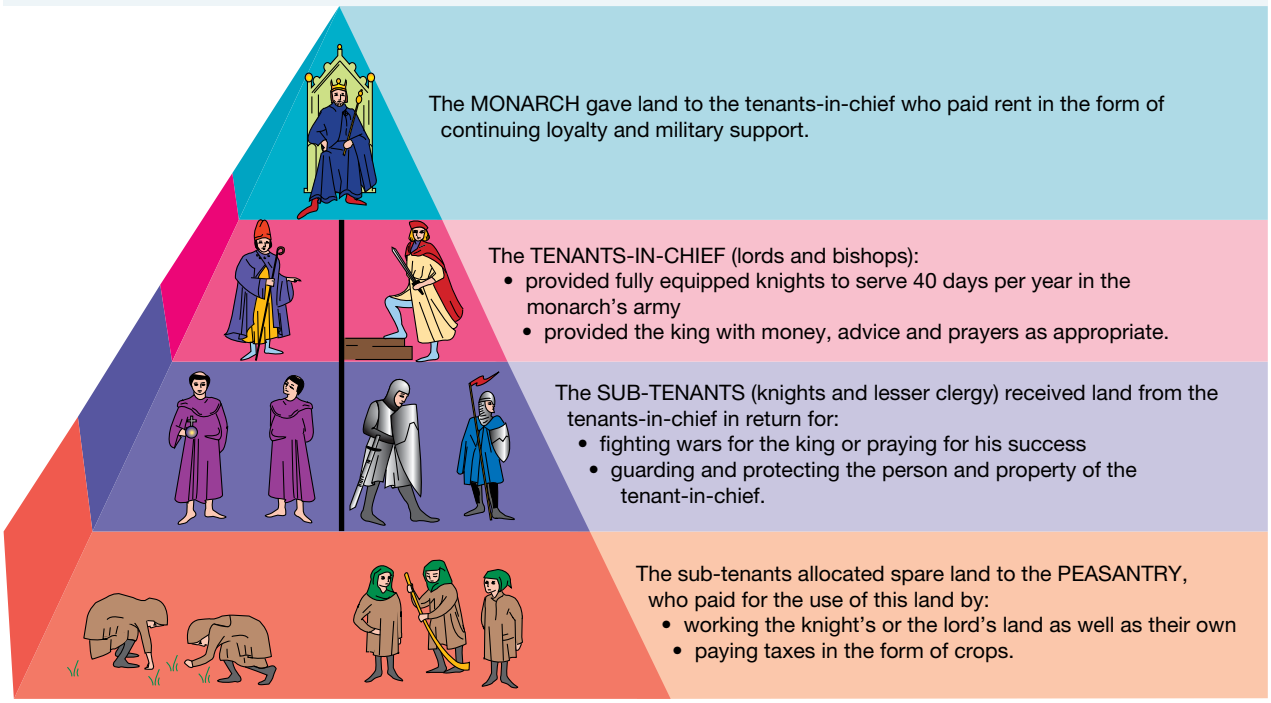
Under feudal systems in medieval times, kings were at the top of societies. In many kingdoms, all land theoretically belonged to the king. The next most powerful class was made up of tenants-in-chief (big noble landowners). They were followed by sub-tenants (knights and lesser clergy). Each of these groups received lands from those above them in return for serving or fighting. At the bottom of society were the peasants, who worked to provide a surplus for those above them (see **SOURCE 1**).

Inequality was common to all medieval civilisations. In most societies, slaves were only a small proportion of the population. However, by around the tenth century, **serfdom** became the lot of most peasants. Conditions varied from place to place, but generally, serfdom meant that peasants were not free to leave the land. It also meant that feudal lords had the right to force serfs to work for them, to tax them and to place other burdens on them. It was a kind of slavery that ended in most of western Europe by the fifteenth century, but continued in eastern Europe and much of Asia and Africa until much later.

serfdom the position of peasants who were not free to leave the land they worked

int-4071

SOURCE 1 A diagram showing the organisation of medieval society under feudalism. From the tenth century, increasing numbers of peasants were serfs.



War

Wars continued to be frequent and many were fought on a bigger scale than ever before. New technologies made them even more destructive. The invention of the stirrup enabled heavily armed knights to fight on horseback. New weapons such as the crossbow and longbow caused high casualties. Castles and walled cities offered some protection until gunpowder was adopted for war. By the fourteenth century, wealthy kings could hire **mercenary** armies to fight their rivals and crush rebellious nobles by using cannons to smash castle walls. Peasants were the main victims – armies killed and maimed them, stole their food and animals, and destroyed fields and villages.

16.6.2 Religion and rulers

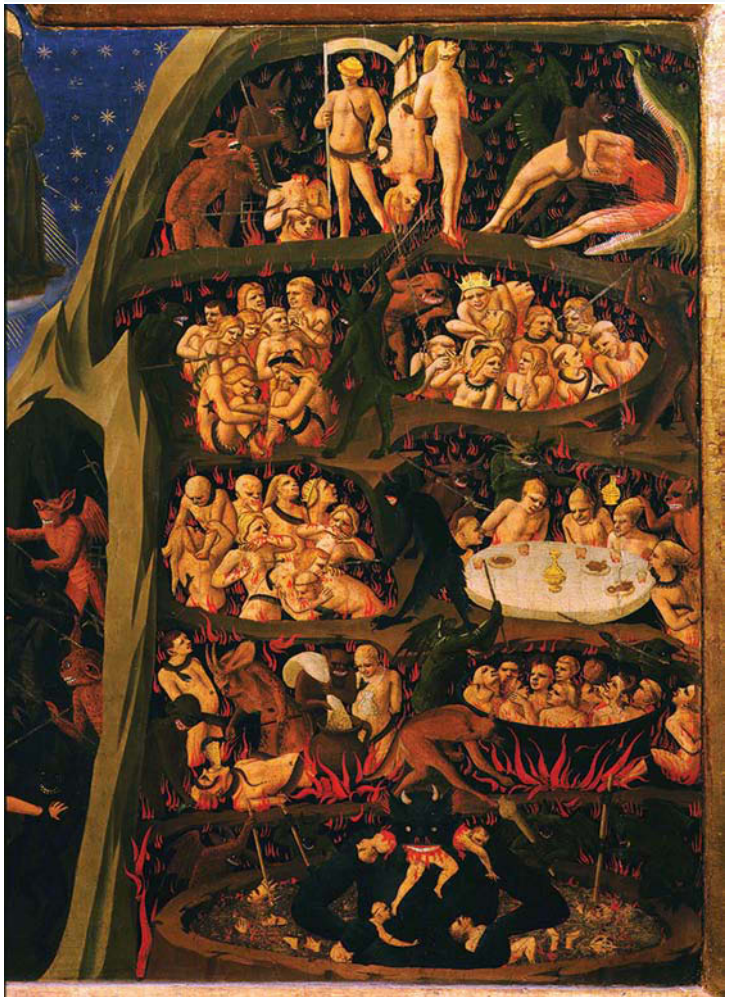
Traditional local religions declined due to the spread of Islam, Christianity and Buddhism. Increasingly, rulers claimed to be chosen by gods. In Christian Europe, kings claimed to rule by 'divine right'; that is, they were God's chosen representatives on Earth. In Africa and in the Buddhist and Hindu kingdoms of Asia, rulers claimed to be demigods – people who were part-human and part-god.

mercenary a soldier who fights for money rather than for patriotic reasons

DID YOU KNOW?

In 1054 CE, the Christian Church split, creating a division that has lasted to the present. Western Europe followed the Catholic Church while most of eastern Europe followed the Orthodox Church.

SOURCE 2 Detail from medieval Italian artist Fra Angelico's *The Last Judgement*, 1432–1435



In societies where rulers claimed such powers, religious leaders usually supported them. This meant that attempts to overthrow a ruler could be seen as rebellion against a society's god or gods. In Christian Europe, priests taught ordinary people that their unequal position in society was God's will and that they must accept it. Generally, people did as the Church told them. Life was short and the promise of heaven offered hope of a better life after death. The threat of burning in hell was a big incentive to obey the Church (see **SOURCE 2**). However, such threats did not prevent nobles and kings waging war against one another, nor did they prevent members of royal families murdering each other to gain power.

DISCUSS

In small groups discuss what you think each social class in a feudal society would have gained from religion.

General capability: Intercultural understanding

16.6.3 The changing map of Europe

The map of Europe changed often during later medieval times. Kings of strong states increased their power while some new kingdoms also became powerful. From 1095 CE, Europe launched Crusades to take the **Holy Land** from the Muslims (see topic 17 Investigating medieval Europe). Crusader states were set up in the Middle East, but Acre, the last crusader stronghold, fell to the Muslims in 1291. By the end of the Middle Ages, Christians had driven the Muslims out of Spain. However, Muslims came to dominate Europe's Balkan Peninsula, in south-east Europe.

Western Europe

In 1066, William, Duke of Normandy, invaded and conquered England with an army of Norman knights. In the following centuries, Norman England invaded Ireland, conquered Wales and fought to dominate Scotland. From 1337, England fought the Hundred Years' War with France over English claims to the French throne. The war saw the weakening of the power of feudal lords because kings became increasingly dependant on standing armies of peasant infantry armed with longbows, rather than mounted knights. From 1445 to 1485, England was divided by civil war (the War of the Roses) over rival claims to its throne.

Southern Europe

In the eleventh and thirteenth centuries, the Muslims were driven out of Portugal, southern Italy and Spain, with the last stage being the capture of Granada in 1492. In Italy, independent city-states grew wealthy through control of trade in the Mediterranean Sea.

The Byzantine Empire and the Balkans

In the eleventh and twelfth centuries, the Byzantine Empire was powerful. However, Bulgaria had a successful rebellion in 1185 and crusaders captured Constantinople in 1204. The Byzantine Empire disappeared when the Ottoman Turks captured Constantinople in 1453. By the end of the Middle Ages, the Turks controlled the entire Balkan Peninsula.

Central Europe

Throughout later medieval times, the area that is now Germany and other modern central European states formed the Holy Roman Empire. It was made up of several kingdoms, principalities and city-states. Hungary became powerful and Poland formed a huge state through a union with Lithuania, the last part of Europe to be converted to Christianity.

Holy Land land in the Middle East that has significant importance for Christians, Muslims and Jews

SOURCE 3 A map of Europe in 1328

Source: Map drawn by Spatial Vision.

Eastern Europe

In the thirteenth century, the Mongols (Tartars) from Central Asia invaded eastern Europe, conquering huge areas of Russia and creating **vassal states**. In the sixteenth century, the Tartars were driven out of Russia.

vassal state a state whose ruler acknowledges a foreign ruler as his overlord

on Resources

Interactivity The organisation of medieval society under feudalism (int-4071)

Explore more with myWorldHistoryAtlas

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

- Overview > **Byzantine Empire**
- Overview > **Invasion of Britain**

16.6 EXERCISE

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

Learning pathways

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

Check your understanding

1. Explain what it meant to be a serf.
2. Rulers and nobles waged wars but which class usually suffered regardless of which side won?
3. Why do you think rulers claimed to be chosen by gods or claimed to be demigods themselves?
4. What did 'divine right' mean?
5. Suggest why rulers might have felt less fear of hell than their subjects felt.
6. Against which countries did Norman England make war?
7. How did the Hundred Years' War change the nature of medieval warfare?
8. When were the Muslims driven out of most of south-western Europe?

Apply your understanding

9. Referring to **SOURCE 1**, explain how people at each level of medieval society benefited from those in levels below them.
10. Which social class really provided everything for all higher classes?
11. Analyse **SOURCE 2** using the following questions.
    a. Who created this source?
    b. For what reasons might it have been created?
    c. Describe the tortures suffered by the sinners in this depiction of hell.
    d. How do you think believing in the possibility of such an afterlife would affect people's behaviour?
12. Examine **SOURCE 3**.
    a. What were the main states in central Europe?
    b. Which part of Europe was controlled by the Mongols in the thirteenth and fourteenth centuries?
13. Create a timeline of events in Europe during later medieval times using the dates and references in this subtopic.
14. Outline the conclusions you can draw from your timeline about territory gained or lost in medieval Europe by Christians and Muslims.
15. Describe how rulers, war and religion changed Europe during late medieval times.

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

16.7 Migrations, invasions and empires in Asia

LEARNING INTENTION

By the end of this subtopic, you should be able to explain the significance of the Mongol Empire and how migrations and invasions affected Asia between the eighth and thirteenth centuries.

16.7.1 Change in Asia and the Pacific

Outside the Islamic and Christian worlds, other peoples were on the move. From about the eighth century, great migrations and invasions took place and new empires arose far from the old centres of civilisation.

East Asia

On the islands of Japan, a social system developed that was similar in many ways to European feudalism. From 794 to 1192 CE, the powerful Fujiwara family dominated Japan. Rulers depended on local lords called daimyo to control areas.

In China, the Tang dynasty fell in 907 CE because of rebellion and invasions by nomads. The Chinese empire fell apart until its southern territories were restored under the Song dynasty (960–1279 CE). Under the Song, China experienced a golden age in literature, the arts and sciences, and produced new inventions including gunpowder and printing with moveable type.

SOURCE 1 The Longhua pagoda in Shanghai is a seven-storey Buddhist temple. It was constructed in the tenth century during the Song dynasty.

South and South-East Asia

From the seventh century, most of India was divided into Hindu kingdoms that were often at war with each other. However, Muslims from Afghanistan came to dominate the north-west. By 1206 CE, they had captured most of northern India, which became known as the Delhi Sultanate.

Indian traditions influenced civilisations that emerged in much of South-East Asia from the sixth century. From the beginning of the ninth century to the early fourteenth century, this region was dominated by the Khmer Empire, with its centre at Angkor in Cambodia. Distinct from the rest of South-East Asia, northern Vietnam was strongly influenced by Chinese culture because it was part of the Chinese empire from the fourth century until it broke away and formed the state of Dai Viet in 939 CE.

The Pacific

Unknown to the peoples of the continents, from about 1000 BCE there were big movements of Polynesian peoples who navigated over vast distances across the Pacific Ocean. Their first migrations probably started from Malaya and Indonesia. Polynesians left no written records, but it is believed they reached Easter Island and Hawaii in about 500 CE and New Zealand in about 1000 CE.

16.7.2 The rise and fall of the Mongol Empire

Arguably the most amazing event of these times was the eruption of hordes of ferocious mounted warriors from Central Asia. In 1206 CE, a chief called Temujin became **khaghan** of the Mongol and Turkic tribes. He took the title Genghis **Khan** and united the tribes into a disciplined army that fell upon surrounding civilisations, killing and conquering over an enormous distance.

Why did the Mongols conquer?

One theory is that the Mongols needed to expand the territory they controlled. Low rainfall had reduced the amount of grass available for their stock, and the Jin and Xia dynasties that controlled northern China had cut off the trade upon which the Mongols depended. These states and China became Genghis Khan's first targets for invasion.

How did the Mongols conquer?

As they conquered other societies, the Mongols took some of the defeated men into their own armies; foremost among these were the Turkic Uighurs. The Mongols used cavalry, consisting of lightly-armed, fast-moving archers and **lancers**. They used giant catapults to bombard town and city walls, but their main weapon was terror. If a city or town refused to surrender, the Mongols would massacre everyone. It is possible that 90 per cent of Eastern Persia's population died in Mongol invasions. Many millions were also killed in China and Russia.

SOURCE 2 From the Muslim scholar Ibn al-Athir, *The Complete History*, written c. 1231

This thing involves . . . the greatest catastrophe . . . which befell all men generally, and the Muslims in particular . . .

For . . . these **Tatars** spared none, slaying women and men and children, ripping open pregnant women and killing unborn babies . . .

Tatars conquered most of the habitable globe, and the best, the most flourishing and most populous part . . . in about a year; nor did any country escape their devastations which did not fearfully expect them and dread their arrival.

Moreover they need no . . . supplies, for they have with them sheep, cows, horses . . . the flesh of which they eat . . .

Stories have been related to me . . . as to the terror of the Tatars . . . so it is said that a single one of them would enter a village or a quarter wherein were many people, and would continue to slay them one after another, none daring to stretch forth his hand against this horseman . . .

The Mongols in East Asia and South Asia

Genghis Khan advanced into China in 1207 after defeating the Jin and the Xia empires north of China. His grandson, Kublai Khan, completed the invasion in 1260 and founded the Mongolian Yuan dynasty. In 1368, the Chinese rebelled and founded the Ming dynasty. Over the next thirty years, the Chinese drove the Mongols out. Under the Ming, China's prosperity was restored, manufacturing and trade increased, and thousands of peasants were conscripted to build vast palaces and to strengthen the Great Wall.

In 1281, Kublai Khan sent a huge fleet with 150 000 soldiers to invade Japan. While the Japanese were desperately fighting to prevent the landing, a typhoon destroyed the Mongol fleet.

khaghan title equivalent to emperor; 'Great Khan'

Khan title of rulers in Central Asia; 'king', 'chief'

lancers mounted troops armed with lances (spear-like weapons used when charging)

Tatars another name for Mongols

The rulers of several states decided that it was better to become vassal states and pay tribute to the Mongols rather than be conquered. These states included Burma, the Khmer Empire and some Thai states.

Mongol forces led by Timur the Lame captured Delhi and massacred its people in 1398. After Timur left, India broke up into warring states. In 1526, Babur, another descendant of Genghis Khan, defeated India's Hindu and Muslim kings and founded the Mughal dynasty.

SOURCE 3 *The sacking of Suzdal by Batu Khan* from a sixteenth century Russian chronicle. In February 1223, Suzdal, the capital of a Russian principality, was captured by a Mongol army led by Batu Khan and burned to the ground.

The Mongols in eastern Europe and western Asia

In 1218, Genghis Khan ordered his generals to complete China's conquest while he led other Mongol forces west. Mongol armies invaded Russia and penetrated eastern Europe as far as Hungary and Poland by 1241. Lithuania, Bulgaria and Serbia became vassal states.

Other Mongol armies invaded the Muslim lands of western Asia, including Persia. They destroyed the Abbasid Muslim dynasty and occupied its capital, Baghdad, in 1285.

Running the Mongol Empire

The Mongol Empire was the largest **contiguous** empire in human history. At its peak, it was four times the size reached by the Roman Empire. The Mongols encouraged trade because of the benefits it brought them, and they tolerated different religions. Their own religion was **shamanism** but they provided tax benefits to Buddhist, Daoist, Islamic and Christian clergy to win support.

The collapse of the Mongol Empire

After Genghis Khan's death in 1227, his empire was divided between his sons and grandsons, creating four **khanates**. From 1269, the khanates often fought each other. There was also division within khanates because some Mongols wanted to adopt the settled ways of the people they ruled while others wanted to keep their nomadic traditions. Gradually, the Mongols lost control of lands they had conquered.

contiguous adjoining, where its parts are not separated by other states or oceans

shamanism central Asian religion based on a belief in many gods in the natural world and the power of shamans (priests) to influence these gods

khanate territory ruled by a khan

DID YOU KNOW?

In China, Kublai Khan and his successors encouraged painting, theatre, and advances in science, engineering and medicine. They employed Confucian scholars and Buddhist monks as advisers, oversaw the construction of palaces, roads and postal stations, and encouraged travel, trade and the exchange of ideas between the East and the West.

int-4073

SOURCE 4 A map of the Mongol Empire near its peak in 1280

Source: Map drawn by Spatial Vision.

Explore more with myWorldHistoryAtlas

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

- The Asia-Pacific world > **Khmer Empire**
- The Asia-Pacific world > **Japan under the shoguns**
- The Asia-Pacific world > **Polynesian expansion**
- Expanding contacts > **Mongol Empire**

16.7 EXERCISE

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

Learning pathways

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

Check your understanding

1. What did the social system of Japan have in common with that of medieval Europe?
2. Which older civilisations influenced South-East Asia?
3. What were the Mongols' motives for invading countries at the beginning of the thirteenth century?
4. How were the Mongols able to overwhelm many great civilisations?
5. Why were the Mongols tolerant of different religions in their empire?

Apply your understanding

6. In what ways does **SOURCE 1** provide evidence to support the view that the Song dynasty was a golden age in China?
7. Use **SOURCES 2** and **3** to answer the following questions and to support your answers.
   a. How did the Mongols strike fear into their enemies?
   b. Why were Mongol armies able to advance without waiting for supplies?
8. Study **SOURCE 4** and compare it with maps of modern-day Asia and Europe.
   a. Which modern-day countries occupy the land controlled by each of the Mongol khanates in 1280?
   b. Name the places outside the Mongol khanates that were attacked by Mongol armies.
9. Referring to the sources and other information in this subtopic, explain why the age of the Mongol Empire can be regarded as a turning point in Asian and European history.
10. Explain why the Mongol Empire has great historical significance.

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

16.8 Population, cities and trade

LEARNING INTENTION

By the end of this subtopic, you will be able to explain how technologies impacted population growth, cities and trade.

16.8.1 The rise of the cities

Many of the great changes that occurred between the 1400s and about 1750 resulted from events or ideas from later medieval times. These included the spread of Islam to India and parts of South-East Asia, the opening of trade under the Mongol Empire and the fall of Constantinople. Later medieval times also saw advances in farming and sailing technologies, and the growth of populations, cities and trade. All of these changes would influence the world in the centuries to come.

SOURCE 1 Cities like Genoa in Italy became wealthy trading ports from the fifteenth century.

World population grew because changes in technology enabled more food to be produced. New technologies spread across Europe, Asia and Africa through trade routes. Important technological changes included:

- the mouldboard plough, which enabled heavy European soils to be turned and drained
- better irrigation methods
- improved breeds of farm animals, providing more meat from each animal
- the horse collar, enabling horses to pull heavier loads without choking
- improving crops and enriching soils
- the cultivation of rice in areas such as the huge Ganges Delta in India
- the spread of techniques for growing crops such as corn in the Americas.

The population of Europe, Asia and Africa reached about 235 million by 1250 CE, but in the early fourteenth century, population levels fell due to:

- epidemics, especially the Black Death (bubonic plague), which began in 1347 and reduced the population by possibly a third
- the Little Ice Age (a cold period in the Northern Hemisphere), which caused many famines because much less food could be grown.

The population again grew rapidly after about 1350, reaching about 400 million by 1500. However, environmental problems also grew. Forests were cut down for wood and to clear more land for farming, which increased soil erosion and flooding.

The number of big towns and cities once again grew. This was possible because:

- improved agriculture provided a surplus to feed people in towns and cities
- towns and cities were growing centres of trade, populated mainly by merchants and skilled craftsmen and their families.

As cities became wealthy, their power grew. In some European countries, representatives of cities sat alongside lords and church leaders as advisers to kings. Some trading cities came to be almost independent states, governed by wealthy citizens.

DID YOU KNOW?

Towns could be dangerous places to live. There were few effective ways of getting rid of wastes, so the smell in towns was usually terrible, and disease and illness could spread easily. Also, fires in workshops and houses spread quickly and often. The city of Rouen in France was destroyed by fire eight times in 25 years.

16.8.2 Trade routes

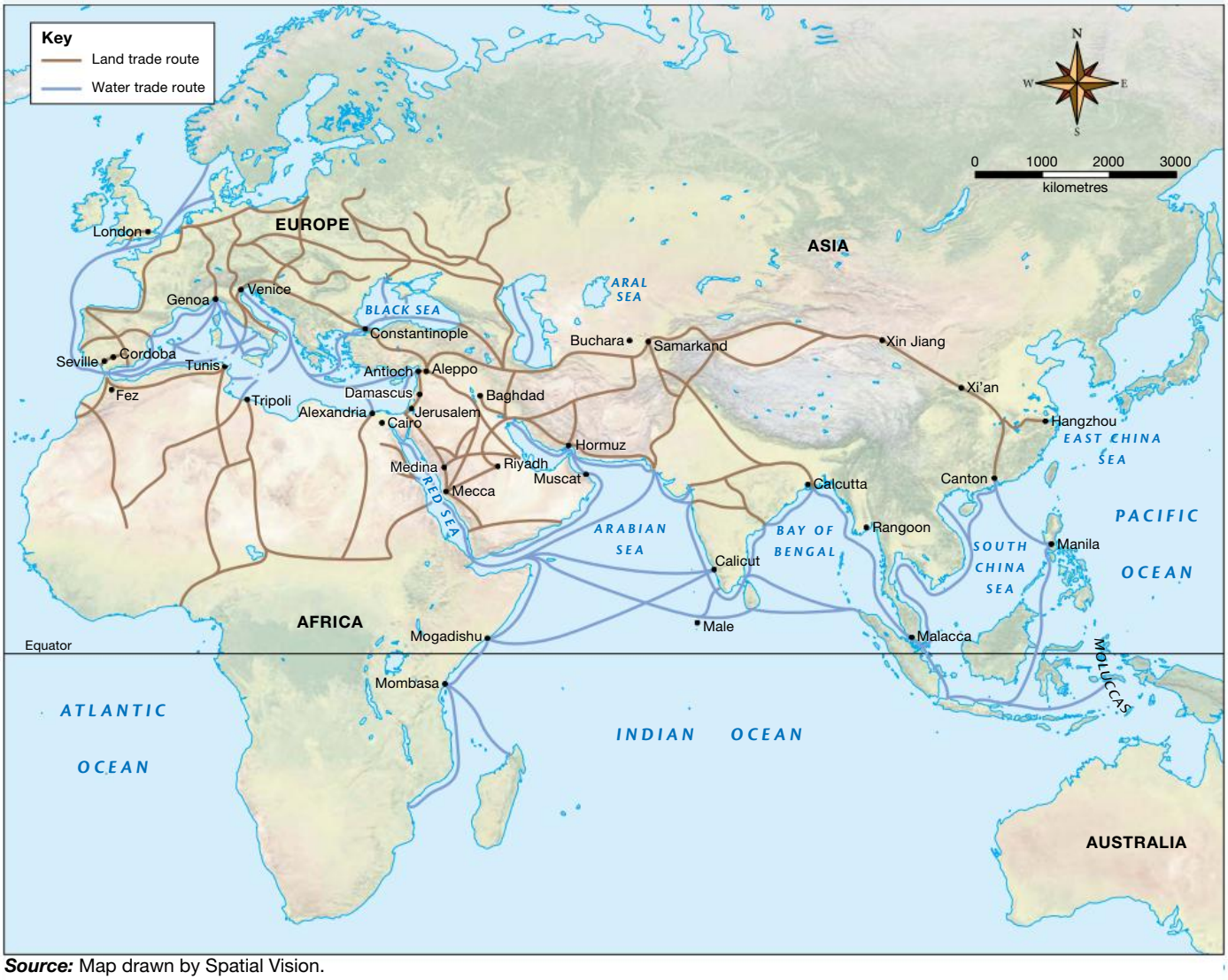
Trade expanded along ancient trade routes including the Silk Road, and new trade networks were opened. Goods traded included spices, silk, tea, salt, horses, gold and slaves. Land trade routes criss-crossed Europe, Asia and North Africa. Sea trade routes crossed Europe's Atlantic coast; Africa's east coast; the Baltic, Mediterranean, Black, Red and Arabian seas; the Bay of Bengal; and the South China Sea. Long-distance voyages were very dangerous but they were helped by new technologies in ship-building and inventions such as the **mariner's astrolabe** and the **sternpost rudder**. The Chinese developed large ships that could carry hundreds of sailors and merchants. Between 1405 and 1433, Chinese admiral Zheng-He took a fleet all the way from China to east Africa.

mariner's astrolabe a medieval instrument used to navigate while sailing. It was used to find a ship's latitude by measuring the altitude of the Sun or a star.

sternpost rudder a heavy board hung from the centre of the back of a ship that makes it easier to steer

int-4075

SOURCE 2 A map of trade routes of Europe, Asia and Africa in later medieval times



Source: Map drawn by Spatial Vision.

on Resources

Interactivity A map of trade routes of Europe, Asia and Africa in later medieval times (int-4075)

Explore more with myWorldHistoryAtlas

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

- Overview > **Non-European exploration**

16.8 ACTIVITY

Conduct research and write a brief account of the reasons for the wealth and power of one trading city in this period.

HASS skills: Questioning and researching

16.8 EXERCISE

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

Learning pathways

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

Check your understanding

1. Many of the real changes that occurred between the 1400s and about 1750 resulted from events or ideas from which time period?
2. Copy the following sentences and complete them by filling in the gaps.
   a. The world's population rose until the early _____ century because _____ enabled agriculture to produce more _____.
   b. In the early fourteenth century, population levels fell in Europe, Africa and Asia due to _____ and _____.
   c. Clearing forests for agriculture caused problems such as _____ and flooding.
3. Give two reasons for the increase in the number of large towns and cities in the Late Middle Ages.
4. Name some of the goods that were exchanged along trade routes.
5. How did the mariner's astrolabe and the sternpost rudder improve travel by sea?

Apply your understanding

6. Look closely at **SOURCE 1**. Identify and describe the features that provide evidence of Genoa's past prosperity as a trading port.
7. Imagine you are a merchant who is about to set out along one of the trade routes shown in **SOURCE 2**. Make a plan for your journey. Include:
   a. a copy of the route you will take
   b. a list of provisions for your journey
   c. a list of places where you will get fresh supplies of food
   d. an estimate of the distance of your journey. (*Hint:* Use the scale in **SOURCE 2**.)
8. Choose one of the trade routes in **SOURCE 2**.
   a. Name the medieval cities along the route.
   b. Use a modern atlas to list the countries and/or seas crossed by this trade route.
   c. Make a list of at least five questions that a historian could ask about this trade route.
9. How might the location of a city along a trade route contribute to its prosperity?
10. Why would some cities such as Genoa and Venice have gained huge advantages from their locations?

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

16.9 Muslim traders and Africa

LEARNING INTENTION

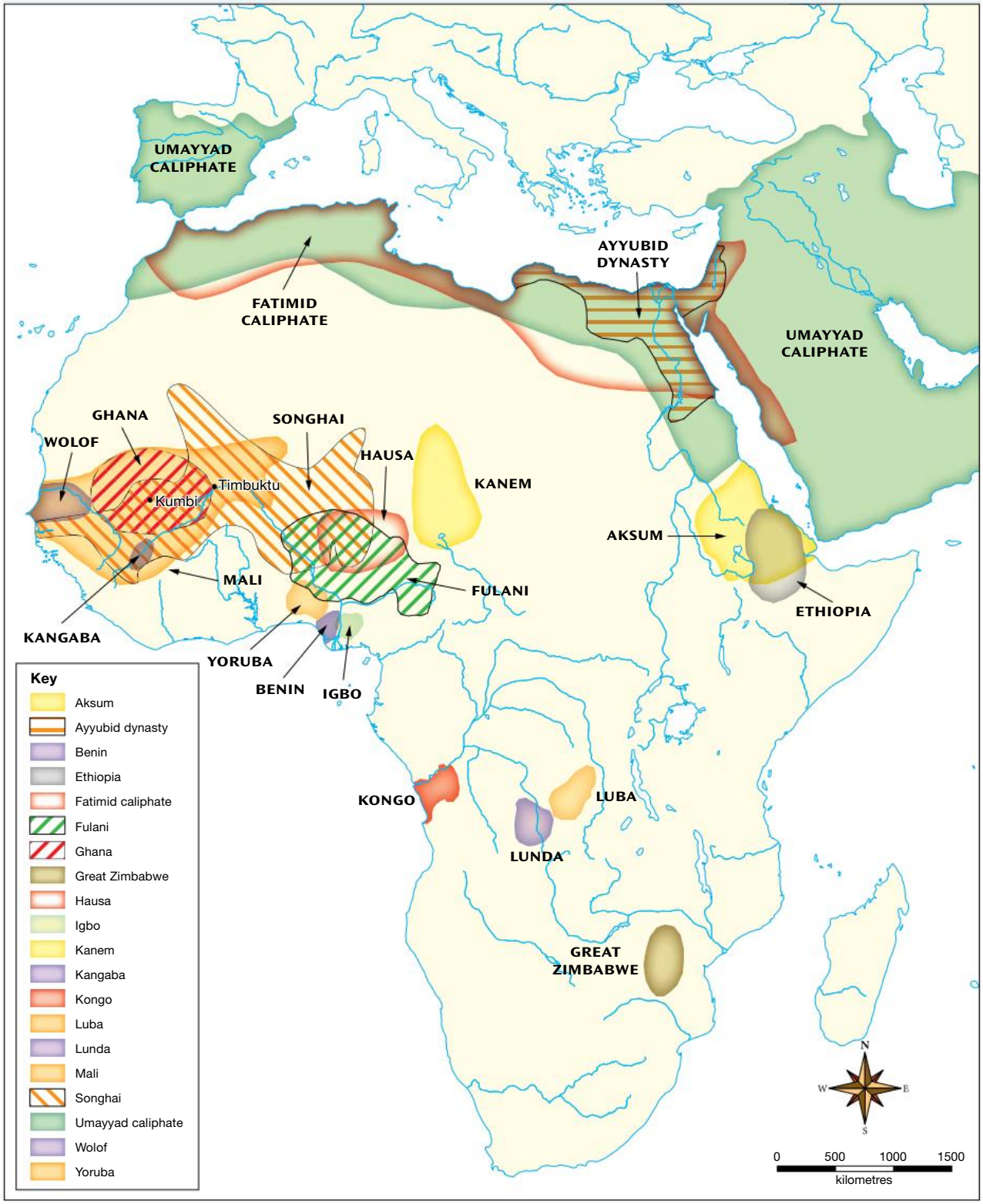
At the end of this subtopic, you will be able to explain the role of Muslim Arabs in establishing trade networks in Africa and identify the significant kingdoms that existed in Africa.

16.9.1 Trade, wealth and slavery

In the seventh century, Muslim Arabs conquered coastal North Africa. From there, Arab traders gradually spread along the east coast. Because traders could cross the deserts with camels, Arabs were able to spread Islam south of the Sahara into several West African kingdoms.

int-7808

SOURCE 1 A map of medieval Africa showing the rise and fall of kingdoms



Source: Map drawn by Spatial Vision.

By the thirteenth century, Arab Muslims lived in and traded from bases in African coastal towns, from modern-day Somalia to Tanzania. Arab **dhows** brought manufactured goods to Africa from the Arabian Peninsula and India. Goods included weapons, tools, cloth, glass and pottery. The boats sailed back carrying slaves, ivory and gold.

dhow a traditional Arab sailing vessel

Ghana

Ghana was the strongest of the farming kingdoms that arose in West Africa from the ninth century. Ghana was located north of the modern state of Ghana in what is now Mali. In 1062 CE, Muslim Amazigh (Berber) nomads attacked Ghana, but it took 14 years before they captured its capital, Kumbi. Ghana collapsed but Mali rose in its place in the thirteenth century.

SOURCE 2 Conical tower within the ruins of Great Zimbabwe

Mali

The first ruler of the Mali Empire was Sundiata (1230–1255). He expanded its territory and gained control of the gold trade, in which Arab traders transported gold north through caravan routes. Mali's rulers became Muslims and gained great wealth. When Mana Musa, who ruled Mali from 1312 to 1327, went on a pilgrimage to Mecca, he took a huge party with him, including 12 000 slaves dressed in silk. Arab scholars were brought to Mali and, in the fourteenth century, they built a university at Timbuktu that operated until the sixteenth century, when invaders from Morocco destroyed it.

Other African civilisations

By the fifteenth century, Islam also influenced other wealthy African trading states, including the Hausa city-states, Kanem and the Songhai Empire. City-states also emerged in Guinea. In the sixteenth century, Portuguese and Dutch explorers visited some of their towns, including Benin. Between the thirteenth century and the fifteenth century, Great Zimbabwe became a wealthy African kingdom by trading gold through Muslim merchants on the coast.

on Resources

Interactivity A map of medieval Africa (int-7808)

16.9 EXERCISE

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

Learning pathways

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

Check your understanding

1. In which parts of Africa did Arab influence spread in medieval times?
2. How did the camel and the dhow help Muslims to trade and spread their influence in Africa?
3. What types of cargo did Arab traders bring into and take out of Africa in their dhows?
4. What did Sundiata accomplish as ruler of the Mali Empire?
5. Why is Timbuktu significant?

Apply your understanding

6. Create a timeline of medieval milestones in Africa using the information in this subtopic.

7. Using **SOURCE 1** and a modern atlas:
   a. make a list of West African kingdoms in the Middle Ages
   b. find out which modern countries occupy the sites of these kingdoms.
8. Look carefully at **SOURCE 2** and explain how it provides evidence of a great civilisation.
9. Using the sources and other information in this subtopic, identify what changed in Africa due to the activities of Muslim traders.
10. Explain how Muslim traders were able to spread their influence in Africa between the seventh century and the sixteenth century.

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

16.10 The emerging power of western Europe

LEARNING INTENTION

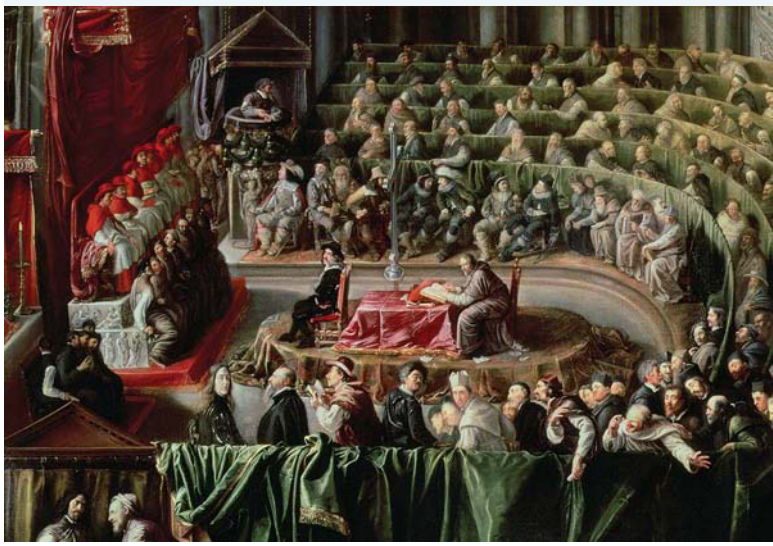
By the end of this subtopic, you will be able to identify changes that occurred between the fifteenth and eighteenth centuries and explain why these changes enabled western Europe to dominate much of the rest of the world.

16.10.1 New ways of thinking

Western Europe was changed by three great movements during early modern times. The first was the **Renaissance**, which began in the fifteenth century. The second and third were the Scientific Revolution and the Enlightenment of the eighteenth century. Early modern times also saw western Europeans spread their power by finding new sea routes, exploring, taking control of trade, conquering new lands and founding **colonies**. Three things made this possible: new ideas, the quest for riches and new uses for inventions.

When Marco Polo, an Italian merchant and explorer, visited China in the thirteenth century, he was amazed by its wealth and culture. Nobody in his time could have imagined that western Europe would come to dominate the world. The changes that made this possible started with the Renaissance in Italy in the 1400s. It was a period of renewed interest in the learning and arts of ancient Greece and Rome. It led to a movement in which some people began to think more independently and to seek a better understanding of their world.

SOURCE 1 The trial of Galileo, painted in the seventeenth century



The Scientific Revolution

The Renaissance brought a scientific revolution that encouraged thinkers to challenge authority and be guided by observation and reason. However, such thinking was dangerous because the Catholic Church still expected people to follow its interpretations of science. Among the most famous of the new scientific thinkers were Leonardo da Vinci (1452–1519) and Galileo Galilei (1564–1642). Galileo proved by observations that the Earth rotated around the sun and he published his findings in 1632. The Church still insisted that the Earth was the centre of the universe and they put him on trial and threatened him with torture. Galileo was forced to recant (take back what he had proved) and was kept under house arrest for the remainder of his life. However, challenges to old beliefs could not be stopped completely. Increasingly, the Church found it harder to crush new ways of thinking, especially after printing presses helped new ideas to spread.

Renaissance meaning 'rebirth', it refers to the flowering of the arts and sciences in late medieval Italy and later in north-western Europe

colony an area of a country that is ruled by a different country

The Enlightenment

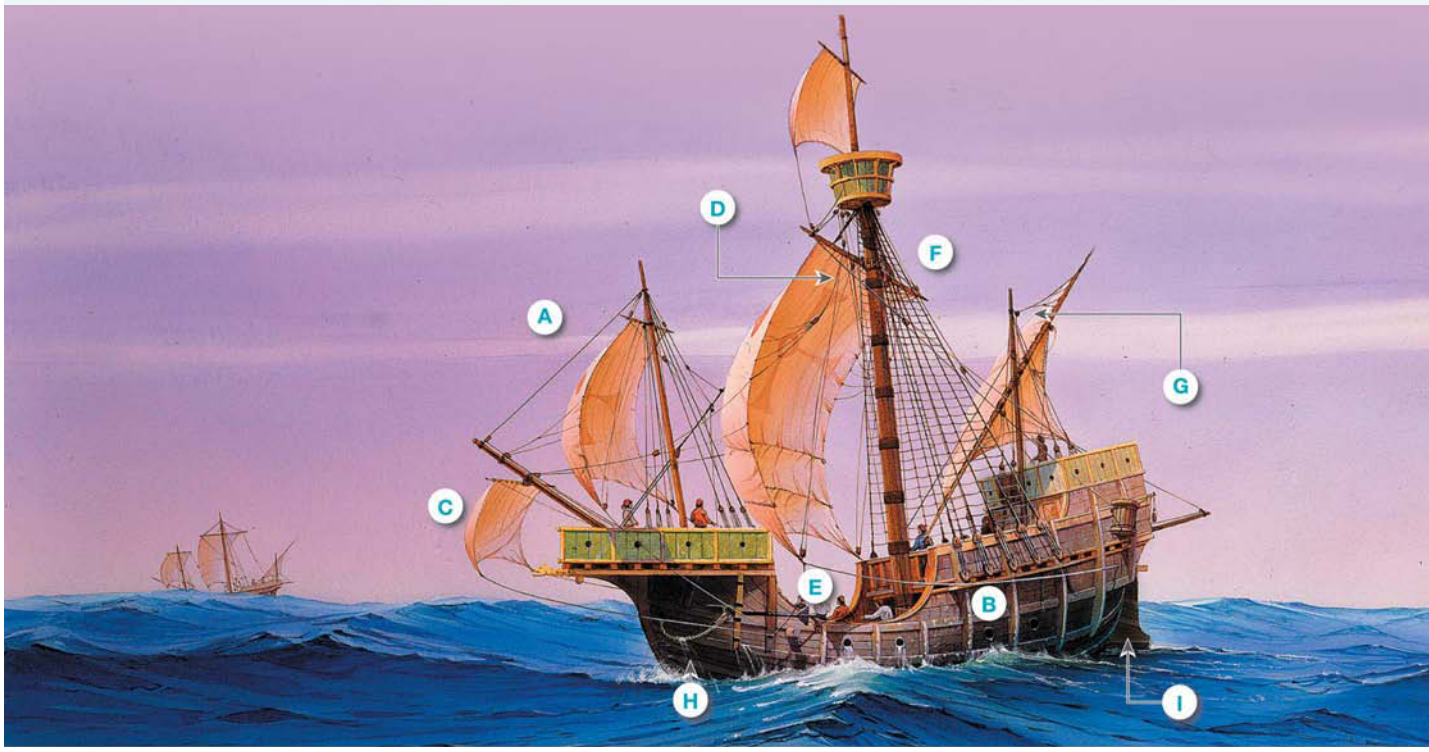
By the eighteenth century, educated Europeans were influenced by what came to be known as the Enlightenment. In this period, a number of remarkable Europeans carried out their own experiments in the search for greater understanding. In this 'Age of Reason', thinkers criticised old systems of power. Their ideas would inspire others to overthrow the power of the Church, kings and nobles in the French Revolution, which began in 1789.

16.10.2 The quest for riches and the use of inventions

In the thirteenth century, the Mongols had encouraged trade and foreign contacts throughout their empire. European merchants had travelled along the Silk Road, creating a growing European demand for luxury goods from Asia. This demand contributed to the search for a sea route to Asia, especially after 1453 when the Ottoman Turks captured Constantinople and took control of overland trading routes linking Europe and Asia. By the 1400s, many merchants had become very wealthy. Some became bankers who lent money to rulers. Merchants encouraged artists and architects and saw that great profits might be made by funding exploration to find a sea route to Asia.

int-4077

SOURCE 2 A modern artist's impression of a fifteenth-century caravel



- **A** Caravels were about 15 metres long and weighed about 80 tonnes. They were smaller, lighter and faster than the later Spanish galleons.
- **B** Food supplies included salted fish, pickled meat, weevil-infested biscuits, rice, dried beans, chickpeas and raisins. On long journeys, sailors often became very sick with scurvy (caused by a lack of vitamin C) because they had no fresh fruits and vegetables.
- **C** Water and wine were stored in casks and often went 'off' on long journeys.
- **D** Square sail
- **E** As well as ordinary seamen, a ship's crew included carpenters, cask makers and sailmakers.
- **F** A mix of square and lateen (triangular) sails made caravels easy to manoeuvre, especially when sailing into headwinds.
- **G** Lateen sail
- **H** Wooden planks were fixed side by side onto the hull with wooden pegs. To keep the ship steady under sail, the bottom of the hull was often filled with gravel.
- **I** A rudder at the back of the ship (adapted from the Chinese) meant the ship could steer without oars.

Western Europe's expansion was also made possible by its use of inventions from other cultures. Many inventions that Europeans adopted originated in China and had been in use there for hundreds of years. These included gunpowder, the **compass** and printing. **Clockwork** had been invented in the Byzantine Empire. Modern mathematics had spread from fourth century India through the Islamic world to Europe. **Lateen sails** had been used for centuries on Arab dhows. Europeans improved upon these inventions. Printing spread rapidly after Johannes Gutenberg produced the first European book on a printing press using moveable type in 1445. By 1500, there were about a thousand printers in Europe and new ideas were spreading widely through printed books. The first portable clock was made in 1410. Hans Lippershey, a Dutchman, made the first telescope in 1608.

Mathematics, compasses, telescopes and clockwork were very important for navigating ships. In the fifteenth century, a new shipbuilding method emerged in Europe. It used the lateen sails of Arab dhows with the fixed square rigged sails that had been used in ancient galleys to produce the world's first real ocean-going ship, the **caravel** (see **SOURCE 2**). From the beginning of the sixteenth century, carracks were developed from caravels. These new ships were bigger, faster and could be sailed under different wind conditions.

compass navigation instrument that shows the direction of north

clockwork the inner workings of a mechanical clock or a machine that operates in a similar way

lateen sail a triangular sail rigged at 45 degrees to the mast of a boat or ship

caravel a type of light, fast ship, used mainly by the Portuguese and Spanish between the fifteenth century and seventeenth century

DID YOU KNOW?

The first paperback books were printed in Venice by Aldus Manutius. They were made without heavy covers so that they could be carried in saddlebags.

DISCUSS

Form small groups to discuss ways in which the printing press, gunpowder and the compass could have contributed to the growth of European power. **History concept: Significance**

Hold a class discussion on how history might have been different if the printing press had never been invented. **General capability: Critical and creative thinking**

on Resources

Interactivity A modern artist's impression of a fifteenth-century caravel (int-4077)

Explore more with myWorldHistoryAtlas

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

- Overview > **The West visits the East**

16.10 EXERCISE

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

Learning pathways

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

Check your understanding

1. What new attitudes marked the Renaissance, the Scientific Revolution and the Enlightenment?
2. Describe the attitude of the Catholic Church to these new ways of thinking.

3. Why was the Church unable to stop the spread of scientific thinking?
4. Why was the Silk Road important for trade?
5. What motivated Europeans to find a sea route to Asia?
6. Describe the role of merchants in the quest for a sea route to Asia.

Apply your understanding

7. Look closely at **SOURCE 1**.
   a. Describe what is happening in this painting.
   b. Why was Galileo on trial?
   c. How would you explain the different perspectives of Galileo and the people who were prosecuting him?
8. Using **SOURCE 2**, identify three features of the caravel that would have made it more suitable for sailing across oceans than earlier ships.
9. Draw a mind map to show how new ways of thinking, the quest for trade and the use of inventions contributed to Europe's expansion from the fifteenth century.
10. How would the invention of printing presses with movable type in 1445 have made the spread of new ideas quicker and easier?
11. What advantages would Western Europe have gained from the invention of the telescope?

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

16.11 Portuguese and Spanish voyages of discovery

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- identify who the leading explorers and traders were prior to the fifteenth century
- identify why they were displaced by the Portuguese and Spanish from the fifteenth century
- describe how these later voyages redrew the map of the world.

16.11.1 Diaz, Columbus and Magellan

The spirit of inquiry that marked the Renaissance also contributed to European exploration and the expansion of Europe's influence throughout the world. Sea travel was extremely dangerous but there were huge profits to be made, and so the Portuguese and Spanish sailed through unmapped waters towards what many thought were the edges of the Earth.

Between the seventh and thirteenth centuries, Muslims had been the world's leading explorers and traders, but from the fifteenth century the lead was taken by the Portuguese and soon after by the Spanish. The small kingdom of Portugal took the first steps. Prince Henry, the governor of Portugal's southern coastal region from 1419, encouraged shipbuilders, sailors and cartographers. He founded a school for navigation and obtained funds from Italian and German bankers. Henry wanted to take over the African coastal trade from the Muslims. By 1446, Portuguese expeditions had explored and mapped the northwest coast of Africa and brought back cargoes of gold and slaves.

In 1487, Portugal sent Bartholomew Diaz to find an eastern route to India by sailing around Africa. Diaz sailed down the west coast and reached the bottom of Africa but he had to turn back because many of his crew had died from diseases and the others refused to sail on. Ten years later, Vasco da Gama would succeed where Diaz had failed.

Columbus

With financial backing from Spain, Christopher Columbus, an Italian explorer, set out in August 1492 to find a western route to Asia. At that time, nobody in Europe knew that the Americas existed. So when Columbus reached the Americas in October, he believed he had reached Asia. Between 1493 and 1504, Columbus made three more voyages to the '**New World**', as the Americas were called. He established Spain's first American colony on the island of Hispaniola and set the pattern of brutal Spanish treatment of the Native Americans.

SOURCE 1 A map from *Cosmographia,* printed in Germany in 1482. The map shows what Europeans knew of the world at that time.

SOURCE 2 A map of the Americas drawn in 1587

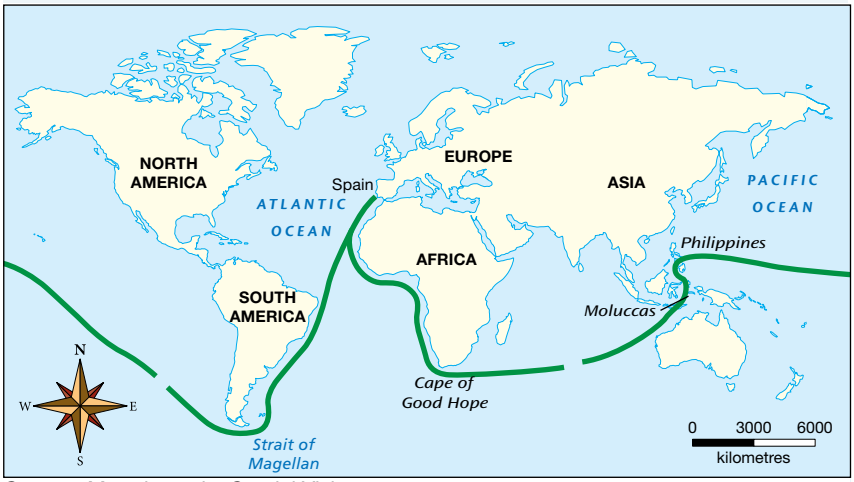
Magellan

Ferdinand Magellan was a Portuguese sailor but, like Columbus, he worked for Spain. Magellan believed that he could travel west to Asia if he sailed south of the route Columbus had taken. In 1519 he set out with five ships. Three reached the Philippines and the Moluccas but only one ship survived to return to Spain through the Indian Ocean in 1522. That ship had **circumnavigated** the world.

New World a term used to describe the Americas

circumnavigate to sail around the world

SOURCE 3 A map of Magellan's voyage around the world from 1519 to 1522



Source: Map drawn by Spatial Vision.

16.11.2 Motives for empire-building

In the sixteenth century, Portugal expanded their empire to include Brazil and ports in Africa, India, Malaya and China. Spain's empire included the Philippines and much of the Americas. Forces that motivated Portugal and Spain included:

- rivalry with Muslim countries and the desire to take trade from the Muslims
- the search for legendary but non-existent Christian kingdoms in Africa and Asia
- growing demand for luxury goods from Asia
- the search for gold and silver that could increase European wealth and be exchanged for Asian luxury goods such as spices, silks, cotton and porcelain
- the desire to convert non-Christians to Catholic Christianity.

SOURCE 4 Part of the Alhambra, built near Granada in Spain by Muslims who ruled most of Spain and Portugal through much of the Middle Ages

Explore more with myWorldHistoryAtlas

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

- Overview > **European exploration**

16.11 EXERCISE

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

Learning pathways

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

Check your understanding

1. Why might Columbus have believed that he was in Asia when he reached the Americas?
2. Of the five motives for empire-building listed in this subtopic, which were mainly concerned with wealth and trade?
3. What were Spain's and Portugal's religious motives for conquests and empire-building?
4. Which of the five motives do you think were the most important to the Spanish and Portuguese? Give the reasons for your choice.
5. What did Diaz accomplish for Portugal?

Apply your understanding

6. Read the information on Magellan's voyage and look at **SOURCE 3**. Imagine that you are a member of the crew on the sole surviving vessel of Magellan's five ships. Describe how you would feel about the hazards of your voyage.
7. Compare **SOURCES 1** and **2** and explain what Europeans knew about the world in 1587 that they did not know in 1482.
8. Look closely at the small section of the Alhambra in **SOURCE 4**. How would such achievements of the Muslims have influenced Spain's and Portugal's desire to take international trade from them?
9. Explain how voyages of discovery enabled Europeans to redraw the map of the world.
10. Describe why Columbus's discovery of the Americas was historically significant even though it was accidental.

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

16.12 Vasco da Gama opens the East

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- describe the voyages of Vasco da Gama
- explain what a trading post is and why it is important
- explain the connection between trading posts and Portugal's dominance in the trade of spices and luxury goods.

16.12.1 Vasco da Gama captures the spice trade for Portugal

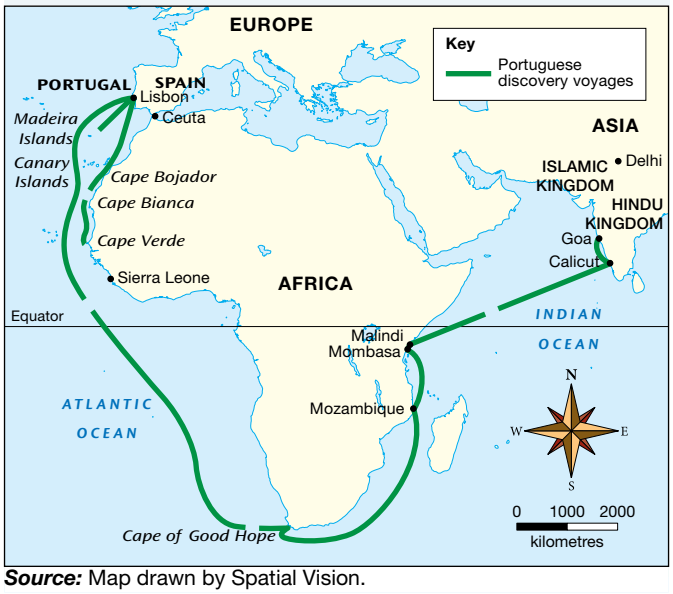
In 1497, Vasco da Gama commanded the first ships to sail from Portugal to India. Da Gama returned to Calicut in India in 1502 and captured the city as a trading port for Portugal. The Portuguese set up other trading posts along Africa's west coast and along the sea route to China. This enabled Portugal to dominate the trade in spices and luxury goods.

Vasco da Gama grew up at a time when Portugal's aim was to sail around Africa's southern tip and on to India. Reaching India by sea would enable Portugal to take control of the very profitable trade in spices from India.

On 8 July 1497, da Gama set out with four Portuguese ships and 170 men along the route that Diaz had taken down the west coast of Africa. Rather than sticking close to the coast, da Gama sailed south from present-day Sierra Leone to reach the westerly winds of the South Atlantic Ocean. Diaz had discovered these winds a decade earlier and da Gama judged that they could blow his ships towards the bottom of Africa. It worked, but by the time the fleet reached the Cape it had travelled for more than three months over 8000 kilometres on the open ocean completely out of sight of land (see **SOURCE 1**).

Da Gama's fleet then sailed up Africa's east coast to the Muslim trading port of Mozambique, where he clashed violently with the local Muslims. Further up the coast, da Gama robbed Arab trading ships. The fleet stopped briefly at Mombasa, provoking more hostility. The next stop was Malindi. Here, da Gama gained help from an Arab guide. With this man's knowledge of the winds, the fleet reached Calicut in India in May 1498. When he was unable to persuade the Hindu king of Calicut to grant trading rights, da Gama kidnapped several locals and set sail for Portugal with a valuable cargo of spices. When he returned to Portugal in 1499, da Gama had lost two ships and over half of his crew had died of **scurvy**.

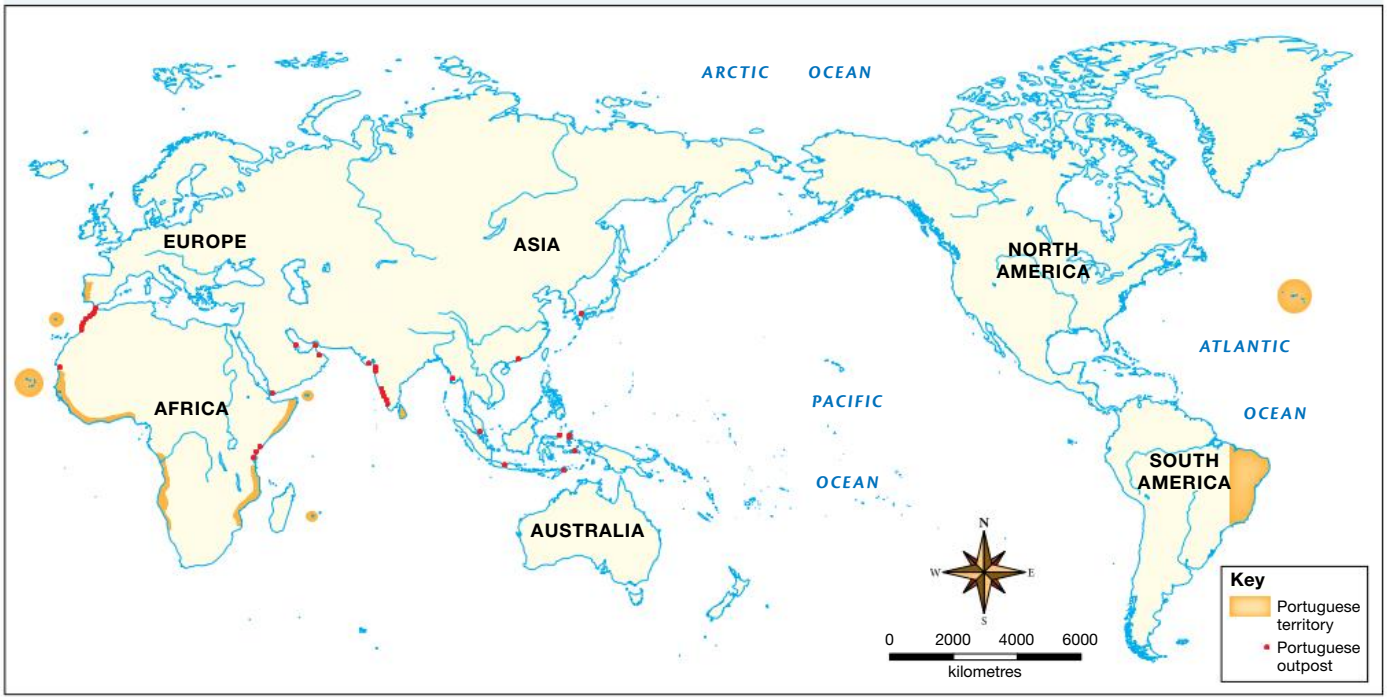
SOURCE 1 A map showing Portuguese voyages of discovery in the fifteenth century



Source: Map drawn by Spatial Vision.

scurvy a painful and often fatal disease caused by lack of vitamin C

SOURCE 2 The Portuguese Empire during the reign of King John III (1502–1557). In 1500, Portuguese navigator Pedro Alvares Cabal landed in Brazil and claimed it in the name of King Manuel I of Portugal.



Source: Map drawn by Spatial Vision.

Da Gama's second voyage

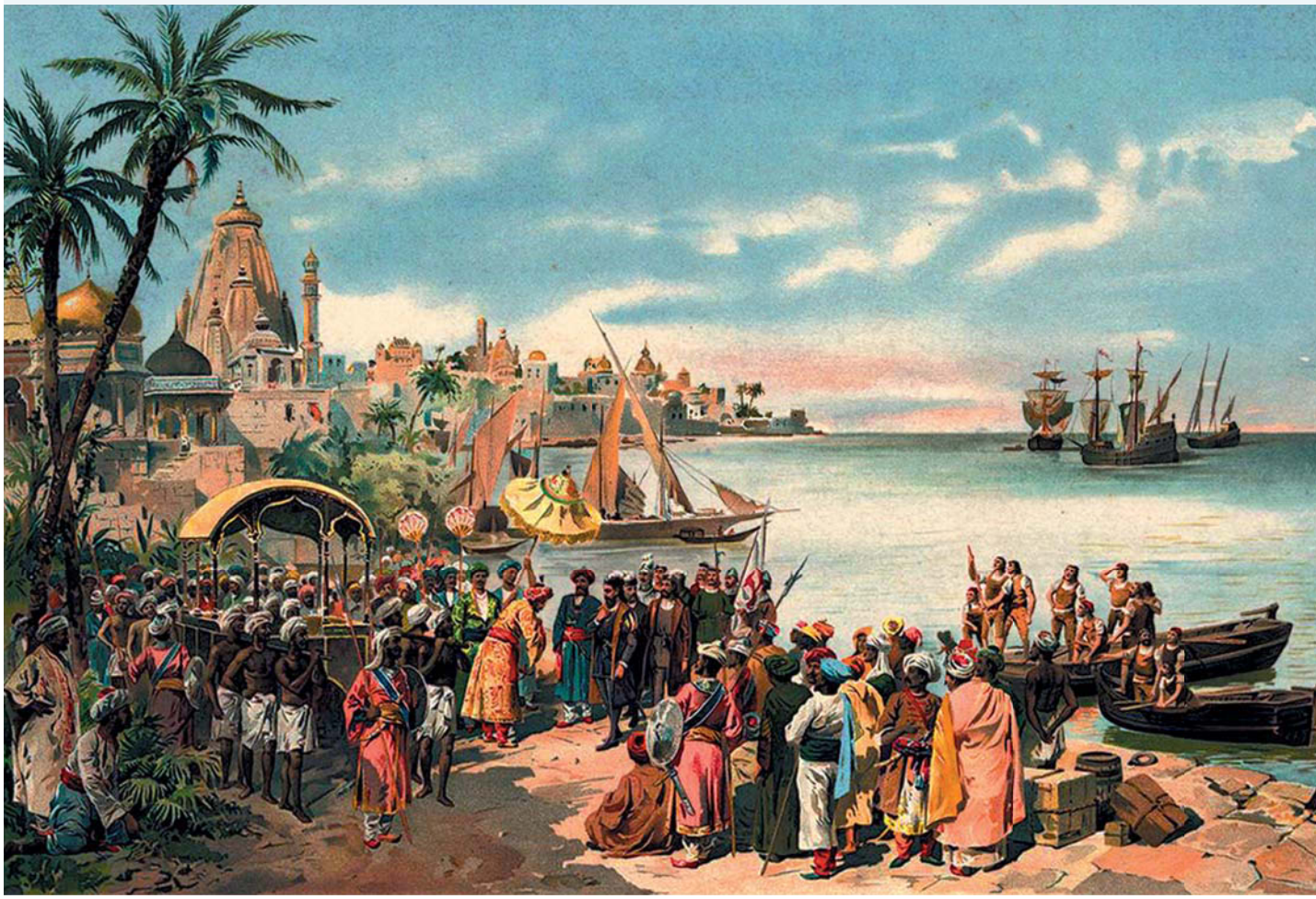
On his subsequent voyages, da Gama showed how ruthless he could be. In 1502, he led a fleet of fifteen ships with 800 men to capture Calicut. After capturing several Arab trading ships, da Gama bombarded Calicut with cannon fire. He also captured several rice boats and cut off the hands, ears and noses of their crew members. In the Indian Ocean, he seized a Muslim ship returning from Mecca. After robbing the 400 passengers – including women and children – of their valuables, da Gama ordered his men to lock them in the ship's hold, where they all died when da Gama had the ship set on fire. Despite these actions, Vasco da Gama received many rewards from Portugal's King Manuel I. In 1524, he was made governor of Portugal's Indian trading colonies but he died of malaria soon after arriving there.

DISCUSS

For centuries, Vasco da Gama was regarded as a hero in Portugal. Form small groups to discuss the following question: 'Should Vasco da Gama be regarded as a hero or as a brutal criminal?'

General capability: Ethical understanding

SOURCE 3 A painting by Alfredo Roque Gameiro (1864–1935) depicting the arrival of Vasco da Gama in Calicut in 1498



Explore more with myWorldHistoryAtlas

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

- Overview > **European exploration**

16.12 EXERCISE

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

Learning pathways

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

Check your understanding

1. Which type of winds did Diaz discover when he sailed from Sierra Leone to the South Atlantic Ocean?
2. What did Vasco da Gama's voyages achieve for Portugal?
3. Why did Portugal want trading posts along Africa's west coast and in India?

4. On 8 July 1497, when da Gama set out along the route that Diaz had taken down the west coast of Africa, what change did he make to the journey?
5. Describe da Gama's return to Portugal in 1499.

Apply your understanding

6. Refer to **SOURCE 2** and make a list of the modern-day places in which Portugal had colonies by about the mid-sixteenth century.
7. Using both the sources and information in this subtopic, explain why Vasco da Gama's voyages can be considered significant turning points in world history.
8. Look closely at **SOURCE 3**.
   a. Describe what is happening in this scene.
   b. What really happened when da Gama was in Calicut?
   c. Why should paintings not always be trusted as historical evidence for the events they depict?
9. Roughly how many centuries had passed between Vasco da Gama's arrival in Calicut and Gameiro's depiction of the event in **SOURCE 3**?
10. How reliable could **SOURCE 3** be and how different might it be had it been painted by a resident of Calicut?

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

16.13 Consequences of the discoveries

LEARNING INTENTION

By the end of this subtopic, you will be able to explain the positive and negative consequences of the colonisation that occurred as a result of the voyages of discovery.

16.13.1 The clash of empires

European discoveries and colonisation had huge consequences for the Europeans and for the peoples they came to colonise or dominate.

Under the Treaty of Tordesillas, signed in 1494, Pope Alexander VI divided the rights to new lands between Spain and Portugal. The treaty gave Spain the right to explore and colonise all lands to the west of Cape Verde on the coast of Africa. Portugal was given the right to everything to the east, including Brazil. However, the French, English and Dutch would not let such a ruling stand in their way. All three established American colonies in the first decades of the seventeenth century. As Portugal's power declined, a four-way struggle developed between the Spanish, French, English and Dutch to dominate the New World.

DID YOU KNOW?

The desire to convert non-Christians to Christianity was among many motives for European exploration and empire-building. This became an even stronger motivation for Roman Catholics after the Protestant Reformation of the sixteenth century, which led to the Catholic Church losing its power in most of northern Europe.

The French in North America

Jacques Cartier led a series of French expeditions exploring Newfoundland and eastern Canada from 1534. The French found that there were riches to be gained from fish, timber and furs. They established their first North American settlement at Quebec in 1608 and forged a harmonious relationship with the Huron and Algonquin tribes who controlled the supply of furs. This relationship changed the economy of France's indigenous allies without threatening their way of life. However, it made the French the enemies of the powerful Iroquois of the Five Nations, the traditional enemies of the Algonquin and Huron. The Iroquois allied themselves with the English.

SOURCE 1 French and British settlements and areas of interest in North America before 1763

Source: Map drawn by Spatial Vision.

The British in North America

In 1607, the Virginia Company of London founded Britain's first successful colony in North America. By the end of the seventeenth century, Britain had a strip of colonies along the east coast of the modern-day United States. While searching for an imagined north-west passage to Asia in 1610, Henry Hudson discovered Hudson Bay (in modern-day Canada). Following this, Britain settled much of eastern Canada. Unlike the French, the English were mostly farmers and they soon made enemies of the indigenous tribes whose lands they took. In the seventeenth and early eighteenth centuries, Britain also founded colonies on several islands in the Caribbean Sea.

DID YOU KNOW?

For many years, early English and French explorers in North America thought they would find a 'north-west passage' through the dangerous American wilderness that would take them to India.

The Dutch Empire

The Dutch East India Company was formed in 1602 to seize control of the eastern trade from Portugal. It established Batavia (modern-day Jakarta in Indonesia) as a trading base. Malacca was an important link along the trade route between India and China, and so the Dutch captured Malacca from the Portuguese in 1641 and took over the eastern trade. To re-supply their ships on the long voyage between Amsterdam and the east, the Dutch founded a colony at the Cape of Good Hope, the most southerly point in Africa, in 1652.

In 1606, 1623 and 1642, Dutch sailors made landings on Australia's west coast, but they saw the country as having no value for them. In 1621, the Dutch West India Company was formed to join in the enormously profitable Atlantic trade. By 1642, the Dutch captured many Portuguese forts on the West African coast and took over transportation of African slaves to colonies in the Americas. From about 1650, the English and French joined in the slave trade as, to a lesser extent, did the Danes, Swedes and Germans. The Dutch also gained small colonies in the Americas.

Rivalry between Britain and France

After the 1650s, Dutch sea-power declined and there was increasing conflict between the French and the British in North America. In 1681, a French expedition sailed down the Mississippi River and claimed a vast area, which it called Louisiana. This stood in the way of future British expansion.

The two powers also had conflicting interests in India. By 1647 the British East India Company had 27 trading posts in India, and in 1665 it gained Bombay (Mumbai) from the Portuguese. France set up its *Compagnie des Indes* to expand French influence in India and it soon clashed with the British. The Seven Years' War (1756–63) between Britain and France would lead to the loss of New France in America and the decline of French influence in India.

16.13.2 Other consequences

The world changed in many ways during this age of exploration and colonisation.

- Colonial powers suppressed indigenous peoples and fought each other over territory and trade. In such conflicts, the advantage was often held by those with the best firearms, such as cannons mounted on ships.
- Some European traders became wealthier than the land-owning nobility.
- Silver and gold flowed into Spain and beyond. Silver was mined in the Americas and was used to expand Europe's trade with Asia. One of the difficulties of trading with Asia had been the fact that Europe produced very little that Asia wanted to trade for spices and other luxuries.
- Missionaries spread Christianity among indigenous peoples.
- Millions of African slaves were captured in tribal wars. They were sold to European slave traders who shipped them to the Americas to work in mines and on sugar, tobacco and cotton plantations. While world population rose, the population of Africa fell.
- The impact on the indigenous peoples of the Americas was even worse. From 1500 to 1600, the combined population of Europe, Africa and Asia increased from 418 million to 545 million. In the same period, the population of **Latin America** fell from about 36 million to about 10 million. Many people were worked to death, but most died of diseases brought by the Europeans. This is because indigenous Americans had no immunity to diseases that had previously been unknown in the Americas.

DID YOU KNOW?

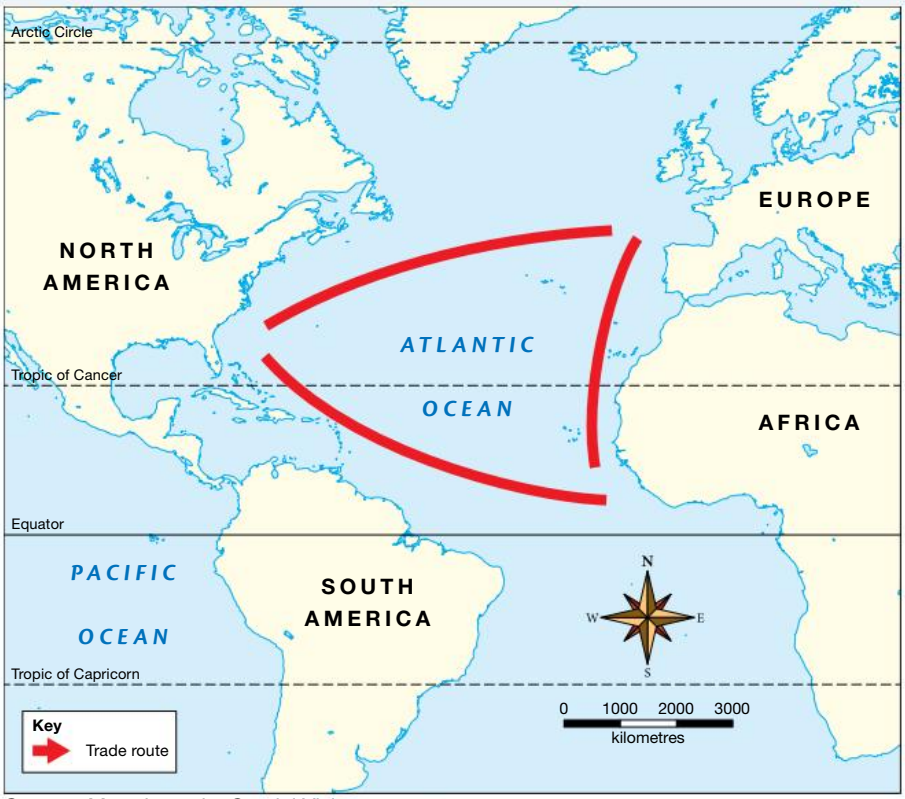
Europe's colonies brought great wealth into the hands of a few, but most people's lives changed very little. By 1750, only about 2 per cent of the world's people lived in cities.

The Columbian Exchange

Along with diseases, there was a massive transfer of other life forms between the Old World and the New World. Europe gained new plant products such as tobacco, beans, peanuts and potatoes from the Americas. Into the Americas they brought animals that had not existed there, including horses, cattle, pigs and sheep. Such exchanges, along with exchanges of people, technologies, ideas and beliefs, have been called the Columbian Exchange. The two centuries after Columbus's 1492 voyage transformed the lives of many people in both worlds.

Latin America the part of the Americas that was colonised by the Spanish and Portuguese

SOURCE 2 A map showing the triangular trade in the Atlantic Ocean. European traders sailed from Europe to the west coast of Africa, where they sold European goods and bought African slaves. They then transported the slaves to the Americas. There they sold the slaves, loaded their ships with goods and took them to Europe.



Source: Map drawn by Spatial Vision.

Explore more with myWorldHistoryAtlas

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

- Overview > **European contact with Australia**

16.13 ACTIVITIES

1. Working in small groups, identify at least one consequence of the colonisation of the Americas and the Columbian Exchange that you believe had significant effects for the world right up to our own times. Provide evidence for your choices and share your view with the class. **History concept: Continuity and change**
2. In small groups, role-play the following situation: Imagine that you are a member of a settler family during the early colonisation of the Americas that followed the voyages of discovery. You have been brought up to believe that all people were created by God and they should be treated with compassion. You live in a settlement that has taken land from its indigenous owners, who once farmed or hunted on that land. Not far from your settlement there are still Native American tribes following their traditional lifestyles.

   The leaders of your community have described the Native American tribes as primitive savages who need to be forced off their remaining land or be destroyed so that the settlement can expand and prosper.

   These leaders have called on you and your fellow settlers to take part in an armed attack on the neighbouring tribe, to kill those who resist and to take their land. The settlers have called a meeting at which you and others will have a chance to state your opinions in support of or against this armed attack.

   In your role-play, different speakers should represent different views about the importance of sticking to religious principles and about the way that your neighbouring Native Americans have been labelled as savages.

   After your role-play, examine how various cultural groups are represented, by whom they are represented, and comment on the purpose and effect of these representations.

   General capability: Intercultural understanding

16.13 EXERCISE

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

Learning pathways

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

Check your understanding

1. What rights were given to Spain and Portugal under the Treaty of Tordesillas?
2. At which country's expense did the Dutch expand up to the mid-seventeenth century?
3. While the Spanish and Portuguese colonised South America and Central America, which two European powers became rivals for control of North America?
4. What advantages did colonial powers have over indigenous peoples?
5. How did the flow of silver and gold from the Americas help Europe to trade with Asia?

Apply your understanding

6. Examine **SOURCE 1**. Why were Britain and France in conflict in North America?
7. Study **SOURCE 2** and explain why this trade route has been called the 'triangular trade'.
8. Describe the historical significance of the colonisation of the Americas for the Native Americans.
9. What changes in patterns of consumption would have resulted in Europe from colonisation of the Americas?
10. How would the lives of many Africans have been changed by the triangular trade?

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

16.14 Thinking Big research project: Time travel brochure

Scenario

Imagine that you have discovered the art of travelling through time! You have started a business that offers to take customers on exciting tours to witness four significant historical events that took place in the period between the ancient and modern worlds.

The four stops on the tour are as follows:

Stop 1: Killala Bay on the west coast of Ireland in 807 CE

The Vikings first raided Ireland just two years after their first raid on England and started raiding the west coast of Ireland in 807.

A round tower at Killala Bay; Christian monks built these towers to protect themselves from raiders.

Stop 2: Jerusalem in 1099

In 1099, the First Crusade captured the city of Jerusalem from the Muslims.

The city walls of Jerusalem, viewed from the Mount of Olives

Stop 3: The Christian city of Constantinople in 1453

In 1453, Constantinople fell to the Muslim Turks.

The Blue Mosque in Istanbul, formerly Constantinople

Stop 4: Nagasaki harbour in 1640

The Tokugawa Shogunate permitted Dutch merchants to trade from the artificial island of Dejima in 1640.

Nagasaki harbour, Japan

Task

Create an attention-grabbing brochure that will entice paying time travellers to join you on this remarkable tour. Be sure to provide intriguing information about interesting events that occurred at each of the stops on the tour. Follow the steps detailed in the **Process** section to complete this task.

Process

- Open the ProjectsPLUS application for this topic. Click the **Start new project** button to enter the project due date and set up your project group. Working in groups of four will enable you to share responsibility for the project. Save your settings and the project will be launched.
- Navigate to the **Research forum**, where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered.
- You should first revisit the timeline in the subtopic 16.1 Overview. Using the resources in the **Media centre**, research and record information about important historical events in each of the four places, in and around the designated year for each stop on the tour.
- Write up your research findings under the heading for each stop in your Research forum.
- You can view, share and comment on other group members' research findings. Be sure to enter the source for any information you find online.
- Give your time travel company a catchy name. Find images to make your brochure colourful and exciting and to help customers understand what they might experience on the tour. Design a pleasing layout.
- Describe what your time travel customers will witness. Explain the short- and long-term historical significance of each of the events in the places you will visit.
- Submit your brochure to your teacher for assessment and feedback.

on Resources

ProjectsPLUS Time travel brochure (pro-0158)

16.15 Review

16.15.1 Key knowledge summary

16.2 Examining the evidence

- Some societies in this period did not keep written records.
- Some sources have been lost and most people could not read or write so there are significant gaps in our evidence.
- Sources often provide the recorded evidence of only one section of a society and only one side in a conflict.
- Because sources can often be one-sided we need to look out for bias.

16.3 People on the move

- Migrating nomads caused centuries of chaos in Europe and Asia.
- Invaders took over much of the former Roman Empire.
- The Byzantine Empire kept ancient Roman culture alive.
- The Persian and Byzantine empires were weakened by wars with each other.

16.4 Religions on the move

- In the Early Middle Ages, the rise of Islam created a powerful new civilisation.
- Islam expanded into three continents.
- Christianity spread gradually to dominate almost all of Europe by around 1000 CE.

16.5 A different way of life

- Smaller, weaker states replaced the Roman Empire.
- Cities, learning and trade declined in early medieval Europe.
- Feudalism became the dominant social system.

16.6 Rulers, religion and the changing map of medieval Europe

- By later medieval times, peasants were increasingly forced into serfdom.
- New technologies increased the destructiveness of wars.
- European rulers claimed to be chosen by god.
- Many Asian rulers claimed to be demigods.
- The Muslims were driven out of Spain but Muslim Turks came to control Europe's Balkan Peninsula.

16.7 Migrations, invasions and empires in Asia

- Japan became a feudal society.
- China suffered invasions by nomads but the Chinese Empire was restored under the Song dynasty.
- The Delhi Sultanate dominated northern India from 1206 until it was destroyed by Mongols in 1398.
- Indian traditions influenced much of South-East Asia.
- The Mongol Empire overwhelmed many civilisations in the thirteenth century.

16.8 Populations, cities and trade

- Improved farming technologies enabled more food production so populations grew.
- Populations fell dramatically due to the Black Death in the mid-1300s.
- From the mid-1300s, populations, cities and trade all grew significantly after the Black Death ended.

16.9 Muslim traders and Africa

- Arab Muslims conquered coastal North Africa in the seventh century.
- By the thirteenth century, Arab Muslims had trading bases along the east coast of Africa and controlled trade between Africa, Arabia and India.
- Several powerful African kingdoms became wealthy through trade between the ninth and fifteenth centuries.

16.10 The emerging power of western Europe

- Western Europe was changed between the fifteenth and eighteenth centuries by the Renaissance, the Scientific Revolution and the Enlightenment.
- European power spread through explorers finding new sea routes, conquering new lands and founding colonies.

16.11 Portuguese and Spanish voyages of discovery

- The quest for huge profits and religious zeal motivated Portugal and Spain to take the African trade from the Muslims and find a sea route to India.
- The discovery of the Americas was an accidental result of Spain's quest to find a sea route to India.

16.12 Vasco da Gama opens the East

- Vasco da Gama commanded the first Portuguese voyage to India.
- His achievement led to Portuguese domination of the trade between East and West in spices and luxury goods.

16.13 Consequences of the discoveries

- The rising maritime powers of western Europe were the Dutch, French and English, who established American colonies in the seventeenth century.
- The Dutch took control of the eastern trade from Portugal.
- Imperial rivalry grew between the British and French, leading to war.
- Colonisation had enormous impacts, especially on subject peoples.

16.15.2 Key terms

caravel a type of light, fast ship, used mainly by the Portuguese and Spanish between the fifteenth century and seventeenth century

Caucasus the region where Europe meets Asia between the Black Sea and the Caspian Sea

circumnavigate to sail around the world

clockwork the inner workings of a mechanical clock or a machine that operates in a similar way

colony an area of a country that is ruled by a different country

compass navigation instrument that shows the direction of north

contiguous adjoining, where its parts are not separated by other states or oceans

dhow a traditional Arab sailing vessel

doctrine of Mahomet the religion of Islam; the Muslim faith, which follows the teachings of Mohammed

Gaul most of present-day France and Belgium

heresy any religious opinion that differed from that of the Roman Catholic Church

Holy Land land in the Middle East that has significant importance for Christians, Muslims and Jews

idolatry worship of idols

Judaism the religion of the Jewish people

khaghan title equivalent to emperor; 'Great Khan'

Khan title of rulers in Central Asia; 'king', 'chief'

khanate territory ruled by a khan

lancers mounted troops armed with lances (spear-like weapons used when charging)

lateen sail a triangular sail rigged at 45 degrees to the mast of a boat or ship

Latin America the part of the Americas that was colonised by the Spanish and Portuguese

mariner's astrolabe a medieval instrument used to navigate while sailing. It was used to find a ship's latitude by measuring the altitude of the Sun or a star.

mercenary a soldier who fights for money rather than for patriotic reasons

monasteries where Christian monks lived

New World a term used to describe the Americas

nomadic moving around from place to place

Renaissance meaning 'rebirth', it refers to the flowering of the arts and sciences in late medieval Italy and later in north-western Europe

scurvy a painful and often fatal disease caused by lack of vitamin C

self-sufficient able to provide for its own needs

serfdom the position of peasants who were not free to leave the land they worked

shamanism central Asian religion based on a belief in many gods in the natural world and the power of shamans (priests) to influence these gods

steppe a vast plain without trees

sternpost rudder a heavy board hung from the centre of the back of a ship that makes it easier to steer

Tatars another name for Mongols

three-field system where two fields were planted with different crops at different times of year, and a third field was left unplanted

vassal state a state whose ruler acknowledges a foreign ruler as his overlord

16.15.3 Reflection

Complete the following to reflect on your learning.

16.15 ACTIVITIES

Revisit the inquiry question posed in the Overview:

Ideas, religion and exploration. How did the changes of the Middle Ages reshape the world?

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

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5558)
Word search (ewbk-5554)
Revision quiz (ewbk-5555)
Reflection (ewbk-5555)
Crossword (ewbk-5556)
Student Learning Matrix (ewbk-5546)

Interactivity From the ancient to the modern world crossword (int-7584)

16.15 Review exercise

Multiple choice

1. Islam began in which of these places?
   - A. North Africa
   - B. Arabia
   - C. India
   - D. Central Asia
2. Medieval technological changes that increased food production included which of these?
   - A. The three-field system
   - B. The stump-jump plough
   - C. Use of tractors
   - D. Use of horses
3. What did serfdom mean?
   - A. Peasants were free to work for whoever they chose.
   - B. Peasants became landowners.
   - C. Peasants could be bought and sold by landowners.
   - D. Peasants were not free to leave the land on which they worked.
4. Which of the following technologies increased the destructiveness of wars in late medieval times?
   - A. Stronger castle walls
   - B. Development of tanks
   - C. Use of canons
   - D. Hand grenades
5. In 1066, England was conquered by which of the following?
   - A. Saxons
   - B. Romans
   - C. Mongols
   - D. Normans

6. The Byzantine Empire fell when which of these groups captured Constantinople in 1453?
   A. The Crusaders
   B. The Ottoman Turks
   C. The Venetians
   D. The Mongols
7. Which Chinese dynasty was founded in 1368?
   A. Yuan
   B. Qin
   C. Song
   D. Ming
8. Which of the following caused a big fall in population levels in the mid-fourteenth century?
   A. The Black Death
   B. A major war
   C. Declining food production
   D. Birth control
9. From the 1400s, long-distance sea voyages were helped by which of these inventions?
   A. Radar
   B. Steam power
   C. The mariner's astrolabe
   D. The telescope
10. In the fifteenth century, what was a caravel?
   A. An amusement ride in a circus
   B. A type of ocean-going ship
   C. A trader's caravan
   D. A new type of weapon
11. Which of these best describes the result of the Seven Years' War?
   A. The Americans gained independence.
   B. The Dutch took colonies from the Portuguese.
   C. The French gained control of North America.
   D. The French lost New France in North America.
12. The Columbian Exchange refers to:
   A. the exchange of plants, animals and people between the New World and Old World.
   B. the fact that Columbus was not looking for the Americas when he found them.
   C. the imperial rivalry between European powers.
   D. the stock exchange.

Short Answer

13. A historical argument is a historian's explanation or interpretation supported by historical details. When you read a historian's argument, you need to identify the main point of the argument and identify the details that are used to support the main point. Analyse the arguments presented in the following **SOURCE 1** and **SOURCE 2**. They are both about the achievements of Christopher Columbus. Remember to identify the main argument in each source and then to identify the point or points that the historian has used to support that argument.
14. Explain how these two sources differ in their assessment of the significance of Columbus.

SOURCE 1 From S. E. Morison, *Christopher Columbus, Mariner*, Meridian Books, New York,1983, pp. 9, 25.

America was discovered by Columbus purely by accident . . . we now honour Columbus for doing something he never intended to do, and never knew that he had done. Yet we are right in so honouring him, because no other sailor had the persistence, the knowledge and the sheer guts to sail thousands of miles into the unknown sea until he found land . . . Supposing there had been no America, no ship then built, however resolute her master and crew . . . could have made the ten-thousand-mile voyage from Spain to Japan.

SOURCE 2 From E. G. Bourne, *Spain in America, 1450–1580,* Barnes & Noble, New York, 1962, pp. 74–5.

That the Portuguese should have lighted on (accidentally found) Brazil in their second expedition sent out to the East Indies . . . shows with almost complete certainty that if Christopher Columbus had never lived, the New World would have been discovered within a few years of the time of its actual discovery, as an inevitable sequel to the activities of Prince Henry the Navigator in promoting . . . exploration.

15. Look closely at the details in **SOURCE 3** and compare the areas shown with the same areas in a modern atlas.

a. Identify the parts of the map that are most accurate and the parts that are least accurate.

b. Explain the reasons for some parts being known to the map-maker while other parts were relatively unknown.

SOURCE 3 The Fra Mauro map was made in Venice between 1457 and 1459 by a Catholic monk, after whom it is named, and Andrea Bianco, a cartographer, at the request of King Alfonso V of Portugal. It was drawn on parchment and set in a timber frame. This circular map is two metres in diameter. The original was lost but this copy was completed by the cartographer. Unlike modern maps, the world is shown 'upside down', with North at the bottom.

16. Look closely at the details in **SOURCE 4** and compare the areas shown with the same areas in a modern atlas.
    a. Identify the parts of the map that are most accurate and the parts that are least accurate.
    b. Explain the reasons for some parts being known to the map-maker while other parts were relatively unknown.
17. Explain how the voyages of discovery from the late fifteenth century changed what was known of world geography at the times of the creation of both of these maps.

SOURCE 4 The Da Ming Hun Yi Tu map was painted in China on 17 square metres of silk for a Ming emperor, possibly around 1389. It is the oldest surviving Chinese world map. Completed about 60 years earlier than the Fra Mauro map, it shows China at the centre of the known world with a squashed Europe and Africa at the left.

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 16 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

16.1 Overview

Video eLesson
- From the ancient to the modern world (Part 1) (eles-1059)

16.3 People on the move

eWorkbook
- People on the move (ewbk-5547)

Video eLesson
- Lesson introduction (eles-1234)

Interactivity
- A map showing invasions (int-7806)

myWorldHistoryAtlas
- Expanding contacts > **China: the Middle Kingdom**
- Overview > **Transformation of the Roman World**
- Overview > **Byzantine Empire**
- Overview > **Invasion of Britain**

16.4 Religions on the move

eWorkbook
- Religions on the move (ewbk-5548)

Video eLesson
- Lesson introduction (eles-1234)

myWorldHistoryAtlas
- Overview > **Spread of Islam**
- The Western and Islamic world > **Medieval Christendom**
- The Western and Islamic world > **Holy Roman Empire**

16.6 Rulers, religion and the changing map of medieval Europe

Interactivity
- The organisation of medieval society under feudalism (int-4071)

eWorkbook
- The Battle of Hastings and the Norman Conquest (ewbk-6717)

myWorldHistoryAtlas
- Overview > **Byzantine Empire**
- Overview > **Invasion of Britain**

16.7 Migrations, invasions and empires in Asia

eWorkbook
- Changes in Asia and the Pacific (ewbk-5549)

Interactivity
- A map of the Mongol Empire near its peak in 1280 (int-4073)

myWorldHistoryAtlas
- The Asia-Pacific world > **Khmer Empire**
- The Asia-Pacific world > **Japan under the shoguns**
- The Asia-Pacific world > **Polynesian expansion**
- Expanding contacts > **Mongol Empire**

16.8 Population, cities and trade

Interactivity
- A map of trade routes of Europe, Asia and Africa in later medieval times (int-4075)

myWorldHistoryAtlas
- Overview > **Non-European exploration**

16.9 Muslim traders and Africa

Interactivity
- A map of medieval Africa (int-7808)

16.10 The emerging power of western Europe

eWorkbook
- The emerging power of Western Europe (ewbk-5550)

Interactivity
- A modern artist's impression of a fifteenth-century caravel (int-4077)

myWorldHistoryAtlas
- Overview > **The West visits the East**

16.11 Portuguese and Spanish voyages of discovery

eWorkbook
- Portuguese and Spanish voyages (ewbk-5551)

myWorldHistoryAtlas
- Overview > **European exploration**

16.12 Vasco da Gama open the East

eWorkbook
- Vasco da Gama (ewbk-5552)

myWorldHistoryAtlas
- Overview > **European exploration**

16.13 Consequences of the discoveries

eWorkbook
- Consequences of the discoveries (ewbk-5553)

myWorldHistoryAtlas
- Overview > **European contact with Australia**

16.14 Thinking Big research project: Time travel brochure

ProjectsPLUS
- Time travel brochure (pro-0158)

16.15 Review

eWorkbook
- Word search (ewbk-5554)
- Revision quiz (ewbk-5555)
- Reflection (ewbk-5557)
- Crossword (ewbk-5556)
- Student learning matrix (ewbk-5546)

Interactivity
- From the ancient to the modern world crossword (int-7584)

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

17 Investigating medieval Europe

17.1 Overview

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

From the Crusades and castles to the Black Death, was medieval Europe the worst place to live in history?

17.1.1 Links with our times

In this topic we will explore Europe from the sixth century CE to 1500. This period is referred to as the Middle Ages and can be broken down into three periods: the Early Middle Ages (c. 500–1100), the High Middle Ages (c. 1100–1300) and the Late Middle Ages (c. 1300–1500). People often associate kings, knights and castles with the Middle Ages, but this period had many other defining features. This topic will explore the feudal system, which was the most widely adopted social order of the period, the increasing power and influence of the Catholic Church, and the peasantry, or poor farmers, who made up most of the population. It is hard to imagine that our modern, technology-centred society could uphold any traditions from the Middle Ages (or medieval times, as they are also known). Australia, for example, was colonised 300 years after the end of the Middle Ages, yet we have a monarch whose position dates back to the Middle Ages. Many Australians follow the Christian or Islamic faiths. Both these major world religions expanded during the Middle Ages, and major conflicts involving these religions first emerged during this period. Modern nations such as France, Russia and England also emerged during the Middle Ages, and even the English language is a product of the Middle Ages; it did not exist before then. Although we no longer have need of castles or knights on horseback, many traditions, events and entire nations today have their roots in the Middle Ages.

on Resources

- **eWorkbook** Customisable worksheets for this topic (ewbk-5571)
- **Video eLesson** Medieval Europe (eles-1824)
- **Interactivity** A timeline of major events in medieval Europe (int-4280)

SOURCE 1 Illustration of pilgrims embarking on their journey in the Chaucer classic *The Canterbury Tales*

int-4280

SOURCE 2 A timeline of major events in medieval Europe

CE

700

750

800

800
The feudal system begins in the Frankish Empire under Charlemagne.

850

Late ninth century
First version of *Anglo-Saxon Chronicle* is written.

900

950

965
Denmark adopts Christianity.

966
Poland adopts Christianity.

1000

1000
Hungary adopts Christianity.

1050

988
Kiev Rus adopts Christianity.

1100

1099
Crusaders conquer Jerusalem.

1095
Pope Urban II launches the First Crusade.

1147
Second Crusade begins.

1150

1187
Turks reconquer Jerusalem.

1200

1189
Third Crusade begins.

1202
Fourth Crusade begins.

1250

1300

1350

1347
The Black Death begins in Europe.

1381
The Peasants' Revolt in England.

1400

1450

1453
Constantinople falls to the Turks.

1391
Geoffrey Chaucer writes *The Canterbury Tales*.

1500

CE

17.2 Examining the evidence

LEARNING INTENTION

By the end of this subtopic, you will be able to identify the types of evidence that historians use to draw conclusions about medieval Europe.

SOURCE 1 Peasants working in the fields, from a French calendar illumination by the Limbourg Brothers, c. 1415

17.2.1 How do we know about medieval Europe?

There are many different types of evidence that provide historians with information. These include artwork, written sources and artefacts, monuments and buildings.

17.2.2 Artwork

Illuminations such as **SOURCE 1** help us imagine what life was like during the Middle Ages. In the foreground, peasants can be seen engaged in various activities on a farm. Many illuminations show scenes of village life, with peasants tending their crops and livestock. For the illustrator, such a scene would have been commonplace, because 90 per cent or more of the medieval population were peasants.

illumination hand-painted illustration in a medieval book

SOURCE 2 A section of the Bayeux Tapestry that shows the nobles feasting while on campaign fighting for King William I of England

The Bayeux Tapestry (see **SOURCE 2**) is an embroidered cloth that depicts the battle of Hastings in 1066 and the events leading up to it. It is remarkably well preserved and hangs in Bayeux in France. Although the origins of the Bayeux Tapestry are unclear, wall hangings of this type were used for both decoration and insulation against the cold castle walls of the times. They were also highly portable and so moved around with their owners. These artworks give historians much information about the scenes they depict as well as the technologies available to their creators.

Other artworks include paintings, mosaics and frescos.

SOURCE 3 *The Domesday Book* is an amazing eleventh century public record of who owned what and how much they had. After conquering the English, the new king, William I, ordered a public survey of his new territory and the record was written up to become *The Domesday Book.*

17.2.3 Written sources

Many stories and poems have survived over the centuries and give us more information. One of the most famous examples is a collection of stories and poems by Geoffrey Chaucer. It is called *The Canterbury Tales* and was written in about 1391. This book examines medieval English society — even the titles of the tales show the types of jobs the people of medieval England had. For example, some stories are 'The Miller's Tale', 'The Knight's Tale', 'The **Reeve's** Tale', 'The Monk's Tale', 'The **Franklin's** Tale' and 'The Squire's Tale'.

Official records also help to give us information about the Middle Ages. For example, William the Conqueror (also called William I) carried out a stocktake of all property in England in the late eleventh century. This record is called *The Domesday Book* (see **SOURCE 3**) and is a detailed record of the resources that were held throughout England at this time. It is an incredibly useful source for historians.

17.2.4 Artefacts, monuments and buildings

Artefacts, monuments and buildings that have survived from the Middle Ages can be valuable sources of information. Artefacts include all types of items, such as coins, armour, weapons, utensils, tools and goblets. Artefacts made of durable metal such as silver, gold and bronze are more common than garments and timber and iron materials, which tend to rust or rot away. To understand what such materials may have looked like, historians rely on written and pictorial records.

All sorts of buildings have survived from the Middle Ages: some cottages, churches, monasteries, **tithe barns**, castles and manor houses still exist. The cottage in **SOURCE 4** is made of **thatch** and stone. Although it would have been frequently renovated (for example, thatch needs to be replaced every 20 to 30 years), it is a good example of a peasant's cottage from the fourteenth century. Compare this to **SOURCE 5**, Dover Castle, which is clearly intended for a class of people far wealthier and more powerful than peasants. The history of its site goes back to pre-Roman times. However, its present appearance began to take shape under King Henry II in the late twelfth century. Castles like Dover help historians understand how such buildings were used both as military fortresses and homes for rich owners and their

reeve a magistrate administering law in a village

franklin in the fourteenth century, one who was a landowner but not a member of the nobility

tithe barn a barn where peasants' produce is stored as a form of taxation

thatch straw used for making roofs

supporters. Comparing cottages and castles also gives us an idea about the class differences between the peasants and their rich and powerful rulers. Even buildings that are now ruins may give us clues about what life was like in the Middle Ages.

SOURCE 4 These reconstructed cottages date back to the fourteenth century.

SOURCE 5 Dover castle in Kent, England, was built in the eleventh and twelfth centuries.

17.2 ACTIVITIES

1. Make a list of types of sources under the headings of 'Artwork', 'Written sources' and 'Artefacts, monuments and buildings'. Include an explanation paragraph about what you can learn from each one as well as an example. Share these in your class and add to a class document that you can display in your history classroom. **History concepts: Sources, evidence**
2. Find out more about the Bayeux Tapestry, such as who historians think may have commissioned it and which side of the Battle of Hastings it favours. **History concepts: Sources, evidence**

17.2 EXERCISE

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

Learning pathways

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

Check your understanding

1. What are the different types of artwork that historians have access to in order to draw conclusions about the medieval era?
2. Why were most illuminations concerned with scenes of village and farm life?
3. Consider **SOURCE 2**.
   a. What was the Bayeux Tapestry created to celebrate?
   b. What was the purpose of this type of wall hanging during medieval times?
4. Explain the importance of written sources from this period to historians.
5. What are the types of artefact that were most likely to survive from this period? Explain why this is so.

Apply your understanding

6. Study **SOURCE 2**. What questions would you need to ask to work out what its biases are?
7. Is a photograph of a primary source, such the one of *The Domesday Book* in **SOURCE 3**, a primary or a secondary source? Give reasons for your decision.
8. How do **SOURCES 1, 4** and **5** help us learn about what life in medieval Europe was like?
9. What would a historian be likely to learn about the medieval period from *The Canterbury Tales*?
10. Suggest reasons to explain why William the Conqueror conducted a public survey of his new kingdom and created a written account of it (*The Domesday Book*).

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

17.3 The impact of the 'barbarian' invasions

LEARNING INTENTION

By the end of this subtopic, you will be able to:

- explain the impact of the fall of the Roman Empire in 476 CE
- describe the rise of the 'barbarian' empire in Western Europe
- explain the consequences of the rise of the 'barbarian' empire.

17.3.1 The fall of Rome

The term 'Dark Ages' is sometimes used to describe the Early Middle Ages; that is, the period in Europe from the fall of the Roman Empire in 476 CE to about 1000 CE. It was a time when some believed the 'light' of Rome was extinguished, and Europe was plunged into 'darkness' and chaos, until it began to advance its knowledge and learning in a time known as the Renaissance. Many historians and archaeologists now avoid use of the term 'Dark Ages' because they believe it downplays the significance of the period and undervalues the achievements of the societies of the time.

SOURCE 1 A map of Europe in 500 CE

Source: Map drawn by Spatial Vision.

DID YOU KNOW?

The term 'Dark Ages' was originally used by the Italian scholar Petrarch in the 1330s. He was describing what he considered to be the poor quality of literature coming from Europe in the period following the fall of Rome.

Romans called all those from beyond the borders of the empire 'barbarians', from a Greek word meaning 'foreigners'. Barbarians were thought to be uncivilised because of their different culture and customs. For a number of reasons, these barbarians were still able to defeat and overthrow the Roman Empire.

Historians have various hypotheses to explain the fall of Rome:

1. The empire was simply too big to survive.
2. The Roman population was declining.
3. The Roman legions increasingly enlisted 'barbarians', whose loyalty could no longer be taken for granted.
4. The adoption of Christianity as the official religion of the empire blunted their desire to conquer.
5. Infighting and civil war weakened the empire.

The collapse may have been due to a combination of these or other factors. Whatever the cause, the last Roman emperor, Romulus Augustulus, was **deposed** in 476 CE.

Not all of the Roman Empire was lost, though. In 395 CE the empire had split and the eastern part became known as the Byzantine Empire. Its capital was the city of Constantinople (modern-day Istanbul in Turkey). The Byzantine Empire lasted another thousand years until it was conquered by the Turks in 1453 CE.

Many kingdoms emerged to fill the vacuum left by the fall of the Western Roman Empire. At different times, Huns, Goths, Vandals and other groups that had challenged Rome established empires of their own. However, beset by internal divisions or invasions, most of these kingdoms did not last.

17.3.2 The times that followed

Consequences

The Dark Ages were a time of great instability. The security provided by Roman control was gone. These were times of great violence. To educated people it seemed that ignorance and backwardness had triumphed over learning and order. Grand Roman buildings, roads and aqueducts were destroyed or abandoned. Migrations of peoples from various lands led to further conflict. Because few could speak or read Latin, the great Roman works of literature were no longer widely read, and many were lost.

Contributions

We now recognise that important changes were taking place during this period, with new social systems and cultures emerging. Feudalism is an example of one such system. Many Roman customs and legal principles survived because the new rulers came to see the benefits such laws gave them and their people. Charlemagne (also known as Charles the Great) was one ruler whose achievements were far greater than those of a mere warlord. As king of the **Franks**, he encouraged the arts and learning. Under his rule, large parts of western Europe became Christian and he promoted education, particularly through monasteries. The English king Alfred the Great is another great ruler from this time. Some Early Middle Age societies, such as the Vikings, had political systems that had no place for kings or dictators; some historians see in these systems the beginnings of modern democratic principles.

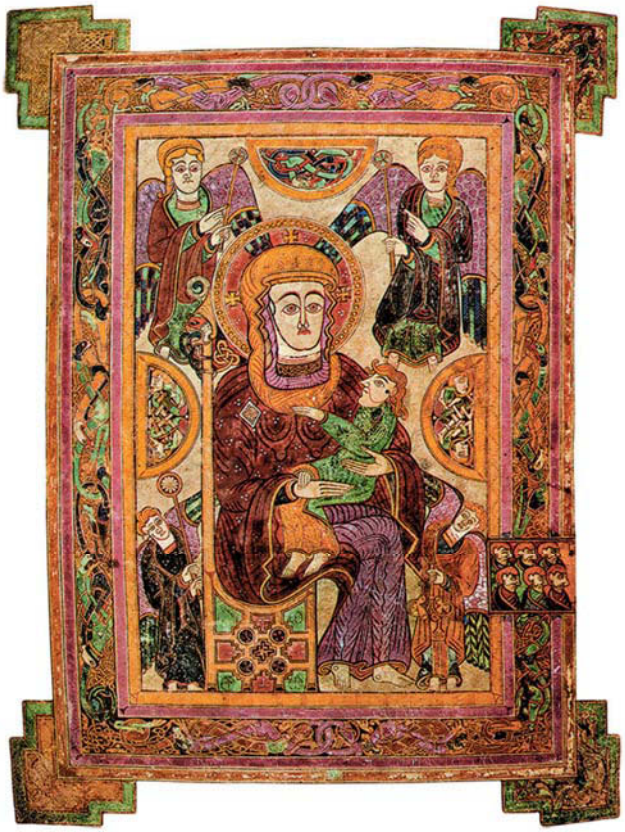
Contrary to the views of Petrarch, great works of literature containing magnificent artwork were created in these years. The *Anglo-Saxon Chronicle*, which documents the early history of England, was written in the time of King Alfred (886–899 CE). The beautifully illuminated *Book of Kells*, featuring the four Christian gospels written in Latin, was created during the eighth century. It is on public display in Dublin today.

deposed removed from a position of authority

Franks people of a group of a Germanic nation who ruled in western Europe from the sixth century CE

SOURCE 2 Alfred the Great, as depicted in a twentieth-century stained glass window

SOURCE 3 An image from the *Book of Kells* showing Mary with the baby Jesus



Explore more with myWorldHistoryAtlas

Deepen your understanding of this topic with related case studies and questions.

- Overview > **Transformation of the Roman World**

17.3 EXERCISE

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

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions	Questions	Questions
1, 3, 7, 9, 12, 15	2, 4, 6, 10, 11,16	5, 8, 13, 14, 17

Check your understanding

1. Who or what was a 'barbarian'?
2. Explain the main reasons for the fall of Rome.
3. Who was the last Roman emperor and in what year was he deposed?
4. What did the remaining piece of the Roman Empire become known as?
5. What were some of the results of the loss of the security of the Roman Empire?
6. Why were significant works of literature from that time lost?

7. Name two great rulers from the so-called 'Dark Ages'.
8. Describe one of the new social systems that developed during this time.
9. List two great works of literature from this period.

Apply your understanding

10. The map in **SOURCE 1** shows the kingdoms and empires that rose after the fall of the Roman Empire.
    a. Which of these kingdoms or empires appears to be the largest?
    b. What modern continents does it cover?
11. Using **SOURCE 1**, explain the impact of the fall of the Roman Empire on Europe.
12. **SOURCE 2** shows Alfred the Great holding two objects. What are these objects and what might this depiction tell us about his accomplishments?
13. Artworks such as **SOURCE 3** were drawn by monks by hand and took a very long time to create. They devoted their lives to this work. What conclusions can we draw about these monks? What does it tell us about the importance of religion to these people?
14. Using information gathered from looking closely at **SOURCES 2** and **3**, argue whether or not you believe that the Early Middle Ages was a time lacking in art and learning.
15. What is meant by the term 'Dark Ages'?
16. Identify three reasons why some consider the period from 500 CE to 1000 CE to be a 'dark age' and give three reasons why some believe this to be an inaccurate description.
17. Identify the contributions of the medieval period and rank them from most significant to least significant.

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

17.4 Early medieval Christianity

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- explain why Rome played an important part in the life of the medieval Church
- describe the role of monks and monasteries in medieval Europe
- describe the overall influence of the Church in medieval Europe.

17.4.1 The power of the Pope

Christianity stemmed from the Jewish religion in the first century CE. It spread throughout Europe after becoming the official religion of the Roman Empire. Following the fall of Rome, it became entrenched as the principal religion across Europe. For many reasons, cultures turned away from their traditional belief systems and adopted Christianity.

The Pope is the head of the Catholic Church. After the fall of the Western Roman Empire, the power and authority of the Pope increased — he became a unifying figure. Based in Rome, the Pope made a powerful ally in political disputes. Papal support gave a leader both political prestige and moral authority.

The Pope became far more powerful than any other Christian bishop for several reasons. He was able to claim authority based on St Peter's decision to lead the Christian Church from Rome. St Peter and St Paul, two early Christian leaders, were **martyred** in Rome, and this gave the city particular religious significance. Strategic political alliances with rulers such as Charlemagne also saw papal power and importance rise.

martyred killed or made to suffer because of religious beliefs

SOURCE 1 Charlemagne's coronation by Pope Leo III (800 CE)

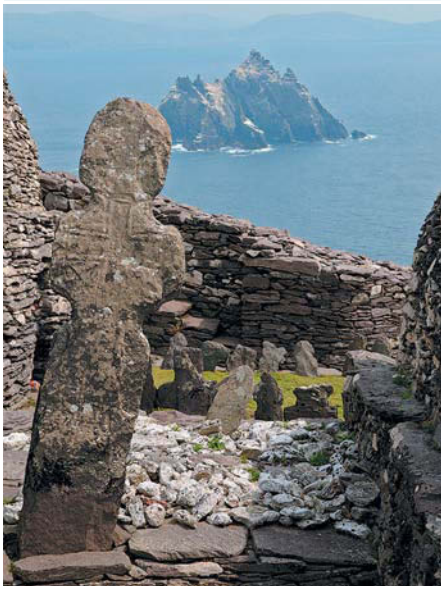
17.4.2 Monks and monasteries

An important feature of early Christianity was the role of monks and monasteries. A monk was a man who chose to withdraw from society in order to live according to strict Christian principles. Communities of monks were formed, with rules governing every aspect of their lives in order to ensure their obedience of God. These communities of monks lived in monasteries. Many monasteries were built in isolated places (see **SOURCE 2**), both for their protection and to free them from worldly distractions and influences.

Some monasteries played important roles in the community. Many had schools attached to them. Some had markets where fairs were held. Justice and law were dispensed by the abbot (the head of the monastery) in the towns that developed around the monasteries. People gave money to the monasteries in the belief that this would please God. Sometimes people were forced to pay taxes to the monastery for the use of their land or to sell produce in the markets. This made some monasteries very rich and powerful.

The spread of Christianity during the Early Middle Ages was in large part due to the work of missionaries. These were committed Christians, usually men, who took the message of Christianity to the **pagan** foreign tribes. They were usually most successful when they were able to convert the king, who would then ensure his followers converted. A notable example of this occurred when Clovis, king of the Franks, converted in 496 CE and began the task of converting the Frankish kingdom to Christianity.

SOURCE 2 A stone cross on Skellig Michael in Ireland. The monastery, on a small island off the west coast of Ireland, was built in the seventh century.



pagan someone who is not a Christian, Jew or Muslim, but who worships many gods

SOURCE 3 A ninth-century monastery in Tatev, Armenia

17.4.3 Education and health

The Church was one of the few sources of education during this period. Most schools were run by the Church and represented the only educational opportunities for most people (see **SOURCE 4**). Similarly, most hospitals were attached to monasteries. The Church was often the only place the poor could turn to for help or welfare.

SOURCE 4 A thirteenth-century illustration showing a boy being brought by his parents to a monastic school

SOURCE 5 In this medieval illustration a sick man is cured through the power of prayer.

Despite its position of authority, there was still much ignorance in the Church and in society's perception of the Church. Medical knowledge was scant and often based on **superstition** rather than science. For example, the monks believed that a person could be saved from disease only through the intervention of God. Often they would pray to the saints or use **holy relics** to treat people rather than apply practical medicine.

superstition a belief based on custom or fear rather than knowledge or reason

holy relic the physical remains of someone or something very significant to a religious tradition

DID YOU KNOW?

Pope Leo I personally met the barbarian invader Attila the Hun in 452 CE outside the walls of Rome. Attila, known as the 'Scourge of God', had ravaged Europe, invaded Italy and was set on sacking the city. No-one knows what was said during the meeting, but Attila withdrew his forces and Rome was saved.

17.4 ACTIVITIES

1. Using software such as Google Earth, locate Skellig Michael in Ireland (see **SOURCE 2**). Evaluate why monks might have chosen to construct a monastery in this location. **HASS skills: Evaluating**
2. Using the internet, the library and both primary and secondary sources, investigate the importance of Christian relics. Can you find examples of religious relics that still exist today? **History concept: Significance**

17.4 EXERCISE

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

Learning pathways

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

Check your understanding

1. What was the role of the Pope?
2. Why was the Pope so powerful in the early Christian period?
3. Explain why someone might become a monk.
4. Identify one role that monasteries played in the community.
5. Explain what a missionary did.
6. How could people gain an education in the early medieval period?
7. Where would the poor turn if they were sick or needed help?
8. Give an example of superstition or ignorance from this era.

Apply your understanding

9. Examine **SOURCE 1**. What evidence is there in this image that Pope Leo III was a powerful man?
10. Approximately how long after the fall of Rome was Leo III the Pope?
11. After closely examining **SOURCES 2** and **3**, explain why monasteries were built in isolated places.
12. Using **SOURCES 4** and **5**, evaluate the significance of the Church in the lives of the poorer people.
13. Look at **SOURCE 3**. Apart from being a place to live, does this monastery look as though it had other purposes? Explain why this might be needed.
14. Examine **SOURCES 4** and **5**. What conclusions can you draw about the Church and its importance to people of the time?
15. Evaluate the two important contributions of the Church to the lives of people in early medieval times.

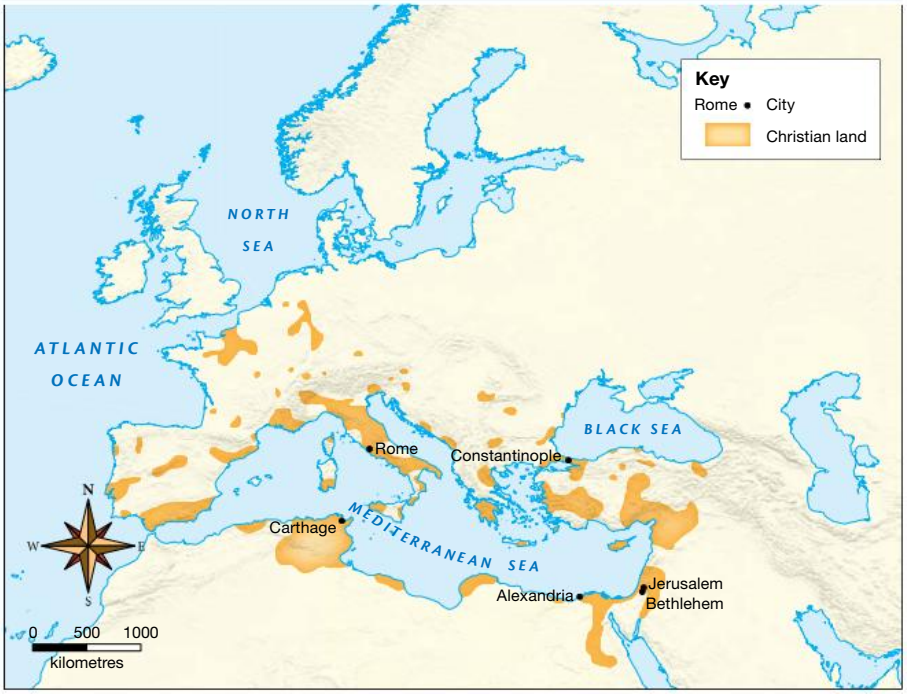
For sample responses to every question, go to www.jacplus.com.au.

17.5 Spreading Christianity in the Early Middle Ages

LEARNING INTENTION

By the end of this subtopic, you will be able to explain why Christianity spread so quickly during the Middle ages, and the role missionaries played.

SOURCE 1 Map showing the spread of Christianity in the Roman Empire by 400 CE



SOURCE 2 A map showing the spread of Christianity by 1000 CE and important medieval sites

17.5.1 Conversion of an empire

For many reasons, the Early Middle Ages proved to be fertile ground for two of the world's great religions: Christianity and Islam. How did these two religions grow so quickly? In this subtopic, we will explore the role missionaries played in the spread of Christianity.

The Roman Empire was the dominant power in Europe during the time of Jesus and in the first centuries of Christianity. Rome, the centre of the empire, also became the centre of the Church. When the apostle Peter (whom some historians consider to have been the first Pope) was executed in Rome, his tomb became an important site for Christian worship.

However, Christians also suffered **persecution** in Rome. For example, Emperor Nero blamed the Great Fire of Rome in 64 CE on Christians, unleashing a brutal campaign of persecution. It was not until Emperor Constantine took control of Rome in 306 CE that the persecution of Christians ended. Constantine encouraged religious tolerance and himself converted to Christianity.

persecution oppression or punishment of a person or group of people, usually because of their religion

saints people recognised by the Christian faith as having been very holy and who have performed miracles

17.5.2 The work of missionaries

The spread of Christianity during the Early Middle Ages was in large part due to the work of missionaries. These were committed Christians, usually men, who took the message of Christianity to the pagan foreign tribes.

Many missionaries were declared to be **saints** by the Church in recognition of their efforts. Famous missionaries include:

- St Patrick, the patron saint of Ireland, who lived in the fifth century
- St David, who introduced Christianity to Wales in 550 CE
- St Columba, who began the conversion of the Picts in Scotland in 563 CE
- St Augustine, who converted King Ethelbert of Kent in 600 CE, leading to Christianity becoming the primary religion of England
- St Ansgar, who introduced Christianity to Sweden in 829 CE. Some historians argue that Christianity played an important role in ending the Viking raids.

SOURCE 3 Saint Patrick driving the snakes from Ireland

DID YOU KNOW?

Many stories were told about the saints and their ability to perform miracles. For instance, it was said that there are no snakes in Ireland because St Patrick stood on a hill and used his staff to drive all the snakes into the sea. Although we now know this story to be untrue, at the time it was used to impress superstitious and uneducated people.

Explore more with myWorldHistoryAtlas

Deepen your understanding of this topic with related case studies and questions.

- Holy Roman Empire
- Medieval Christendom

17.5 EXERCISE

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

Learning pathways

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

Check your understanding

1. Explain what is meant by the term 'missionary'.
2. Name three Christian missionaries and state which people they converted to Christianity.
3. Why do you think it was important for a missionary to convert the king or ruler of a people?
4. The _____ Empire was the dominant power in Europe during the time of Jesus and in the first centuries of Christianity.
5. Who do many historians consider to have been the first Pope?

Apply your understanding

6. Using **SOURCES 1** and **2**, briefly describe the spread of Christianity from its beginnings to 1000 CE.
7. You have read the story of St Patrick and the snakes of Ireland. Use the internet and your library to find another story of a saint performing a miracle. Explain how this story would persuade people to convert to Christianity.
8. Explain the term 'persecution' and use it in a sentence.
9. Why did Christianity spread so quickly during the Middle Ages?

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

17.6 The feudal system

LEARNING INTENTION

By the end of this subtopic, you should be able to:

- identify the key features of feudalism
- and explain the interdependence of the different hierarchical layers of feudal society.

17.6.1 Charlemagne, King of the Franks

Charlemagne was a king of the Franks, modern-day France, who ruled from 768 to 814 CE. He was a powerful leader who conquered many lands around him. He was a strong Christian monarch who converted his subjects to Christianity, by force where required, thus expanding the religion widely across Europe. Under his reign, his Empire grew larger than the old Roman Empire and in 800 CE, he was crowned ruler of the Holy Roman Empire by the Pope. By implementing a strong feudal system, Charlemagne brought peace and productivity to his previously chaotic empire.

In 800 CE, Charlemagne gave land to churchmen and wealthy families in return for their support in running the empire. This method of ordering society is called **feudalism**. Although Charlemagne's feudal system was based on practices that had

feudalism social order in medieval Europe

SOURCE 1 A statue of Charlemagne that stands in Paris. Charlemagne bears the traditional symbols of a medieval European king: **orb**, **sceptre** and crown.

existed for centuries, it is in this period that strong evidence first identifies a clear feudal system in Europe. It took hundreds of years for feudalism to spread. Some European countries never adopted the system, and some Asian societies, such as Japan, developed their own particular feudal system.

17.6.2 The feudal kingdom

There were few cities or towns in early medieval Europe. Most communities were based around small villages. Most people who lived in the villages were peasants — poor farmers who worked the surrounding land. Most of the wealth therefore came from the produce generated by the peasants, who were by far the biggest social class and made up about 90 per cent of the population.

Under feudalism, the monarch was the owner of all land in a kingdom. The next most powerful class consisted of feudal **lords**, who were the big landowning nobles. In return for the right to land and control over peasants who worked it, these nobles (or tenants-in-chief) were required to give the king their loyalty, fight for him in wars and provide him with a proportion of taxes collected from the peasants. Below the nobles were the knights (or sub-tenants). In return for land, they gave loyalty to their lord, fought for him and provided him with taxes from their peasants.

orb globe with a cross, symbolising a Christian monarch's rule

sceptre rod symbolising royal authority of the monarch

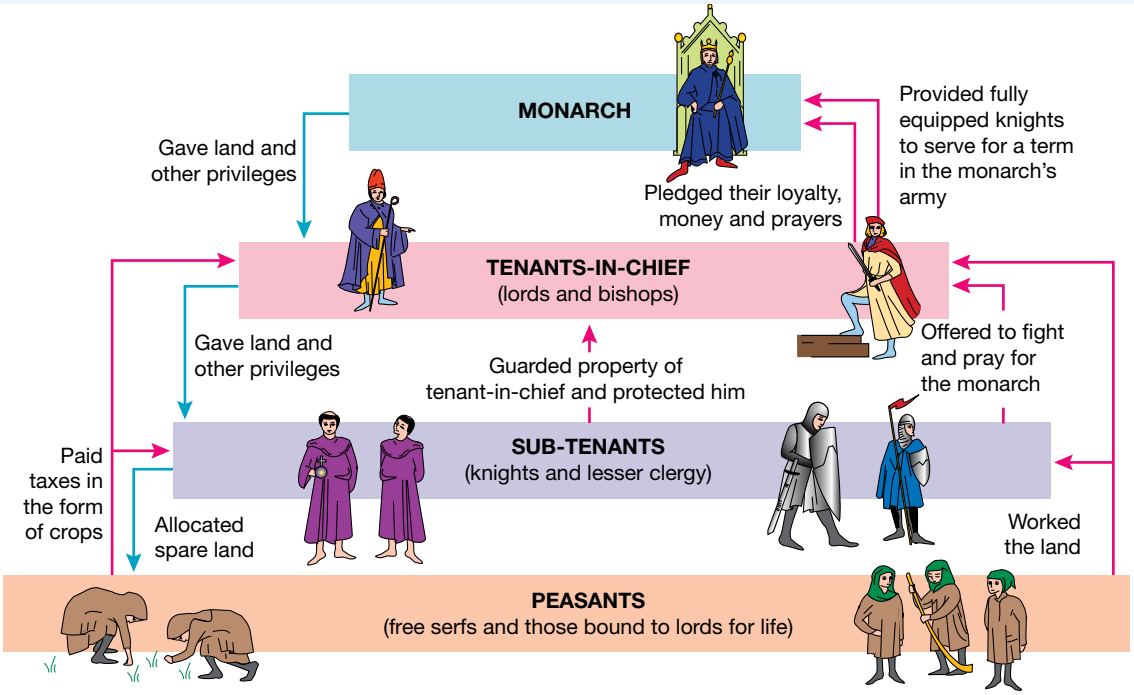
lord chief position in the feudal system below the monarch

homage pledging duties and loyalty to someone of superior rank in the feudal system

SOURCE 2 An oath taken in 1127 by knights and clergy to serve William, Count of Flanders, at Bruges, Belgium. The bond between them was sealed when William touched each man with a sceptre at the end of the ceremony.

I promise by my faith that from this time forward I will be faithful to Count William and will maintain towards him my **homage** entirely against every man, in good faith and without deception.

SOURCE 3 How society in Europe was organised under the feudal system



The monarch also gave land to the **clergy**. In western European countries such as England, the clergy swore loyalty to the Pope in Rome over their king. However, they also supported the feudal system by accepting the monarch and the lord as God's earthly representatives. Well-educated clerical advisers were often assigned to the king's service and helped keep social order.

Maintaining the social order

Feudalism was an effective way for the kings to control their nobles and lords. If they broke their oath with him, he could take the lands back and remove their source of power.

In return everyone had the same power of control over those who were below them, all the way to the peasants at the bottom of the social order.

Towards the end of the Middle Ages, towns and cities based on trade began to grow. The rich merchants who ran them could afford to defy or ignore the king and his lords. They could even afford to hire their own knights to protect their interests and the power of feudalism began to decline. *The Domesday Book*, ordered by William the Conqueror around 1085 to determine who owned what land and how much was owed to him in tax, allowed him to maintain control over what was his. It is an amazing achievement and gives us a clear picture of the medieval manors of the time.

clergy officials of the Church
geld a form of land tax

SOURCE 4 This extract from *The Domesday Book* gives information about a reasonably large village called Hitchen in County Hertfordshire.

Source Taxable units: Taxable value 5 **geld** units.

Value: Value to lord in 1066 £4.

Value to lord in 1086 £6.

Value to lord c. 1070 £1.

Households: 45 villagers. 17 smallholders. 12 slaves. 29 cottagers.

Ploughland: 38 ploughlands (land for). 7 lord's plough teams. 1 lord's plough teams possible.

22 men's plough teams.

Other resources: 2.5 lord's lands. Meadow 4.25 ploughs. Woodland 600 pigs. 4 mills, value 2.66.

1 church.

Lords in 1066: Earl Harold; Hitchin, church of.

Lords in 1086: Hitchin, church of; King William.

Tenant-in-chief in 1086: King William.

17.6 EXERCISE

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

Learning pathways

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

Check your understanding

1. When is it believed Charlemagne introduced the principles of the feudal system to his empire?
2. What were the features of his rule that led to him being one of the most significant figures in medieval Europe?
3. Under feudalism, who was the ruler and owner of the land?
4. Under feudalism, who were the tenants-in-chief?
5. Apart from the king, to whom did the clergy swear loyalty?
6. How did the lords maintain control over the people below them?

Apply your understanding

7. Explain what **SOURCE 1** tells us about the power of Charlemagne.
8. The oath-taking ceremony described in **SOURCE 2** seems very formal. Why would people have sworn an oath to their lord? Do similar oath-taking ceremonies occur in modern times? List some examples.
9. Using the diagram in **SOURCE 3**, explain in a paragraph how the monarch received support from his subjects and what these subjects were given in return.
10. What power did *The Domesday Book* give William the Conqueror?
11. Using the information in **SOURCES 1** and **4**, explain what symbols of power are used to show the strength of the monarch, or tenant-in-chief and what they represent.
12. Read the extract from *The Domesday Book* (**SOURCE 4**) closely.
    a. Who was the tenant-in-chief of this village?
    b. How many families of villagers are indicated (each number represents a family, rather than a single person)?
    c. How much land does Hitchen have?
    d. What resources does this village have?
    e. What conclusions can you draw about whether or not this was a thriving village?
13. Describe three essential elements of a feudal society. These may be physical constructions, social classifications or ways of thinking. Write these as a short paragraph.

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

17.7 Life on the manor for men, women and children

LEARNING INTENTION

By the end of this subtopic, you will be able to distinguish between the roles of medieval men and women in different social classes, and explain how the life of a child in medieval society differs from your own.

17.7.1 The people on the manor

Quality of life in the Middle Ages depended largely on what position a person had in the feudal system. For the nobility, who had the luxury of wealth and servants, life was certainly more comfortable than for the peasants. Knights and barons enjoyed privileges befitting their rank; they could own several manors and lived off the taxes extracted from their peasants. The clergy led simple lives, forsaking possessions in the service of God. As the educated elite, they enjoyed the pursuit of scholarly learning in their monasteries. Although the clergy often engaged in the same kind of farm work as the peasants, many monasteries operated like manors and owned villages.

Women

Medieval women, regardless of class, had few rights. Women from the nobility married as early as the age of 12! Their marriage was arranged by the family. The aim was usually to gain political power or wealth for the girl's family. Her husband — and society in general — expected her to produce a male heir to continue the noble line of her husband. In an era of poor medical care, childbirth for women of any class was dangerous. It has been estimated that during the Middle Ages, one in five women died during childbirth. Although she looked after her husband's household and had some command over the servants, the noble woman could not own property, except as a widow.

Peasant women had even fewer rights. Peasant families generally were reluctant to allow their girls to marry as young as the noble girls. This was because children were an important source of labour. Peasant women did much the same farm labour as the men. On top of that, they had household duties such as preparing food and weaving clothes, and looking after the children and small livestock.

Men

For the vast majority of peasant men, life was very hard. They endured a daily grind of farm work: clearing fields, harvesting, repairing buildings, sawing and chopping timber, and paying the tithe to the lord of the manor. Most men were uneducated and remained tied to the drudgery of peasant labour. Still, some boys managed to receive formal education in monasteries. This might provide them with the opportunity to become a parish priest or to work in the manor in a bookkeeping role such as a bailiff or a steward.

Children

Childhood as a time of play or schooling was almost non-existent. Children were regarded as sources of labour on the farm. At first they would help the women with household chores, but fairly soon they could be expected to be sent out to the fields. Peasant children were educated in how to harvest a field, fix a thatched roof or milk a cow.

It appears that in medieval Europe, the period of growth now called adolescence was ignored. Children were treated as adults from the age of ten, because by then they could participate in the farm work. Boys generally married a little older than girls, when they were about 14. 'Teenagers' were isolated; as they did not go to school, they had few opportunities to mix with other people their own age.

int-4070

SOURCE 1 Life on a manor in the Middle Ages

A Lords often owned and operated grain mills. They kept a portion of all grain ground as tax. The lord lived in a castle or a manor house. The woods, and any game they contained, were the lord's property.

B The house of the steward — the lord's business manager — was surrounded by stables, barns, a bake house and a kitchen.

C Animals grazed on an open stretch of land called a common.

D The house of the bailiff, who collected taxes and ensured the steward's directions were carried out.

E The house of the reeve, who supervised farm work carried out by serfs to ensure it was done properly.

F Women were the property of their menfolk, and were married by about 14. They cooked, spun and weaved, and tended to the animals and the children.

G The three-field rotation system was introduced by the Anglo-Saxons. Crops were grown in two fields, with the third left to lie fallow (not used) so the soil could recover its nutrients. Fields being used were divided into strips, with different serfs working each strip. Crops were rotated to prevent the same nutrients in the soil always being used.

H The miller operated the mill, where grain such as wheat was ground into flour.

I Tithe barn, where peasants deposited one-tenth of all they produced for use by the church.

J The church (and its grounds) was a central feature. People went to church regularly. It was also the place where they paid their tithes and often held their simple markets. The tithe was a tax given to the Church equal to one-tenth of what someone received, grew or raised.

K Serfs lived in simple wattle and daub huts with thatched roofs. A hole in the roof allowed smoke to escape from cooking fires. Windows had rough wooden shutters.

L As well as farming, some serfs also worked as blacksmiths and carpenters. They generally could not read or write.

M A serf who had been punished by the reeve was placed in the pillory. This punishment instrument consisted of a wooden framework built on posts, with holes through which the victim's head and hands were placed and then locked.

N Thatchers wove thick bunches of straw, reeds and sticks together to form roofs of village houses.

O Scythes, sickles and rakes were used to harvest crops.

P A serf's most important tool was the heavy wheeled plough.

Q Lunch for a serf might be coarse bread and vegetable soup, washed down with ale.

on Resources

Interactivity Life on a manor in the Middle Ages (int-4070)

17.7 EXERCISE

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

Learning pathways

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

Check your understanding

1. What type of work did peasant men generally do?
2. How might peasant men manage to get an education?
3. Why were noble women's marriages arranged for them by their family?
4. What property rights did a noble woman have compared with her husband?
5. Why did peasant women generally not marry as young as noble women?
6. How were children regarded on a farm?
7. Why might it be highly valued to have a large family?

Apply your understanding

8. Make a list of the work you can see people doing in **SOURCE 1**.
9. Of the jobs listed, which ones would women and children have been able to do?
10. Is **SOURCE 1** a primary or secondary source? Explain your answer. What is its value?
11. Who held the most wealth and power in the manor in **SOURCE 1**? Explain the basis of their wealth.
12. Examine **SOURCE 1**.
    a. Explain the roles of the reeve, steward and bailiff.
    b. Create a diagram that shows them in order of importance.
    c. Do you think women would have been allowed to do these jobs in medieval times? Explain your answer.
13. Using the information gained from **SOURCE 1**, as well as any other knowledge you have, write a paragraph about life on the manor, describing work, living conditions and farming practices.
14. To which social class did most people in medieval Europe belong?
15. Compare the quality of life of those high up in the feudal system with those at the bottom. Be specific about wealth and work.

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

17.8 The miller and the watermill

LEARNING INTENTION

By the end of this subtopic, you will be able to explain the significance of the watermill in medieval Europe, and how it was operated.

17.8.1 Millers, flour and mills

We have seen that, apart from nobles and the clergy, most people in medieval Europe were poor peasants who tilled the soil on estates that were owned by lords, knights and the Church. However, not all of the common people worked on the land. Some were skilled artisans such as carpenters, stone masons and blacksmiths. In fact, many surnames come from skilled trades that have existed for centuries. For example, you may know someone whose last name is Mason, Carpenter, Smith or Miller. Millers were among the most important of the medieval skilled craftsmen.

SOURCE 1 From the prologue to *The Canterbury Tales* by Geoffrey Chaucer (c. 1391). This passage is written in Middle English, which is what the English language looked like in the Late Middle Ages. The same passage, and a little more, is translated into modern English prose and appears in **SOURCE 2**.

The Miller was a stout carl, for the nones;

Ful big he was of braun, and eek of bones;

That proved wel, for over-al ther he cam,

At wrestling he wolde have alwey the ram.

Millers were men who ground grain into flour so that people could bake bread and cakes. Bread, in particular, has made up much of the food consumed by peasants throughout history. In the Early Middle Ages, men and horses turned the heavy stones that were used to grind grain into flour. By the eighth century, a new technology had developed to make the miller's work easier and to create flour much more efficiently. This new invention was the watermill. By 1085 CE, a survey ordered by William the Conqueror showed there were 5682 watermills operating in England.

SOURCE 2 A modern translation as well as other descriptions of the miller from *The Canterbury Tales*.

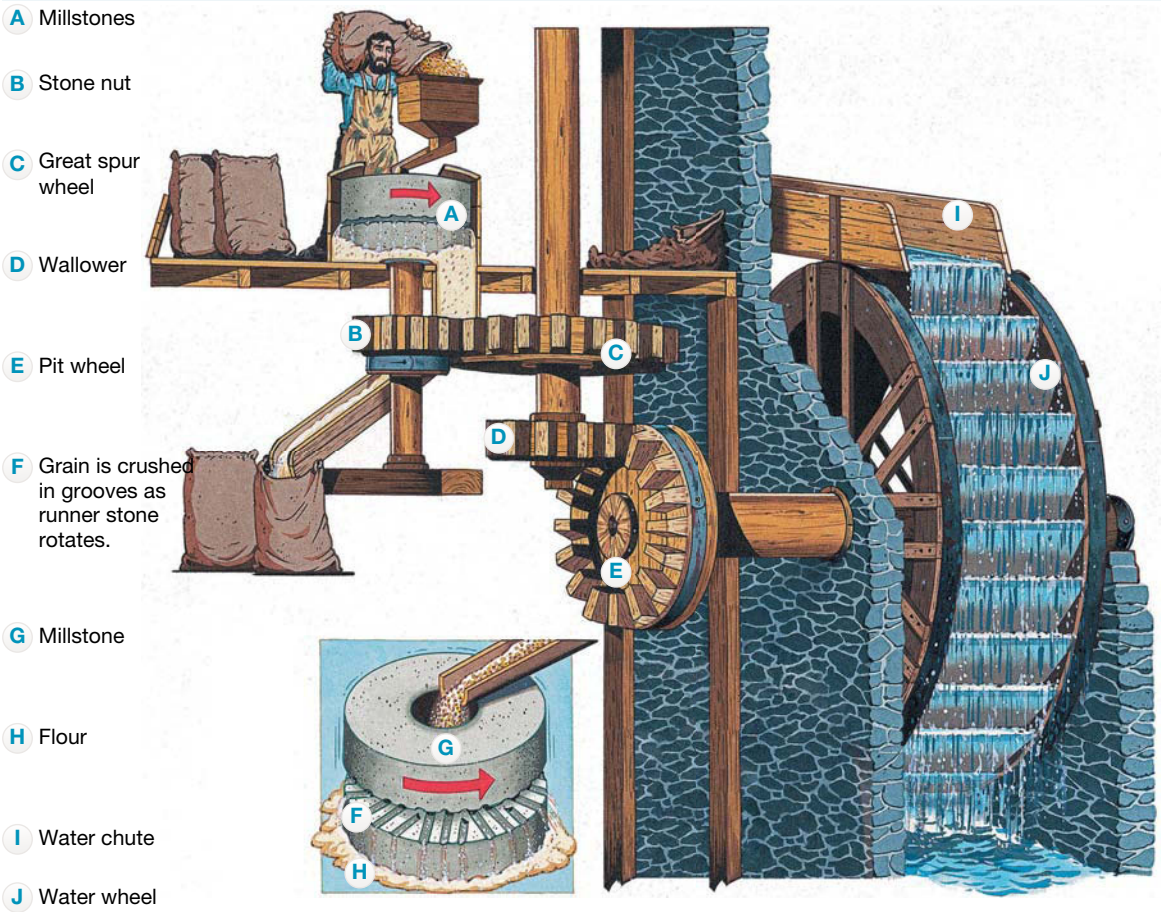
The miller was a burly fellow on this occasion. He had big muscles, and thick bones too. That proved handy because wherever he went he always won the prize ram at wrestling matches. He was short-shouldered and broad — a thickset brute. There was no door he couldn't heave off its hinges or break by running at it with his head. His beard was as red as any sow or fox, and broad, as though it were a spade. On the top of his nose he had a wart. A tuft of hairs, red as the bristle of a sow's ears, grew from it. His nostrils were black and wide. He bore a sword and buckler at his side. His mouth was as big as a great furnace.

17.8.2 Operating the watermill

A watermill had to be located beside a stream so that water from the stream could be diverted into a channel called a leat. The rim of the water wheel was designed to catch the water that was flowing through the leat so that the water wheel was always turning. The power generated by the water wheel was transferred through a series of toothed wheels. The last of these wheels turned the millstones that ground the rain (see **SOURCE 3**). The millstones could turn at speeds of up to 120 times a minute, much faster than they could ever have been turned by people or even the strongest horses. The watermill could be stopped by closing a sluicegate to block the flow of the water.

Peasants would bring their harvested grain to the mill, which was usually owned by the lord of the manor. As can be seen in **SOURCE 3**, the miller would lift great bags of grain on his powerful shoulders and empty them into a wooden container, which fed the grain between the turning millstones. After it was ground into flour, it would pour down into bags. In at least a few places in England, the watermill continued to be used until the early twentieth century.

SOURCE 3 A cross-section of a watermill, showing how it works



17.8 EXERCISE

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

Learning pathways

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

Check your understanding

1. What is the main purpose of a mill?
2. What did you have to do to get a watermill working and how did you stop it?
3. How do we know that the mill was a common machine throughout England in the time of William the Conqueror?
4. A survey conducted in 1085 CE showed there were how many watermills operating in England?
5. Explain the purpose and process of a mill by creating a flowchart.

Apply your understanding

6. How would the invention of the watermill have helped increase grain production in the Middle Ages?
7. What evidence is there in **SOURCES 1, 2** and **3** that the miller tended to be a strong man?
8. What else do **SOURCES 1** and **2** tell us about the miller, apart from the fact that he was a strong man?
9. Using the cross-section shown in **SOURCE 3**, write a description of how the watermill worked by explaining the role of the chutes and wheels.

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

17.9 The knight

LEARNING INTENTION

By the end of this subtopic, you will be able to explain the significance of the knight in medieval warfare and describe changes that occurred in the knight's armour.

17.9.1 The warrior on horseback

One of the most iconic images of the Middle Ages is that of the mounted warrior called the knight.

Although there are some earlier descriptions of warriors on horseback, the knight as we know him did not appear until the Middle Ages. Two important developments were needed to enable a soldier to move around on horseback during a battle: the **stirrup** and a heavier breed of horse capable of carrying a man in full armour. These developments emerged in the Early Middle Ages. The Battle of Hastings, fought in 1066 between Norman knights and English infantry, is one of the earliest recorded military engagements involving knights on horseback.

The knights at Hastings fought for their lord, William, **Duke** of **Normandy**. This feudal service to the lord or the king was an important aspect of knighthood. Generally, knights were wealthy themselves, because it was expensive to breed warhorses and own good armour. They were also generally quite powerful landowners. However, some knights were monks who served the Church. Their role was usually to accompany pilgrims and protect them while they were on the Crusades. The Church could afford to pay for their horses and armour.

SOURCE 1 A scene from the Bayeux Tapestry, dating from the late eleventh century. Norman knights on horseback are seen here attacking their English enemies at the Battle of Hastings in 1066.

17.9.2 In battle

Weapons and armour

As **SOURCE 1** shows, a heavily armed warrior on horseback was meant to terrorise and destroy foot soldiers. The decapitated body at the bottom of the panel demonstrates the effectiveness of a charging knight.

The knight used an arsenal of heavy iron weapons. Swords, **maces** and battle axes were common. However, the **lance** appears to have been the favoured weapon: it helped to put distance between the knight and the infantry soldier he was fighting. As a last resort, the knight's wooden shield could be used as a weapon — swiping at someone with its rim could cause severe wounds.

Duke in England, a lord whose status placed him just below that of a prince; elsewhere in Europe, a ruler of a small state called a duchy or dukedom

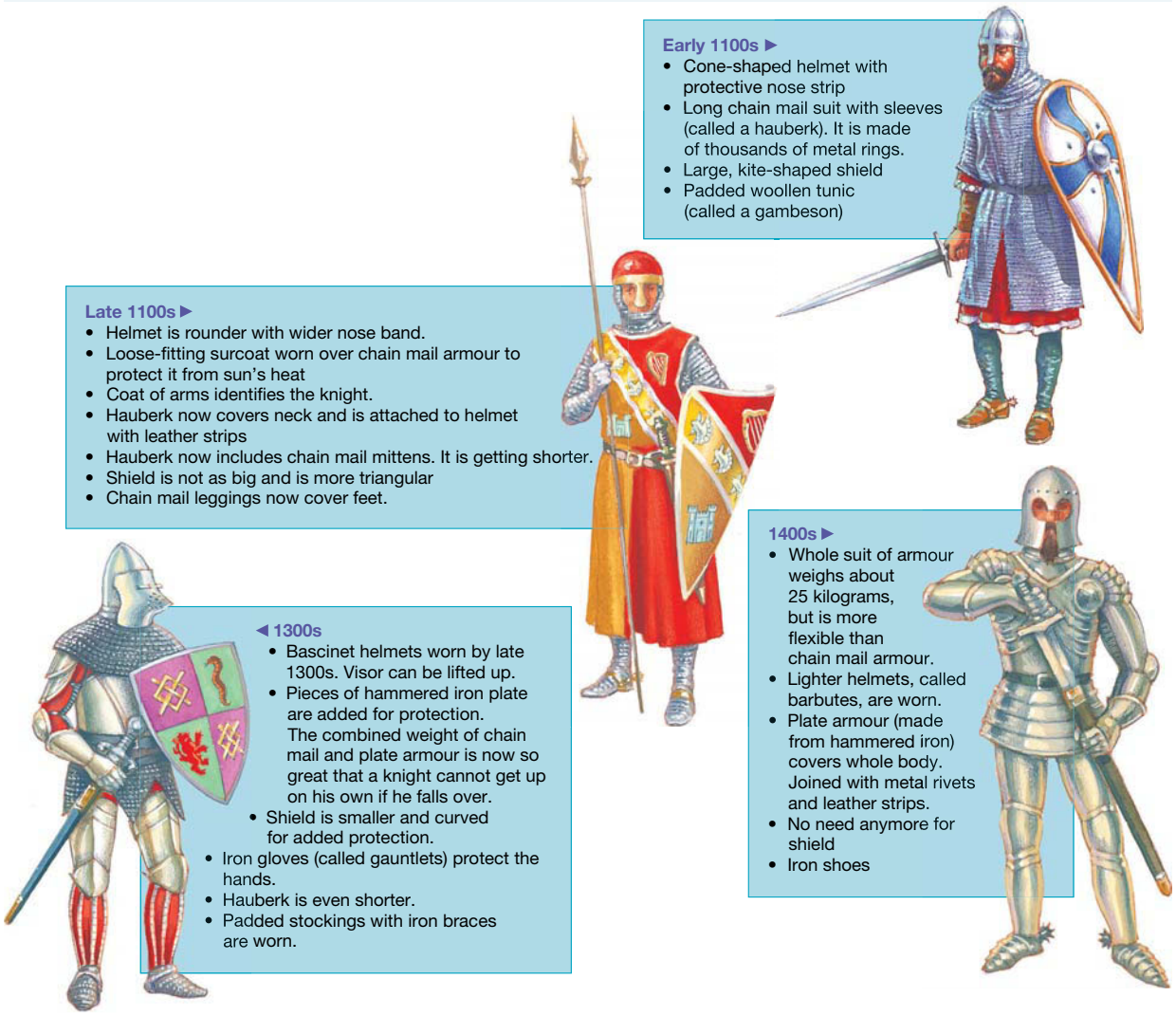
Normandy now a French province, in the Middle Ages it was a dukedom in northern France

mace iron-headed club

lance a long wooden shaft with steel point used as a weapon by mounted knights

int-7818

SOURCE 2 The development of the knight's armour



The armour was both heavy and awkward. The coats of mail worn by the fighters in **SOURCE 2** could weigh more than fifteen kilograms. It was no easy task to wear such a cumbersome outfit on horseback and fight furiously in battle.

Jousting tournaments

In films and other popular media, knights are often seen charging at each other in sporting events called **jousts**. This type of sporting event actually did happen. It was no doubt a useful method of training. Unlike Roman gladiators, knights in jousts did not fight to the death. The lances were padded, but swords and other weapons were not, so it was still a violent sport with many accidental fatalities.

The fall of the knight

By the end of the Middle Ages, the knight's effectiveness as a warrior had diminished. By then, professional armies were forming. These were often made up of peasants who were properly trained to bring down a knight off his horse. Also, the development of firearms by the Late Middle Ages proved too much for the knight's armour, so the days of the knight were over.

joust combat between two mounted knights using blunted lances

SOURCE 3 John Chalon of England and Lois De Beul of France jousting, 1448

SOURCE 4 The body armour of today: Canadian riot squad police. Modern riot squad police also often carry a perspex shield as protection from missiles such as rocks or homemade fire-bombs.

on Resources

Interactivity The development of the knight's armour (int-7818)

17.9 ACTIVITY

You are a medieval sports journalist. Write a three-paragraph report on a jousting tournament suitable for reading by your medieval audience. You should use the internet and your library to research the organisation and rules of jousting.

History concept: Perspectives

17.9 EXERCISE

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

Learning pathways

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

Check your understanding

1. The knight could not have existed without two important developments. What were they?
2. Which individuals or institutions did the knight serve?
3. What was the purpose of the mounted warrior?
4. List four different weapons used by knights. Which one did they favour the most and why?
5. What was jousting?
6. Why did the knight's usefulness in battle decline at the end of the Middle Ages?

Apply your understanding

7. In a paragraph, describe what is happening in **SOURCE 1**. How would this source help the historian find out about the weapons and armour of the medieval knight of the eleventh century?
8. Using **SOURCE 2**, write a paragraph describing how the knight's weapons and armour changed between the early 1100s and the 1400s. List at least four things that changed (this might include changes in function, appearance or shape).

9. Why do you think the shield disappeared as armour by the 1400s?
10. Why do you think weapons and armour changed over time? Think of reasons such as protection and comfort.
11. Examine **SOURCE 4**. In what ways are the riot squad police of today like the medieval knights? Modern armies, for the most part, do not use armour like the riot squad police. Can you guess why?
12. Compare and contrast **SOURCES 1** and **3**. Draw up a table with two columns, using it to examine similarities and differences under headings such as armour, weapons, purpose of clash, and consequences of the event.
13. Why do you think that the knight is often seen as a symbol of the Middle Ages? What is it that has made them an iconic image of this time?

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

17.10 Medieval warfare

LEARNING INTENTION

By the end of this subtopic, you will be able to identify the weapons used in medieval battles, and identify Identify and explain strategies and formations used in battle.

17.10.1 Medieval weapons and battles

Many destructive wars were fought during the Middle Ages. However, nothing like today's firepower existed in medieval times. The destruction wreaked by two atomic bombs dropped on the Japanese cities of Hiroshima and Nagasaki show what modern technology is capable of. In medieval Europe, wars were fought literally through clash of arms, with swords, axes and maces. Arrows and rocks, rather than bullets, were the main missiles. Still, even in the Middle Ages, there were instances of large-scale massacres. The knights shown in **SOURCE 1** slaughtered thousands of Turks when they took the city of Antioch. Later in this chapter, you will read about the Tartars using **trebuchets** like the one shown in **SOURCE 2** to fling disease-ravaged bodies over the walls of the city of Caffa. This allowed them to kill many people with sickness.

The invention of gunpowder, originally from China, changed the way battles were fought. In Europe, guns and cannons were developed from the early fourteenth century. Medieval guns were at first ineffectual, being very slow to load, inaccurate and liable to blow up. Archers with longbows and crossbows were more effective. However, by the end of the fifteenth century, gun technology had improved.

Medieval battles would have been terrifying experiences. Anyone observing a battle from a short distance would have heard yelling, screaming and the clash of steel on shields. This would have been noisy in the thick of battle, but from a distance it would not have been very loud. The ear-splitting noise of twentieth and twenty-first century warfare largely comes from modern **artillery**.

Fighting hand-to-hand, medieval armies tended to battle in tightly grouped formations. One side would push against the other. Infantry stabbed and slashed each other with swords, axes, **pikes**, maces and even farming tools. It was the job of mounted knights to charge such formations and try to break them up, as shown in **SOURCE 1** of subtopic 17.9.

The bloodshed was horrific. Limbs and heads were chopped off, and brains and guts were strewn across the battlefield. The tight formations meant that soldiers were likely to stumble over the dead and the dying. By the end of the battle, which did not usually last more than an hour, the battlefield was covered with gore and blood. The ground would be littered with the bodies of both men and horses.

For those who died, there were no war cemeteries and no pensions for their wives and children. Nor were there any entitlements for disabled veterans. A beggar's bowl was often the only means of survival for the medieval common soldier who was crippled fighting for his lord or king.

trebuchet heavy medieval siege machine that uses a sling to hurl large missiles

artillery large mounted firearms such as the cannon

pike long spear-like weapon carried by foot soldiers

SOURCE 1 A medieval illumination showing the siege of Antioch in 1098. The knights in this illumination resemble the soldiers from two centuries after the event depicted. In some ways, this would be like depicting a soldier from colonial Australia as a modern Australian infantry soldier. Medieval artists were not historians, and they often painted historical scenes as if the event was happening in their own time.

SOURCE 2 The trebuchet was a kind of giant slingshot designed for hurling rocks at enemy armies and fortresses. Sometimes other missiles were used, including dead animals and slain enemies, with the twin aims of demoralising the enemy and spreading disease among the besieged population.

SOURCE 3 From a chronicle describing the Battle of Bannockburn in 1314, when the Scottish rebel leader Robert the Bruce defeated the English, who sought to control Scotland. Robert became King Robert I of Scotland.

The two hosts [English and Scottish armies] came together, and the great steeds of the [English] knights dashed into the Scottish pikes as into a thick wood; there arose a great and horrible crash from rending [splitting] lances and dying horses, and they stood locked together . . .

SOURCE 4 From *The History of the Art of War in the Middle Ages* by C. Oman, published in 1924. The battle described here is between Swiss and German infantry.

The two bristling lines of pikes crossed, and the leading files were thrust upon each other's weapons by the irresistible pressure from behind. Often the whole front rank of each **phalanx** went down in the first onset, but their comrades stepped forward over their bodies to continue the fight.

17.10 ACTIVITY

Design a poster, web page or PowerPoint presentation that explains the most important weapons used in the Middle Ages.

HASS skills: Communicating and reflecting

phalanx body of foot soldiers in close battle order

17.10 EXERCISE

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

Learning pathways

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

Check your understanding

1. Why were guns not as popular as longbows and crossbows during the Middle Ages?
2. Where did gunpowder originate?
3. List three weapons used by fighters in a medieval battle.
4. Describe how a medieval battle differed from a modern-day battle.
5. What often happened to soldiers who were permanently injured during battle?

Apply your understanding

6. Closely examine the trebuchet in **SOURCE 2**. List two ways that it could be used against the enemy.
7. Closely examine **SOURCE 1**. What were the weapons used in this battle?
8. What was the name given to the soldiers on horseback in **SOURCE 1**?
9. Study **SOURCES 2, 3** and **4**. What can you tell from each of these sources about:
   a. the effectiveness of pikes in battles
   b. the risks to horses in battle
   c. the tight formations in which medieval battles were fought
   d. the reasons for high casualties in the front ranks?
10. Using what you have learned about knights in subtopic 17.9 and medieval warfare in this subtopic, write a short paragraph exploring why mounted soldiers (knights) became less and less useful in battles as warfare technologies changed. In preparing your answer, consider the types of weapons and how they changed, as well as the formations that were used.

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

17.11 Castles

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- identify the key features of castles
- explain how the key features of castles changed over time
- identify methods used to attack and defend castles.

17.11.1 Building a castle

During medieval times, castles were built to protect the monarch or lord's land. They had many features, such as high walls, that made it very difficult for enemies to invade. However, if conquered, castles could then be used by invaders to help control the land they had taken. Castle walls were so effective in the Middle Ages that they were even built around some towns and cities.

The first castles appeared in the eleventh century. They were usually made from timber and sat on a high mound called a **motte**, which was surrounded by a ditch. If the castle was near a river, the ditch could be filled with water to create a **moat**. The innermost tower was called the **keep**. **Palisades** and walls called baileys protected the keep. By the end of the eleventh century, timber was replaced with more durable material such as stone or brick.

The easiest place to build a castle was on flat ground. However, castles were often built on hills or cliffs because high positions enabled castle occupants to look out over and control the surrounding countryside. Such positions were also easier to defend because attackers had to advance uphill. There were also great advantages in building castles on islands in rivers or lakes. Castles were built along the Rhine River in Germany to force merchants transporting goods along the river to pay taxes. Such positions also ensured a supply of water to fill a castle's moat and for drinking during long sieges.

SOURCE 1 The ruins of Corfe Castle, in Dorset, England. The square tower is a Norman keep. The destruction was the result of cannon fire during the English Civil War in the mid-seventeenth century.

17.11.2 Attacking a castle

Attacking a castle was no easy task. As castle designs became more sophisticated, more features were added. For example, **concentric curtain walls** meant that attackers who broke through one wall were faced with another and were trapped in the space between them. Marienburg Castle in modern-day Poland had five curtain walls. Drawbridges could be lifted above the moat, blocking access to the main gate. All manner of missiles could be launched down at attackers from the walls, including arrows and rocks. Even boiling oil could be tipped through 'murderholes' in the roof of the gatehouse surrounding the main entrance. In turn, attackers responded by using siege engines, including battering rams and hide-covered siege-towers on wheels. It was not unusual for a siege to last many months. Defenders kept an ample supply of food in the castle keep and sunk wells in the inner courtyard to ensure a protected water supply.

motte a mound upon which a castle was built

moat water-filled defensive ditch surrounding a castle

keep innermost tower of a castle

palisade tall fence made of pointed timber stakes driven into the ground

concentric having a common centre

curtain wall outer wall surrounding an inner wall in a castle

int-4072

SOURCE 2 A castle under siege

A The gatehouse was heavily defended. If attackers got in, defenders could shower them with rocks, red-hot sand or boiling water through a hole in the ceiling (called a murderhole).

B A battering ram made of a huge, often reinforced timber beam would be driven against a castle gate or lower wall to try to break through.

C Battlements lined the top of castle walls.

D A castle was often surrounded by a ditch, sometimes filled with sharpened stakes (palisade) or water.

E Sometimes castle walls sloped outwards at the base. This added strength to the walls and reduced the effectiveness of battering rams.

F Missiles could be dropped on attackers through holes in the floor of the battlements known as machicolations.

G The trebuchet, introduced to Europe from the Arab world, was a type of counterweighted catapult. It was used to hurl huge rocks weighing up to 90 kg against castle walls, and to toss rotting animal bodies over the walls.

H The ballista was a giant crossbow that fired flaming bolts over castle walls.

I A mangonel was a type of catapult used to hurl smaller objects (e.g. heads, smaller rocks or piles of dung) over castle walls.

17.11.3 A lord's home is his castle

The castle may have been a fortress, but it was also a home. A castle was usually owned by a lord or the Church. It had all the requirements of a fortress, such as troop quarters, stables and an armoury. However, if owned by a lord, it also had facilities for the comfort of his family.

By the end of the Middle Ages, castles were no longer as effective or desirable. The feudal system, which until then had encouraged the lord to show his strength by having a castle, was fading. Also, developments in the cannon meant that castle walls could no longer protect against invading armies.

17.11 ACTIVITIES

1. Use the internet to research information about the construction of a British eleventh century castle and one from the fifteenth century, then compare and contrast the two. What differences were introduced and what remained the same? **History concepts: Sources, evidence**
2. Draw a diagram of a Corfe Castle in **SOURCE 1**, recreating it from its ruins, as the motte and bailey castle it was. Label the keep, the palisade, the motte and the bailey. **History concepts: Sources, evidence**

on Resources

Interactivity A castle under siege (int-4072)

17.11 EXERCISE

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

Learning pathways

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

Check your understanding

1. Complete the following sentences by choosing the correct words from the alternatives in brackets.
   a. The first castles appeared in the (tenth/eleventh) century.
   b. The innermost tower was called a (motte/keep).
   c. The bailey was a (wall/moat).
2. What were early castles built of?
3. Why were castles often built on a steep hill?
4. Why did some castles have a series of concentric curtain walls surrounding the keep?
5. What was a 'murderhole' used for?
6. Give two reasons for why castles were built.
7. How was the castle a symbol of the feudal system?

Apply your understanding

8. Study **SOURCE 2**. Which features of the castle and its defenders would be most effective in holding back the attack? Which methods of attack appear to be most effective? Give reasons for your answers.
9. How likely do you think it is that the attackers in **SOURCE 2** will succeed in breaking into the castle? Why?
10. How does **SOURCE 1** support the idea that castles eventually went out of fashion as military fortresses?
11. List the features seen in **SOURCE 1** that support the accuracy of the castle illustrated by a modern artist in **SOURCE 2**.

12. Find out what it means to have a 'licence to crenellate'. What did it entitle the holder of the licence to do?
13. Describe the common methods used to attack and defend castles.
14. Describe the best places to build a castle and explain why.

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

17.12 The power of the medieval Church

LEARNING INTENTION

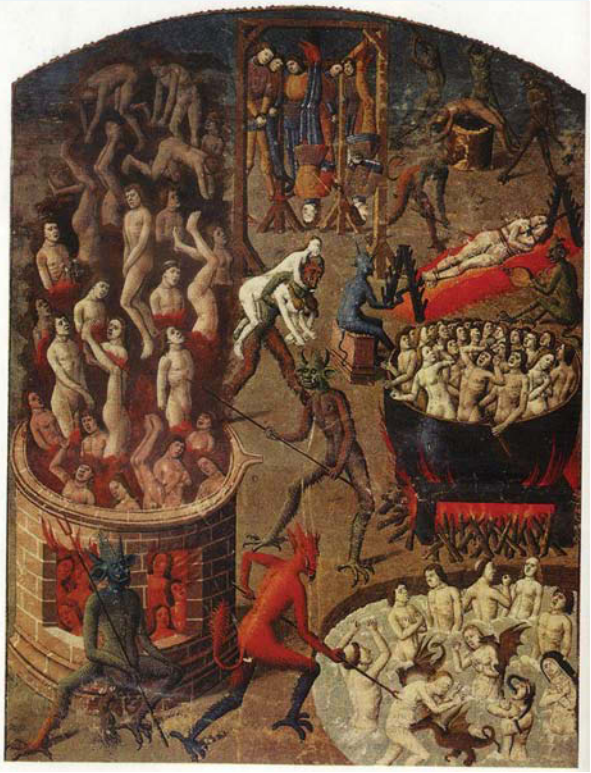
By the end of this subtopic, you will be able to explain why the Catholic Church had immense power in medieval times and identify the hierarchical structure of the Church.

17.12.1 The authority of the Church

The Roman Catholic Church was the one common institution found throughout western Europe. Its rituals were similar across the continent. It even used a common language, Latin, although no-one other than the clergy spoke this old Roman language any longer. Everyone was expected to live according to Church law and attend **Mass**. The **sermons** of the priest, often delivered in the **vernacular** language rather than Latin, reminded parishioners of their Christian responsibilities.

The head of the Roman Catholic Church was the Pope. As God's representative on Earth, he was very powerful. His **cardinals**, **archbishops** and **bishops** supported the Pope's **edicts**, advised lords and kings, and had key government positions. Below this upper class of clergy were the parish priests, **nuns** and monks, and friars. These lesser clergy took the Church's message to the people in the villages. They also collected the taxes on which the Church's wealth depended. At the village level, this tax was called a tithe. The tithe required that 10 per cent of a person's income, or of what they produced, such as grain, eggs and livestock, should be paid to the Church.

SOURCE 1 A medieval painting depicting what happens to people when they go to hell



Mass Roman Catholic church service

sermon moral or religious lecture delivered by a priest

vernacular everyday language spoken by a particular group or class

cardinal leading clergyman who is a member of the Pope's Council, or Sacred College, and who has the power to elect the Pope from among his own group

archbishop head bishop

bishop clergyman who governs a diocese, a large church district

edict order issued by a monarch or other person in authority

nun member of a closed community of women living under religious vows and rules

Anyone who was believed to be acting against the interests of the Church could be excommunicated. This meant they could no longer attend Mass and receive the Christian **sacraments**. Worse, they were told they would go straight to hell when they died. The Church made sure that the fear of hell, with its fires and devils, was instilled in everyone.

SOURCE 2 Canterbury Cathedral, in Kent, England. This is a typical example of Gothic architecture, which can be identified by the pointed arches and highly decorative style.

17.12.2 The parish church and the cathedral

Almost every village had a parish church. Often it was both the largest building and the only one built of stone or brick. The parish church was built using peasant labour. Although unpaid for their efforts, the parishioners would have felt a sense of achievement and communal ownership. The church walls, and sometimes the stained-glass windows, depicted scenes from the Bible, especially the life of Jesus. These helped teach Bible stories to the mostly illiterate congregation. In an age before clocks, the bells in the church tower helped people keep track of the time of day.

The church was not only a place of worship. It was also a community centre, a fairground and a school for those studying for the priesthood.

The bishop's church — the cathedral

Many European cities today have at least one **cathedral**. Some of the greatest cathedrals were built in the Middle Ages.

The word 'cathedral' comes from the Greek word *kathedra*, meaning seat. This refers to the bishop's seat or throne in the back of the church. It is from here that the bishop ran his diocese,which, in turn, was divided into parishes.

The bishop's church was very important. This was reflected in its size and magnificence. The cathedral towered over the other buildings in the town. Many cathedrals took more than a hundred years to build and were completed long after their architects had died.

sacrament sacred Christian ceremony; in the Catholic Church, for example, baptism and marriage

cathedral main church of a diocese; contains the bishop's throne

17.12 ACTIVITY

Using the internet and other information sources, explore the significance of medieval church music, especially Gregorian chants. Explain what your findings tell us about the influence of the medieval church.

History concept: Significance

17.12 EXERCISE

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

Learning pathways

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

Check your understanding

1. Which religious institution dominated western Europe during the Middle Ages?
2. What language was used in the medieval Mass?
3. Who is the Head of the Roman Catholic Church and what power did he have?
4. Almost every village had a parish church.
   a. Who did most of the work in building the parish church?
   b. How did this make people feel part of the community?
5. How did the Church teach the illiterate about the Bible stories?
6. What is the origin of the word 'cathedral' and what does it mean?
7. Who is responsible for the cathedral and its diocese?
8. Why were cathedrals so enormous?

Apply your understanding

9. Write a detailed description outlining what is happening in **SOURCE 1**. What effect was a painting like this intended to have on the villagers?
10. Canterbury Cathedral in **SOURCE 2** dominates the city's skyline even today. How do you think the cathedral would have impressed the ordinary people of Canterbury in the fifteenth century?
11. Compare and contrast **SOURCES 1** and **2**. Which one do you think was a more effective way of making an impression on the medieval population? Explain your answer in detail.
12. Identify five ways the Roman Catholic Church demonstrated its power over the people of medieval Europe.
13. What were some of the methods that the parish churches used to create a sense of community?

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

17.13 Monasteries and convents

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- identify the role of priests, monks and nuns in spreading the Catholic faith
- identify the duties of priests, nuns and monks
- explain the difference between a monastery, abbey and convent.

17.13.1 Closed communities

Parish priests, monks, nuns and friars played important roles in spreading faith by taking the Christian message to the remotest villages. This was important because until then Christianity was practised mostly in the towns, even though most people lived in the country.

Monks lived in small closed communities called monasteries. Only males could join. A monastery included a church, a chapter house (the monks' meeting place), dormitories or cells (where the monks slept), a hospice (where the sick and aged were cared for), a refectory (eating hall), a library and the **abbot's** quarters. The abbot had complete authority and strict rules had to be observed by all the monks. These rules covered daily activities such as religious services, social work, manual labour and copying manuscripts.

abbot chief monk in a monastery

SOURCE 1 *The Death of St Francis*, a painting by the fifteenth-century Italian artist Giotto. St Francis was the founder of the Franciscan order of friars. This painting shows some of them mourning his death.

Nuns lived in similarly closed communities called **convents**. Girls and women could join a convent, where they too had to observe strict rules. The chief nun was called the **abbess**. Some monasteries and convents were called **abbeys**.

Monasteries and convents spread throughout Europe in the Middle Ages in part because they were efficient instruments for upholding feudal order. A lord granted land to a monastic order because monks and nuns helped him maintain social control over a population that was widely dispersed across the countryside. Some monasteries owned their own villages, whose serfs worked their fields.

17.13.2 The monastic orders

The origins, rules and practices of monastic orders vary widely. The Benedictines were one of the earliest monastic orders. They established many of the rules and customs followed by nuns, monks and friars. **SOURCES 2** and **3** are both Benedictine monasteries, with Cluny Abbey being the largest monastery in Europe during the Middle Ages. At its height in the twelfth century it had about 300 monks, whereas most monasteries had about 30.

There were, and still are, numerous monastic orders with varied purposes and practices. Monasteries of the Cistercians order relied solely on the labour of their own monks. This limited labour force drove the Cistercians to move into new agricultural areas, such as raising sheep on a large scale. Such efforts gained them considerable wealth. However, the monks themselves, in accordance with their order's rule, remained poor.

Some orders did not live in small communities. The Franciscans and Dominicans, for example, sent their members out into the larger community as friars. They moved among the people as missionaries. The Franciscans tried to live as Jesus had lived, as poor preachers serving the needy.

The Church was almost the sole source of literacy during the Middle Ages. Before the printing press was invented, every book had to be handwritten. Among the tasks performed by monks was the writing and copying (and often decorating) of books by hand. Some of the first universities in Europe began as monasteries. The architecture of such ancient schools of learning as Oxford University in England is based on the layout of a monastery. Even a comparatively recently established school such as Sydney University, with its Great Hall and cloisters, has architecture based on the monastic model.

convent community of nuns
abbess chief nun in a convent
abbey monastery or convent run by an abbot or abbess

SOURCE 2 The pointed, fanned arches of the Great **Cloister** at Canterbury Cathedral in Kent, England. Canterbury Cathedral had an attached monastery run by Benedictine monks.

cloister a covered walkway surrounding a quadrangle

SOURCE 3 Cluny Abbey in Burgundy, France. Its church was the largest in the world until the early seventeenth century, when St Peter's Basilica in Rome was rebuilt.

SOURCE 4 An illuminated letter from the *Book of Kells*

DID YOU KNOW?

There are still several Benedictine monasteries in Australia. New Norcia is a small town a couple of hours' drive northeast of Perth, Western Australia, that was settled by Spanish Benedictine monks in 1847. It is still run as a Benedictine community that people can visit to learn about monastic life.

17.13 ACTIVITY

Using a range of sources of information, such as the internet and your school library, explore how illuminated manuscripts like **SOURCE 4** were created. **History concepts: Sources, evidence**

17.13 EXERCISE

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

Learning pathways

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

Check your understanding

1. What are the communities where monks live called?
2. What are the communities where nuns live called?
3. How did monks and nuns help to support the feudal system?
4. Which monastic order did much to establish the rules followed by monks and nuns?
5. Upon whose labour did the Cistercian monks depend and what impact did this have on their order?
6. Which modern educational institution has its origins in the medieval monastery?

Apply your understanding

7. The friars in **SOURCE 1** are dressed in coarse woollen garments called habits. Many still dress this way today. Why do you think they would have chosen such simple clothing?
8. Examine **SOURCE 2**. What sorts of activities do you think monks would do in the cloisters?
9. Is **SOURCE 3** a primary or secondary source? Explain your answer. How useful is it to historians?
10. Closely examine **SOURCES 2** and **3** and use the architectural features you can see to explain the impressions they would have had on peasant communities living in villages.
11. Write a brief outline identifying the ways that the monasteries and convents played a role in further spreading the messages of the Roman Catholic Church.
12. What were the ways that monks and nuns helped to maintain social control over the people of medieval Europe?

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

17.14 The Crusades

LEARNING INTENTION

By the end of this subtopic, you will be able to explain the purpose of the Crusades, when they occurred, and who they were organised against.

17.14.1 The First Crusade

The Crusades were a series of wars fought throughout Europe and the Middle East between the eleventh and thirteenth centuries. In these wars, Christians fought against non-Christians and **heretics**. The Crusades generally centred on the Holy Land and the main enemy of the **Crusaders** were the Muslim Turks. The term *Crusader* comes from the Latin word *Crux*, which referred to the Christian cross. However, evidence suggests Crusaders only began calling themselves this as late as the thirteenth century.

Jerusalem is a very important city for Christians, Muslims and Jews. The Holy Sepulchre in Jerusalem is believed to be the site of Jesus' tomb. When the Muslim Turks took control of Jerusalem in 1071, they began to harass and even kill visiting Christian **pilgrims**.

In Constantinople, Emperor Alexius I appealed to Pope Urban II to help him fight his Muslim enemies. In 1095, the Pope called upon Christians to fight the Turks and reclaim Jerusalem.

heretic a Christian who holds views that conflict with official Church teachings

Crusader during the Middle Ages, someone who took part in a Crusade, an armed expedition against those believed to be enemies of the Church

pilgrim one who travels to a sacred place to show devotion to his or her faith

SOURCE 1 A map of the Crusades in the Holy Land

Source: Map drawn by Spatial Vision.

SOURCE 2 Extract from call to arms by Pope Urban II at Clermont, France, in 1095

If you choose the right path, you will be forgiven for all your sins. This path is to make war upon the Turk . . .

Let those who are going to fight for Christianity put the form of the Cross upon their garments . . .

God will be gracious to those who undertake this expedition: those who die will go straight to heaven . . .

SOURCE 3 From an account of one of the Crusaders who took part in the capture of Jerusalem in 1099

With drawn swords our people ran through the city; nor did they spare anyone, not even those pleading for mercy. If you had been there, your feet would have stained up to the ankles in blood. What more shall I tell? Not one of them was allowed to live. They did not spare the women or children. The horses waded in blood up to their knees, nay up to the bridle. It was a just and wonderful judgment of God.

There were various reasons why Christians responded to the Pope's call. These included the chance to gain wealth, power, land and knighthood. They were also promised eternal life in heaven.

The First Crusade was two expeditions. One, known as the Peasants' Crusade, was led by Walter the Penniless. It was a violent rabble beginning with a murder of Jews in Germany. It left a trail of destruction all the way to Constantinople. Being poorly organised, it was wiped out by the Turks after it had set out from that city. The second expedition was led by knights. It successfully defeated the Turks, and took city after city throughout the **Holy Land**, including Nicaea, Antioch and, finally, Jerusalem.

The Crusader victory did not last. The Turks fought back and the Crusaders' alliance with the Byzantine emperor dissolved because each distrusted the other.

Holy Land land in the Middle East that has significant importance for Christians, Muslims and Jews

pillage to steal or plunder using force, especially during war

17.14.2 More crusades

The Crusades continued over the next two centuries. The Second Crusade (1147–9) began because the Turks had taken the town of Edessa. This crusade did not succeed; the Turks defeated the Crusaders at Damascus.

In 1187, the Kurdish leader of the Turks, Saladin, conquered Jerusalem. This inspired the Third Crusade (1189–92). A lack of unity among Crusader leaders prevented a victory for them, although they were successful in capturing the city of Acre. Despite their defeat, Saladin allowed Christians to visit the Holy Sepulchre in Jerusalem.

The Fourth Crusade (1202–4) started out against the Turks, but ended up as a **pillage** of Christian cities, including Constantinople. The driving issue was commercial rivalry rather than religion.

There were more Crusades in which control of land was lost and won. Jerusalem was recovered by the Christians for a brief time, and the Turks retook Acre in 1291. It is generally agreed that the Crusades came to an end when the Turks took Constantinople in 1453 as part of the Ottoman Empire.

SOURCE 4 The siege of Nicaea in 1097, from a thirteenth-century French manuscript, *The History of Outremer*. Outremer was the name by which the parts of the Holy Land captured by the Crusaders became known.

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Deepen your understanding of this topic with related case studies and questions.

- The Western and Islamic world > **The Crusades**

17.14 EXERCISE

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

Learning pathways

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

Check your understanding

1. Against whom were the Crusades organised?
2. What does the term *Crusader* mean?
3. Compare the two expeditions in the First Crusade. Can you explain the different outcomes?
4. Who was the Kurdish leader of the Turks during the Third Crusade?
5. Who controlled the city of Constantinople at the end of the Crusades?
6. Decide whether each of the following statements is true or false.
   a. The Crusades continued over four centuries.
   b. The Second Crusade failed.
   c. Despite the failure of the Third Crusade, Saladin allowed Christians access to the Holy Sepulchre.
   d. The Fourth Crusade was a success.

Apply your understanding

7. Read **SOURCE 2**. What do you believe is the aim of Pope Urban II's speech?
8. Using the map in **SOURCE 1** as well as the text, describe which cities the First Crusade captured.
9. The Crusaders in **SOURCE 4** are using a trebuchet to throw their enemies' heads over the walls of the besieged city. Why do you think they are doing this?
10. After reading **SOURCE 3**, write an account of the same day from 1099 from a Muslim Turk's perspective.
11. Which sources show evidence of the brutality of the Crusades? What sort of brutal acts were committed by the Crusaders?
12. Analyse whose perspective **SOURCE 3** is from. How reliable do you think it is in telling/showing us about the behaviour of the Crusaders?
13. Explore the reasons that European Christians went on crusades. List them in order of importance (as you see it) and explain each one of them.
14. List the four main Crusades mentioned here in order of dates and briefly outline what happened in each one of them.
15. After reading this subtopic, can you see any positives in the relations between Muslims and Christians over this period?

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

17.15 The Age of Faith

LEARNING INTENTION

By the end of this subtopic, you will be able to:

- describe the influence the Islamic faith had on the Middle Ages
- explain how both Christianity and Islam sought to exert power in the Middle Ages
- identify the impact and legacy of Islam on medieval Europe.

17.15.1 Christianity and Islam

Many people assume that the conflict between the Christian Crusaders and Islamic Turks was the first point of tension between Christians and Muslims. However, it started much earlier than that. Islam originated in Medina and Mecca in the Middle East early in the seventh century. By the eighth century it had spread to North Africa and was the religion of the invaders of southern Spain in 711 CE. Significant tension and conflict between the two monotheistic religions has existed since the Early Middle Ages.

Generally speaking, religion does not strongly influence governments today. Many countries around the world are secular, which means they are neutral in regards to religion. It was different in the Middle Ages. In western Europe, the Christian Church had great influence over rulers. The situation was similar in the Islamic world. Countries were ruled by Muslim leaders called **caliphs**. With religion dominating so much of private and public life, it is not surprising that some historians have called the Middle Ages 'the Age of **Faith**'.

The conflict between Christians and Muslims is most often assumed to have begun with the First Crusade at the end of the eleventh century, but Muslim Arabs had conquered much of Spain, via North Africa, as early as 711 CE. This was a major Muslim inroad into Christian Europe, and wherever the Christian West and the Muslim East met, there was conflict.

caliph in Islamic countries, the chief civil and religious ruler and a successor to the Prophet Mohammed

faith religious belief and practice

SOURCE 1 Map of the spread of Islam circa 1000 CE

Source: MAPgraphics Pty Ltd, Brisbane

17.15.2 Religion in Spain

Spain is a good example of how relations developed between the Christian West and the Muslim East. Muslim Arabs ruled much of Spain for about 700 years. Throughout that period, there was a great exchange of culture between not only the Muslim occupiers and the Christians, but also the Jews, who were a sizable minority in Spain. Even after the Christians reconquered Spain, much of the rich Muslim culture remained. In fact, Muslim music, architecture and many other fields continued to flourish, even after Muslims were forcibly converted to Catholicism. For example, an instrument that would eventually develop into the Spanish guitar was invented by Muslim Arabs. The famous Spanish dance music, flamenco, is also thought to be Middle Eastern in origin.

Just as the Christians tried to subject conquered peoples to their faith, so too did the Muslims subject countries they had conquered to Islam. In Muslim Spain, Christians and Jews were tolerated but they suffered discrimination and were made to pay special taxes because their religions were regarded as inferior. When Christians eventually reconquered Spain, they would be much less tolerant and ruthlessly persecuted Muslims and Jews.

There may have been some appreciation of the refined culture of the Muslim Arabs in Spain, but as conflict developed between the Christian north and the Muslim south in Spain, new waves of invaders arrived.

SOURCE 2 Amad ibn Muammad al-Yammani, a Muslim traveller, commenting on music he had heard while recovering from an illness in the Moorish city of Malaga during the eleventh century

The people are absolutely dominated by their passion for music. One night I awoke . . . to . . . a breath of sound, tranquil and lovely. I felt that my soul understood this music, and would find repose [peace] in it . . . [It] began increasing slowly in volume. I was drawn to it and disposed to listen . . . I found myself forgetting my misery in the emotional enjoyment, which almost caused me to imagine that the walls and floor were floating around me.

SOURCE 3 The prayer hall of the Great Mosque in Cordoba, Spain. Begun around 786 CE.

The Arabic leaders brought in North African fighters (called **Moors** by the Christians). The Moors were less tolerant of differences. An example of their intolerance was the destruction of a splendid palace in Cordoba called Medina Azahara.

17.15.3 Shared learning

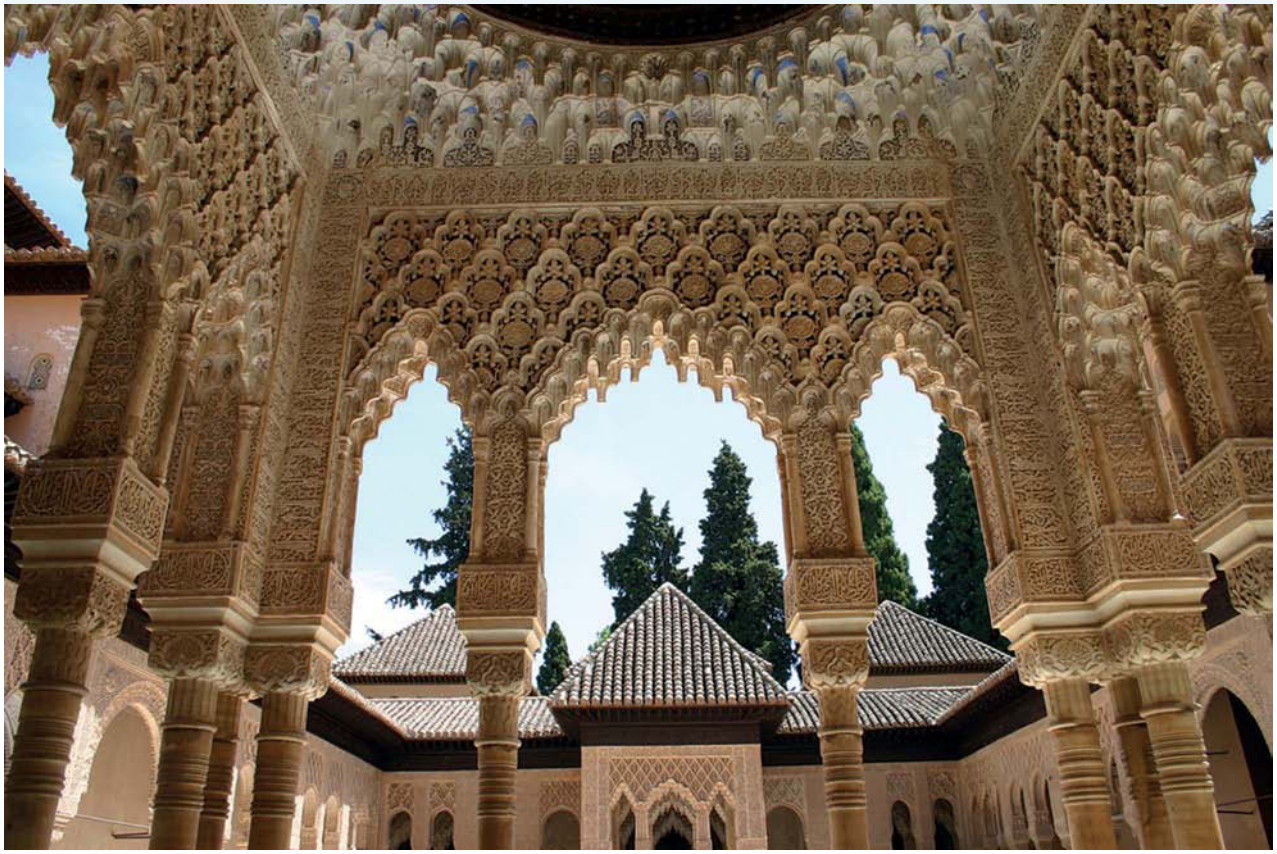
While much of the learning of ancient Greece and Rome had been lost in the West during the Early Middle Ages, it was kept alive by Muslim scholars. One of the greatest libraries in history was established in Muslim Baghdad in 832 CE. Called the House of Wisdom, it held copies of manuscripts and books on the arts, sciences and many other topics. It was a meeting place for academics and intellectuals for hundreds of years. Islamic societies also built hospitals for the sick, and their scholars led the world in studies of medicine, sciences and mathematics. The Crusades gave European Christians the opportunity to gain an insight into the learning of the Islamic East. As in Spain, Europeans became influenced by Islamic culture, including poetry and architecture. European scholars were no doubt impressed by Muslim schools as it was about this time that the great universities of Europe were established. The challenge posed by Islamic learning was at least partly responsible for this development.

Moor a member of a north-west African Muslim people of mixed Berber and Arab descent

SOURCE 4 From Usamah ibn Mequidh, a twelfth-century Arab writer and soldier. Muslims referred to Crusaders as 'Franks' because many Crusaders came from the part of Europe that was once the Frankish Empire (near modern-day France and Germany).

When I come to tell stories about the Franks [Crusaders] I cannot help but glorify and praise Allah (exalted is He!), for I see them as animals possessing the virtues of courage and fighting, but nothing else; just as pack animals have only the virtues of strength and carrying loads.

SOURCE 5 Details of the Alhambra, a magnificent fortress and palace built by the Islamic rulers of Granada in the mid fourteenth century



Did the Islamic East have anything to learn from Europe in return? As it turns out, the Europeans, who appeared rough and barbaric to the Muslims, had little to offer at this point in history. Their contribution to government, learning and invention lay far in the future.

DID YOU KNOW?

The Muslim world also adopted and further developed ancient technologies. An example is the astrolabe, an instrument invented by a Greek scholar about 150 BCE to locate and predict the positions of the Moon, the planets, the Sun and other stars. Medieval Muslim scholars made improvements to the astrolabe that enabled it to be used for navigation at sea and to find the direction of Mecca, the holy city in the Arab empire that Muslims were required to face during prayer.

17.15 ACTIVITY

Use the internet and/or your library to find out more about the great Mosque at Cordoba (**SOURCE 3**). Some questions you could answer are:

- When was it originally built and by whom?
- What are some of its impressive features?
- What is it being used for today?

History concepts: Sources, evidence

17.15 EXERCISE

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

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions	Questions	Questions
1, 2, 3, 11, 12	4, 5, 6, 7, 13, 14, 15	8, 9, 10, 16, 17, 18, 19

Check your understanding

1. What is the name for a Muslim ruler?
2. Why have some historians called the Middle Ages 'the Age of Faith'?
3. Who conquered much of Spain in 711 CE?
4. Name the three main religious groups in Spain during the Middle Ages.
5. List two elements or products of Spanish culture today that are Middle Eastern in origin.
6. Were other religions permitted in Muslim Spain?
7. Which two groups in Muslim Spain were discriminated against with taxation?
8. How was much of the ancient Greek and Roman knowledge kept alive during the Early Middle Ages?
9. In what fields did Islamic scholars lead studies in the world during medieval times?
10. How much did the Muslims learn from European culture in the Middle Ages? Explain.

Apply your understanding

11. Using the map in **SOURCE 1**, explain the spread of Islam into Spain by around 1000 CE.
12. Examine **SOURCE 2**. What impression does Amad ibn Muammad al-Yammani have of the Moorish music he hears?

13. Look closely at the repeated architecture in the Prayer Hall of the Great Mosque in **SOURCE 3**. What impressions would this give the worshippers and what techniques were used to obtain these impressions?
14. Examine **SOURCE 4**.
    a. What positive things does Usamah ibn Mequidh have to say about the Crusaders?
    b. What negative things does he have to say?
    c. Why do you think Usamah ibn Mequidh would make such negative remarks about the Crusaders?
15. What does **SOURCE 5** tell historians about the Islamic rule in Granada in the mid-fourteenth century? Explain how it does this.
16. Using **SOURCES 2** and **4**, explain whether the medieval Muslim travellers and soldiers saw themselves as the brutal infidels that the Christian Crusaders saw them as. Use short quotations from the sources to back up your statements.
17. Examine **SOURCES 3** and **5** closely. What features of these buildings justify their reputations as magnificent examples of medieval Islamic architecture?
18. What were the achievements of the Islamic East during medieval times? How does this contrast with Christian Europe of the same time?
19. Write a short paragraph evaluating whether you agree that there was greater tolerance in Muslim Spain during the Middle Ages than might be expected for that time.

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

17.16 Towns and trades

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- explain the key terms 'middle class' and 'fief'
- explain why towns began to grow in Europe from the eleventh century
- suggest reasons for why people left the feudal manor and moved to towns.

17.16.1 The growth of towns

By about the eleventh century, Europe was a relatively peaceful place. People felt free to risk living beyond the security of the manor. In time, a network of towns sprang up, particularly along trade routes. These towns became the focus for the rise of a new social group — a **middle class** of merchants.

Personal loyalty to a lord in exchange for a **fief** was a basic principle of feudalism. As barbarian raids stopped, as food stocks increased, and as money rather than personal services began to be given to lords in exchange for rights and privileges, the feudal system began to break down.

People began to drift away from the manors to start new lives in towns, many of which had developed near castles. Some people learned new skills such as spinning, weaving, baking, leather work, music, acting, ale brewing, armour construction, ropemaking, butchery, banking, cloth dying and stonemasonry.

As towns grew, large walls were built around them. Near these walls were the cramped homes of the poor, which were mostly wooden and many storeys high. Most houses were coated with a highly flammable paint made of pitch and linseed oil. Pitch was a black, tarry substance used to seal cracks in buildings and boats. The homes of the wealthy were in the town's centre.

The town's lanes were crooked and narrow. They were lit only by people's lanterns and candles, and had no footpaths. They became smelly, rat-infested rubbish dumps, splattered with food scraps, bones and sewage. Open drains stank from cloth dyes and the blood of slaughtered animals. Townspeople tramped through this muck to reach the town's central marketplace. It bustled with the activity of traders, musicians, actors, jugglers, pickpockets and beggars.

middle class a social class between the privileged nobility and the poor peasants. It typically comprised merchants and wealthier craftspeople.

fief a gift, usually land, given by a lord to a vassal (or tenant) in exchange for loyalty and service

SOURCE 1 A young boy's experience on entering the marketplace in the English town of Shrewsbury in 1241. This extract is from *Falls the Shadow*, a novel by Sharon Penman, Penguin, 1989, p. 132.

Church bells pealed out the hour . . . Men wandered the streets shouting 'hot meat pies' and 'good ale' . . . itinerant [wandering] pedlars hawked [tried to sell] their goods, offering nails, ribbons, potions to restore health . . . People gathered in front of the cramped, unshuttered shops, arguing prices at the tops of their voices. Heavy carts creaked down the streets . . . Dogs darted underfoot, and pigs [shuffled] about in the debris dumped in the centre gutter.

17.16.2 Rise of the merchant class

Adventurous European merchants began looking for more distant markets. They travelled to Asia, northern Africa and the Middle East with goods such as iron, timber and copper. They returned with exotic silks, furs, spices, gold and precious stones. They visited trade fairs in Europe, where both goods and ideas were exchanged. It is thought, for example, that the windmill was first heard of from traders from Iran, and soap from traders from China.

Long-distance trading was risky. There were robbers and sea pirates. As well, merchants had to deal with clever money lenders. To protect themselves and their profits, merchants often formed partnerships and shared responsibilities. This led to the formation of companies, which in turn created new jobs.

By the latter part of the Middle Ages, this new merchant class had become a very powerful force in medieval society.

SOURCE 2 Medieval illustration of stonemasons, who were highly respected craftspeople

Growth of apprenticeships

The demand for skilled workers was growing. Apprenticeships began to be set up to train young people in particular trades. Most were seven-year agreements, and were strictly controlled by guilds.

Guilds

The standard of work in each skilled craft was also controlled by its **guild**. These associations were formed by artisans to protect their interests, settle disputes between employers and skilled workers, and to set wages and prices. In some ways they were like modern trade unions, but unlike trade unions, guild members included employers.

Merchants also had guilds. The most powerful merchant association was the Hanseatic League, which controlled many trading ports around the Baltic Sea, and trading outposts as far away as Russia, Italy and England. The Hanseatic League was so powerful during the fourteenth and fifteenth centuries that it minted its own money and wrote its own laws. In the fourteenth century, it even waged war against the King of Denmark.

guild an association of people engaged in a particular trade or craft for the mutual benefit of its members

SOURCE 3 As shown in this medieval painting, businesspeople usually sold their goods from the ground floor of their home. Family, servants and apprentices lived on the upper floors.

17.16 EXERCISE

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

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions	Questions	Questions
1, 3, 4, 5, 14, 16	2, 6, 7, 8, 13, 15, 17	9, 10, 11, 12, 18, 19

Check your understanding

1. What was the basic principle (idea) of feudalism?
2. What was the initial change that meant that food stock increased and money could be exchanged?
3. Why were the new towns quite frequently destroyed by fire?
4. Where did the poor usually live in the town? Why?
5. Where did the wealthier people usually live? Why?
6. Where did the more adventurous European merchants travel to?
7. What did they take with them to trade and what did they return with?
8. What were the risks associated with long-distance trading?
9. How long were the new apprenticeship agreements?
10. What is a guild?
11. Describe the major role of guilds.
12. What was the Hanseatic League?

Apply your understanding

13. Read **SOURCE 1**.
    a. Describe features of medieval towns that would have made them dirty, noisy and unhealthy.
    b. What would you need to know about this source in order to judge its reliability?
14. Describe the medieval trades that you can see in **SOURCES 2** and **3**.
15. Imagine that you are a peasant who left your manor to come to a town. Use the sources and information in this subtopic to write a paragraph describing what you see as you enter the town and make your way to the marketplace. Keep in mind that there are probably many things that you would find remarkable.
16. If you had been a young town dweller in the Middle Ages, to what trade would you like to have been apprenticed? Give reasons for your choice.
17. Describe the factors that led to the decline of feudalism.
18. Explain what the growth of trade and skilled crafts had to do with the growth of towns.
19. Explore the growth in power of the merchant class and guilds. Identify the impact that this would have on the lords and their knights.

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

17.17 The Black Death

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- explain the origins of the Black Death and its distribution across three continents
- explain why the Black Death was able to spread
- identify medieval treatments for the Black Death and why they were not effective.

17.17.1 Origins of the Black Death

In 1347 something terrible happened across three continents — something that changed the course of history. This event is known as the Black Death or the **plague**. The Black Death was a disease that spread across the known world and wiped out

plague fatal epidemic disease; usually used in reference to the bubonic plague

pestilence fatal epidemic disease

whole towns and villages. In Europe alone, between 1347 and 1352, one-third of the population may have died as a result of this **pestilence**. What was the nature of the Black Death? Where did it come from, and how did it spread? And how did it change the course of history?

It is believed that the Black Death originated in Mongolia in the early fourteenth century. It spread along trade routes and via military expeditions. In 1346 the Tartars, a people descended from the Mongols, were besieging the Black Sea port city of Caffa, a trading colony of the Italian city of Genoa. Then the Tartar troops started to fall sick and die. Weakened by disease, they used trebuchets to hurl infected dead bodies over the walls of Caffa in an attempt to inflict the same pestilence on the city's inhabitants. Some historians and medical scientists cite this event as possibly the first instance in history of **biological warfare**. Some people escaped from Caffa on ships for Italy. They may have escaped the Tartars, but not the Black Death, because it accompanied them on their ships. At least one such ship is recorded as having reached the Italian port of Messina, with dead or dying crew on board. This was probably not the only way the Black Death reached Europe, but it is the best documented. The Black Death spread right across Europe and North Africa.

SOURCE 1 The spread of the Black Death across three continents

Source: Map drawn by Spatial Vision.

17.17.2 What was the Black Death?

The Black Death had three variations. Its most common form was bubonic plague, named for the buboes (stinking, pus-filled swellings) that appeared on the victim's body (see **SOURCES 2** and **3**). The second form was pneumonic plague, which affected the respiratory system, and the third was septicaemic plague, which affected the blood. Fever and vomiting were common symptoms. In its final stages, victims' skin turned purple-black and their nervous system was affected. This slurred their speech and they staggered about in convulsions. Observers called this phase the *danse macabre* — 'the dance of death'.

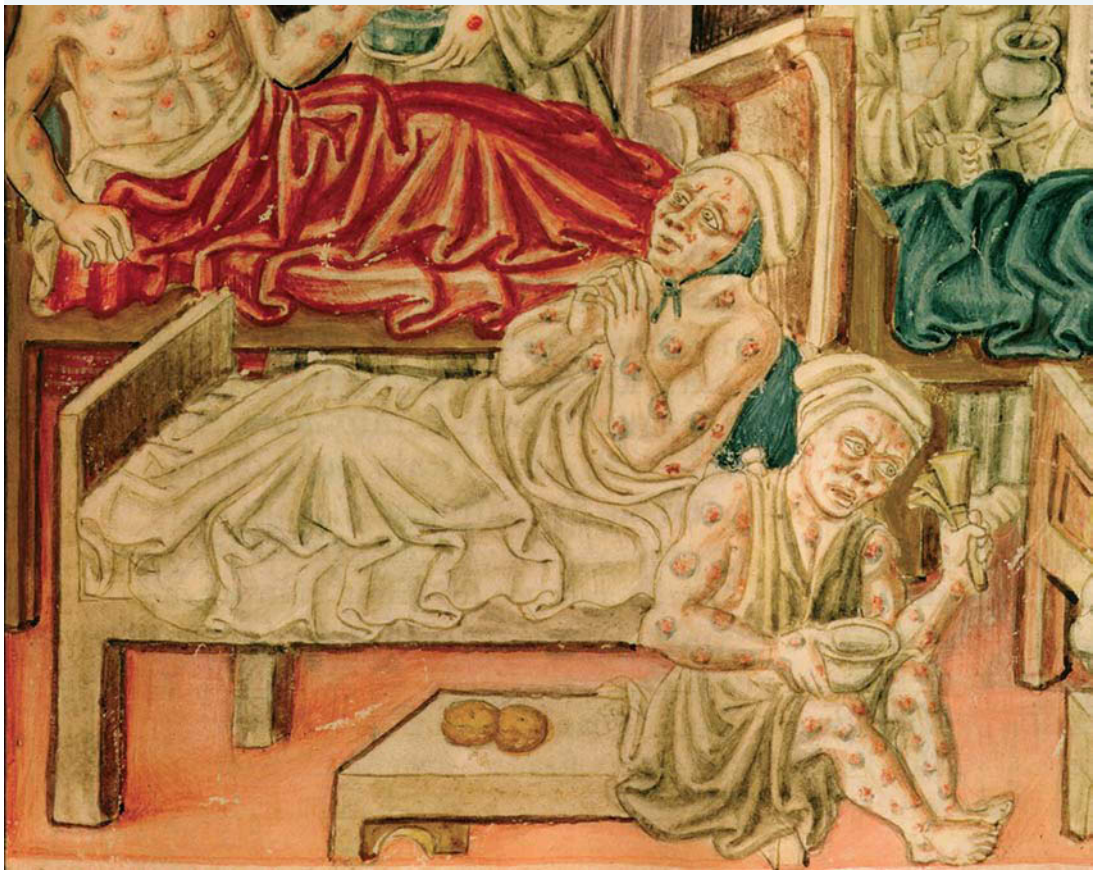
pestilence fatal epidemic disease
biological warfare method of warfare based on infecting the enemy with deadly disease

The source of the disease was bacteria found on the fleas of black rats. Such rats were common on ships and in towns such as Messina. In the unhygienic conditions of medieval Europe, plague-ridden rats bred rapidly and the fleas were able to move to other animals and to people.

SOURCE 2 From *The Decameron*, a collection of stories by Giovanni Boccaccio, written between 1350 and 1352, when the plague was ravaging his country, Italy, along with the rest of Europe. Boccaccio's stories are told by characters who have fled the plague to isolate themselves in a villa in the countryside. In real life, those who took such action — and Boccaccio was one of them — did sometimes survive, but only the rich had this option.

. . . [The] deadly pestilence . . . showed its first signs in men and women alike by means of swellings either in the groin [area between the belly and thigh] or under the armpits, some of which grew to the size of an ordinary apple and others to the size of an egg (more or less), and the people called them [buboes]. And from the two parts of the body already mentioned, in very little time, the . . . deadly [buboes] began to spread indiscriminately over every part of the body; then, after this, the symptoms of the illness changed to black or livid [bluish] spots appearing on the arms and thighs, and on every part of the body — sometimes there were large ones and other times a number of little ones scattered all around . . . [Almost] all died after the third day of the appearance of the previously described symptoms (some sooner, others later), and most of them died without fever or any other side effects.

SOURCE 3 Plague victims in Perugia, Italy, from a sixteenth-century manuscript



17.17.3 Medieval treatments for the Black Death

The details of the Black Death were not understood during the Middle Ages. Doctors knew nothing about the cause of the plague or how to treat it. All sorts of treatments were offered. They believed that stench was a cause of the disease, and offered patients sweet-smelling flowers and pot-pourri to smell. Some believe this is the source of the children's nursery rhyme 'Ring around a rosie, a pocketful of posies, a-tishoo, we all fall down'. Other doctors lanced buboes to draw out 'bad blood', but this helped only to spread the disease.

As if the doctors' remedies were not bad enough, panic and superstition made things even worse. Many believed that the plague was God's punishment for their sins, like the plagues described in the Bible that had ravaged Egypt in the time of Moses. One extreme response was made by a group called the Flagellants. They travelled from town to town publicly whipping themselves in the hope of receiving God's forgiveness for their sins and deliverance from the pestilence. However, with the blood from their whipped backs flowing freely, all this did was help spread the disease. Pope Clement VI ordered that these groups be disbanded. Clement, incidentally, may have come closest to an effective method of protection from **contagion**. His adviser, Guy de Chauliac, sat the Pope between bonfires for many days so he could breathe the purified air. Given that fleas dislike such heat, this may have helped save the Pope's life.

SOURCE 4 A doctor dressed up to treat the Black Death, as shown in a seventeenth-century manuscript

Of all the remedies attempted during the period of the Black Death, cleanliness and hygiene were generally the treatments that were overlooked. This is because no-one connected the plague to the rats, which carried the pestilent fleas. Few people bathed regularly or changed their clothes, and they continued to live in dirty, cramped cottages, often with their livestock. No-one thought of clearing the dung heaps in the middle of manor-house courtyards, and people continued to use the streets as dumps for their household waste. Such conditions attracted the flea-ridden rats. As the rats bred and died in the squalor of medieval towns and villages, the fleas continued to infect the human population. And so, more than any other factor, it was the living conditions in medieval times that encouraged the spread of the deadly catastrophe that was the Black Death.

SOURCE 5 Minority groups, including the Jews, were blamed for the Black Death and were persecuted, as shown in this sixteenth-century illustration.

Inevitably, minority groups were blamed for spreading the plague. Some thought **lepers** were to blame, and many of them were hunted down and murdered. Jews were accused of deliberately poisoning wells. Despite the fact that the plague did not distinguish between Jews and Christians, thousands of Jews were murdered. Many were burned alive.

17.17.4 Effects of the Black Death

Within four years, at least a third of Europe's population had perished from the Black Death. Many villages were deserted and never repopulated. It would take another 200 years for the population of Europe to reach the size it had been in 1347. A **catastrophe** on such a scale had a major effect on society and the economy.

The feudal system itself was weakened as a result of the Black Death. With a shortage of workers, serfs began to demand wages and lower rents for their labour, and freemen, who were already paid, demanded higher wages. In some cases in England, workers' wages tripled during the time of the Black Death.

contagion the spreading of disease

leper person stricken with leprosy, a bacterial disease that causes ulceration of the skin, deformities and a loss of sensation

catastrophe a disaster on a vast scale

The power of the Church was weakened too. Partly, it lost respect in failing to protect the people through prayer. But also, the clergy lost many of its own members. Monasteries were closed communities and some lost almost all their educated monks. There were few priests left to perform Mass and conduct weddings and funerals. The Church desperately needed new clergy and was forced to accept novices with no education.

Farming changed. With fewer peasants to work the fields, grain production went into decline in England and other European countries. Farmers turned increasingly to livestock such as sheep that required fewer workers on the land.

SOURCE 6 As shown in this Italian fresco, increased wages led to a growth in markets and in the number of merchants offering goods for sale.

DID YOU KNOW?

One of the most recent pandemics of bubonic plague occurred in about 1900. It originated in China and spread to Australia, among other places. This time medical and other authorities knew how to respond. Exterminators were sent into Sydney's Rocks area, which was a slum in those days, to wipe out rats. Suspected plague carriers were taken to the Quarantine Station at Manly. The disease was thus contained.

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- Expanding contacts > **Black Death**

17.17 EXERCISE

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

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions	Questions	Questions
1, 2, 4, 6, 13, 15, 16	3, 5, 7, 8, 9, 14, 17, 18, 19, 20	10, 11, 12, 21, 22, 23, 24

Check your understanding

1. What is another name for the Black Death?
2. Where did the Black Death probably originate?
3. How did the Black Death enter the Black Sea city of Caffa?
4. What are buboes?
5. Describe the three variations of the Black Death.
6. What have we since discovered was the source of the disease and what carried it?
7. Why did medieval doctors offer patients sweet-smelling flowers and pot-pourri to smell as a cure for the Black Death?
8. Who were the Flagellants?

9. How did Pope Clement VI successfully avoid catching the Black Death?
10. What was the main factor that encouraged the spread of the disease?
11. What percentage of the European population died from the Black Death?
12. List three effects that the Black Death had on medieval society.

Apply your understanding

13. Using **SOURCE 1**, write a short paragraph explaining how the Black Death spread across Europe, Asia and Africa.
14. In which continent did the Black Death have the most impact? Why do you think this might be?
15. Read **SOURCE 2** and examine **SOURCE 3**. On which variation of the Black Death did most descriptions and paintings focus? Why do you think this was so?
16. What is the person in the bottom right of **SOURCE 3** holding and for what reason?
17. Imagine you are the doctor in **SOURCE 4**. Explain why you are dressed in such outlandish clothes.
18. How does the Black Death appear to have contributed to the development of markets, such as that shown in **SOURCE 6**? How would you describe the people at this market?
19. Analyse the map in **SOURCE 1** carefully. Which places did not suffer from the Black Death? Using a modern atlas to find out any physical features or population information, create a hypothesis explaining why these features may have prevented the Black Death from reaching them.
20. How does **SOURCE 2** support **SOURCE 3** as evidence?
21. One historian has suggested that without trade the Black Death may never have happened. Explain whether or not you agree with this statement, giving evidence to support your opinion.
22. Examine the three main effects of the Black Death on medieval society discussed in this subtopic. Which one do you think was the most significant? Explain why.
23. Why do many historians believe the Black Death changed the course of history?
24. Evaluate the responses of the different groups of people at the time to the Black Death and its effects on society. Pay particular attention to the Flagellants and the minority groups. How did they behave and what were their reasons for doing so?

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

17.18 The Peasants' Revolt

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- explain the causes of the Peasants' Revolt in 1381
- describe the events that took place during the Peasants' Revolt
- explain the consequences of the Peasants' Revolt.

17.18.1 What caused the revolt?

In 1381 there was a serious revolt among the peasants in England. Along with the Black Death and the growth of the merchant class in the towns, this event did much to weaken the feudal system. What made the revolt so serious was its scale: there are no reliable figures on how many peasants were involved (50 000 is sometimes suggested), but the uprising caused such dread among the powerful that the king himself sought refuge for fear of his life.

The trigger for the revolt was the **Poll Tax** of 1380, the third such tax imposed in four years. The Poll Tax was intended to restore a treasury that had been drained by the costs of fighting the French in the **Hundred Years' War**. Price increases causing hunger and shortages led to despair and anger in the population.

Poll Tax a tax levied on every person, regardless of age, sex or income

Hundred Years' War a series of campaigns and battles over territory between the English and the French, and between warring French princes

The long-term causes of the revolt went back to the Black Death. We learned that one of the results of the Black Death was a labour shortage that allowed the peasants to demand higher pay. Traditionally, peasants had been tied to the manor. Now, with a vastly reduced population, they left their villages in search of better pay and

conditions in other manors. In 1351 a law called the Statute of Labourers was passed. It aimed to put a stop to peasants' free movement around the countryside and to cap their wages at the level they had been in 1346, before the Black Death occurred. Naturally, peasants greatly resented this law, and many risked punishment by ignoring it. Tensions grew, but the Poll Tax of 1380 turned the peasants' anger into open rebellion.

The outbreak

The Poll Tax returns of 1380 showed that very little of the tax had been collected, so the tax collectors were sent out again. They were instructed not only to collect the tax — in some cases for a second time — but to extract payment for those who didn't turn up. This caused outrage among the peasants. In May 1381, at the village of Fobbing in Essex, one collector and his men were beaten up and driven out. When the Chief Justice was sent to sort out the villagers, he too was driven out.

What happened next was made possible only by the free movement of peasants around the countryside. In early June, word about what had happened in Fobbing spread across Essex and Kent. Peasants from across both counties gathered together into one angry mob. Manor houses were burned down, tax and debt records were destroyed and some wealthy landowners were killed or humiliated by being forced to be the servants of their new masters, the peasant rebels. By 10 June, the city of Canterbury was seized by the rebels. With the Archbishop of Canterbury absent in London, the rebels appointed a poor monk as the new archbishop and attacked rich visitors.

The peasant revolt was not entirely a disorganised mob. Several of their number came forward as leaders, in particular, Wat Tyler, Jack Straw and a parish priest, John Ball. Tyler was able to exercise some control over what would otherwise have been a mob without direction. John Ball preached against the leaders of his own Church because he felt that they were helping the lords to **exploit** the poor.

SOURCE 1 Speech given by John Ball in 1377

Why are those whom we call lords, masters over us? How have they deserved it? By what right do they keep us enslaved? We are all descended from our first parents, Adam and Eve; how then can they say that they are better than us . . . At the beginning we were all created equal. If God willed that there should be serfs, he would have said so at the beginning of the world. We are formed in Christ's likeness, and they treat us like animals . . . They are dressed in velvet and furs, while we wear only cloth. They have wine, and spices and good bread, while we have rye bread and water. They have fine houses and manors, and we have to brave the wind and rain as we toil in the fields. It is by the sweat of our brows that they maintain their high state. We are called serfs, and we are beaten if we do not perform our task . . . Let us go to see King Richard. He is young, and we will show him our miserable slavery, we will tell him it must be changed, or else we will provide the remedy ourselves. When the King sees us, either he will listen to us, or we will help ourselves.

17.18.2 The events and consequences

The rebels set out for London to appeal directly to the king, Richard II, who was at the time only a boy of 14. Evidently the King's Council were taken by surprise, because there were few guards to defend the city. With the rebels in the city by 13 June, along with many sympathisers among the Londoners themselves, fear spread among the ruling classes. Property was damaged, and some merchants were killed. Wat Tyler probably ensured that the rebels for the most part remained peaceful.

The king agreed to meet with the rebels the next day. The King's Council wanted to avoid meeting them inside the city, with its flammable timber buildings, narrow streets and lack of guards, so they met outside the city gates at a place called Mile End. The king declared that he agreed to their demands, pardoed the rebels, abolished the Poll Tax and reduced land rents. However, one group of peasants was not satisfied. They attacked the Tower of London, capturing and beheading three people: the Archbishop of Canterbury, the King's

exploit use dishonestly to one's own advantage

Treasurer and John Legge, who had created the Poll Tax. The rebels impaled their heads on stakes and paraded them around the city in triumph. Richard hid himself away, fearing a similar fate.

The following day, on 15 June, Richard met the rebels again outside the city, this time at Smithfield. In the course of the negotiations, a fight broke out involving Wat Tyler. He was struck with a sword by the Lord Mayor. Afterwards he was beheaded and his head was mounted on a stake. The king again agreed to the rebels' demands and, with their leader dead, they dispersed. However, the king's promises were soon revoked. Richard claimed they had been made under threat and so were not lawful. John Ball was hung, drawn and quartered. The four parts of his body were displayed in other towns as a warning against continuing the rebellion. Jack Straw was also beheaded. His head accompanied Wat Tyler's, and was displayed on London Bridge. The Peasants' Revolt came to a violent end.

SOURCE 2 The death of Wat Tyler as Richard II addresses the crowd. Illumination from a medieval manuscript.

Results of the Peasants' Revolt

Despite being brutally crushed, the revolt had struck fear into the hearts of the privileged classes, particularly the lords and bishops. The rebels' demands were not met, yet the Poll Tax was not pursued again. Nor did the king's government try to continue controlling the wages landowners paid their peasants. Above all, this brief taste of freedom helped to weaken the feudal system, which was becoming increasingly outdated.

SOURCE 3 From a chronicle written at the time of Wat Tyler's death

[one of the King's retinue] . . . said aloud [to Wat Tyler] that he knew him for the greatest thief and robber in all Kent . . . and for these words [Tyler] tried to strike him with his dagger . . . [The] Mayor of London, William Walworth, reasoned with . . . [Tyler] . . . and arrested him. And because he arrested him . . . [Wat] stabbed the Mayor with his dagger in the stomach in great wrath. But, as it pleased God, the Mayor was wearing armour and took no harm, but like a hardy and vigorous man drew his cutlass [a sword with a curved blade], and struck back at . . . [Tyler], and gave him a deep cut on the neck, and then gave a cut on the head. And during this scuffle one of the King's household drew his sword, and ran [Wat] two or three times through the body, mortally wounding him . . . [He] fell to the ground half-dead. And when the commons [peasant rebels] saw him fall, they began to bend their bows and shoot, wherefore the King himself spurred his horse, and rode out to them, commanding them that they should all come to him to Clerkenwell Fields . . . [Wat Tyler] had been carried . . . to the hospital for poor folks . . . And the Mayor went thither and found him, and had him carried out to the middle of Smithfield . . . and there beheaded. And thus ended his [Wat Tyler's] wretched life. But the Mayor had his head set on a pole and borne before him to the King . . . [who] thanked the Mayor greatly for what he had done.

DID YOU KNOW?

The government of former British prime minister Margaret Thatcher tried to introduce a Poll Tax in 1990. Like the Poll Tax of 1380, it caused widespread anger and riots, and had to be dropped. Many believe it led to Thatcher's political downfall a year later.

17.18 EXERCISE

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Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions	Questions	Questions
1, 2, 3, 5, 6, 13, 17	4, 7, 8, 9, 14, 15, 20	10, 11, 12, 16, 18, 19, 21

Check your understanding

1. What was the Poll Tax and why was it imposed?
2. Briefly outline two long-term causes of the Peasants' Revolt.
3. What was the trigger for the revolt?
4. How did the peasants show their dislike of the Poll Tax in the early part of the revolt?
5. Consider the actions of the peasant rebels once they'd gathered into a mob.
   a. Which city did the rebels take over before setting out for London?
   b. Why did they appoint a new archbishop?
6. Who were the leaders of the Peasants' Revolt?
7. What indication is there that Wat Tyler was a charismatic and powerful man?
8. How did the king act in the part he played in the rebellion?
9. Who were the three public figures that the rebels captured and beheaded? What did they represent?
10. Examine the methods used to execute the leaders of the revolt. Why were they killed in these ways?
11. What was the ultimate achievement of the revolt for:
    a. the peasants
    b. the king?
12. Why is the revolt believed to have weakened the feudal system in the long run?

Apply your understanding

13. Read **SOURCE 1**. What would the following groups have thought of what John Ball said in his speech?
    a. The peasants
    b. The nobles
    c. The king
14. In what ways does **SOURCE 2** support **SOURCE 3** as evidence for what occurred during the second meeting between the king and the rebels?
15. What view do you think **SOURCE 3** takes of the rebel leader Wat Tyler? Whose side do you think the author of this chronicle takes? Explain your answer with evidence from the passage.
16. Read **SOURCES 1** and **3**. They are both intended to persuade people. Explain who they were trying to persuade, what they were trying to persuade them to believe and what techniques the authors used. Which one do you think was more successful?
17. Examine **SOURCE 2** closely. What aspects do you think the painter made up? How do you know this?
18. Create a timeline starting with the Statute of Labourers and ending with the clash between the king and the rebels that explores the sequence of events.
19. Examine why the revolt failed. State which event you think was the turning point for the peasants.
20. Explore the reasons why historians sometimes see this as a significant event as Britain moved towards democracy.
21. What developments stemmed from this event in British history?

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

17.19 Joan of Arc

LEARNING INTENTION

By the end of this subtopic, you will be able to explain why Joan of Arc is an important historical figure and describe the life of Joan of Arc.

17.19.1 The life of Joan

In 1430 Joan of Arc was publicly burnt at the stake. Her crime? Listening to, and obeying, what she said were the voices of saints. Yet these same 'voices' helped this uneducated teenage girl bring about the coronation of a French king. Some 500 years later, in 1920, the Catholic Church declared her a saint.

Jehanne d'Arc (or Joan of Arc as we call her today) was born in 1412 in the small French village of Domrémy. Her simple life as the obedient daughter of a peasant farmer changed when she was 13. She began, she said, to see visions of saints and hear their voices. One day, they told her to drive the English armies from France and take France's **dauphin**, Charles VII, to the city of Rheims to be crowned as king.

It was three years before Joan decided to leave home and carry out the instructions she had been given. At first, her story was not believed. Eventually, she convinced the governor of the neighbouring town that she had to talk to Charles VII. Travelling there in men's clothing, she was taken to his castle by six men.

dauphin name given to the oldest son of the French king

Supporters of Charles VII may have wanted to believe this strange young woman. The so-called Hundred Years' War had made them weary of fighting. But Charles VII wanted to be sure. He asked members of the Church Council to question her. They reported they '. . . had found nothing in her that was not of the Catholic faith and entirely consistent with reason'.

SOURCE 1 The only contemporary image of Joan of Arc, although it is probable that the artist, Clement de Fauquembergue, had not met Joan at this stage. The sketch was a personal note in the margin of the record he was making of the day when he heard of the victory in Orleans.

SOURCE 2 A miniature of Joan of Arc painted between 1450 and 1500 CE. She is holding her sword and her standard, showing Jesus with an angel on each side.

Joan soon had the army she wanted. Dressed in white armour and on a white horse, she rode to Orleans, where she drove the English back across the Loire River. It was here she earned her nickname, The Maid of Orleans. A series of amazing military successes followed, which turned her into a folk hero. On 17 July 1429, her dream came true: she stood beside Charles VII in the Rheims Cathedral when he was crowned King of France.

17.19.2 A fiery death

Once he was king, Charles VII lost interest in Joan. Nevertheless, she continued to lead her army. In May 1430, she was captured and was soon a prisoner of the English. She was held captive in Rouen for eight months, living on little more than bread and water. The English hated her, but they also wanted to damage the reputation of the new French king. They decided they could do this by proving Joan was a witch. When that failed, they tried to prove that she had gone against the Church by listening to 'voices', which, she said, told her to wear male clothing.

Joan's trial lasted more than three months. No-one defended her. Yet this girl who had never even been to school remained fearless and clear-headed in the face of constant questions. She finally gave in when threatened with being burned alive, and said she would stop wearing men's clothes, but she was tricked into putting them back on. That was all the authorities needed: she was declared a heretic.

SOURCE 3 Extract from the court transcript, in which Joan is being questioned

Joan: I know well enough. I recognise them [the saints] by their voices, as they revealed themselves to me; I know nothing but by the revelation and order of God.

Q: What part of their heads do you see?

Joan: The face.

Q: These saints who show themselves to you, have they any hair?

Joan: It is well to know they have.

Q: Is there anything between their crowns and their hair?

Joan: No.

Q: Is their hair long and hanging down?

Joan: I know nothing about it. I do not know if they have arms or other members. They speak very well and in very good language; I hear them very well.

Q: How do they speak if they have no members?

Joan: I refer me to God. The voice is beautiful, sweet and low; it speaks in the French tongue.

Q: Does not Saint Margaret speak English?

Joan: Why should she speak English when she is not on the English side?

SOURCE 4 On 30 May 1431, Joan was tied on top of a pile of wood in the market square of Rouen, and burnt alive. She was 19 years old. Her last word was 'Jesus'.

DISCUSS

500 years after she was burned at the stake, Joan was made a saint by the Catholic Church. As a class, discuss why so much time might have passed. **General capability: Critical and creative thinking**

17.19 ACTIVITY

Some people believe that Joan suffered from a form of mental illness or epilepsy that caused her to hear voices.

a. What evidence do we have to suggest whether she really heard holy voices, or was just unwell or confused, or else a clever political activist? Individually, write your opinion in your work journal, including stating your evidence to back up your perspective.
b. In pairs, discuss whether our judgement of Joan of Arc might be affected by the social and cultural context of current times. Consider which view the following groups might be most likely to have had of Joan:
   i. the French of the time
   ii. the English of the time
   iii. a modern Australian who is reading about Joan of Arc.

   In your discussion, make sure that you consider the biases that might be held towards Joan of Arc by particular groups, and the religious and scientific beliefs of the times, as well as anything else you think might be relevant.

General capability: Ethical understanding

17.19 EXERCISE

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

Learning pathways

LEVEL 1	LEVEL 2	LEVEL 3
Questions	Questions	Questions
1, 2, 3, 4, 10, 11	5, 6, 7, 8, 12, 13, 14	9, 13, 15, 16

Check your understanding

1. What sort of family background did Joan have?
2. According to Joan, what did the voices tell her to do about:
   a. the English armies that occupied parts of France
   b. the dauphin, Charles VII?
3. Why did people not believe her at first?
4. What conclusions did the Church Council make when they questioned her?
5. Why did Joan become a folk hero?
6. How did Charles VII treat Joan once he was made king?
7. Why did the English hate Joan?
8. How did they treat her?
9. Why did the English burn Joan at the stake?

Apply your understanding

10. Examine **SOURCE 1**. Although it is a contemporary sketch, the artist, Clement de Fauquembergue, had not met Joan at this stage. What do you see as historically accurate in his sketch and what is not?
11. **SOURCE 2** was painted sometime soon after Joan's death. What is the artist trying to convey about Joan in his image?
12. Examine **SOURCE 3**. How can you tell that the questioner in the court was against Joan?
13. We know that Joan appealed to God. What evidence is there in **SOURCE 4** that her English executioners also appealed to God, in other words, justified burning her at the stake in the name of God?
14. In real life, Joan did not have the benefit of anything like a defence lawyer. Using **SOURCE 3** as a guide, prepare a series of questions you would ask Joan at her trial as her defence lawyer.
15. Using **SOURCES 1** and **2**, explain what the key features were that symbolised Joan of Arc to people of the fifteenth century and what they represented.
16. Evaluate what Joan of Arc's story tells you about the public role of women in medieval times? Consider her wearing of men's clothes.

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

17.20 The heritage of medieval Europe

LEARNING INTENTION

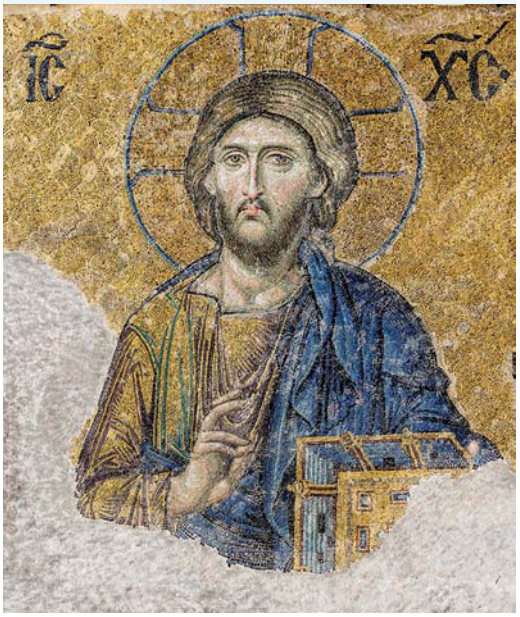
By the end of this subtopic, you will be able to describe the legacies of medieval Europe and the impact of medieval Europe on the modern world and Australia.

17.20.1 The Byzantine Empire

Most modern European nations did not exist before the Middle Ages. France, Germany, Poland, Hungary, Sweden, Denmark, Russia and Spain: all of these nations have their origins in the Middle Ages. Many of their languages also developed in this period. The English language first emerged after the Angles and Saxons invaded Britain in the fifth century CE, but it was only after the French-speaking Normans invaded England in 1066 that the English language, with many words of French origin added to it, began to take the form with which we are now familiar.

Some European nations had origins in the ancient Greek and Roman world, but the traditions they developed belong to the Middle Ages. For example, Greece has its roots, including its language, in ancient times. However, much of what is today traditional in Greece belongs to the culture of the Byzantine Empire. The Byzantine Empire was an important power in the Middle Ages. Although it inherited Roman culture, transplanting it to the eastern Mediterranean world, it replaced the old Roman language, Latin, with Greek and adopted the Orthodox Christian faith.

SOURCE 1 A twelfth-century Byzantine mosaic of Christ Pantocrator from the Hagia Sophia in Constantinople.



17.20.2 New nations emerge through Christianity

Many of the modern nations of Europe emerged at more or less the time they adopted the Christian faith. What is now Russia, Ukraine and Belarus, but was then a single state called Kiev Rus, adopted Orthodox Christianity in 988 CE. The centre of Orthodox Christianity was the Byzantine capital, Constantinople.The Byzantine emperor was the head of the Orthodox Church. We have already seen that the centre of the Roman Catholic Church, which dominated western Europe, was Rome, and its head was the Pope. Most western and northern European countries adopted the Roman Catholic faith around the same period, at the end of the Early Middle Ages. Christianity came to Denmark in 965,

SOURCE 2 St Mary's Cathedral in Sydney. The cathedral is Roman Catholic, which was the dominant religion in western Europe in the Late Middle Ages. Its style is Gothic, which is medieval in origin, but it was built in nineteenth-century Australia.

to Poland in 966, to Hungary in 1000 and to Sweden in 1164 (although one Swedish monarch had been baptised as early as 1000). Christianity was adopted in England somewhat earlier. It first reached English shores in 597, and had spread across the whole country within a century.

Why rulers adopted Christianity

The Christian faith attracted many rulers in the later part of the Early Middle Ages. Firstly, its spiritual message had a universal appeal. Now that rulers were aware of cultures other than their own, the old local gods may have seemed limited compared with the Christian faith, which embraced the whole world. Secondly, the clergy were an educated elite. They were often the only people who could read and write, so could offer the ruler valuable support. Finally, the Church was a truly international institution, with influence that stretched across many lands. In short, adopting Christianity added to a nation's influence in the Middle Ages. To be Christian was in the interests of any ruler.

17.20.3 Feudalism and the modern world

As a system of government, feudalism could not survive beyond the Middle Ages. Its existence depended on the inequality between a large class of peasants and a small class of wealthy, powerful families. The centre of government was a king who often enjoyed absolute authority. In Australia there is no class of peasant farmers and no nobility, so it would be impossible for feudalism to exist here. Even so, our Head of State is an English monarch. Although we have a **constitution** that allows us to vote for a new government headed by a prime minister, that same constitution still acknowledges the role of an English monarch whose office originated hundreds of years ago in the Middle Ages.

constitution written rules outlining how a country will be governed

SOURCE 3 A meeting room of the European Parliament, a body created to represent the common interests of European nations. Almost all its member states and candidate states have their origins in the Middle Ages.

17.20 ACTIVITIES

1. Create a timeline of approximate dates for when the following nations adopted the Christian faith: Poland, Hungary, Denmark, Sweden, England and Russia. Using the internet or your library, try to find out why England was so different from the others. **History concept: Continuity and change**
2. Refer to **SOURCE 3**. Find out which countries are member states and candidate states of the European Parliament. How many of these states first emerged in the Middle Ages? Try to also find out when they emerged as nations. **History concept: Continuity and change**

17.20 EXERCISE

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

Learning pathways

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

Check your understanding

1. What was the main language and religion of the Byzantine Empire?
2. What was the culture that the Byzantine Empire inherited?
3. Where was the centre of the Roman Catholic Church and who was its head?
4. In what period did most of the western and northern European countries adopt Christianity?
5. List three reasons why the Christian faith was so attractive to many rulers of this period.
6. On what was the existence of the feudal system based?
7. What is the connection between modern Australia and medieval England?

Apply your understanding

8. Mosaics and icons flourished in Byzantine art. Look at **SOURCE 1** and answer the following questions.
   a. Who is the main figure? How would you know this if you did not have the caption?
   b. How does this source reinforce what you have learned in section 17.20.1? Does it raise any questions?
9. Examine **SOURCE 2**. Why do you think St Mary's Cathedral in Sydney was built in the Gothic style, which was an architectural style of the Late Middle Ages?
10. Explain the potential inequity in a feudal system of government.
11. Describe the significant changes to Europe over the medieval period. Which ones do you think were most important? Explain why.
12. How did the lives of the people change over this period?

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

17.21 Thinking Big research project: Festival of Lost Trades

Scenario

As the feudal system weakened, the populations of medieval towns grew. People drifted away from the land and headed for the towns, which became more popular. People began to specialise in trades and would showcase their skills and sell their wares at weekly markets, held in the centre of town. Merchants began to travel long distances to trade. This created further wealth and a new middle class began to rise.

Task

As a class, hold a Festival of Lost Trades with a focus on medieval trades. Your fair should showcase and celebrate trades that have been lost over time. Some of these might include:

- Chandler
- Wheelwright
- Fletcher
- Scrivener
- Armourer

After you have held your fair, write an account of how a young man or young woman would become a member of this trade, the kind of work they would do and where they travelled to buy and sell.

Follow the steps detailed in the **Process** section to complete this task.

Process

- Open the ProjectsPLUS application for this topic. Click the **Start new project** button to enter the project due date and set up your project group. Working in pairs will enable you to share responsibility for the project. Save your settings and the project will be launched.
- Navigate to your **Research forum** where you will find starter topics loaded to guide your research. You can add further topics to the Research forum if you wish. When you have completed your research, you can print out the **Research report** in the Research forum to easily view all the information you have gathered. In the **Media centre** you will find an assessment rubric to guide your work and some weblinks that will provide a starting point for your research.
- Choose a trade to showcase at the festival.
- Create your display. Include a written description of what the trade involves, as well as some primary visuals to show what your wares were like.
- Hold the Lost Trades fair in your classroom or another large space. Invite some visitors (another class or some parents or teachers) to come and view your displays. Make sure that they are prepared to ask you questions about your trade (and that you can answer them!).
- Conduct follow-up research on how people became qualified in different trades (apprentices and journeymen) and the formation of guilds. Use the **Guide to writing a historical recount** document in the Media centre to help you.
- Draft your account and hold a critique session where you and your classmates will provide helpful feedback to each other so that you can draft your writing.
- When happy with your work, submit your final draft to your teacher.

on Resources

ProjectsPLUS Festival of Lost Trades (pro-0160)

17.22 Review

17.22.1 Key knowledge summary

17.2 Examining the evidence

- Much of what we know about medieval Europe is from different types of evidence that provide us with information.
- Sources from medieval Europe include artwork, written sources and artefacts, monuments and buildings.

17.3 The impact of the 'barbarian' invasions

- After the fall of Rome in 476 CE, people believed that Europe fell into chaos and darkness. Now it is recognised that, although it was a time of great instability with old empires being dismantled and much migration, there were also important developments taking place.
- Some of the changes that took place were: the system of feudalism, the rise of monasteries as centres for learning and the move towards modern English.

17.4 Early medieval Christianity

- After Christianity became the official religion of the Roman Empire, it spread widely and became the principal religion across Europe.
- By early medieval times, the Pope was the head of the Christian Church and communities of religious men had formed, called monasteries. These religious men devoted their lives to God and played important roles in the local communities, such as running schools and hospitals.
- The spread of Christianity was, in large part, due to the work of missionaries, who were committed Christians that travelled spreading the word of God to pagan tribes. They spread across Europe and many were later declared saints in recognition of their efforts.

17.5 Spreading Christianity in the early Middle Ages

- Christianity and Islam grew rapidly during the Early Middle Ages.
- The spread of Christianity was mainly due to the work of missionaries.
- Missionaries were Christian people who took the message of Christianity to the pagan foreign tribes.
- Famous missionaries include St Patrick, the patron saint of Ireland, who lived in the fifth century.

17.6 The feudal system

- Feudalism, a method of ordering society, was expanded and developed over the period that Charlemagne ruled in Europe.
- The system was based on the king giving land to the wealthier nobles and lords in return for their loyalty and taxes.
- With the land, the nobles and lords gained power over the peasants who lived and worked there, which gave them an income.
- Below the nobles were the knights, who were their sub-tenants. In return for land, they gave loyalty to the lord, fought for him and paid tax they earned from their peasants.
- The feudal system was an effective way to maintain social order.
- Towards the end of the Middle Ages things began to change in relation to the feudal system, as the towns and cities grew.

17.7 Life on the manor for men, women and children

- Quality of life in the Middle Ages depended largely on what position a person held in the feudal system. The nobility, knights and barons all lived reasonably comfortable lives with privileges. The clergy generally led simple and scholarly lives. Peasants, though, had few rights and life was very hard.
- Men did all the farm work, which was mainly physical labour.
- Most peasants had no formal education.
- Women had few rights, even those of higher classes. Their purpose was to provide children. Most peasant women also did farm labour work such as food preparation, looking after livestock and weaving.
- Children were also regarded as sources of labour as soon as they were old enough to help.

17.8 The miller and the watermill

- Millers were skilled craftsmen who ground flour so people could bake bread and cakes. They were extremely important in medieval Europe.
- The watermill was a significant invention of the Early Middle Ages. It meant that millers no longer had to use heavy stones to grind the grain into flour.
- The watermill made the miller's work much easier and more efficient. In 1085, there were 5682 watermills operating in England.

17.9 The knight

- Two important developments in the Middle Ages that allowed for the appearance of the mounted warrior, or the knight, in battle were the stirrup and a heavier breed of horse that could carry a man in full armour.
- The Battle of Hastings is one of the earliest recorded battles with knights, where William of Normandy's loyal lords fought alongside him.
- Knights tended to be wealthy, because it was expensive to breed warhorses and own good armour.
- Over the few hundred years that knighthood was at its peak, the armour developed from chain mail to whole suits of armour. Weapons were heavy iron swords, maces, battle axes and lances.
- By the end of the Middles Ages, weaponry and warfare had developed so that opponents could easily take a knight down during a battle, and so the days of knights were over.

17.10 Medieval warfare

- Medieval warfare was a clash of arms for power and wealth.
- Armies would fight hand-to-hand in tightly grouped formation, using weapons such as swords, pikes, axes and maces.
- Archers with crossbows and longbows would also be used and mounted knights would try to break up the enemy's formations.
- Missiles were used to try to break the walls of a town or castle, with trebuchets and early cannons hurling rocks and other materials at the enemy.

17.11 Castles

- In medieval times, castles were built to protect the monarch or lord's lands, as well as for them to live in.
- Early castles were of motte and bailey design: a keep built on a high mound, surrounded by a ditch or moat. The high position gave the people in the keep the advantage when they were being attacked.
- During the Middle Ages castle designs became more and more sophisticated, with heavy concentric walls, battlements and drawbridges.
- Within the castle there were troop quarters, stables, armouries, living quarters, kitchens and dining halls.
- By the end of the Middle Ages, feudalism was declining, castles were no longer effective as a show of strength and weaponry had developed so that older weapons no longer stood up to an attacking army.

17.12 The power of the medieval Church

- The Roman Catholic Church was the one common institution found across western Europe and everyone was expected to live by Church law and keep its rituals and customs.
- As God's representative on Earth, the Pope was a very powerful figure and ruled with the upper class of clergy, his cardinals, archbishops and bishops.
- The lower clergy took the Pope's messages to the people in the villages through their sermons.
- Every village had a parish church built with peasant labour, which was the centre of their community. The more powerful churches, the seats of the bishops, were called cathedrals.

17.13 Monasteries and convents

- Parish priests, monks, nuns and friars played an important role in spreading Christianity to even the most remote village.
- Monks lived in small closed communities called monasteries and nuns lived in similar communities called convents.
- The daily practices of the orders within which the monks and nuns lived varied greatly.

- The Benedictines were one of the earliest orders and established the rules and customs followed by many later nuns and monks.

17.14 The Crusades

- The Crusades were a series of wars fought between the eleventh and thirteenth centuries throughout Europe and the Middle East between Christians and non-Christians. They generally centred on the Holy Land and the control over Jerusalem.
- The first Crusade started after the Pope called upon Christians to fight the Turks and reclaim Jerusalem in 1095.
- In the twelfth and thirteenth centuries, there were a number of Crusades and control of the Holy lands went back and forth between the Christians and the Muslims.
- Eventually the Crusades came to an end when the Turks took Constantinople in 1453 as part of the Ottoman Empire.

17.15 The Age of Faith

- The tensions between Islam and Christianity began in medieval times and developed in intensity during the Crusades.
- Muslim Arabs ruled much of Spain for about 700 years and much of the current Spanish culture comes from that time, such as flamenco guitar and architecture.
- The Muslim Arabs were quite tolerant of other religions, something that was not reciprocated when the Catholics eventually reconquered Spain.
- Much of the knowledge gained from Ancient Greece and Rome was kept in Muslim libraries during the medieval period.
- Islamic scholars led the world in many fields including medicine, sciences and mathematics, and the West was influenced in many areas such as architecture and poetry.

17.16 Towns and trades

- As trade routes became more established and Europe became more settled and peaceful, a network of towns sprang up, giving rise to a new social group, the merchants.
- Merchants travelled to distant markets in Asia, the Middle East and Africa, and returned with goods and ideas to be exchanged.
- The new merchant class became quite powerful.
- As the demand for skilled workers grew, young people were trained in particular trades in apprenticeships.
- The standard of work by tradesmen was overseen by a guild, which was an association formed to protect the trade's own interests. The merchant guilds become quite powerful, controlling trading ports and routes for themselves.

17.17 How did the Black Death change society?

- The Black Death had a brutal effect on medieval life between the years 1347 and 1352. Although more than one-third of Europe's population was killed, there were also a number of positive changes.
- Doctors started looking for more ways to cure patients when they were sick and the authorities became more aware of the need for better sanitation and town hygiene.
- Due to the death of so many educated people who used to communicate in French and Latin, English became more widely used in literature and scholarship.
- The feudal system, which was already in decline, was put under extreme pressure because the loss of so many workers meant that peasants had more power to negotiate their conditions and wages.
- There were a number of workers' revolts demanding government reform.
- The power of the Church was greatly diminished. Because the Church had not been able to stop the plague, people started to believe that perhaps it was not the all-powerful institution that it was once believed to be.

17.18 The Peasants' Revolt

- The Peasants' Revolt was an uprising by the English peasants in response to the Poll Tax of 1380. This was a tax on the people by the monarchy to restore the treasury after the cost of fighting the French.

- There had been food shortages and hunger so the enforced collection of the Poll Tax caused outrage and spurred a group of peasants to rise against the government and storm to London, destroying tax and debt records as they went.
- Several leaders emerged, such as Wat Tyler, Jack Straw and the parish priest John Ball.
- The rebels marched on London hoping to speak with the king.
- The rebels met the king outside London at Mile End and the king agreed to several of the demands. However, some were not satisfied and they attacked the Tower of London, killing several of the king's officials connected with the Poll Tax.
- Ultimately, the rebellion was quashed by the king's troops and punished with death. Despite this outcome, the Peasants' Revolt did much to weaken the feudal system and raise the leaders' awareness of the needs of the people.

17.19 Joan of Arc

- Joan of Arc was born in 1412 in a small French village and was the daughter of a simple peasant farmer.
- At the age of 13, Joan began to have visions of saints who told her to drive the English from France and help the dauphin, Charles VII, to take his throne.
- Although she was not believed at first, eventually, disguised in men's clothing, she was taken to meet Charles VII.
- Many people were weary of the war and wanted to believe that they could stop the fighting.
- Joan soon led an army and had a series of military successes against the English, and in 1429 she stood beside Charles VII when he was crowned King of France.
- Once he was king, Charles VII lost interest in Joan and she was captured by the English, tried as a witch and burned at the stake in 1431.
- She has since been recognised by the Catholic Church as a saint.

17.20 The heritage of medieval Europe

- The medieval period in Europe established many nations that did not exist before and laid the groundwork for the modern world.
- The Byzantine Empire took over the eastern part of Europe and adopted the Orthodox Christian faith with its centre in Constantinople, while the Roman Catholic Church, with its centre in Rome, dominated western and northern Europe.
- Christianity was attractive to the European rulers who adopted it and it unified many diverse groups of people of the time.
- Feudalism and its absolute power of the monarch and nobility was widespread in the early medieval period but as the world changed, it weakened and by the end of this period, the early seeds of constitutional democracy were sown.

17.22.2 Key terms

abbess chief nun in a convent
abbey monastery or convent run by an abbot or abbess
abbot chief monk in a monastery
archbishop head bishop
artillery large mounted firearms such as the cannon
biological warfare method of warfare based on infecting the enemy with deadly disease
bishop clergyman who governs a diocese, a large church district
caliph in Islamic countries, the chief civil and religious ruler and a successor to the Prophet Mohammed
cardinal leading clergyman who is a member of the Pope's Council, or Sacred College, and who has the power to elect the Pope from among his own group
catastrophe a disaster on a vast scale
cathedral main church of a diocese; contains the bishop's throne
clergy officials of the Church
cloister a covered walkway surrounding a quadrangle
concentric having a common centre
constitution written rules outlining how a country will be governed
contagion the spreading of disease
convent community of nuns
Crusader during the Middle Ages, someone who took part in a Crusade, an armed expedition against those believed to be enemies of the Church
curtain wall outer wall surrounding an inner wall in a castle
dauphin name given to the oldest son of the French king
deposed removed from a position of authority
Duke in England, a lord whose status placed him just below that of a prince; elsewhere in Europe, a ruler of a small state called a duchy or dukedom
edict order issued by a monarch or other person in authority
exploit use dishonestly to one's own advantage
faith religious belief and practice
feudalism social order in medieval Europe
fief a gift, usually land, given by a lord to a vassal (or tenant) in exchange for loyalty and service
franklin in the fourteenth century, one who was a landowner but not a member of the nobility
Franks people of a group of a Germanic nation who ruled in western Europe from the sixth century CE
geld a form of land tax
guild an association of people engaged in a particular trade or craft for the mutual benefit of its members
heretic a Christian who holds views that conflict with official Church teachings
Holy Land land in the Middle East that has significant importance for Christians, Muslims and Jews
holy relic the physical remains of someone or something very significant to a religious tradition
homage pledging duties and loyalty to someone of superior rank in the feudal system
Hundred Years' War a series of campaigns and battles over territory between the English and the French, and between warring French princes
illumination hand-painted illustration in a medieval book
joust combat between two mounted knights using blunted lances
keep innermost tower of a castle
lance a long wooden shaft with steel point used as a weapon by mounted knights
leper person stricken with leprosy, a bacterial disease that causes ulceration of the skin, deformities and a loss of sensation
lord chief position in the feudal system below the monarch
mace iron-headed club
martyred killed or made to suffer because of religious beliefs
Mass Roman Catholic church service
middle class a social class between the privileged nobility and the poor peasants. It typically comprised merchants and wealthier craftspeople.
moat water-filled defensive ditch surrounding a castle
Moor a member of a north-west African Muslim people of mixed Berber and Arab descent
motte a mound upon which a castle was built
Normandy now a French province, in the Middle Ages it was a dukedom in northern France

nun member of a closed community of women living under religious vows and rules
orb globe with a cross, symbolising a Christian monarch's rule
pagan someone who is not a Christian, Jew or Muslim, but who worships many gods
palisade tall fence made of pointed timber stakes driven into the ground
persecution oppression or punishment of a person or group of people, usually because of their religion
pestilence fatal epidemic disease
phalanx body of foot soldiers in close battle order
pike long spear-like weapon carried by foot soldiers
pilgrim one who travels to a sacred place to show devotion to his or her faith
pillage to steal or plunder using force, especially during war
plague fatal epidemic disease; usually used in reference to the bubonic plague
Poll Tax a tax levied on every person, regardless of age, sex or income
reeve a magistrate administering law in a village
sacrament sacred Christian ceremony; in the Catholic Church, for example, baptism and marriage
saints people recognised by the Christian faith as having been very holy and who have performed miracles
sceptre rod symbolising royal authority of the monarch
sermon moral or religious lecture delivered by a priest
stirrup foot supports suspended from a saddle by straps
superstition a belief based on custom or fear rather than knowledge or reason
thatch straw used for making roofs
tithe barn a barn where peasants' produce is stored as a form of taxation
trebuchet heavy medieval siege machine that uses a sling to hurl large missiles
vernacular everyday language spoken by a particular group or class

17.22.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

From the Crusades and castles to the Black Death, was medieval Europe the worst place to live in history?

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

on Resources

eWorkbook Customisable worksheets for this topic (ewbk-5571)
Reflection (ewbk-5570)
Word search (ewbk-5567)
Summing up (ewbk-5568)
History crossword (ewbk-5569)
Student Learning Matrix (ewbk-5560)

Interactivity Medieval Europe crossword (int-7586)

17.22 Review exercises

Multiple choice

1. Which of the following was not a weapon used by knights?
   - **A.** Mace
   - **B.** Lance
   - **C.** Cannon
   - **D.** Sword
2. Which of the Roman Catholic clergy was the most powerful?
   - **A.** Cardinal
   - **B.** Priest
   - **C.** Bishop
   - **D.** Monk
3. The main work of early Christian missionaries was to:
   - **A.** Persecute the pagans
   - **B.** Spread the word of Christianity to the pagans
   - **C.** Eliminate the snakes in Ireland
   - **D.** Travel across Europe to pagan tribes
4. Where did the plague most likely originate?
   - **A.** Australia
   - **B.** Asia
   - **C.** Europe
   - **D.** Africa
5. What was the goal of the Peasants' Revolt?
   - **A.** To behead the king
   - **B.** To meet with the king
   - **C.** To pay the Poll Tax
   - **D.** To march to London
6. Which of the following is incorrect in regards to the Crusades?
   - **A.** There were more than four Crusades.
   - **B.** The Crusades were generally centred on the Holy Land.
   - **C.** Crusaders were promised eternal life in heaven.
   - **D.** The most successful Crusade was the Peoples' Crusade.
7. What is an illumination?
   - **A.** A light in the altar of a church
   - **B.** A decorated holy manuscript
   - **C.** A new idea
   - **D.** A stained glass window
8. Which of the following was not a social group in the feudal system in medieval Europe?
   - **A.** Clergy
   - **B.** Lords
   - **C.** Peasants
   - **D.** Pagans

9. Which of the following statements *does not* describe why historians once called the medieval period 'the Dark Ages'?
   A. They believed that ignorance triumphed over learning and order.
   B. There was a long period of coldness and darkness causing famine.
   C. It was a period of great instability.
   D. Many Roman architectural structures were destroyed or abandoned.
10. Which of the following was not a defence feature of a medieval castle?
   A. Brewery
   B. Moat
   C. Palisades
   D. Bailey

Short answer

11. List the main social groups in the feudal system.
12. What was the job of the miller in a village?
13. What is a trebuchet?
14. Who is the head of the Roman Catholic Church?
15. What is an illumination?
16. Who lives in a monastery?
17. Against whom did the Crusaders set off to fight in the Holy Land from 1095?
18. What is another name for the Black Death?
19. What was the Hanseatic League?
20. What is the name of the tax that led to the Peasants' Revolt in England in 1381?

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for topic 17 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

17.1 Investigating medieval Europe

Video eLesson
- Medieval Europe (eles-1824)

Interactivity
- A timeline of major events in medieval Europe (int-4280)

17.3 The impact of the 'barbarian' invasions

eWorkbook
- The Dark Ages (ewbk-5561)

myWorldHistoryAtlas
- Overview > **Transformation of the Roman World**

17.5 Spreading Christianity in the Early Middle Ages

myWorldHistoryAtlas
- **Holy Roman Empire**
- **Medieval Christendom**

17.7 Life on the manor for men, women and children

Interactivity
- Life on a manor in the Middle Ages (int-4070)

17.9 The knight

Interactivity
- The development of the knight's armour (int-7818)

17.10 Medieval warfare

eWorkbook
- Stand up and fight (ewbk-5562)

17.11 Castles

eWorkbook
- My home is my castle (ewbk-5563)

Interactivity
- A castle under siege (int-4072)

17.12 The power of the medieval Church

eWorkbook
- The church's power - for better or for worse (ewbk-5564)

17.14 The Crusades

myWorldHistoryAtlas
- The Western and Islamic world > **The Crusades**

17.17 The Black Death

myWorldHistoryAtlas
- Expanding contacts > **Black Death**

17.18 The Peasants' Revolt

eWorkbook
- The Peasants' Revolt (ewbk-5565)

17.20 The heritage of medieval Europe

eWorkbook
- The heritage of medieval Christendom (ewbk-5566)

17.21 Thinking Big research project: Festival of Lost Trades

ProjectsPLUS
- Festival of Lost Trades (pro-0160)

17.22 Review

eWorkbook
- Reflection (ewbk-5570)
- Word search (ewbk-5567)
- Summing up (ewbk-5568)
- History crossword (ewbk-5569)
- Student Learning Matrix (ewbk-5560)

Interactivity
- Medieval Europe crossword (int-7586)

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

18 Investigating the Black Death in Asia, Europe and Africa

18.1 Overview

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

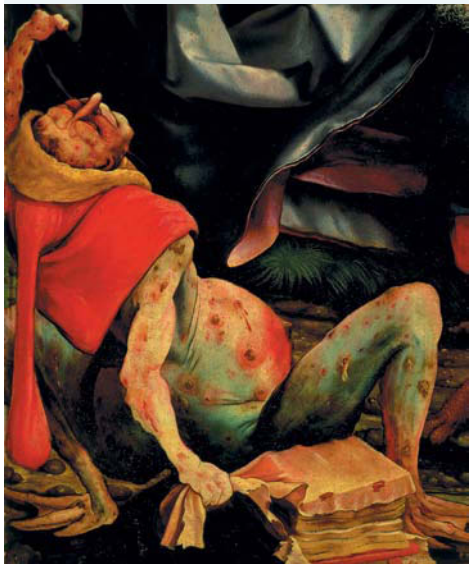
The Black Death is believed to have killed between 25 and 200 million people. What caused this devastating event and how did the world react?

18.1.1 Links with our times

In 1997, eighteen people in Hong Kong were infected with a form of influenza unknown in human beings. Six of them died. Their disease was identified as a type of flu previously found only in poultry such as chickens, ducks and geese. It was the first time this type of flu had crossed from birds to humans, and it became known as 'bird flu' or 'avian flu'. In 2005 this strain of flu was discovered in migratory birds in China and Central Asia. The newly appointed United Nations Coordinator for Avian and Human Influenza warned that the spread of this form of the disease could kill anywhere from 5 to 150 million people worldwide. The very mobile nature of migratory birds increased the level of fear and panic at the time. In even more recent times, we have seen the outbreak of the COVID-19 pandemic. So, why do we panic about such diseases?

These examples, two from recent history and one from medieval history, can help us answer this question. Between 1918 and 1920 an extremely infectious type of influenza known as the Spanish Flu spread from the United States to virtually all parts of the world, killing more than 50 million people. When an infectious disease spreads across a significant part of the world and causes illness in large numbers of people, it is known as a *pandemic*. More people died of the Spanish Flu than had been killed in World War I.

SOURCE 1 This painting by early sixteenth-century painter Matthias Grunewald conveys some of the horror of the Black Death that devastated Europe, Asia and North Africa



Although it happened many hundreds of years ago, the horror of the Black Death pandemic of the fourteenth century still has a strong influence on us. Millions of people died a horrible death from this disease and were completely powerless to prevent or treat it. When new illnesses suddenly arise, with no apparent treatment, it is not surprising that our historical experiences lead us to fear the possible consequences.

on Resources

eWorkbook	Customisable worksheets for this topic (ewbk-5581)
Video eLesson	The Black Death — a 14th century plague (eles-1831)
Interactivity	A timeline of the Black Death in Asia, Europe and North Africa in the fourteenth century (int-4287)

int-4287

SOURCE 2 A timeline of the Black Death in Asia, Europe and North Africa in the fourteenth century

CE

1310

1315–17
Crop failures lead to widespread famine.

1320

1320–40
Regular crop failures and famines throughout Europe

1330

1334
The first recorded outbreak of the Black Death in Hubei, China

1348
January — the Black Death first reported in Venice and Genoa.

June — all of Italy, southern France, the Adriatic coast, north-eastern Spain, Gaza and Syria are infected.

December — plague reaches Austria, Switzerland, central and north-western France, southern England, the Arabian peninsula and Tripoli.

1340

1346
The siege of Caffa

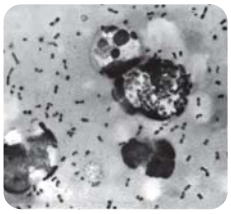
1347
The Black Death appears in Baghdad, Constantinople, Alexandria and the Mediterranean islands.

1349
June — southern Germany, northern France, Holland, central England and Mecca in Arabia are infected.

December — the Black Death arrives in central Germany, Scotland and Ireland, northern England, southern Spain and Marrakesh.

1350

1352
December — by this date, the Black Death has left Europe.



1360

1350
June — plague spreads to eastern Germany and Scandinavia.

December — parts of Poland, Russia and the Baltic coast are infected.

1358
Revolt of the Jacquerie in France

1370

1378
The Ciompi revolt in Florence in Italy

1380

1381
Peasants' Revolt in England

1390

CE

18.2 How do we know about the Black Death?

LEARNING INTENTION

By the end of this subtopic, you will be able to identify and describe the written and archaeological sources that tell us about the Black Death.

18.2.1 Written sources and contemporary art

The Black Death was a catastrophic event that had a huge impact on all the countries it passed through. There are many types of primary and secondary sources that help historians understand this event, particularly its effects in Europe. For example, there are a large number of written accounts of how the plague affected people, and many artists also recorded their own observations in paintings and woodcuts.

Many written accounts of the Black Death survive to this day. In monasteries throughout Europe, monks took on the responsibility of recording the events occurring around them in various **chronicles**.

Individual writers such as Geoffrey the Baker or the monk Henry Knighton recorded the impact of the plague in England. In Italy, Agnolo di Tura described in detail the effect of the plague on the people of the city of Siena.

SOURCE 1 From Agnolo di Tura's *Description of the Black Death*, 1348

The victims died almost immediately. They would swell beneath the armpits and in the groin, and fall over while talking. None could be found to bury the dead for money or friendship. Members of a household brought their dead to a ditch as best they could, without priest, without divine offices. In many places in Siena great pits were dug and piled deep with the multitude of dead. And they died by the hundreds, both day and night, and all were thrown in those ditches and covered with earth. And as soon as those ditches were filled, more were dug.

The Italian writer Giovanni Boccaccio used the Black Death as a basis for his fictional work *Decameron* (see **SOURCE 2**), and the poet Petrarch used his poetry to express his personal feelings about the huge loss of life caused by the disease.

Medieval church parishes kept written records of baptisms, marriages and deaths. Although the huge numbers killed by the Black Death often meant that priests or monks could not keep their records completely up-to-date, some quite accurate details of the deaths in particular parishes still survive.

SOURCE 2 Boccaccio's *Decameron* was written between 1349 and 1351 and contains descriptions of the effects of the Black Death on the population of the Italian city of Florence. This edition was printed in the sixteenth century.

IL
DECAMERON
DI MESSER
GIOVANNI BOCCACCI
Cittadino Fiorentino.
Ricorretto in Roma, et Emendato secondo
l'ordine del Sacro Conc. di Trento,
Et riscontrato in Firenze con Testi Antichi & alla sua
vera lezione ridotto da' Deputati di loro Alt. Ser.
NVOVAMENTE STAMPATO.
IN FIORENZA
Nella Stamperia de i Giunti
MDLXXIII.

Contemporary artists

Just as writers were keen to record the events happening around them, artists produced drawings and paintings showing many aspects of the Black Death. As well as illustrating the symptoms of the diease in their artworks, artists were inspired to explore themes of death and destruction. The *danse macabre* (or 'dance of death') was a theme explored by many artists in the years following the Black Death (see **SOURCE 3**). It demonstrated

chronicle a record of events as they happened, usually written by a person who was present at the time they occurred

that life was fragile and that death would eventually affect everyone, no matter how rich or important a person might be.

18.2.2 Medical science

We do not know as much about how the plague affected Asia and Africa, but advances in medical science in recent times have helped us to understand the nature and spread of the disease that savaged so much of the known world in the fourteenth century.

At the time of the Black Death, no-one had any idea of the actual causes of disease. It wasn't until the nineteenth century that medical science was able to identify disease-causing bacteria. By comparing the descriptions and drawings of the disease as provided by medieval writers and artists, medical scientists have been able to compare these symptoms with those of known diseases. This has allowed them to develop an explanation as to what caused the Black Death.

18.2.3 Archaeological evidence

Many medieval villages lost almost all their inhabitants during the Black Death. Many villages were left completely deserted at the time, while others were abandoned by the small number of surviving inhabitants in the years following the plague. These people found that the village could not function with its reduced population, and so they moved to other locations. Modern aerial photography can show us where these deserted medieval villages were once located (see **SOURCE 4**).

SOURCE 3 The *danse macabre* was an artistic theme inspired by the effects of the Black Death.

SOURCE 4 The medieval village of Bingham's Melcombe in England was abandoned shortly after the Black Death. The location can be seen in this aerial photograph. The fourteenth-century church still survives.

18.2 EXERCISE

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

Learning pathways

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

Check your understanding

1. What sources exist to help historians understand the Black Death?
2. What was the *danse macabre*?
3. In which century was the cause of the Black Death identified?
4. How were scientists able to identify the disease-causing bacteria?
5. What impact did the Black Death have on villages?

Apply your understanding

6. Although Boccaccio's *Decameron* (see **SOURCE 2**) is a work of fiction, it can still provide useful historical information. How can works of fiction help us to find out about the past?
7. Read **SOURCE 1**. What does this source reveal about the symptoms of the plague?
8. How can archaeological evidence such as that in **SOURCE 4** help us to understand the effects of the Black Death?
9. Explain the basic idea behind artworks associated with the *danse macabre* as shown in **SOURCE 3**.
10. Why might church parish records of deaths caused by the Black Death not always be a reliable source of information about the impact of the disease?
11. Why would it be unlikely that primary sources could provide reliable information about the spread of the plague?

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

18.3 What was the Black Death?

LEARNING INTENTION

By the end of this subtopic, you will be able to
- explain what the Black Death was
- identify the origins of the Black Death
- explain why Black Death was able to spread.

18.3.1 Introduction

During the mid-1300s the terrible disease known as the Black Death was killing millions of people in all parts of the known world, but no-one actually knew what caused it. Today we understand that the bite of a flea that lived on black rats helped spread the disease. However, this was completely unknown in the fourteenth century.

SOURCE 1 The appearance of black or purple blotches on the skin is thought to be the origin of the name 'Black Death'.

Why 'Black Death'?

There are a number of theories about the origin of the English name 'Black Death'. The most popular of these comes from the appearance of the disease in its final stages. At this time, small black or purple blotches appeared on the skin of those suffering from the disease, and this may have contributed to the name. In French, the disease was known as *morte bleue* ('Blue Death'). The Latin name *pestis atra* ('terrible plague') was widely used by educated writers of the time.

Three diseases in one

The Black Death appears to have been a combination of three related diseases, all of which had different symptoms and different ways of being transmitted to humans. The first of these was the bubonic plague. This was so named because of the 'buboes' that appeared on the victims' bodies. These buboes were pus-filled swellings of the **lymph nodes** in the groin, under the armpits and on the neck. This disease was not necessarily fatal by itself and recovery was possible. A far more severe form of the disease was the pulmonary or pneumonic plague. This form attacked the lungs and was always fatal. The third form was septicaemic plague, which aggressively attacked the bloodstream. In this form the bacteria multiplied so fast that the person would die within hours of infection, with bleeding into the skin causing purple-black blotches to appear.

SOURCE 2 The bubonic plague was so named because of the appearance of 'buboes', which were swellings of the lymph nodes.

18.3.2 Origins and spread of the plague

Origins

Bubonic plague appears to be **endemic** to certain parts of the world, including western Arabia, Kurdistan, northern India and the Gobi Desert. It usually lies **dormant**, but at different times in history it has broken out in the form of major **pandemics**. In the sixth and seventh centuries CE it spread from Arabia, reaching Egypt in 542 and then spreading through Europe. It eventually reached Ireland in 664. In the 1890s, a pandemic that began in Yunnan Province in China spread to northern India, killing more than six million people. In 1900 it arrived in Australia and killed more than 550 people. Recent scientific research has suggested that the medieval pandemic known as the Black Death may have originated near Lake Issyk-Kul, in north-eastern Kyrgyzstan, in Central Asia. From there it spread into China, India and the Middle East and Europe.

SOURCE 3 The bacteria that caused the Black Death were transmitted by fleas living on the bodies of black rats.

How did it spread?

In 1894 scientists identified a bacterium known by the scientific name of *Yersinia pestis*. This is now understood to be the cause of all three forms of the plague. These bacteria were transmitted by a number of different types of flea. One such flea was commonly found living on the bodies of black rats. Wherever the rats thrived, the fleas had the opportunity to bite other animals and humans, usually infecting them with the bubonic or septicaemic form of the disease. Fleas could bite many people.

Pneumonic plague was the most contagious form of the disease because it infected the lungs. This would cause severe coughing, which would spray the bacteria out into the air. The disease could be breathed in by anyone close by, who would then be infected.

lymph nodes lumps of tissue that help the body fight infection; part of the immune system

endemic normally and regularly found in a particular location or environment

dormant inactive or sleeping, with the potential to become active at any time

pandemic widespread across a large region

SOURCE 4 Rat-catchers in Sydney in 1900 attempting to control the spread of bubonic plague

DID YOU KNOW?

When a flea became infected with the plague bacteria, the bacteria would multiply quickly and block the flea's feeding tube. This would make the flea very hungry. It would try to feed on the blood of a host (an animal or human) but could not swallow the blood because of the blocked feeding tube. The blood mixed with the bacteria would be **regurgitated** and enter the host through the open wound, leading to a new infection.

regurgitate to vomit, or bring up the contents of the stomach or throat

18.3 EXERCISE

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

Learning pathways

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

Check your understanding

1. Explain the three forms of the Black Death, including how each was transmitted and how the body was affected in each case.
2. What does it mean if a disease is *endemic*?
3. What are buboes?
4. a. Identify two parts of the world in which bubonic plague appears to be endemic.
   b. Why do these parts of the world not suffer from the plague all the time?
5. What was the main factor that encouraged the spread of the Black Death?

Apply your understanding

6. Examine **SOURCE 1** and explain why the Black Death may have been given that name.
7. Using **SOURCE 2**, explain what buboes are and how they affect the body.
8. How does **SOURCE 3** help us to understand the role of the flea in transmitting the plague from person to person?
9. What information would the rat-catchers in **SOURCE 4** have had that was not available to the people of the Middle Ages?
10. Using the internet and your library, prepare a brief report on the bubonic plague outbreak that occurred in Australia in 1900. Which areas were the worst affected and what steps were taken to deal with the disease?

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

18.4 Living conditions and medical science in the Middle Ages

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- describe the living conditions in medieval cities
- describe the limitations of medical science in the Middle Ages
- compare life expectancy, hygiene and sanitation to that of today.

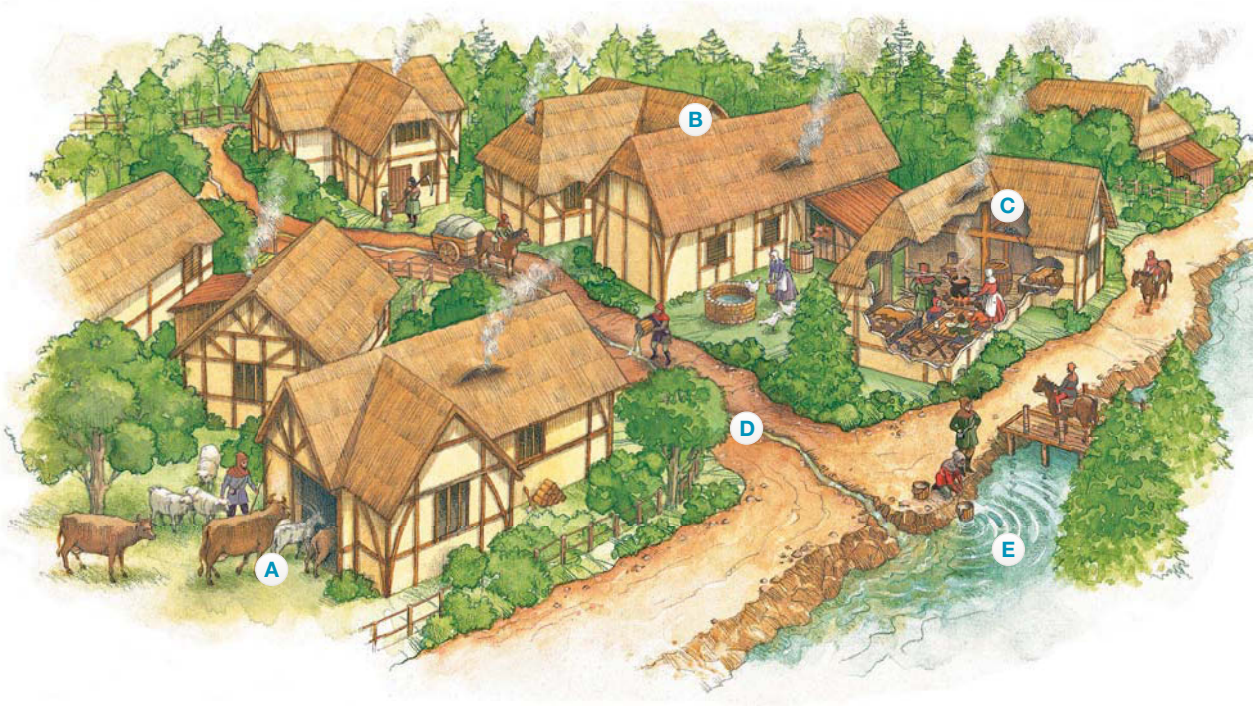
18.4.1 Living conditions in medieval cities

The High Middle Ages (c. 1100–1300 CE) in Europe was a period of rapid population growth and relative prosperity. It saw the expansion of towns and cities. Many of these were filthy and overcrowded, providing ideal conditions for the spread of disease.

Medieval cities such as London, Paris and Florence grew very rapidly during the thirteenth and fourteenth centuries, with little thought given to proper planning or healthy living conditions. Most houses were small, containing only one or two rooms. Privacy was not a particularly high priority, and even members of reasonably well-off families would all sleep in the same room. Among the poor, it was not unusual for as many as a dozen people to all sleep on the floor together. In country villages, they would often be joined by their livestock. If someone became ill, it was physically impossible to isolate them from other members of the family. So if one member of the family became sick, it was likely that all would catch the same illness.

int-4112

SOURCE 1 Medieval houses and towns were generally very unhealthy places to live.



- **A** The presence of domestic animals and straw on the floor allowed rats and other vermin to flourish.
- **B** Houses were close together, allowing for the easy spread of disease.
- **C** Houses were very small, providing little opportunity to isolate sick family members.
- **D** A drain down the middle of the street was the only way to remove waste and rubbish.
- **E** Rivers and streams that were used for drinking water often became contaminated.

Hygiene and sanitation

In a small village, the removal of rubbish and human waste was relatively simple, but in an overcrowded town it became a more difficult problem. The streets were narrow, usually with a drain running down the middle that was meant to carry waste away. However, these drains regularly filled up and so the waste remained. Often the drains fed into the same rivers and streams from which people drew their drinking water. While breathing in foul air or drinking contaminated water could not spread the Black Death, cases of gastric diseases such as **dysentery** and diarrhoea were common. If the body was weakened because of such diseases, the plague could take hold more easily, and death was likely to occur much sooner.

Life expectancy

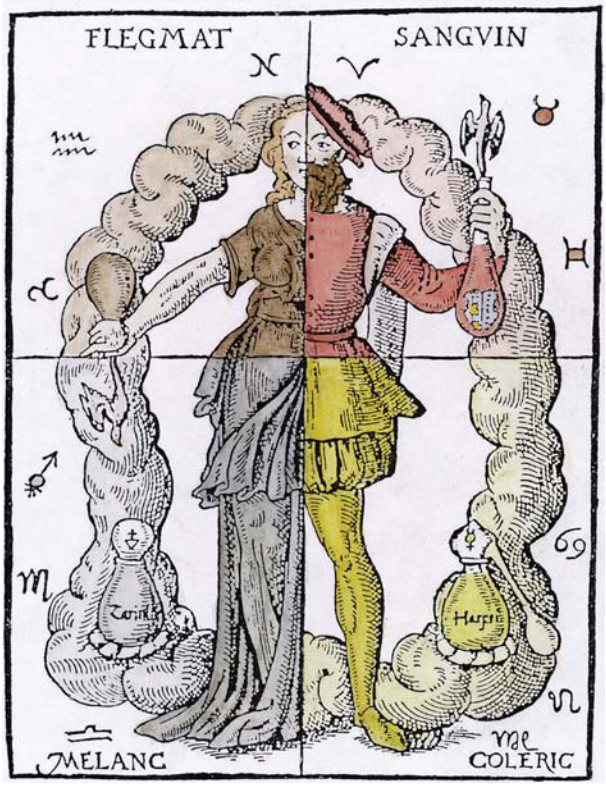
Although the average life expectancy in Australia today is about 82 years, most people did not live this long in medieval times. Death from infectious disease was common and children were the most likely victims. Close to a quarter of all babies died within the first year of life. Less than half of all children would reach the age of ten. Those who passed the age of ten had a reasonable chance of reaching adulthood and perhaps living to around forty years of age. Only a small minority lived to what we would regard as old age.

18.4.2 Medical science in the Middle Ages

The High Middle Ages (c. 1100–1300 CE) in Europe was a period of rapid population growth and relative prosperity, but medical science was totally inadequate and unprepared for the plague that was to come.

Medical knowledge at the time was based largely on ancient knowledge and had not advanced much for a thousand years. Doctors relied largely on the theories of ancient physicians such as Hippocrates and Galen. In the fourth century BCE, the Greek physician Hippocrates was one of the first to determine that illness was not a result of a curse from the gods. He promoted the idea that illness and disease were part of nature and could be influenced by factors such as diet and a person's living habits. Nevertheless, he was completely unaware of microscopic organisms as a cause of disease. The Greek physician and philosopher Galen lived in Rome in the second century CE. Because human dissections were illegal under Roman law, Galen carried out anatomical dissections on various animals. He proposed theories on the operation of the brain and the nervous system, as well as on the circulation of the blood throughout the body. Although many of his theories were later proved to be incorrect, they were the definitive word on medical science in Europe. Medieval doctors refused to accept any idea that was not consistent with Galen's theories and so were not willing to accept any new evidence relating to the causes or spread of disease.

SOURCE 2 This sixteenth-century diagram illustrates the four humours that medieval doctors believed determined the health of the body.



Treating the sick

The treatment of illness and disease in the Middle Ages was based more on superstition and ignorance than on any genuine medical knowledge. Medieval doctors believed that the body contained four 'humours' or aspects that influenced a person's state of health (see **SOURCE 2**). These humours were black bile, yellow bile, phlegm and blood.

dysentery a severe, infectious bowel disease

While the humours were in balance, the body would be healthy. Illness occurred when these humours were out of balance in the body. In these circumstances, one common cure was to drain blood from the body through a process of bloodletting (see **SOURCE 3**). Applying leeches to the body to suck the blood was an alternative method of restoring the body's balance (see **SOURCE 4**).

Herbal medicines were also popular, but often contained poisons, and so were sometimes more dangerous than the disease. Surgery was usually carried out by barbers and was rarely successful. Amputations of injured or diseased limbs were the most common form of surgery. Because of the strong religious beliefs of the time, most people believed that prayer was the most effective way of dealing with serious illness.

SOURCE 3 Bloodletting, as shown in this artwork, involved the draining of a measured amount of blood from a vein believed to be connected to the diseased organ in the body.

SOURCE 4 In this illustration from Boccaccio's *Decameron*, doctors apply leeches to a royal or aristocratic patient.

DID YOU KNOW?

Modern anaesthetics were unknown in medieval times, so the patient was wide awake during surgery. One mixture used to try to dull the pain was known as 'dwale' and it consisted of lettuce juice, gall from a castrated boar and assorted herbs such as bryony, henbane and hemlock. All these plants were poisonous and could have killed the patient. Cuts and wounds from surgery were treated by cautery. This was a process of applying hot irons to the wound to seal it and prevent further loss of blood.

18.4.3 Life suddenly gets harder

The growth in population throughout Europe in the twelfth and thirteenth centuries quickly led to most of the best farming land being overworked. By the beginning of the fourteenth century, the quantity and quality of crops were in decline. This raised the threat of famine. To make matters worse, there appears to have been a change in weather patterns early in the fourteenth century, with the winter of 1306–7 the coldest experienced in over 300 years. As the colder and wetter weather took hold, farming conditions became worse, with the years 1315 to 1317 bringing crop failures and widespread famine. The 1320s and 1330s saw frequent famine conditions continue as the weather and overworked soils brought regular crop failures. By the 1340s the standard of health of much of the European population was very poor, with little resistance to serious disease. It was to this ravaged population that the Black Death was to bring unprecedented death and destruction.

Resources

Interactivity Medieval houses and towns were generally very unhealthy places to live. (int-4112)

18.4 EXERCISE

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

Learning pathways

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

Check your understanding

1. Explain the contributions made by Hippocrates and Galen to medieval medical knowledge.
2. Why had there been no significant advances in medical knowledge in Europe for over a thousand years?
3. Of all babies born in medieval times, approximately what proportion could expect to reach adulthood?
4. How did most people in the Middle Ages attempt to deal with illness?
5. What happened in the first half of the fourteenth century in Europe to make people more susceptible to disease?

Apply your understanding

6. Using **SOURCE 1**, list three reasons why people living in medieval times were at greater risk of disease than we are today.
7. Explain the purpose of the medical treatments depicted in **SOURCES 3** and **4**.
8. a. How do we know the patient in **SOURCE 4** was an important person?
   b. From the reactions of the three other people in **SOURCE 4**, what can you identify as one of the patient's symptoms?
9. Each of the four humours depicted in **SOURCE 2** was associated with a number of other natural and human characteristics. Using resources from your library and the internet, find out the following:
   a. What were the names of each of the humours?
   b. What elements in nature was each humour associated with?
   c. How were the humours believed to have influenced a person's personality and mood?
10. Imagine that you are a medieval barber. Design an illustrated sign for your shop advertising all of the services you provide, including various types of amputations.

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

18.5 Religious beliefs

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- explain the significance of religion in medieval Europe
- explain the Catholic Church's attitude towards medical science during the Middle Ages.

18.5.1 The importance of religion

Religious beliefs, and particularly the Roman Catholic Church, were central to medieval European life. When good things happened, people believed they were being rewarded for their good deeds, and illness and disease were seen as a punishment from God.

Most people were illiterate and very superstitious, and they relied heavily on priests for education and guidance on events that happened around them. Those who did not follow the Christian religion were viewed with suspicion

and even hatred. If something bad happened, people looked to the Bible for an explanation and often believed they were being punished for their sins.

DID YOU KNOW?

Superstitious minds looked everywhere for a cause of the Black Death. Astrologers said that the alignment of the planets Saturn, Jupiter and Mars in the house of Aquarius in 1345 was to blame. An alignment of Saturn and Jupiter was supposed to bring death and disaster, while an alignment of Mars and Jupiter was said to cause disease. The alignment of all three planets could only mean a huge catastrophe was imminent.

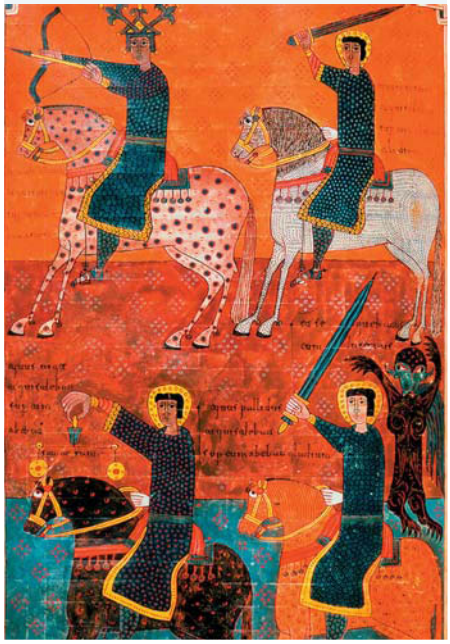
18.5.2 Religion and medical science

Because the Church controlled every aspect of education, the training received by medieval doctors had to be in accordance with religious teachings. All medical education carried out in universities was strictly in line with the beliefs of ancient physicians such as Hippocrates and Galen. No new research was permitted because it was believed that the ancient teachings were complete and could not be contradicted. In 1300, Pope Boniface VIII prohibited the cutting up of corpses, so any attempt to study human anatomy was virtually impossible. This meant that even the most educated doctors had very little knowledge of human anatomy, making treatment of sickness difficult and any form of surgery almost impossible.

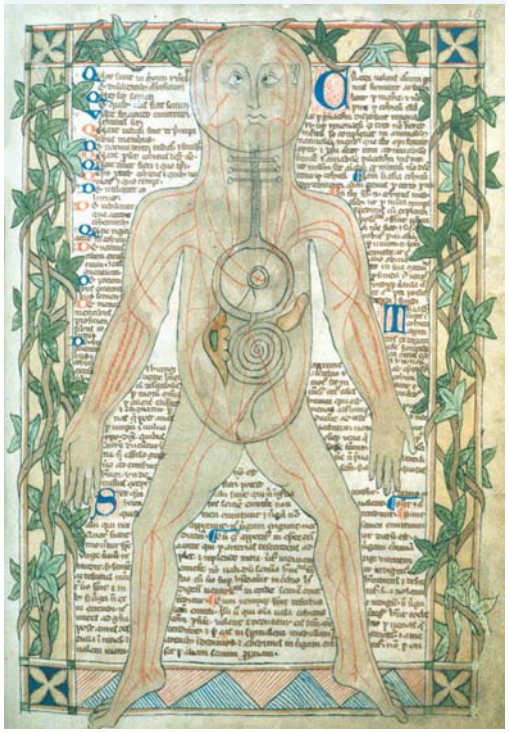
Doctors and priests

It is clear that in medieval Europe, medicine took second place to religion. Priests were considered to be more important than doctors in the treatment of the sick. When dealing with an ill person, the priest always took the lead – the doctor was permitted to assist only once the praying was finished. If the patient was an important or wealthy person, the doctor might wait while a whole group of churchmen offered up prayers before being granted access. If the disease was working quickly, the doctor might not even get to examine the patient until after they died. It is not surprising then that doctors were powerless to deal with a pandemic such as the Black Death.

SOURCE 1 The Four Horsemen of the Apocalypse, shown in this twelfth-century manuscript, represented famine, plague, war and death. They were seen as a sign of God's punishment and that the end of the world was near.



SOURCE 2 This late thirteenth-century illustration of the human body was meant to display the flow of blood through the body.



18.5.3 Religious conflict

By the beginning of the fourteenth century, virtually all of western Europe was Roman Catholic. The Arabic conquests during the seventh century and onwards, and the later expansion of the Ottoman Empire, meant that most of the Middle East and North Africa followed Islam. Christians and Muslims looked at each other with suspicion, largely as a result of the Crusades and of the efforts of Spanish Christians to recapture Spain from Muslim control. Since both religions viewed illness as a form of divine punishment, the people of each religion blamed the other for the Black Death when it ravaged their people. Christians also treated Jews very poorly because they blamed the Jews for the death of Jesus Christ. Evidence suggests that European Christians blamed the Black Death on the Jews.

SOURCE 3 Prayer for the sick was considered to be more important than medical science.

SOURCE 4 An excerpt from Henry Knighton's *Chronicon*, an account written during the fourteenth century.

> The Scots, hearing of the cruel plague of the English, declared that it had befallen them through the revenging hand of God … And thus the Scots, believing that the English were overwhelmed by the terrible vengeance of God, gathered … with the intention of invading the whole realm of England. The fierce mortality came upon them, and the sudden cruelty of a monstrous death winnowed [came upon] the Scots.

18.5 EXERCISE

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

Learning pathways

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

Check your understanding

1. What was the attitude of the medieval Church towards medical science?
2. Why was there suspicion between Christians and Muslims during the Middle Ages?
3. 'Doctors were considered to be more important than priests in the treatment of the sick.' True or false?
4. Evidence suggests that European Christians blamed the Black Death on who?
5. During the fourteenth century, Muslims and Christians viewed illness as a form of _____ .

Apply your understanding

6. Examine **SOURCE 1**. What does it tell us about the medieval explanation for events such as famine and plague?
7. Identify two inaccuracies in the diagram of the body shown in **SOURCE 2**. What prevented medieval doctors from finding out more about the human body?
8. In what ways could the activity depicted in **SOURCE 3** actually hinder medical treatment for illness?
9. From the information in **SOURCE 4**, what do you think was the attitude of the Scots towards the English?
10. How did the Scots' religious beliefs influence their actions?

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

18.6 Trade and the spread of disease

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- explain the role of trade in the spread of the Black Death
- describe the distribution of the Black Death across three continents.

18.6.1 Settlements and trade

The early fourteenth century was a time of rapid expansion of trade between Europe, North Africa and Asia. Wherever people traded, black rats and their disease-carrying fleas followed. Disease that had previously been confined to an area in Central Asia soon spread to populations that had no immunity to its ravages.

Human settlement in the fourteenth century

As we have learned, the early medieval era was a period in which many nomadic groups moved through Europe and Asia, invading new land (see topic 16 From the ancient to the modern world). Through the Middle Ages, most of these nomadic groups gradually settled in the lands they had conquered, establishing permanent villages and towns as the centres of agricultural activity. Warriors such as the Franks, Magyars and Goths became farmers, while seafaring raiders such as the Vikings and Danes came to use their ships for peaceful trade. By the fourteenth century, most of Europe, southern and eastern Asia and much of northern Africa was subject to permanent human settlement. Only in the northern and central regions of Asia and sub-Saharan Africa was the nomadic lifestyle still prevalent.

int-4805

SOURCE 1 Permanent human settlement led to the growth of towns and expansion of trade, which allowed the Black Death to spread more easily.

The growth of trade

Settled civilisations in Europe, and Asian empires such as those in India and China were quick to realise the benefits of peaceful trade. Networks of overland trade roads developed throughout Europe and Asia, connecting the rapidly growing towns and leading to the growth of some towns as major trading centres. These towns would regularly hold fairs to allow merchants to display and sell their wares. Major commercial city-states such as Genoa and Venice sent ships throughout the Mediterranean and to western and northern European ports. Trade between Europe and Asia expanded rapidly along the Silk Road, with China and many other centres through central Asia coming into regular contact with European merchants.

18.6.2 Outbreak in Asia

Written reports indicate that outbreaks of the Black Death may have occurred in China in the 1320s and 1330s. The province of Hubei in central China is considered by many to be the location of the first major outbreak in 1334. It was here that the Black Death first appeared in its most deadly form. In the fourteenth century, China was largely ruled by the Mongols, who had strong links to Central Asia, so they may have brought the disease with them to China. At the same time, trade between China and a number of European states was increasing via access along the Silk Road. The potential was always there for the Black Death to be carried to Europe, either by European traders returning from the east or by the Central Asian Tartar warriors (Mongols), who were continuing their attacks in eastern Europe.

The siege of Caffa

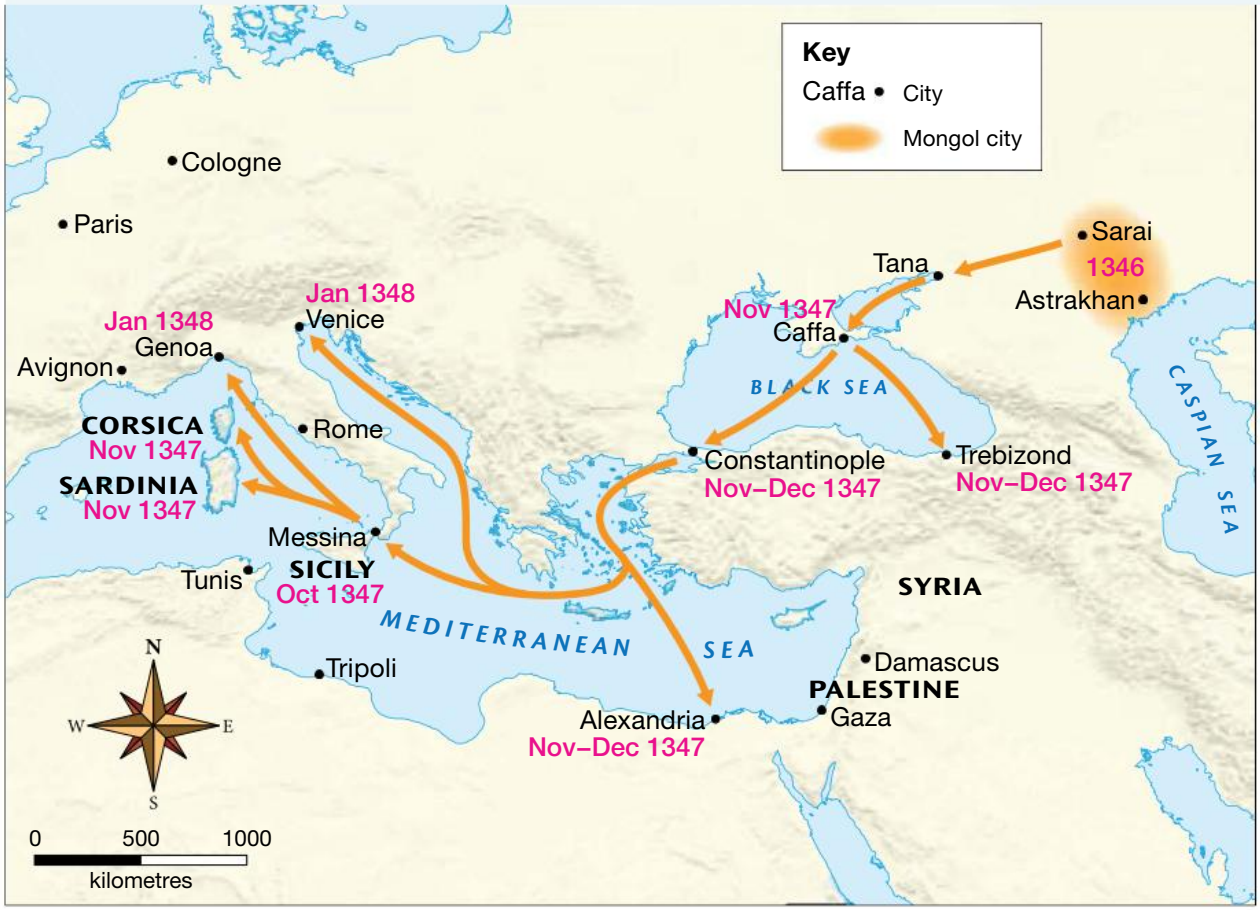
In the thirteenth century, the Italian trading city of Genoa had taken control of Caffa, on the Crimean Peninsula, in modern-day Ukraine. Caffa was a major shipping port for trade throughout the Black Sea. In 1346 the Tartars attacked the city. They were supported by Genoa's bitter rivals, the Venetians, who had previously controlled Caffa. As they laid siege to the city, the Tartars began to fall sick from a serious disease and large numbers died in a very short time. Unable to maintain the siege, the Tartars began to withdraw, but before they did, they began catapulting the diseased bodies of their dead over the walls and into the city (see **SOURCE 2**). The Genoans who escaped from Caffa soon found they were carrying the Black Death. Venetian traders who had been present during the siege were also infected and both groups carried the deadly disease deep into the heart of Europe (see **SOURCE 3**).

SOURCE 2 When the Tartars attacked Caffa, they used trebuchets like the one shown in this illustration to catapult infected bodies over the city walls.

How important was Caffa in the spread of the Black Death?

Trade links between Asia and Europe were developing so strongly during the fourteenth century that Caffa was probably not the only source of the Black Death coming to Europe. Messina in Sicily first recorded the plague shortly before the siege of Caffa. Nevertheless, the rapid spread to places that engaged in trade with Caffa suggests that it was important in hastening the infection into Europe, the Middle East and North Africa. During the last few months of 1347, the disease was carried to Constantinople, the southern shores of the Black Sea, Alexandria in Egypt and the islands of Sicily, Corsica and Sardinia in the Mediterranean. Most of this spread appears to have originated in Caffa.

SOURCE 3 Merchants and soldiers returning from Caffa in late 1347 soon spread the Black Death to the Middle East, North Africa and Italy.



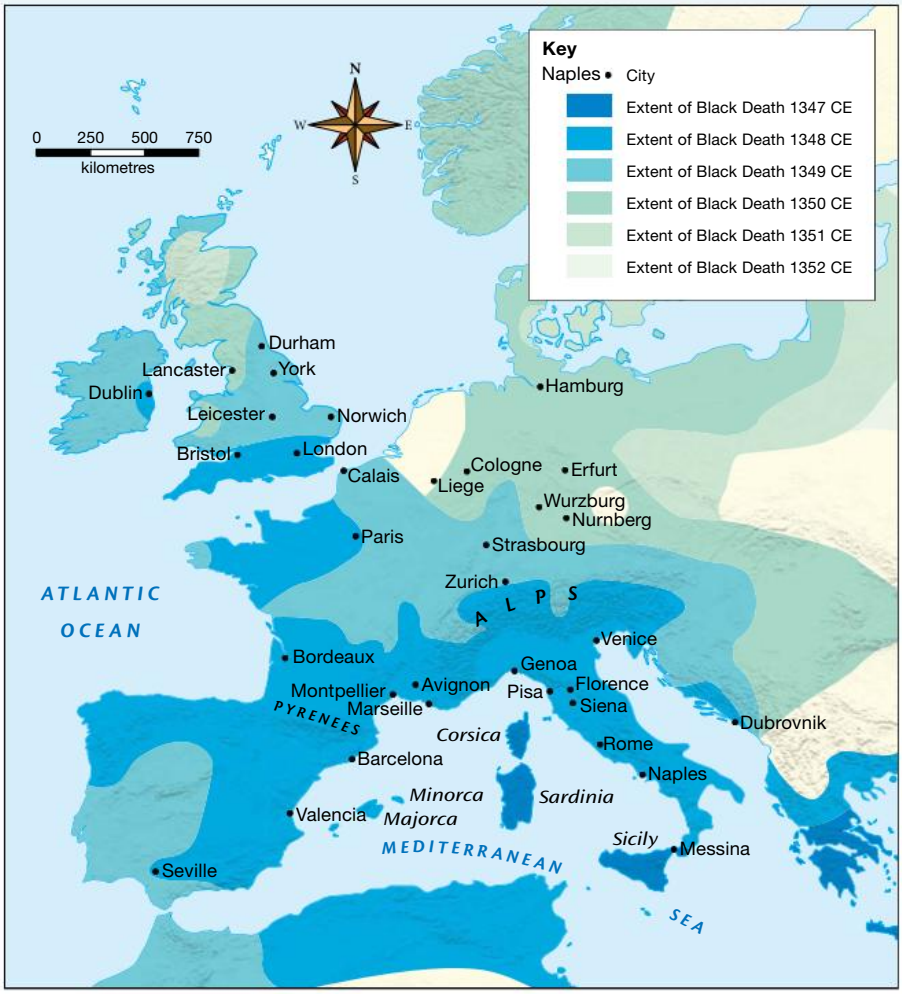
18.6.3 The spread through Europe, the Middle East and Africa

Europe

By January 1348, cases of the plague were reported in both Genoa and Venice in northern Italy. From there it quickly spread to the rest of Italy, and to southern France and Spain by the middle of that year. Within a year all of western Europe was affected and, by 1350, the Black Death had turned east again and had reached Russia. **SOURCE 4** shows how quickly the Black Death spread throughout Europe between 1348 and 1351.

int-4115

SOURCE 4 The Black Death spread like a wave across Europe between 1348 and 1351.



DID YOU KNOW?

Some historians believe that fleas carrying the Black Death came to Caffa on the skins of marmots. These small Central Asian mammals had no resistance to the disease, and large numbers became infected and died in the mid-1340s. Fur traders came across the dead animals, removed their hides (including the deadly fleas) and sent them along the Silk Road to cities such as Caffa.

The Middle East and North Africa

The plague appears to have come to the Middle East through several different routes. During 1347, warriors returning to Baghdad from battle at Tabriz in northern Persia (now Iran) found that they had brought the disease with them. These soldiers would have carried supplies of grain with them for food. Not only did black rats infest the grain supplies but the fleas carrying the disease would also have been able to survive on grain debris. The area that includes modern-day Iraq, as well as Syria and southern Turkey, was soon ravaged by the Black Death. It is also believed that Muslim pilgrims coming to Mecca from northern India via the Persian Gulf and the Red Sea may have been transporting rats from Central Asia to the Arabian Peninsula, bringing the plague with them.

The Egyptian city of Alexandria was a major trading port on the southern shores of the Mediterranean Sea. It had strong links with Constantinople, as well as with Arab cities to the east and all along the north African coast. Alexandria became infected in 1347, soon after the siege of Caffa. The Black Death then spread eastwards to Palestine and Syria in 1348, and into the Arabian peninsula, reaching Mecca.

int-4114

SOURCE 5 The spread of the Black Death across the Middle East and North Africa

North Africa

From Alexandria, the plague began to spread along the north African coast, and had reached Tripoli in modern-day Libya by 1348. At the about the same time, the city of Tunis appears to have been infected through its trade with Sicily, with an outbreak reported in April 1348. From Tunis, the plague spread eastwards into Libya, with that country now attacked by the plague from both east and west. In 1348, the ruler of Morocco attempted to conquer Tunis but failed, and his retreating army carried the disease back to Morocco, infecting Algeria along the way. The plague reached Marrakesh in central Morocco in 1349. It is possible that Morocco was also infected by traders from Spain, who brought the disease via the island of Majorca.

From Alexandria, the plague also spread south along the Nile valley, although it does not appear to have spread into other parts of Africa. It appears that settled areas with towns and agriculture provided the most suitable environment for black rats to thrive. The area to the south of Egypt and the Sahara was inhabited largely by nomadic tribes. Their lifestyle did not provide an environment suitable for the rats, so the plague did not spread into these parts of Africa.

DID YOU KNOW?

The spread of the plague to Scandinavia is believed to have occurred through a trading ship carrying wool from England. The ship was seen floating off the Norwegian coast and the locals rowed out to examine it. They found the crew dead and decided to take the cargo of bales of wool. Little did they know the bales were full of the deadly plague-carrying fleas.

on Resources

Interactivities

Permanent human settlement led to the growth of towns and expansion of trade. (int-4805)
The Black Death spread like a wave across Europe between 1348 and 1351. (int-4115)
The spread of the Black Death across the Middle East and North Africa (int-4114)

Explore more with myWorldHistoryAtlas

Deepen your understanding of this topic with related case studies and questions.

- **Black Death**

18.6 ACTIVITY

Using the internet and your library, find out all you can about the Silk Road, including the answer to the following questions.

1. Where did the Silk Road begin and end, and which regions or countries did it pass through?
2. When was the earliest recorded use of the Silk Road for trade?
3. What were the main goods traded along the Silk Road?
4. Why was the Silk Road so significant in spreading the plague?

HASS skills: Questioning and researching
History concept: Evidence

18.6 EXERCISE

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

Learning pathways

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

Check your understanding

1. Outline the areas of Europe, Asia and the Middle East that had become permanent human settlements by the fourteenth century.
2. Where did the Black Death first appear in the deadly form that eventually devastated Europe, the Middle East and North Africa?
3. Why was the city of Caffa important in the spread of the Black Death?
4. Why did the Black Death primarily affect settled communities rather than people living a nomadic existence?
5. What is a pandemic? Explain why it is appropriate to refer to the Black Death as a pandemic.

Apply your understanding

6. Examine **SOURCE 3**. Why were the cities of Constantinople, Alexandria, Venice and Genoa among the first to be infected after the siege of Caffa?
7. How did the Tartars in **SOURCE 2** spread disease into the city of Caffa?
8. Using **SOURCE 4**, identify when each of the following cities was infected by the Black Death: London Paris Hamburg Dublin Marseilles
9. Using **SOURCE 5**, identify three different routes by which the Black Death came to the Middle East and northern Africa.
10. One historian has suggested that without trade, the Black Death may never have happened. Explain whether or not you agree with this statement. Give evidence to support your opinion.

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

18.7 Responses to the Black Death

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- identify medieval treatments for the Black Death and they were not effective
- explain the religious responses to the Black Death in the Middle Ages.

18.7.1 Medical treatments

The strength and speed of the Black Death pandemic caught everyone in its path off guard. Medical science had no way of dealing with the outbreak and religious beliefs provided no protection against the onslaught.

Medieval doctors had no idea what had caused the Black Death and so they resorted to the traditional methods of treating illness. As mentioned in subtopic 18.5, bloodletting and the use of leeches were tried and failed to cure the disease. Attempts to cut into the buboes to remove the 'bad' blood often did little more than help spread the disease by exposing the doctors to the bacteria living in the blood.

A common belief was that disease came from **miasma**, or the bad smells that were often found in overcrowded towns. To counter this, doctors often encouraged their patients to sniff posies of fragrant flowers, bundles of herbs or sweet-smelling oils. In some cases, they even suggested that patients should breathe in the smell of human waste in the hope that one bad smell might overcome the more dangerous miasma.

Doctors themselves began dressing in long hooded robes to protect themselves from infection. They would also wear a face mask that had a long beak-like structure at the front. This beak would contain sweet smelling herbs or oils, designed to filter any evil smells that the doctor might be exposed to.

Some towns resorted to the 'cure of sound'. They would loudly ring the church bells, or fire off cannons, in the hope that the noise would frighten the plague and drive it away. In addition to prayer, spells and charms of all sorts were used in the hope of driving away the evil. These included washing the skin with vinegar and rose water, or applying a mixture of tree resin, white lily roots and dried human excrement to buboes that had been cut open.

SOURCE 1 A Welsh writer, who died in April 1349, described the buboes that appeared on the bodies of victims.

> It is of the form of an apple, like the head of an onion, a small boil that spares no-one. Great is its seething, like a burning cinder, a grievous thing of an ashy colour. It is an ugly eruption that comes with unseemly haste. It is a grievous ornament that breaks out in a rash. The early ornaments of black death.

SOURCE 2 Doctors attempted to treat the plague by draining the bad blood from the buboes in this fourteenth-century fresco.

miasma unpleasant smells or fumes thought to be the cause of disease in medieval times

DID YOU KNOW?

One plague prevention method involved the mixing of roasted and ground eggshells with the leaves and petals of marigold flowers, stirring this mixture with treacle into a pot of warmed ale and drinking twice a day. A similarly exotic remedy was to place a live hen near the swelling to draw out the disease and then drink a cup of your own urine twice a day.

Some effective treatments

The most successful measures taken to avoid the plague were those that involved forms of quarantine. In Venice, disease-carrying ships were quarantined on a number of small islands in the lagoon, away from the main city. In Milan, houses found to contain the plague were walled up to prevent anyone going in or out. These methods did not completely stop the disease, but both of these cities had lower death rates from the plague than many others. In the French city of Avignon, Pope Clement VI sat between two large fires designed to purify the air. The plague bacteria cannot survive intense heat, and fleas also dislike heat, so this method may well have been the most effective. For many people, simply fleeing an infected town or village was the best form of protection, although it was usually only the wealthy who could take advantage of this.

18.7.2 Religious responses

Followers of all religions saw the Black Death as a punishment from God. Christians, who believed they were being punished for their sins, turned to prayer and carried out pilgrimages to holy places in the hope of warding off the disease. When the plague hit Mecca in 1348, devout Muslims believed it was God's punishment for allowing non-believers to enter the city. In some places, religious authorities and town councils imposed tight restrictions on people's behaviour in the hope of keeping the plague at bay. In the French city of Tournai, men and women living together but who were not married were ordered to marry or to separate, and gambling, swearing and working on the Sabbath (a day of religious observance) were banned.

'Bring out your dead!'

So large was the death toll from the Black Death that all the usual religious rituals associated with death, such as confessing one's sins to a priest before death, could rarely be observed. As many as half the priests died from the plague and many others fled, making the situation worse. In 1348, Pope Clement VI decreed that those who were infected could make their confessions to each other, including to a woman, if no priest was

SOURCE 3 This illustration depicts Saint Sebastian interceding for victims of the plague.

SOURCE 4 In this fourteenth-century English engraving people are escaping from their village after setting the buildings on fire. The woman on the left appears to be performing the last rites for a plague-infected man.

available. Collection of corpses took place every night, with most buried in mass graves on the outskirts of the town. Very rarely was a proper funeral service held for those who had died.

Monks and monasteries

Throughout Catholic Europe, monasteries had become important centres of learning, and many had schools attached. The monks made an important contribution to the life of the surrounding community and were often the first ones that people would turn to in times of trouble. Because the monks saw it as their duty to tend to the sick, they quickly caught the disease and numbers in the monasteries were reduced. In the period after the Black Death, many inexperienced and poorly trained monks moved into the monasteries, reducing their influence as places of learning.

Blaming the Jews

Throughout Europe, people looked for someone to blame for their misfortune, and suspicion quickly fell on the Jews. They were suspected of having poisoned the air or of infecting the wells from which people drew their drinking water. In some towns Jews were tortured mercilessly until they confessed to poisoning the wells, whether they had or not. In other towns, Jews were herded into buildings that were then burned to the ground. Synagogues were destroyed and many Jews put to death. Despite Pope Clement issuing a decree declaring the Jews innocent, the persecution continued from 1348 until the early 1350s throughout most of Europe.

The Flagellants

One religious group that responded very publicly to the spread of the plague was a group known as the Flagellants. They believed that whipping themselves with steel-tipped whips would show their willingness to be punished for their sins, and win God's favour. The Flagellants are believed to have originated in the eleventh century and had undertaken pilgrimages across Europe in the 1260s. The onset of the Black Death drew many new followers to their brotherhood, and they travelled from town to town across

SOURCE 5 A medieval illustration showing a group of Jews being burnt at the stake. Jews were required to wear a yellow circle badge to identify themselves.

SOURCE 6 A procession of Flagellants in the Netherlands in 1349

Europe, whipping themselves until they bled. In reality, they were probably helping to spread the disease. Many of them carried the disease in their blood, and they often brought the disease-carrying rats and fleas with them as they travelled.

18.7 ACTIVITIES

1. Imagine that you are the mayor of a town that has just begun to be affected by the Black Death. Draw up an illustrated notice to advise the townspeople of measures they should take to treat plague symptoms. Base this advice on the beliefs held at the time.
HASS skills: Communicating and reflecting
History concept: Perspective
2. Using the internet and you library, find out all you can about the persecution of the Jews in medieval Europe, particulary during the time of the Black Death. In particular, search for answer to the following questions.
   a. Why were Jews treated as outsiders?
   b. What are some examples of restrictions that were placed on Jews in different countries?
   c. Name at least one other incident when Jews were deliberately targeted for persecution.
HASS skills: Questioning and researching

18.7 EXERCISE

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

Learning pathways

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

Check your understanding

1. What did many people in the Middle Ages believe to be the cause of disease?
2. Identify and explain three 'medical' treatments that were recommended for dealing with the plague.
3. Explain the purpose of the costume worn by doctors during the period of the Black Death.
4. Why would the actions taken by the pope probably have helped to protect him from the plague?
5. Use the information in **SOURCE 1** to write your own description of the buboes that were symptoms of the Black Death.

Apply your understanding

6. Examine **SOURCE 2**. Why was this activity potentially so dangerous for both the patient and the doctor?
7. What does **SOURCE 3** tell us about the importance of religion in medieval life? How did religious authorities respond to the threat of the plague?
8. Normally, the Catholic Church allowed only priests to administer the last rites to a dying person. Why would the woman in **SOURCE 4** have been permitted to carry out this role?
9. How do we know that the people being burned in **SOURCE 5** were Jews?
10. What were the Flagellants, as depicted in **SOURCE 6**, hoping to achieve through their activities?
11. In addition to the fire burning the village in **SOURCE 4**, there appears to be lightning coming from the sky above the village. Why do you think the artist included this lightning in the engraving?

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

18.8 How did the Black Death change society?

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- identify the impacts of the Black Death on Europe in the Middle Ages
- describe the ways society changed in the Middle Ages as a result of the Black Death.

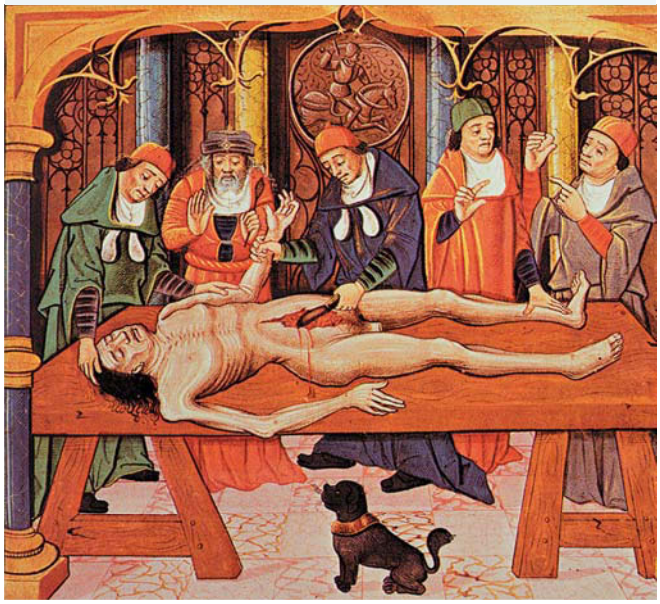
18.8.1 Social changes

Between 1347 and 1351, the Black Death had a brutal effect on life in Europe and the area surrounding the Mediterranean Sea. Despite all the devastation, there were also some positive changes in the following years, many of which occurred as a direct response to the horrors of the plague.

Changes to medicine

The failure of medieval medicine to successfully treat the victims of the plague led to changes in the practice of medicine in the years following the Black Death. Before this time, hospitals were places where sick people were sent to be isolated. When people entered a hospital, all their possessions were disposed of because no-one expected them to survive. During the period of the Black Death, doctors began to try to cure patients placed in hospital, and this practice continued after the plague had gone. Some hospitals began to develop relationships with universities and collect libraries of medical texts. An increased emphasis on medical knowledge led to more dissections of human corpses, and so improvements in the knowledge of anatomy and surgical practices soon followed.

SOURCE 1 As shown in this fifteenth-century illustration, the desire of doctors to find out more about the human body led to an increase in dissections, which improved knowledge of human anatomy.



Sanitation and public health

In a number of places, authorities became more aware of the need to take responsibility for the health of the population. In Italian cities such as Venice and Milan, public health boards were set up to deal with the plague, and these continued after the disease had moved on. These boards gradually gained extra powers and became a valuable means of preventing the spread of illness. In London, the city council brought in regulations to clean up the city. Laws to prevent littering, the employment of street sweepers and heavy fines for dumping waste in the river were all implemented in the years following the Black Death.

Religion

The devastation of the Black Death weakened the influence of the previously all-powerful Catholic Church. The inability of religious leaders to deal with the plague through prayer and the fact that so many priests had died of the disease led to many people losing some respect for the Church. In the 1360s and 1370s, an English **theologian** John Wycliffe wrote a number of works critical of the papacy and of the role of monasteries in society. He gained a strong following among people whose recent experiences had led them to question the power and influence of the Catholic Church in society. Many of Wycliffe's followers were executed for **heresy**.

theologian a person who is considered to be an expert in religious matters

heresy any religious opinion that differed from that of the Roman Catholic Church

Political unrest

The huge decline in the numbers of peasants and agricultural workers meant there were fewer people left to perform their tasks. This meant that peasants were able to demand higher wages. However, these demands were often resisted by those in power. Peasants and workers in various parts of Europe rose up to demand their rights in the years following the Black Death. In France in 1358, a group of workers called the Jacquerie rose up in revolt to try to improve their working conditions. In 1378 a group of workers in the wool industry, who were known as the *ciompi*, led a revolt in Florence where they managed to force some democratic government reforms for a brief time. In England, causes of the Peasants' Revolt of 1381 (see subtopic 17.18) can be traced back to the changes in society that resulted from the Black Death.

SOURCE 2 The Jacquerie uprising in 1358 was an attempt by French workers to improve their conditions.

Language

In England before the Black Death, most educated people spoke Latin or French. The death of large numbers of educated monks and other scholars meant that schools had to resort to English as the language of instruction. By the 1380s, poets such as Geoffrey Chaucer were publishing their works in what is now referred to as Middle English (see **SOURCE 3**). Chaucer is considered by many to be the father of English literature.

SOURCE 3 The decline in the use of Latin and French in England led to increased use of a form of English, such as in this extract of a poem by Chaucer.

And whom I sawgh he wolde never fine
To reden on this cursed book al night,
Al sodeinly three leves have I plight
Out of his book right as he redde, and eke
I with my fist so took him on the cheeke
That in oure fir he fil backward adown.
And up he sterte as dooth a wood leon
And with his fist he smoot me on the heed
That in the floor I lay as I were deed.
And whan he sawgh how stille that I lay,
He was agast, and wolde have fled his way,
Till atte laste out of my swough I braide:
"O hastou slain me, false thief?" I saide,
"And for my land thus hastou mordred me?
"Er I be deed, yit wol I kisse thee."

18.8 EXERCISE

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

Learning pathways

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

Check your understanding

1. How did the experience of the Black Death change the ways in which hospitals operated?
2. Describe an example of an action taken in London to improve sanitation and public health after the plague had moved on.
3. Why did many people begin to lose respect for the Church after the Black Death?
4. Which two languages were used by scholars and educated monks in England before the Black Death?
5. What was the result of the decline in the number of peasant and agricultural workers following the Black Death?
6. How did the decline in the number of peasant and agricultural workers after the Black Death give them the strength to challenge those in power?

Apply your understanding

7. a. Describe what is happening in **SOURCE 1**.
   b. List the differences in the way the activity in **SOURCE 1** is depicted compared with how it would be performed today.
8. a. What appears to be happening in **SOURCE 2** and why did this event take place?
   b. Where else did similar uprisings take place?
9. The extract from a poem by Chaucer in **SOURCE 3** is written in what we now call Middle English. Although it is a form of the language that is unfamiliar to us, it is still recognisable as English.
   a. Identify the words in the poem that are the same as modern English words.
   b. Identify the words that are similar to modern English words and give their equivalent.
   c. List any words that seem completely unrecognisable. Suggest possible meanings for these words based on the context.
   d. After analysing the language, summarise what you think this poem is about.
10. The *ciompi* in Italy managed to gain some 'democratic' reforms in the government of their city. Give an example of what you think might be a 'democratic' reform.

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

18.9 Weakening the feudal system

LEARNING INTENTION

By the end of this subtopic, you will be able to:
- describe the changes that led to the weakening of the feudal system
- explain the role that the Black Death had on changes in the social class structures.

18.9.1 Declining population and power shifts

The dominant form of social and economic organisation in Europe in the Middle Ages was the feudal system. The massive drop in population that occurred as a result of the Black Death was to change the relationship between landowners and those who worked the land. This change severely weakened the feudal system in the following decades.

Huge decline in population

It is estimated that approximately 25 million people died in Europe during the period of the Black Death. This represents a decline in the population of between thirty and fifty per cent in the years 1347 to 1351. The earlier outbreak in Hubei, China is said to have caused the death of 5 million, or 90 per cent of the population. Later outbreaks in China in 1353 to 1354 are believed to have killed almost two-thirds of the Chinese population. In the Middle East the effects seem to have been less devastating, although still very significant. It has been estimated that less than one-third of the population was killed by the plague across the Middle East, although some local areas suffered a higher death rate.

New power for the peasants

Under the feudal system, peasants had been tied to the land and were expected to work the land their families had worked for generations before. The sudden loss of millions of peasants across Europe left many estates with insufficient numbers to work the land. This led to some wealthy landowners offering increased payment to agricultural labourers in other areas to entice them to their estates. Peasants suddenly found they had bargaining power, and in some places wages doubled in the space of one year. At the same time, prices fell for many goods because the number of customers had declined so dramatically. The decrease in available farm workers led many land holders to move away from growing crops and to increase the keeping of livestock, such as sheep and cattle, as this required fewer farm workers.

SOURCE 1 As shown in this Italian fresco, increased wages led to a growth in markets and in the number of merchants offering goods for sale.

18.9.2 Changes in the social class structure

Under the traditional feudal system peasants had kept part of the crop as payment for their labour. By the end of the fourteenth century money wages became a more significant part of peasant earnings. This often meant that peasants and their families had money to spend on goods that had previously been available only to the wealthy. As the population began to recover, there was a gradual rise in the number of people becoming merchants and shopkeepers in response to this increase in demand.

SOURCE 2 A fifteenth-century woodcut showing an apothecary (a medieval pharmacy or chemist) with master and apprentice

Skilled trades open up

Before the Black Death most of the skilled craftsmen and tradesmen such as bakers, blacksmiths and stonemasons had entered their trades because of family connections. The huge death toll meant that many craftsmen had to look outside their own families for apprentices to train. This often led to the sons of peasants gaining access to a trade and the potential wealth and status this would bring.

DID YOU KNOW?

In some parts of Europe, kings and aristocrats were alarmed by the growth of the middle class and the increased wealth of some of the peasant class. They passed 'sumptuary laws', which regulated the type of clothing that peasants were allowed to wear. This was to prevent peasants from using their new-found wealth to begin dressing and behaving as if they were members of the upper classes.

Growth in the middle class

Previously, society had been made up primarily of a wealthy landowning upper class and a relatively poor peasant lower class. The increase in the number of people involved in business, crafts and trades brought about the growth of a **middle class**, particularly in some of the rapidly growing towns. Many historians believe the increasing importance of the middle class in some European countries occurred more quickly because of the Black Death.

middle class a class of people who traditionally fit in between a rich upper class and a working class. In medieval European society, this was the group in between the landowning aristocracy and the peasants or labourers who worked the land. They were usually small landowners or people involved in trade and commerce.

18.9.3 An opposing view

In recent years, some historians have suggested that the changes to the feudal system and growth of the middle class would have happened without the Black Death. They argue that the population was in decline before 1347 because of crop failures and famine. They also point out that the plague returned to Europe many times over the next three hundred years. Although these later incidents did not bring such a high death toll in as short a time, they did keep the population low. Some historians argue that the effects of the Black Death from 1347 to 1351 have been exaggerated in previous historical studies.

18.9 EXERCISE

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

Learning pathways

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

Check your understanding

1. What proportion of the population is estimated to have died during the Black Death in:
   a. Europe
   b. China
   c. the Middle East?
2. How did the decline in population open up opportunities for peasants who had previously been tied to one estate under the feudal system?
3. In what ways did farming practice change after the Black Death?
4. How did the decline in the number of peasant and agricultural workers give them the strength to challenge those in power?

Apply your understanding

5. How does the Black Death appear to have contributed to the development of markets, such as that shown in **SOURCE 1**? How would you describe the people at this market?
6. Examine **SOURCE 2**. Why did access to apprenticeships become possible for members of the peasant class after the Black Death? How do we know that the tradesman depicted has a prosperous business?
7. What do we mean when we refer to a 'middle class' in medieval society?
8. Give four examples of occupations that would have been carried out by middle class people during the Late Middle Ages.
9. From the information in this subtopic and from what you have learned about the Middle Ages this year, how important do you think the Black Death was in the weakening of the feudal system and the growth of the middle class in late medieval Europe?

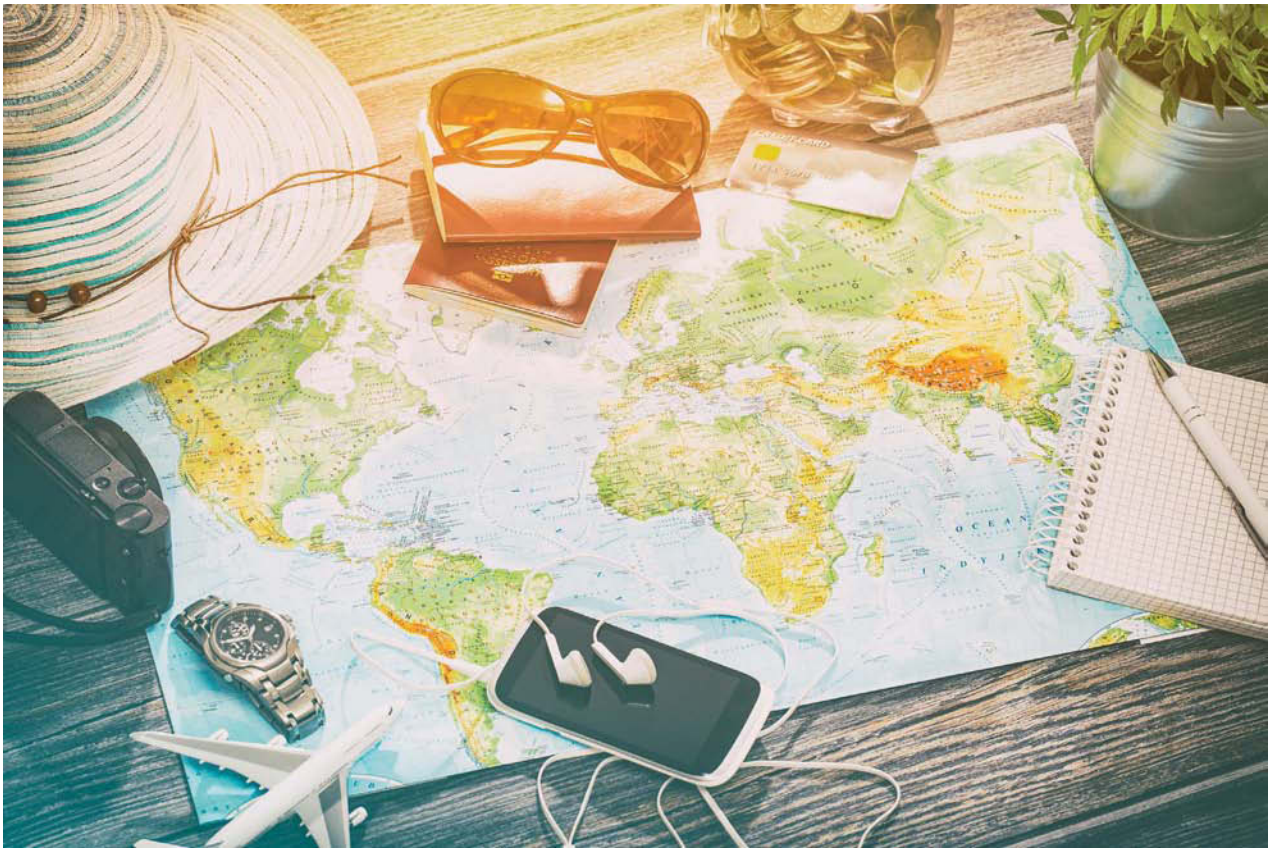
For sample responses to every question, go to www.jacplus.com.au.

18.10 Thinking Big research project: Black Death survival guide

Scenario

The Black Death was a plague pandemic that affected Asia, Europe and North Africa in the 14th century. The disease infected almost everyone who came into contact with it and resulted in a huge death toll and social, cultural and economic upheaval.

Imagine you had to travel to a region being affected by the Black Death. What would you like to know to increase your chances of survival?



Task

Your task is to investigate the social, economic and cultural impacts of the Black Death. At the end of the investigation you are to prepare a travel blog detailing how to survive the Black Death. You may present your findings as either a webpage or video.

Follow the steps detailed in the **Process** section to complete this task.

Process

- Click the **Start new project** button to enter the project due date and set up your project group. Working in pairs or small groups will enable you to share responsibility for the project. Save your settings and the project will be launched.
- In the **Media centre** you will find an assessment rubric to guide your work.

- To start your research, fill in the first two columns of the KWL chart.

K What I know	W What I want to know	L What I have learned

- In the Media centre you will find some weblinks that will provide a starting point for your research. Use these weblinks to help you answer the following questions.
  1. What was the Black Death? What were the features of this disease?
  2. When did the Black Death occur?
  3. How did the disease spread?
  4. What factors contributed to/exacerbated the spread of the Black Death (including hygiene, religious beliefs, living conditions and medical knowledge)?
  5. What were the short- and long-term impacts of the Black Death? You can use these sentence starters to help describe the impacts:
     - A consequence of the reduced population was …
     - The reduced number of labourers resulted in …
     - This had a long-term effect on …
     - One impact of medical ignorance was that …
     - A group in society that faced persecution was …
- Now that you are informed about the topic, you are to create a travel blog. Choose one location for your blog from within Asia, Europe or North Africa.
- You can present your blog as either a webpage or video. See some examples of each type in the Media centre under Weblinks.
- The purpose of your blog is to be a survival guide for anyone travelling to a region affected by the disease. Your blog should include the following information:
  - How to identify anyone suffering from the disease
  - How to avoid getting sick
  - How to treat the disease if they become infected
  - How the area they are travelling to will look during the time of the Black Death
  - The best places to stay and see during their visit
  - How the plague has affected the society, culture and economy of the destination.

- If you have chosen the video blog option, write up a script prior to filming. This will ensure that the recording process goes smoothly and all required information is included.
- Use appropriate images or diagrams to add interest to your work.

on Resources

ProjectsPLUS Thinking Big research project: Black Death survival guide (pro-0253)

18.11 Review

18.11.1 Key knowledge summary

18.2 How do we know about the Black Death?

- Writers and monks recorded written accounts of day-to-day events during the Black Death.
- Medieval church parishes kept written records of baptisms, marriages and deaths.
- Archaeological evidence that exists of the Black Death includes medieval villages that were abandoned by the small number of survivors that were living there.

18.3 What was the Black Death?

- The Black Death was a disease that devastated Europe, Asia and North Africa during the fourteenth century, particularly between 1347 and 1351.
- The Black Death was a combination of three related diseases – bubonic plague, pulmonary/pneumonic plague and septicaemic plague.
- A bacterium known by the scientific name of *Yersinia pestis* was understood to be the cause of the Black Death. These bacteria were transmitted by a number of different types of flea found living on the bodies of black rats.

18.4 Living conditions and medical science in the Middle Ages

- During the Middle Ages, people lived in overcrowded and filthy cities. This provided ideal conditions for the spread of disease.
- People did not live long in medieval times. Only a small minority lived to what we would now regard as old age.
- Medicine during the Middle Ages was based on superstition and ignorance.

18.5 Religious beliefs

- Many people during th Middle Ages were illiterate and therefore relied on priests for education and guidance.
- In Medieval Europe, medicine took second place to religion. Priests were considered more important than doctors.
- Most people believed that prayer was the most effective way of dealing with serious illness.

18.6 Trade and the spread of disease

- The growth of trade played an important part in the spread of disease. The Black Death was more easily able to spread between settlements along trade routes such as the Silk Road.
- It is believed that the Black Death first appeared in its deadly form in China and that it was carried there by the Mongols.
- The potential was always there for the Black Death to be carried to Europe, either by European traders returning from the east or by the Central Asian Tartar warriors (Mongols), who were continuing their attacks in eastern Europe.

18.7 Responses to the Black Death

- Medieval doctors had no idea what had caused the Black Death and so they resorted to the traditional methods of treating illness.
- Some people believed that the disease came from miasma (unpleasant smells or fumes), while others saw the Black Death as a punishment from God.

18.8 How did the Black Death change society?

- Following the Black Death and the failure of medieval medicine to treat the sick, there was a greater focus on medical research. An increased emphasis on medical knowledge led to more dissections of human corpses and improvements in surgical practices.
- The Black Death weakened the Catholic Church – many people lost faith and respect after so many people, including priests, had died from the plague.
- The death of so many educated monks and scholars meant that schools had to teach in English rather than Latin or French.

18.9 Weakening the feudal system

- A huge decline in the population following the Black Death meant that there were fewer peasants to work on the land. Some wealthy landowners started to offer increased wages and peasants found that they had bargaining power.
- The Black Death brought about a shift in the social class structure – peasants were being paid more and therefore had money to spend on goods. There was a gradual rise on the number of people becoming merchants and shopkeepers, which led to a growth in the middle class.

18.11.2 Key terms

chronicle a record of events as they happened, usually written by a person who was present at the time they occurred
dormant inactive or sleeping, with the potential to become active at any time
dysentery a severe, infectious bowel disease
endemic normally and regularly found in a particular location or environment
heresy any religious opinion that differed from that of the Roman Catholic Church
lymph nodes lumps of tissue that help the body fight infection; part of the immune system
miasma unpleasant smells or fumes thought to be the cause of disease in medieval times
middle class a class of people who traditionally fit in between a rich upper class and a working class. In medieval European society, this was the group in between the landowning aristocracy and the peasants or labourers who worked the land. They were usually small landowners or people involved in trade and commerce.
pandemic widespread across a large region
regurgitate to vomit, or bring up the contents of the stomach or throat
theologian a person who is considered to be an expert in religious matters

18.11.3 Reflection

Complete the following to reflect on your learning.

Revisit the inquiry question posed in the Overview:

The Black Death is believed to have killed between 25 and 200 million people. What caused this devastating event and how did the world react?

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 you view? If so, how?
2. Write a paragraph in response to the inquiry question, outlining your views.

18.11 Review exercise

Multiple choice

1. Which social group did the Black Death affect the most?
   - **A.** Lords
   - **B.** Peasants
   - **C.** Clergy
   - **D.** Knights
2. The Black Death was said to be how many diseases in one?
   - **A.** 2
   - **B.** 3
   - **C.** 4
   - **D.** 5
3. The Black Death can be transmitted by what insect?
   - **A.** Spiders
   - **B.** Flies
   - **C.** Fleas
   - **D.** Mosquitos
4. In the years before the outbreak of the plague, Europe experienced a 'mini ice age'. How did this contribute to the impact of the plague?
   - **A.** The plague bacterium thrived in the cold conditions.
   - **B.** The rats that were involved in spreading the plague thrived in the cold conditions.
   - **C.** People were weakened by having lived through the cold conditions.
   - **D.** The fleas that were involved in spreading the plague thrived in the cold conditions.
5. What social factor did *not* contribute to the impact of the Black Death?
   - **A.** Overcrowding
   - **B.** Poverty
   - **C.** Lack of hygiene
   - **D.** Strong economy
6. Why was it difficult for medical knowledge to improve in medieval Europe?
   - **A.** Very few people knew how to read and write.
   - **B.** People were too busy trying to survive to study medicine.
   - **C.** The Catholic Church discouraged the use of dead bodies for medical research.
   - **D.** People did not study dead bodies as they thought they would die from the disease that had killed the person.
7. The ancient Greeks believed the body was divided into four 'humours'. With what was each of these humours associated?
   - **A.** A season
   - **B.** An animal
   - **C.** A colour
   - **D.** An occupation
8. What is the name of the bacterium considered responsible for the Black Death pandemic?
   - **A.** *Yersinia pestis*
   - **B.** *Bacillus anthracis*
   - **C.** *Bacterium yersinius*
   - **D.** None of the above
9. What is the most likely explanation for how the plague made its way into Europe?
   - **A.** Traders
   - **B.** Pilgrims
   - **C.** Invading armies
   - **D.** Migrating birds

10. In which region is the Black Death thought to have originated?
    A. The Middle East
    B. Eastern Europe
    C. The Mediterranean
    D. Central Asia

Short answer

11. How did the Black Death get its name?
12. List the three related diseases that caused the Black Death.
13. Identify two aspects of medieval life that allowed disease to spread quickly.
14. What was one commonly used cure for liness in medieval times?.
15. Decribe one way in which religious beliefs restricted the development of medicine in Middle Ages.
16. Where did the first recorded outbreak of the Black Death occur?.
17. Why was the city of Caffa significant in the spread of the Black Death?
18. Describe one way the plague spread to the Middle East and North Africa.
19. Identify one method that was used to try to avoid the plague.
20. Why were many people buried without the usual religious observance?.

on Resources

eWorkbook
Customisable worksheets for this topic (ewbk-5581)
Reflection (ewbk-5580)
Crossword (ewbk-5578)
Student learning matrix (ewbk-5573)

Interactivities
Black Death timeline (int-6870)
Black Death word search (int-4117)
Black Death crossword (int-8238)

RESOURCE SUMMARY

on Resources

This is a summary of the digital resources you will find online for Topic 18 to help support your learning and deepen your understanding. When you see these icons next to an image or paragraph, go to learnON to access video eLessons, interactivities, weblinks and other support material for this topic.

18.1 Overview

Video eLesson
- The Black Death - a 14th century plague (eles-1831)

Interactivity
- A timeline of the Black Death in Asia, Europe and North Africa in the fourteenth century (int-4287)

18.2 How do we know about the Black Death?

eWorkbook
- The Black Death (ewbk-5579)

18.3 What was the Black Death?

eWorkbook
- What was the Black Death? (ewbk-5574)

18.4 Living conditions and medical science in the Middle Ages

Interactivity
- Medieval houses and towns were generally very unhealthy places to live. (int-4112)

18.6 Trade and the spread of disease

eWorkbook
- How did warfare and trade help the Black Death (ewbk-5575)

Interactivities
- Permanent human settlement led to the growth of towns and expansion of trade. (int-4805)
- The Black Death spread like a wave across Europe between 1348 and 1351. (int-4115)
- The spread of the Black Death across the Middle East and North Africa (int-4114)

myWorldHistoryAtlas
- **Black Death**

18.7 Response to the Black Death

eWorkbook
- Responses and treatment (ewbk-5576)

18.8 How did the Black Death change society?

eWorkbook
- The plague that changed the world (ewbk-5577)

18.10 Thinking Big research project: Black Death survival guide

ProjectsPLUS
- Thinking Big research project: Black Death survival guide (pro-0253)

18.11 Review

eWorkbook
- Reflection (ewbk-5580)
- Crossword (ewbk-5578)
- Student learning matrix (ewbk-5573)

Interactivities
- Black Death timeline (int-6870)
- Black Death word search (int-4117)
- Black Death crossword (int-8238)

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

GLOSSARY

abbess chief nun in a convent
abbey monastery or convent run by an abbot or abbess
abbot chief monk in a monastery
accurate correct and factual
accused the party in a criminal trial against whom an action has been brought
Act a law passed by Parliament
affiliations close connections with a group or organisation
allocate assigning resources to different uses within the economy
altitude height above sea level
aquifer a body of permeable rock below the Earth's surface that contains water, known as groundwater
archaeological concerning the study of past civilisations and cultures by examining the evidence left behind, such as graves, tools, weapons, buildings and pottery
archbishop head bishop
artefact an object made or changed by humans
artillery large mounted firearms such as the cannon
Australian Bureau of Statistics a government-owned agency that gathers and publishes a range of statistics to assist government, business and the community with decision-making
backwash the movement of water from a broken wave as it runs down a beach returning to the ocean
barges a long flat-bottomed boat used for transporting goods
belonging the feeling of being part of a group or community with shared values
beneficiaries the people who are entitled to the benefit of any trust arrangement
biased one-sided or prejudiced, seeing something from just one point of view
Bill a proposed law that has not yet been agreed to by Parliament or received royal assent
biological warfare method of warfare based on infecting the enemy with deadly disease
bishop clergyman who governs a diocese, a large church district
breach of contract a situation where a legally binding agreement is not honoured by one or more of the parties to the contract
budget estimates of all government income to be raised by taxes and other charges, and the planned spending of that income, within any given year
burden of proof the legal principle describing who has to prove a case in court. In a criminal trial, this burden is on the prosecution.
business any activity conducted by an individual or individuals to produce and sell goods and services to make a profit
Cabinet the main group of parliamentary members from the governing party
caliph in Islamic countries, the chief civil and religious ruler and a successor to the Prophet Mohammed
capital growth an increase in the value of shares or property over time
caravel a type of light, fast ship, used mainly by the Portuguese and Spanish between the fifteenth century and seventeenth century
cardinal leading clergyman who is a member of the Pope's Council, or Sacred College, and who has the power to elect the Pope from among his own group
catastrophe a disaster on a vast scale
cathedral main church of a diocese; contains the bishop's throne
Caucasus the region where Europe meets Asia between the Black Sea and the Caspian Sea
cause and effect the concept that every historical event will have a cause, and every event or action is likely to be the cause of subsequent effects or consequences; an event or action that leads to other events or actions
chronicle a record of events as they happened, usually written by a person who was present at the time they occurred
circumnavigate to sail around the world

cite give the details of
civil law the branch of law that protects people's rights and property
clergy officials of the Church
clockwork the inner workings of a mechanical clock or a machine that operates in a similar way
cloister a covered walkway surrounding a quadrangle
code of conduct a set of standards of behaviour that all participants are expected to follow
codified refers to laws that have been collected and organised, usually in written form
colony an area of a country that is ruled by a different country
common law law developed by judges through the decisions of courts
compass navigation instrument that shows the direction of north
compassion feeling empathy towards someone in a less fortunate position
competition the outcome of two or more businesses attempting to supply their products to the same group of customers
concentric having a common centre
conditions of employment the arrangements made between an employer and the employee in terms of work requirements and employee benefits
conscription a process by which people are required to join the armed forces, even if they do not wish to do so
constitution a set of rules that determines the structure of government and its law-making powers
contagion the spreading of disease
contiguous adjoining, where its parts are not separated by other states or oceans
contestability when particular interpretations of the past are open to debate
continuity and change the concept that while many changes occur over time, some things remain constant
convection currents a current created when a fluid is heated, making it less dense, and causing it to rise through surrounding fluid and to sink if it is cooled; a steady source of heat can start a continuous current flow
convent community of nuns
cooperative a business that is owned and operated by the group of people that it serves
corporation a business owned by shareholders
cost of living the level of prices paid by consumers for goods and services
country the area of land, river and sea that is the traditional land of each Aboriginal language group or community; the place where they live
criminal law the branch of law that judges whether someone has committed a crime, and punishes them if they are found guilty
crowdshipping a method of delivery where couriers are obtained from a large group of people, especially from online communities, and connected with customers
Crown the Queen's authority in the Australian parliament, represented by the Governor-General at the federal level and a Governor at the state level
Crusader during the Middle Ages, someone who took part in a Crusade, an armed expedition against those believed to be enemies of the Church
cultural relating to the ideas, customs and social behaviour of a society
curtain wall outer wall surrounding an inner wall in a castle
cuspate spits projections of a beach into an enclosed or semi-enclosed lagoon.
customary law rules for behaviour developed by and for Aboriginal and Torres Strait Islander peoples
dauphin name given to the oldest son of the French king
defamation unlawful damage to a person's good reputation through written or verbal statements
defendant the party in a civil trial against whom an action has been brought
democracy a form of government in which the people determine how they will be governed
democratic supporting democracy, or the system of government where supreme power is vested in the people and exercised directly by them or by their elected representatives under a free electoral system
demographics characteristics relating to population, especially age, gender, ethnicity, employment, income and education
denomination a separate branch of a religion. For example, Catholicism is a denomination of Christianity.
deposed removed from a position of authority

deposition the laying down of material carried by rivers, wind, ice and ocean currents or waves
describe to give details about features and characteristics of a person, place, thing or idea
destructive waves a large powerful storm wave that has a strong backwash
dhow a traditional Arab sailing vessel
direct action showing your disapproval or disagreement with the government and their policies by directly trying to influence their decisions and the views of the public, for example through protesting
discussions responses to a topic or question that present arguments for and against an idea, supported with evidence and examples
disposable income the amount of money that households have available for spending and saving after income taxes have been accounted for
dispute an argument
divergent plates a tectonic boundary where two plates are moving away from each other and new continental crust is forming from magma that rises to the Earth's surface between the two
dividends company profits paid to shareholders, either in cash or as more shares
doctrine a set of beliefs held and taught, usually by a religious group or political party
doctrine of Mahomet the religion of Islam; the Muslim faith, which follows the teachings of Mohammed
dormant inactive or sleeping, with the potential to become active at any time
downstream nearer the mouth of a river, or going in the same direction as the current
drainage basins an area of land that feeds a river with water; or the whole area of land drained by a river and its tributaries
Dreaming the time when the world and all its creatures were formed
Duke in England, a lord whose status placed him just below that of a prince; elsewhere in Europe, a ruler of a small state called a duchy or dukedom
dysentery a severe, infectious bowel disease
ecological footprint the amount of productive land needed on average by each person in a selected area for food, water, transport, housing and waste management
economic performance the measure of how well an economy is performing based on whether it is achieving its economic objectives
economic system a way of organising the production and distribution of the nation's goods, services and incomes
economics a social science (study of human behaviour) that analyses the decisions made by individuals, businesses and governments about how limited resources are used to satisfy society's unlimited needs and wants
economy a system established to determine what to produce, how to produce and to whom production will be distributed
ecosystems an interconnected community of plants, animals and other organisms that depend on each other and on the non-living things in their environment
edict order issued by a monarch or other person in authority
electorate an area of Australia that elects one member to parliament
employer the person or business that pays workers for the work they do
employer expectation what the employer expects to receive from employees in return for the money that they pay them
employment working in return for a wage or salary
endemic normally and regularly found in a particular location or environment
epicentre the point on the Earth's surface directly above the focus of an earthquake
erosion the wearing away and removal of soil and rock by natural elements, such as wind and water, and by human activity
escarpment a steep slope or long cliff formed by erosion or vertical movement of the Earth's crust along a fault line
estuary the wide part of a river at the place where it joins the sea
Eurocentric a point of view that has a strong European focus
evaluative based on assessing value

evidence information that indicates whether something is true or really happened; information that is used to show why a hypothesis, opinion or explanation is correct
explanation a response to a topic or question that outlines how and why something happens, and the relationships involved, and provides supporting evidence and examples
exploit use dishonestly to one's own advantage
exports goods or services that are produced in one country and sold in a different country; goods and services sold by local businesses to overseas consumers
facts information that is objectively true (not influenced by opinion or feelings)
faith religious belief and practice
fault an area on the Earth's surface that has a fracture, along which the rocks have been displaced
federation the process through which the six separate Australian colonies joined to form one united nation
feudalism social order in medieval Europe
fief a gift, usually land, given by a lord to a vassal (or tenant) in exchange for loyalty and service
financial institution any organisation that takes deposits from those with surplus funds, and makes those funds available to borrowers
floodplain an area of low-lying ground adjacent to a river, formed mainly of river sediments and subject to flooding
fly-in, fly-out (FIFO) a system in which workers fly to work, in places such as remote mines, and after a week or more fly back to their home elsewhere
focus the point where the sudden movement of an earthquake begins
foreign policy decisions made by governments concerning their relationships with other nations
franchise the situation where a business sells the rights to distribute its products under its name to other individuals or businesses
franchisee the individual or organisation that purchases a franchise
franchisor an individual or organisation that grants the right to use a franchise
franklin in the fourteenth century, one who was a landowner but not a member of the nobility
Franks people of a group of a Germanic nation who ruled in western Europe from the sixth century CE
Gaul most of present-day France and Belgium
geld a form of land tax
Generation Alpha people born from 2010 onwards
Generation X people born between 1965 and 1979
Generation Y people born between 1980 and 1994
Generation Z people born between 1995 and 2009
geographical factors reasons for spatial patterns, including patterns noticeable in the landscape, topography, climate and population
geothermal energy energy derived from the heat in the Earth's interior
glacier a large body of ice, formed by an accumulation of snow, which flows downhill under the pressure of its own weight
globalisation the process of interacting with markets in other countries around the world, as part of an integrated global economic system
groundwater water that seeps into soil and gaps in rocks
guild an association of people engaged in a particular trade or craft for the mutual benefit of its members
hard engineering a coastal management technique that involves using physical structures to control the effects of natural processes
heresy any religious opinion that differed from that of the Roman Catholic Church
heretic a Christian who holds views that conflict with official Church teachings
heritage everything that has come down to us from the past
Holocaust the destruction or loss of life on a large scale, usually referring to the death of 6 million Jews in Europe during WWII
Holy Land land in the Middle East that has significant importance for Christians, Muslims and Jews
holy relic the physical remains of someone or something very significant to a religious tradition
homage pledging duties and loyalty to someone of superior rank in the feudal system
homicide the killing of one person by another person

hotspot an area on the Earth's surface where the crust is quite thin, and volcanic activity can sometimes occur, even though it is not at a plate margin
household sector a term used by economists to refer to the total of all consumers in the economy
human resource management the process of managing the people who work within an organisation
human resources the people who work within an organisation
Hundred Years' War a series of campaigns and battles over territory between the English and the French, and between warring French princes
hypothesis (plural: **hypotheses**) a theory or possible explanation; an idea or explanation that is used as a starting point for deeper investigation or research
identify to recognise and name
idolatry worship of idols
illumination hand-painted illustration in a medieval book
imperial relating to an empire
import the process of bringing in goods and services from another country
imports goods and services purchased by local consumers from overseas businesses
industry the way that different parts of the economy are grouped; for example, manufacturing, mining etc.
inferential coming to a reasonable conclusion after piecing together evidence
inflation a general rise in prices across all sectors of the economy
infographic a visual way of presenting data and information with images and very little text
infrastructure the facilities, services and installations needed for a society to function, such as transportation and communications systems, water and power lines
inputs those things that contribute to the production process
interdependence the mutual dependence between participants in an economy; that is, the reliance of consumers, workers, businesses and governments on each other
interest a charge made for the use of money that has been deposited or borrowed
intermittent describes a stream that does not always flow
investment the direction of money into the purchase of equipment or premises for the establishment of a new business, or the expansion of an existing business
joust combat between two mounted knights using blunted lances
Judaism the religion of the Jewish people
jury in a criminal trial, a randomly selected group of people who decide the guilt or innocence of an accused person
keep innermost tower of a castle
khaghan title equivalent to emperor; 'Great Khan'
Khan title of rulers in Central Asia; 'king', 'chief'
khanate territory ruled by a khan
labour the human skills and effort required to produce goods and services
labour force people aged 15 and over who are able to work and are either employed or unemployed
labour market the availability and the ability of employees to work and for employers to hire them
lance a long wooden shaft with steel point used as a weapon by mounted knights
lancers mounted troops armed with lances (spear-like weapons used when charging)
land rights the rights of people (in this case Aboriginal and Torres Strait groups) to own the land their ancestors have lived on for generations
landslide a rapid movement of rocks, soil and vegetation down a slope, sometimes caused by an earthquake or by excessive rain
lateen sail a triangular sail rigged at 45 degrees to the mast of a boat or ship
Latin America the part of the Americas that was colonised by the Spanish and Portuguese
law of demand states that the quantity of a good or service demanded varies inversely to price
law of supply states that the quantity of a good or service supplied varies directly with price
laws the system of rules that Australia recognises as regulating the actions of its citizens, which it may enforce by the imposition of penalties and sanctions
legislation a law made by Parliament

leper person stricken with leprosy, a bacterial disease that causes ulceration of the skin, deformities and a loss of sensation
liable legally responsible for a civil wrong
limited liability where shareholders cannot lose more than their investment in the event of the failure of the business
liquefaction transformation of soil into a fluid, which occurs when vibrations created by an earthquake, or water pressure in a soil mass, cause the soil particles to lose contact with one another and become unstable; for this to happen, the spaces between soil particles must be saturated or near saturated
literal to be exact, without exaggerating or misleading
lithosphere the crust and upper mantle of the Earth
lobbying approaching members of parliament to argue a case for change in the law
longshore drift a process by which material is moved along a beach in the same direction as the prevailing wind
lord chief position in the feudal system below the monarch
lymph nodes lumps of tissue that help the body fight infection; part of the immune system
mace iron-headed club
magistrate a court official who hears cases in the lowest court in the legal system
manslaughter the accidental or unintentional killing of one person by another person
mantle the layer of the Earth between the crust and the core
mariner's astrolabe a medieval instrument used to navigate while sailing. It was used to find a ship's latitude by measuring the altitude of the Sun or a star.
maritime trade the trading of goods via sea
market the place where goods, services or resources are exchanged between buyers and sellers
market capitalist economy an economic system that relies on the market to allocate resources based on the actions of consumers and producers, and where resources are generally owned by private individuals and businesses
market equilibrium the point at which the demand and supply curves intersect
martyred killed or made to suffer because of religious beliefs
Mass Roman Catholic church service
meanders a winding curve or bend in a river
mercenary a soldier who fights for money rather than for patriotic reasons
miasma unpleasant smells or fumes thought to be the cause of disease in medieval times
middle class a social class between the privileged nobility and the poor peasants. It typically comprised merchants and wealthier craftspeople; a class of people who traditionally fit in between a rich upper class and a working class. In medieval European society, this was the group in between the landowning aristocracy and the peasants or labourers who worked the land. They were usually small landowners or people involved in trade and commerce.
migrants people who leave one country to reside in another; a person who leaves their own country to go and live in another
minimum wage the legally binding minimum that must be paid to any employee over the age of 21 years
moat water-filled defensive ditch surrounding a castle
monasteries where Christian monks lived
Moor a member of a north-west African Muslim people of mixed Berber and Arab descent
mortgage loan a loan advanced to allow a person to buy a house or other property, with the property itself as security for the loan. This means the bank or other lender can take possession of the property if the borrower fails to make the regular payments.
motte a mound upon which a castle was built
national identity the parts of a society that make people feel like they belong, such as shared values or sense of identity. Defining Australia's national identity is complicated and often debated because of our country's cultural diversity and history.
needs goods or services that consumers consider necessary to maintain their standard of living.
negligence a situation where a person breaches a duty to exercise reasonable care to avoid a foreseeable risk, resulting in another person being injured or suffering a risk of injury
New World a term used to describe the Americas

nomadic moving around from place to place
Normandy now a French province, in the Middle Ages it was a dukedom in northern France
nuisance interference with someone's enjoyment of public or private property
nun member of a closed community of women living under religious vows and rules
offshoring moving certain work processes to be performed overseas
opinion a point of view that may be subjective (based on personal feelings rather than fact) or objective
opportunity cost the next best alternative given up whenever a choice is made
Opposition the main political party in the lower house of parliament not in power
orb globe with a cross, symbolising a Christian monarch's rule
Orient a historical word for the East, particularly China
outsourcing contracting a person or people outside an organisation to perform certain work tasks (that previously might have been performed by workers within the organisation)
pagan someone who is not a Christian, Jew or Muslim, but who worships many gods
palisade tall fence made of pointed timber stakes driven into the ground
pandemic widespread across a large region
Pangaea the name given to all the landmass of the Earth before it split into Laurasia and Gondwana, which over time became the continents we know today
partnership a business owned and operated by two or more people
peninsula land jutting out into the sea
percentage mark-up a fixed percentage increase to the price paid by a business for goods, to determine the selling price of those goods
percolate of water, to filtrate through soil and rocks
perennial describes a stream that flows all year
permafrost a layer beneath the surface of the soil where the ground is permanently frozen
persecution oppression or punishment of a person or group of people, usually because of their religion
perspective a point of view, way of thinking, opinion or belief about an issue, event or thing; point of view or attitude
pestilence fatal epidemic disease
petition a formal request for change signed by many people
phalanx body of foot soldiers in close battle order
physical processes continuing and naturally occurring actions such as wind and rain
pictograph a graph that uses pictures to represent data
pike long spear-like weapon carried by foot soldiers
pilgrim one who travels to a sacred place to show devotion to his or her faith
pillage to steal or plunder using force, especially during war
plagiarise copy other people's work and present it as though it is your own work
plague fatal epidemic disease; usually used in reference to the bubonic plague
plaintiff the person who commences a legal action in civil law
plateau an extensive area of flat land that is higher than the land around it. Plateaus are sometimes referred to as tablelands.
Poll Tax a tax levied on every person, regardless of age, sex or income
population density the number of people living within one square kilometre of land; it identifies the intensity of land use or how crowded a place is
population distribution the pattern of where people live; population distribution is not even – cities that have high population densities and remote places such as deserts usually have low population densities
practitioner in a religious sense, someone who actively participates in a religion
precedent a legal principle developed by a court in the process of resolving a dispute
pre-empted to take ownership of something before someone else
prevailing wind the main direction from which the wind blows
price mechanism the interaction of the forces of demand and supply that determines the price of a good or service
primary industries the group involved in the production of raw materials; for example, farming, mining, forestry

primary production the production of crops, livestock or other basic materials that may then be used by other branches of industry
primary sources objects and documents that were created or written in the period of time that the historian is investigating; sources made at the time of the event
primary waves also known as P-waves; the first waves to hit an area during an earthquake, which cause a sudden jolt
privatise to sell a government-owned provider of goods or services to private investors
product development the creation of products with new or different characteristics that offer new or additional benefits to customers
profit what remains after all business expenses have been deducted from the money that has been collected from selling goods or services
prosecute to take legal action against another person for a criminal offence
qualitative information that provides characteristics and description
quantitative information that provides measurable figures
quaternary industries service industries involved in the processing and transfer of information and knowledge; for example, IT consultants, education services
questions issues or problems that are raised but not answered
quinary industries domestic service providers; for example, cleaning, childcare, home maintenance
reconciliation the process of restoring and encouraging respect for Aboriginal and Torres Strait Islander culture and identity
redundant a situation in which a job is no longer required to be performed by anyone; this may be as a result of the reorganisation of a business, the introduction of new technology or a decline in business sales or production
reeve a magistrate administering law in a village
referendum a process of allowing the people to vote on an important issue, such as a proposed change to the Constitution
regurgitate to vomit, or bring up the contents of the stomach or throat
relationships connections between events
reliable the information in the source is more accurate than other sources (you can rely on it more to be correct)
Renaissance meaning 'rebirth', it refers to the flowering of the arts and sciences in late medieval Italy and later in northwestern Europe
repeal to remove a law so that it no longer applies
resource allocation relates to decisions about how scarce resources are distributed among producers, and which types of goods and services will be produced to satisfy wants and needs
retrenching losing one's job as a result of the position being made redundant
rift zones a large area of the Earth in which plates of the Earth's crust are moving away from each other, forming an extensive system of fractures and faults
right an entitlement to be treated in a particular way. A legal right is a right that can be enforced by law.
river deltas a landform created by deposition of sediment that is carried by a river as the flow leaves its mouth and enters slower-moving or stagnant water. Can take three main shapes: fan shaped, arrow shaped and bird-foot shaped.
sacrament sacred Christian ceremony; in the Catholic Church, for example, baptism and marriage
saints people recognised by the Christian faith as having been very holy and who have performed miracles
scarcity the economic problem of having unlimited needs and wants, but limited resources to satisfy them
sceptre rod symbolising royal authority of the monarch
scurvy a painful and often fatal disease caused by lack of vitamin C
sea change movement of people from major cities to live near the coast to achieve a change of lifestyle
secondary industry the group involved in the processing of primary resources to manufacture other goods
secondary sources reconstructions of the past written or created by people living at a time after the period that the historian is studying; made after the time of the event, using primary sources as evidence
secondary waves also known as S-waves; the waves that arrive at an area after the P-waves, which cause a sustained up-and-down movement
sediment material carried by water

seismic waves waves of energy that travel through the Earth as a result of an earthquake, explosion or volcanic eruption
self-sufficient able to provide for its own needs
serfdom the position of peasants who were not free to leave the land they worked
sermon moral or religious lecture delivered by a priest
shamanism central Asian religion based on a belief in many gods in the natural world and the power of shamans (priests) to influence these gods
shareholders the part-owners of a corporation
shell middens Aboriginal and Torres Strait Islander archaeological sites where the debris associated with eating shellfish and similar foods has accumulated over time
significance the importance assigned to particular aspects of the past, for example, events, developments, movements and historical sites
soft engineering a coastal management technique where the natural environment is used to help reduce coastal erosion and river flooding
sole proprietorship a business that is owned and operated by one person
soluble able to be dissolved in water
spatial distribution the way things (e.g. population or land use) are spread across places
specialisation a method of production where a worker, business or nation focuses on the production of a limited range of goods or services in order to increase production and make the most efficient use of resources
stalactite a feature made of minerals, which forms from the ceiling of limestone caves, like an icicle. They are formed when water containing dissolved limestone drips from the roof of a cave, leaving a small amount of calcium carbonate behind.
stalagmite a feature made of minerals found on the floor of limestone caves. They are formed when water containing dissolved limestone deposits on the cave floor and builds up.
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)
standard of proof the level of proof required to establish a case. In criminal law, the prosecution must prove that the accused is guilty beyond reasonable doubt.
statute laws laws made by Parliament
steppe a vast plain without trees
sternpost rudder a heavy board hung from the centre of the back of a ship that makes it easier to steer
stirrup foot supports suspended from a saddle by straps
subjugate to subdue or conquer
superstition a belief based on custom or fear rather than knowledge or reason
supremacy having the highest power or authority
swash the movement of water in a wave as it breaks onto a beach
target market a group of customers with similar characteristics towards which a business has decided to aim its marketing efforts and its products
tariff a tax on goods imported from a foreign country
Tatars another name for Mongols
tectonic plate one of the slow-moving plates that make up the Earth's crust. Volcanoes and earthquakes often occur at the edges of plates.
terra nullius a Latin phrase that translates as 'land belonging to no-one'
tertiary industries the group involved in the provision of services to others; for example, doctors, accountants, retailers
thatch straw used for making roofs
theologian a person who is considered to be an expert in religious matters
three-field system where two fields were planted with different crops at different times of year, and a third field was left unplanted
tithe barn a barn where peasants' produce is stored as a form of taxation
trade the activity of buying, selling or exchanging goods and services between producers and consumers and/or countries

trade union an organisation of employees formed for mutual support, and to seek improvements in pay and working conditions for its members
transport the movement of eroded materials to a new location by elements such as wind and water
transportation the process of sending convicts to a penal colony
treaty a formal agreement between two or more countries
trebuchet heavy medieval siege machine that uses a sling to hurl large missiles
tree change movement of people from major cities to live near the forest to achieve a change of lifestyle
trend a pattern of change over time
trend line the direction in which something is developing, moving or changing
trespass a tort (civil wrong) involving direct and intentional interference with a person, or a person's land or goods
trust a business created to hold property or assets for the benefit of another person or a group of people
trustee a person or company that holds property or assets for the benefit of another.
unemployment benefits welfare payments by government to people who are unemployed and looking for work. Such payments in Australia are generally known as the Newstart Allowance.
unlimited liability where a business owner is personally responsible for all the debts of their business
urban relating to a city or town; the definition of an urban area varies from one country to another depending on population size and density
urbanisation the growth and expansion of urban areas
urban sprawl the spreading of urban areas into surrounding rural areas to accommodate an expanding population
useful related to your research
vassal state a state whose ruler acknowledges a foreign ruler as his overlord
vernacular everyday language spoken by a particular group or class
volcanic loam a volcanic soil composed mostly of basalt, which has developed a crumbly mixture
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
watershed an area or ridge of land that separates waters flowing to different rivers, basins or seas
weathering the breaking down of bare rock (mainly by water freezing and cooling as a result of temperature change) and the effects of climate
White Australia an immigration policy discriminating against non-white people that existed for much of the twentieth century
work human labour that can be paid or unpaid including voluntary labour
work–life balance a feeling of having an appropriate balance between working and non-working time and activities

INDEX

A

abbess 634, 665
abbeys 665
  definition 629
abbot 634, 666
Aboriginal and Torres Strait Islander peoples 135, 375, 477, 478–481
  regional distribution of 478
ACCI. *see* Australian Chamber of Commerce and Industry
accurate 14, 54
  information 14–24
accused 132, 143
acidic water 363
Act 125, 143
ACTU. *see* Australian Council of Trade Unions
Adelaide's Living Beaches 403
aerial photo, interpretation 324–330
affiliations 159, 167
Africa 540–542
  Great Rift Valley 454, 455
  muslim traders and 540–542
African civilisations 569
age 245, 641–644
  of faith 641–644
Age of Exploration 538
agreement 223
Alexandria 689
allocate 192
allocation 176–177
allocation and markets 176–177
altitude 437, 470
analysing 61, 61–62, 180
analysing evidence 516–517
ancient to modern world
  between c. 650 and 1750 540–542
  consequences of discoveries 580–582
  da Gama, Vasco 577–578
  different way of life 551–552
  emerging power of western Europe 570–572
  empires in Asia 560–562
  evidence 540–542
  invasions 560–562
  migrations 560–562
  people on move 543–546
  Portuguese 573–575
  religions on move 548–550
  Spanish voyages of discovery 573–575
and conducting survey 74–77
animation 420–421
  landforms 410–411
apprenticeships 646
aquifers 355, 386
Arab traders 567
archaeological 375, 386
archaeological evidence 673
archaeological sources 515, 540–541
archbishops 630, 665
archipelago 355
Arc, Joan of 657–659
argument paragraphs 53, 68–72
  developing 68–72
art as sources 533–535
  content 533
  work 533
artefacts 515, 534, 598–600
Artesian Range 380–381
artillery 624, 665
artwork 598
Asia
  empires in 560–562
  outbreak in 685
ASX. *see* Australian Securities Exchange
at Cape Person 399
Atheism 162
Australia 118, 329, 490
  climatic zones of 479
  court hierarchy 129
  drainage basins 370
  economic system 176
  environment 481
  first World Heritage Area 376
  foreign policy 149
  international migration on 493–498
  landform regions of 329
  landforms 366–370
  migrants 492
  moving population 499
  natural environment 118
  natural features of 330
  people on move in 498–502
  population density 477
  population distribution and density 295
  population growth 495
  reasons for immigration to 491
  types of law in 131
  United States and. *see* United States and Australia, urbanisation in 484
Australia Day 153–154
Australian Bureau of Statistics 218, 233
Australian Capital Territory parliaments 106
Australian Chamber of Commerce and Industry (ACCI) 118, 119
Australian Conservation Foundation (ACF) 116
Australian Constitution 84
Australian Consumer Law 222, 225
Australian context 375–376
Australian Council of Trade Unions (ACTU) 119
Australian court system 130
Australian democracy 93
Australian economy 194, 199
Australian landforms 366–370, 385
Australian legal system 60
Australian national identity 147
  aspects of 148
  diversity in 149–150
  indigenous influences on 151–154
  migrant experience 156–157
  mother country 149
  religion in. *see* religion, in Australia
  traditional and changing views of 148
Australian parliament 104
Australian Securities Exchange (ASX) 202, 239
Australians live 475–481
  Aboriginal and Torres Strait Islander peoples 477, 478–481
Australian society, influence of religion on 163–164
  and law 163
  religious values 163
Australian Wildlife Conservancy (AWC) 381
Avars 546

B

backwash 394, 422
bait advertising 223
balance of probabilities 133
Balkans 557
bandwagon effect 109
'barbarian' invasions
  impact of 601–603
barbarians 543, 601
barges 418, 422

basic choropleth map 343
reading and describing 343–347
Bayeux Tapestry 597, 598
Bedouins 546
belonging 167
definition 156
beneficiaries 242, 255
'beyond reasonable doubt' 132
biased 516, 534
bill 125, 143
biological warfare 648, 665
bird flu 670
bird-foot delta 416
bishops 630, 665
church 633–634
Black Death 19, 48, 523, 524, 648, 670, 674–675, 675
Asia 671
change society 694–697
effects of 649–650
feudal system, weakening 697–700
Middle East and North Africa 689
religious beliefs 681–683
responses to 690–694
survival guide 700–702
written sources and contemporary art 672–673
blueberries
demand curve for 205
market equilibrium for 207
supply curve for 206
Blue Mountains 439
BosNYWash 489
brainstorm 8, 9, 10
ideas 9
research everything in 10
Brazil, population density in 343
breach of contract 133, 143
Britain 582
British colonisation 154
British in North America 581
British Westminster system 149
brush-on eyelash extensions 236
bubonic plague 675
Buddhism 161
budgets 218, 233
Bulgarian Empire 549
bullying 90–91
bullying and harassment 90–91
burden of proof 132, 143
business decisions
business ownership 237
corporation 239–241
opportunities for 245–247
own or operate 241
partnership 238
sole proprietorship 237–238
businesses 13, 22, 192, 194
concepts in 173, 192
economic questions for 211–214
evidence-based conclusions 35
interpreting and explaining graphs 183–185
skills in 181
business idea 253–255
business ownership
best form of 243–245
structures of 237
business pitch 189–191
business sector 195
buyers and sellers 195
by legislation 60
and responsibilities 60
Byzantine and Persian empires 544
Byzantine Empire 552, 557, 601, 660
Joan of Arc 657–659

C

Cabinet 125, 143
Caffa
siege of 685–686
spread of Black Death 686–687
caliphs 635, 665
Cape Peron 399–401
capital growth 202, 233
caravel 572, 589
cardinals 630, 665
career lengths 271–272
caring professions 275
castles 627–630
attacking 628–629
building 627–628
under siege 628
catastrophe 649, 665
catchment 412, 418
cathedral 633–634, 665
Caucasus 546, 589
cause and effect 31, 31–32, 54, 518–519, 534
Central Europe 557
change 32, 295, 517–518
change features 391
changing work environment
Google 285
influences on 260–264
significance of technology 265–267
workforce 268–275
work–life balance and 284
world of 259
Charlemagne, King of the Franks 610–611
Charles the Great 601
charts 32–37
children 616
China 543
people on move in 503–505
rural–urban migration 504–505
urban population 503–504
Chinese characters 150
Chinese empire 560
Christianity 548, 641
early medieval 604–608
Islam and 641
nations emerge through 661
rulers adopted 661
spreading 548–549
spreading in early Middle Ages 608–610
Christianity and Islam 641
chronicles 672, 702
Church 608, 630–634
authority of 630
parish church and cathedral 633–634
ciompi 696
circumnavigated 575, 589
cite 20, 54
cities and trade 551–552, 564–565
citizenship 13, 20
civics 13, 20
civics and citizenship 59–61
concepts in 59–61
evidence-based conclusions 35
civilisations
African 569
under attack 543–544
civil law 61, 81, 132–133
criminal law vs. 131
civil rights movements 153
clash of empires 580–582
clergy 611, 665
clockwork 572, 589
cloister 631, 665
closed communities 634–636
closed questions 76
cluster maps 38
coastal 394
environments 407–408
erosion 394–397
landscapes 393
urbanisation 484
coastal erosion 394–397
river 413–416
code of conduct 120
codified 143
definition 136
colonies 570
colony 589
Columbian Exchange 582
Columbus 573–575
column graphs 38
features of 38

Combination Acts 93
comment 533–535
commerce 86
common law 128, 129, 143
Commonwealth Government 116
Commonwealth law 85
Commonwealth Parliament 105
communicating 7, 62, 180
Communist Party 93
compass 572, 589
compassion 163, 167
competition 246, 255
compound bar graphs 339, 339–340
  creating and reading 339–343
  useful 339–340
concentric 665
concentric curtain walls 624
concepts 351
conditions of employment 262, 286
confident eye contact 73
connections 4
  translating information 36–39
conscription 101, 121
constitution 85, 120, 163, 167, 661, 665
constitutional right 95
construction material 397
constructive waves 394, 397
Consumer Affairs Office 225
consumer demand 271
Consumer law 223
consumers 194, 195, 226
  safe 227–230
contagion 649, 665
contemporary art 672–673
contestability 517, 523, 534
context 533
contiguous 562, 589
continental plates 426–428
continuity and change 517–518, 534
contour lines 306, 308
  interval 308
  on map 306–309
  useful 306
contract 223
contraction in demand 207
contributions 601–603
conurbations 489
convection currents 426, 470
convent 665
convents 634–637
convergent plates 427
converging plates 470
cooperative 241, 255
  benefit of 241
coral polyp 374
coral reefs 374
corporation 239–241, 255
  advantages and disadvantages 239–245
  definition 237
cost—benefit analysis 185–187, 186
  cost-benefit analysis 185
cost of living 200, 233
country 477, 508
crimes 132
criminal law 61, 81, 131–132, 222
  civil law vs.civil 133–134
  indictable offences 132
  summary offences 132
cross-section 317
  complete 317–323
  working with 317
crowdshipping 251, 255
crowdsourced delivery 251
Crown 125, 143
Crusaders 638, 665
crusades 638–640
  more 640
cultural 470
cultural or spiritual significance 51
cultures 438–439
curtain wall 665
cuspate spits 399, 422
customary law 61, 81, 135–136, 143
  and Australian law 138
  customary punishment 138
  dispute resolution 136
  Dreaming 135
  Dreaming stories 136
  in indigenous communities 135–140
  recording 136
customary punishment 138
customer service 251

D

da Gama, Vasco 577–578
  second voyage 578
  spice trade for Portugal 577–578
daily life, in religion 163
danse macabre 648, 672, 673
Dark Ages 540, 601
dauphin 657, 665
deceptive conduct 223
deconstruct–reconstruct method 65–68
defamation 91, 132, 143
defendant 133, 143
defiance of law 101
definition 31
deforestation, landscape 296
Delhi Sultanate 560
delta 416
demand 205–206
  changes in 207–208, 208
  shift in 208
democracy 59, 81, 92–98, 93, 120, 514
  Australia 93
  benefits of living in 92–98
democratic rights 89, 95
democratic values 59
demographics 245–246, 255
  age 245
  gender 245
  income 246
demonstrations 99–100, 101
denomination 159, 167
deposed 601, 665
deposition 357, 367, 386, 391, 422
depositional landforms 394
describe 55
destructive waves 394, 422
dhows 568, 589
Diaz 573–575, 577
digital technologies 264
direct action 81, 98–102, 99–101
  demonstrations 99–100
  effectiveness of 101–104
direct action 61
discoveries, consequences of 580–582
  clash of empires 580–582
discussions 52, 54
disposable income 214, 233
dispute 131, 143
dispute resolution 136
dissent in democracy 98–102
  and taking direct action 99–101
  expressing dissent 98
  protests against offshore detention 98–99
  right to disagree 98
District Court 129
divergent plates 427, 470
diverse culture 147
diversity in Australia 149–150
dividends 202, 233
doctors 682–683
doctrine of Mahomet 542, 589
doctrines 159, 167
dome mountains 430–431
Domesday Book 598, 614
dormant 675, 702
downstream 415, 422
drainage basins 368, 386, 412, 418
  Mississippi 415
dramatic rural–urban migration 502
drawing conclusions 39–44
Dreaming 135, 158, 167
  stories 136
Dreaming stories 439
Duke 621, 665

dune revegetation 402
Dutch East India Company 581
Dutch Empire 581
dysentery 678, 702

E

early medieval Christianity 604–608
  manor for men, women and children 614–616
  monks and monasteries 604–608
  power of Pope 604
early Middle Ages 544, 549
  spreading Christianity in 608–610
earthquakes 443–444, 443–451, 451
  damage in Christchurch 446
  epicentre 445
  feature article 467–469
  impacts of 449–451
  measuring 444
  Nepal 444–445
  New Zealand 445
East Asia 560
  and South Asia 561–562
Eastern Europe 558
ecological footprint 487, 508
e-commerce 265
economic effects 498
economic indicators 179
economic management 217–218, 222
economic performance 179, 192
economic resources 174
economics 13, 22, 192
  and business 173–179
  concepts in 173, 192
  definition 172
  evidence-based conclusions 35
  interpreting and explaining graphs 183–185
  skills in 181, 193–194
  world of 173
economic system 176, 192
economy 192
  definition 172
  health of 261–262
ecosystems 418, 422
edicts 630, 665
education 229, 277–278
  and health 608
effectiveness 101–104
elections 105
  Commonwealth Parliament 105
  state or territory parliament 106
electoral system 104–106
electorates 105, 111, 120
empathy 519–521
empires in Asia 560–562
employee and employer groups 116–119
employee relations 218
employees 263
employer 286
employer expectation 259, 286
employer groups 116–119
employers 260, 263
employment 259, 268, 286
  by industry 283
endemic 675, 702
Enlightenment 571
entrepreneurs 237
environment 298
environmental groups 115–119
environmental laws 219
epicentre 444, 445, 470
equilibrium price 184
equilibrium quantity 184
erosion 357, 386, 391, 392, 422
erosion mountains 431
eruptions, volcanoes 457, 462–466, 464
escarpments 381, 386
estuary 416, 422
ethical protocols 20
Eurocentric 150, 167
Europe
  Black Death spread 687
  High Middle Ages in 677, 678
  society in 613
Europe, changing map of 557–558
evaluating 7, 62, 180
evaluative
  definition 12
evidence 20, 54, 516–517, 534
  archaeological. *see* archaeological evidence
  medieval Europe 598–600
evidence-based conclusion 40
executive law 125
explanations 52, 54
explanations: 54
exploit 661, 665
export 197, 233
exports 179
expressing dissent 98
express rights 85–90
extended responses 52

F

Facebook 107
facts 21, 54
Fair Trading 225
fair transactions 222
Faith 641, 665
fall of Rome 601
family's identity 165–166
fault-block mountains 429
faults 366, 427, 470
features 395–397
federal parliament 110
federation 149, 167
fertile soils 462–466
festival of lost trades 661–662
fetch 394
feudalism 518, 519, 610, 613, 665
  modern world and 661
feudal kingdom 611–614
feudal system 610–614, 650
  Charlemagne, King of the Franks 610–611
feudal system, weakening 697–700
fief 645, 665
financial institution 196, 233
financial markets 201
  working of 201–202
finders keepers 128–129
  bracelet found at airport 129
  gold found 128
  private property, money found buried on 128
fire blight 219
First Crusade 638–640
Flagellants 693–694
flea 675
floodplains 367, 416, 422
floods 418
flour and mills 617
fly-in, fly-out (FIFO) 501–502, 508
  accommodation for 500
focus 444, 470
fold mountains 429
foreign policy 149, 167
foreign policy, in Australia 149
formal agreement 262
formal submission 77
formal written partnership agreement 238
formation 426–428
for work 300–301
  thematic maps 331–334
  useful 344–345
  using latitude and longitude 309–313
Foundation Day 153
France 582
franchise 241, 242–243, 255
franchisee 242, 255
franchisor 242, 255
Franklin 598, 665
Franks 603, 608, 610–611, 665
  heritage of 660–661
freedom of assembly 94
freedom of association 93
freedom of conscience 96–99
freedom of movement 61, 84, 95
  process 104–109

freedom of religion 86, 96
freedom of speech 26, 28, 30, 89–96
  importance 89
  limits on 90–92
  restricted 25
freedoms 84–87
  other democratic 89–96
  protection 84–87
Fremantle Markets 183
French in North America 581
French Revolution 571
Frontier 498
full-time and part-time participation rates 270

G

Galen 682
GameZone 247–249
Gaul 544, 589
gazetteer index 311, 313
geld 611, 665
gender 245
gender segregation 278
Generation Alpha 271, 286
Generation X 271, 286
Generation Y 271, 286
Generation Z 271, 286
geographical factors 476, 508
geography 13, 24, 293–300
  aerial photo, interpretation 324–330
  basic choropleth map 343
  careers on move 301
  comparing population profiles 336–339
  compound bar graphs 339–343
  concepts 293–300
  evidence-based conclusions 35
geothermal energy 462, 466, 470
Germanic peoples 544, 544–546
Ghana 569
Gippsland Lakes 410
glaciers 355, 386
globalisation 259, 286
  impact of 262–263, 263
good business pitch 190
goods and services 195, 199, 201
  prices paid for 211
  provision of 218–219
Google work environment 285
gorges 426
government 194
government involvement in market 216–220, 232
  economic management 217–218
  immigration policies 220
  international trade policies 219–220
  planning and environment 219
  role of 216
  wages and employee relations 218
  welfare 216
government regulators 227–228, 228–230, 229
  general market monitoring 228
  safe practices 228–229
  safety problems and enforcing standards 229–230
government sector 196–197
Governor-General in Council Regulations 125
Governor in Council Regulations 125
graphs 32–37, 38
Great Dividing Range 366
Great Mosque of Cordoba 541
Great Rift Valley 454
Great Western Plateau 368
groundwater 413, 422
groups 115–119
guilds 646, 665
Gupta Empire 543

H

Han dynasty 543
harassment 90–91
hard engineering 401, 422
hard management techniques 403
Harvard referencing 20
HASS 6, 23
  analysing 6
  cause and effect relationships in 32
  key concepts in 2–4
  questioning and researching 6
  relevant information 15–17
  skills in 5–8
  tasks and exercises 23
hate speech 90–92
health 608
Heartland 498
herbal medicines 679
heresy 542, 589, 696, 702
heretics 638, 665
heritage 514, 534
Himalayas 436
  formation 432
Hindu immigrants 66
Hinduism 66, 161–162
Hippocrates 682
Hippodrome 544
historian 513
historical significance 521–522
history 13, 24
  and democracy 514
  cause and effect 518–519
  concepts in 513
  contestability 523
  continuity and change 517–518
  empathy 519–521
  evidence 516–517
  interpretation 527–533
  knowledge of 514
  perspective 519, 524
  present and future 514
  skills in 523–524
  sources 515
  value of 514
  work and leisure 514
Holocaust 160, 167
Holy Land 557, 589, 640, 665
holy relics 608, 665
homage 610, 665
homelessness 490–491
homicide 131, 143
horizons 360
hotspots 366, 386, 427, 470
  volcano 455
Hougoumont 160
household sector 195, 233
House of Representatives 113
human civilisation 514
human resource management 272–274, 286
human resources 272, 286
Human Rights Act 64
human settlement in fourteenth century 684
humours 679
Hundred Years War 652, 665
Huns 544–545
hunter-gatherers 376, 386
Hunter River Valley 368
Hwang Jang Yop 27
hygiene 678
hypothesis 12, 54, 517, 527, 534

I

ice, landscapes formed by 419–420
identify 8, 54
idolatry 542, 589
illuminations 598, 665
immigration 160–162
immigration policies 220
Immigration Restriction Act of 1901 149
imperial 528, 534
imported 197
imports 192, 233
  definition 179
income 246
incorporation 239
India 543
indictable offences 132

indigenous 477
culture and identity 153
influences on Australian national identity 151–154
individual voters 111
Industrial Revolution 482
industries 259
industry 286
inequality 555
inferential 54
definition 12
inflation 218, 233
infographics 37, 54
information 39, 40
reflecting 55–56
information 40
infrastructure 233
definition 217
provision of 217
in local community 110–115
inputs 213, 233
inquiry questions for research 63–64
interconnection 294
interdependence 179, 192
interest 201, 233
intermittent 413, 422
international migration
effects 496–498
on Australia 493–498
International Organisation for Standardisation (ISO) 228
international trade 197
policies 219–220
internet 274
interpretations in history 527–533
interstate trade 86
invaders and migrations 544–546
celts 545
Germanic peoples 544
Huns 544–545
Saxons, Angles and Jutes 545–546
Invasion Day 154
invasions 560–562
inventions, use of 571–572
investment 233
Ireland 584
Islam 161
spread of 635
Islam's spread 548

J

Jökulsárlón Glacier Lagoon 408
Japanese tsunami 447
Jerusalem 585, 638
Jews blaming 693
Jin and Xia dynasties 561
Joan of Arc 657–659
jousts 621, 665
Judaism 160, 546, 589
jury 85, 120, 132, 143
justice 60, 222

K

Kakadu 376, 397–401
and resources 378
depositional coastal landforms 397–401
formed by ice 419–420
karst 362–363
formation 363
landscapes 364, 383–385
keep 628, 665
khaghan 561, 589
Khan 561, 589
khanates 562, 589
Khazars 546
knight 619–623
warrior on horseback 619–621

L

labour 195, 233
labour force 259, 286
participation rates 269
labour markets 200, 220, 260, 286
lance 621, 665
lancers 561, 589
landform regions of 329
landforms 303, 410–411
Australia 366–370, 368
coastal 410–411
volcanic 460
world 352
Landforms 303
landforms by 395–397
land rights 153, 167
landscapes
cultural significance of 375–378
formed by water 391
karst 362–363, 383–385
preserving and managing 380–381
shape 357–360
soil 358–359
types of 353, 385
underground 362–364, 385
Western Australia 373–374
world 352, 354
worn 357
landslide 470
language 697
lateen sails 572, 589
Latin America 582, 589
law
and justice 222
religion and 163
law-making process 125
law of demand 205, 233
law of supply 206, 233
laws 83, 120, 124
civil 131–134
courts make 128–129
criminal 131–134
customary. *see* customary law
executive 125
parliaments make 125
protection 84
lay-by agreements 224
learning 551–552
literacy and 552
legal protection of consumer rights 222–226
fair transactions 222
law and justice 222
legislation 87, 120, 125, 143
rights protected by 87–89
lepers 649, 665
liable 132, 143
life expectancy 678
limestone stacks 410
limited liability 239, 255
linear scale 313
line graph 38
elements of 28
features of 35, 38
liquefaction 451, 470
literacy 552
literal 54
definition 11
lithosphere 428, 470
living standards 179
lobby groups 115–119
lobbying 115, 120
local community, members of parliament in 110–115
location 246
longshore drift 399, 403, 422
lord 665
lords 611
loyalty programs 251
luxury motor vehicles 214
lymph nodes 675, 702

M

maces 621, 665
Magellan 575
magistrate 132, 143
magnitude 444
Magyars 546
making choices 175–176
Malacca 581
Mali 569
management strategies 406

managing 401–406
mandatory standards 228
manslaughter 131, 143
mantle 357, 386
manual labour 266
manufacturing process 266
mariner's astrolabe 565, 589
maritime trade 528, 534
market 192
  opportunities in 249–251
market capitalist economy 192
  Australia 177
market equilibrium 233
  definition 207
market forces 211
markets 195, 199
  Australian economy 194
  definition 176
  economic questions for business 211–214
  government involvement in 216–220, 232
  legal protection of consumer rights 222–226
  monitoring 228
  operate 199–203, 232
  price 205–209
  types of 199–203
market system
  important role in 196
  international trade 197
  participants in 195, 232
martyred 604, 665
mass 630, 665
meanders 416, 422
medical knowledge 608
medical science 673
  religion and 681–683
medical science in Middle Ages 678–679
medical treatments 690–691
medieval cities
  living conditions in 677
medieval Europe 636
  age of faith 641–644
  castles 627–630
  Church 630–634
  Crusades 638–640
  evidence 598–600
  feudal system 610–614
  knight 619–623
  major events in 596
  medieval warfare 624–627
  miller and watermill 617–618
  monasteries and convents 634–637
medieval treatments, for Black Death 647–648, 649
medieval warfare 624–627
Mediterranean Sea 689, 694
members of parliament 109–114
  in local community 110–115
  role 109–114
men 616
mercenary 556, 589
meridians of longitude 309
miasma 690, 702
Middle Ages 512, 595
  living conditions in 677
  manor in 613
  medical science in 678
middle class 644, 665, 700, 702
  growth 700
Middle East, Black Death 689
migrants 167, 493, 508
  experience 156–157
  identity 156–157
  in Australia 497
  types of 496
migrants
  definition 156
migrants 156
migrations 338, 560–562
miller 617–618
Ming dynasty 561
minimum wage 200, 233
Mississippi River 418, 418–420
  and Tributaries Project 418
  floods 418
  moving water 413
  river management 418–419
  river systems and features 413–416
moat 628, 665
Modern day Australia 514
modern technology 260
modern world 661
monasteries 549, 589, 693
  and convents 634–637
monastic orders 636–637
  peasants revolt 652–657
  towns and trades 644–646
money functions 201
Mongol Empire 561–562, 562
  collapse of 562
Mongolian Yuan dynasty 561
Mongols conquer 561
  in East Asia and South Asia 561–562
  in eastern Europe and western Asia 562
monks 693
  spread Europe 672
Moors 643, 666
morte bleue 674
mortgage loan 196, 233
mother country 149
motte 628, 666
mountains
  altitude on 437
  Blue Mountains 439
  climate and weather 437
  continental plates 426–428
  cultures 438–439
  dome mountains 430–431
  earthquakes. *see* earthquakes
  fault-block mountains 429
  fold mountains 429
  landscapes in Dreaming 439
  people use 438–439
  plateau mountains 431
  sacred and special places 440–441
  skills to survive 441
  tsunamis 443–451
  types of 428–431
  volcanic mountains 452–457
  world's mountains and ranges 435–437
Mount Taranaki 456, 458
Mughal dynasty 562
multicultural Australia 505–510
multicultural identity 148, 156
Murray-Darling Basin region 369
Muslims 161, 548

N

Nagasaki harbour in 1640 586
National Disability Insurance Scheme (NDIS) 216
national identity 81, 147
  Australia. *see* Australian national identity
  definition 61
  influenced 148
natural environment 118
natural processes 357
needs 192
  limited 192
negligence 132, 133, 143
Nepal earthquake 444–445
Newcastle–Wollongong conurbation 490
new product development 249
new social system 551
New World 528, 534, 575, 589
New Zealand earthquake 445
Ngilgi cave formations 353
Ningaloo Reef 373–374
  wildlife of 374
nomadic 543, 589
nomadic groups 684
Normandy 621, 666
Norse (or Vikings) 546

North Africa
Black Death 689, 689–690
North America
British in 581
French in 581
Northern Australian drainage basins 371
North Korean citizens were required to mourn 27
North Korean defectors 27
notes 19, 65
types of information in 24
nuisance 132, 143
nun 630, 666

O

oblique aerial photos 324
obscenity 91–92
Occupational Health and Safety laws 218
offensive language 91
offshoring 261, 263, 286
Old English 546
online formats 76
online job boards 200
online retailing 199
online shopping 199, 200
open questions 76
opinion polls 107–109
effectiveness of 109–110
opinions 54
opportunity cost 175, 192
relationship 175
Opposition 125, 143
oral communication skills 46
oral presentations 48–55, 72–74
orb 666
Orient 528, 534
Orthodox Christianity 661
oseberg ship 520
outsourcing 261, 286
overseas sector 197
ownership, business
best form of 243–245
structures of 237

P

Pacific 560
change in 560
pagan 607, 666
palisades 628, 666
pandemics 670, 675, 702
Pangaea 432, 470
paper-based survey 77
parallels of latitude 309
parish church and cathedral 633–634
events and consequences 656–657
Parliamentary Committees and Inquiries 80
parliaments 125
executive law 125
law-making process 125
participation rates 269–270
full-time and part-time 270
labour force 269
partners 238
partnership 237, 238, 255
advantages and disadvantages 238
past influences 260
peasants 640, 699
Crusade 640
revolt 652–657
peninsula 403, 422
people 555–556
percentage mark-up 233
percolate 422
perennial 413, 422
permafrost 355, 386
persecution 666
Persian empires 544
personal interviews 74
perspectives 33–34, 35, 54, 519, 534
factors affecting 41
identify relevant 45–47
in history 524
recognising different 524–527
pestilence 647, 666
pestis atra 674
petitions 98
to House of Representatives 113
phalanx 622, 666
physical processes 401, 422
pictographs 32, 37–38, 54, 350
pikes 624, 666
pilgrim 666
pilgrims 632
pillage 640, 666
place 294
plagiarise 20, 54
plague 647, 666, 691
origins 675
spread 675
plaintiff 133, 143
plateau 354, 386
plateau mountains 431
pneumonic plague 675
political factors 504
political unrest 696–697
Poll Tax 652, 666
pollution 491–492
Pope 604
population 551–552, 564–565
and power shifts 697–699
huge decline in 698–699
population density 343, 345, 475, 508
comparing 477
in Australia 477
in Brazil 343
population distribution 476, 508
population profiles 336
comparing 336–339
useful 336
population pyramids 338
Portugal 580
Vasco da Gama spice trade for 577–578
Portuguese 573–575
motives for empire-building 575
potential employees 273
power shifts 697–699
practitioners 159, 167
precedent 128, 129, 144
predominantly rural 482
pre-empted 528, 534
presentation 45, 73
preparing for 45, 72
present influences, on work 260–264
decline and growth of industries 264
government and workers' union 262
health of economy 261–262
impact of globalisation 262–263
pressure groups 115–119, 116–119
employee and employer groups 116–119
environmental groups 115–119
prevailing wind 397, 422
price mechanism 207–209, 233
prices 180, 181–182, 205–209
and markets 177
demand 205–206
influencing 211–212
supply 206–207
priests 682–683
primary industries 260, 286
primary production 260, 286
primary sources 54, 515–516, 534, 540
types of 516
primary waves 444, 470
private corporations 239
private property, money found buried on 128
privatise 233
privatised 217
produce 212–213
producers 195
product 249–251
product development 249, 255
profit 201, 233, 237, 255
prosecute 132, 144

protecting democracy 84
definition 83
lobby groups 115–119
to disagree 98
to freedom of movement 95
protection 84–87
against offshore detention 98–99
of rights and freedoms 84–87
public corporation 239
public execution of North Korean factory worker 27
public health 696
publicity 229
public transport systems 219
pull factors 503–504
push factors 504

Q

qualitative information 54
quantitative information 54
quaternary industries 286
questioning 6, 61
questioning and researching 61
questions 54
question verbs 23
quinary industries 286
'quotes/facts' column 65

R

Ranger uranium mine 378
rapid communication changes 267
reconciliation 151, 153, 167
recording and organising information 14–24
redundant 261, 286
reeve 666
referendum 84, 121, 167
reflecting 7, 62
translate information 39
Regional Sponsored Migration Scheme (RSMS) 497, 498
regional urban areas 485
regurgitated 676, 702
relationships 30–35, 31–36, 54
relationships in 32
communicating 7
drawing conclusions 39–44
evaluating 7
relationships 54
collecting 14–24
reliable 54
religion
and medical science 681–683
and rulers 556–557
Australia 158–162, 167
changing map of medieval Europe 555–558
Christianity 548–549
conflict 683
importance of 681
Islam 548
responses 691–694
social changes 696
religion in Spain 641–643
religious beliefs 681–683
religious values 163
Renaissance 570, 589, 601
repeal 101, 121
researching 6, 61, 180
residential non-discrimination 86
resource allocation 192
decisions 176
resources 176
responsibilities 225–226
retail markets 199–200
retrenching 261, 262, 286
rift zones 452–454, 470
rights 121
and democracy. *see* democracy
contained in Constitution 84–86
to freedom of movement 94
rights and responsibilities 60
river deltas 416, 422
river landscapes 413–416
managing 418–419
river management 418–419
river systems 411, 413–416
Robery Park 27
robotics-based equipment 214
role 109–114
pressure groups 115–119
protection 84–87
Roman Empire 543, 608
Rome, fall of 601
Rouran 546
RSMS. *see* Regional Sponsored Migration Scheme
rule of law 83, 84
rulers 555–558
and people 555–556
religion and 556–557
rules 20
and regulations 125
rural–urban migration in China 504–505

S

sacraments 630, 666
sacred and special places 440–441
saints 666
salary 200
sand formation 398
sanitation 678
and public health 696
scale 298–300, 315
calculating distance using 313–317
measuring curved distances with 315
Scandinavian warrior 546
scarcity 192
definition 172
sceptre 610, 666
Scientific Revolution 570
scurvy 577, 589
sea change 499–501, 508
seasonal agricultural workers 502
secondary industries 260, 286
secondary sources 54, 515–516, 534
secondary waves 444, 470
sediment 367, 386
seismic waves 444, 470
self-service machines 190
self-sufficient 551, 589
septicaemic plague 675
serfdom 555, 589
serious offences 153
sermons 630, 666
settlements 684
shamanism 562, 589
shape landscapes 357–360
natural processes 357
role of tectonic forces 357
shapes, volcanoes 457
shared learning 644
shareholders 239, 255
shell middens 407, 422
Sierra Nevada Range 433
significance 521–522, 534
of technology 265–267
singular Australian identity 148
smart technology (smartphones) 265
social changes 649–650, 694–697
language 697
political unrest 696–697
religion 696
sanitation and public health 696
to medicine 694–696
social class structure 647–648, 699–700
origins of 647–648
social effects 496
social group 147
social media 104, 106–107, 267
social order 613–614
soft engineering 401, 422
soil 358–359
formation 359
profile 360
sole proprietorship 237, 237–238, 243, 255
advantages and disadvantages 238
sole trader. *see* sole proprietorship

soluble 364, 386
Song dynasty 560
sources 542–543
  history 515
  medieval art as 533–535
South 560
South-East Asia 560
Southern Europe 557
space 293–294
Spanish Flu 670
Spanish voyages of discovery 573–575
spatial distribution 33, 54
specialisation 178–179, 192
specialisation and trade 178–179
  analysis with cost–benefit opportunity 185–187
  definition 173
  economics and 173
  opportunity with cost–benefit analysis 185–187
  pitch for new product/business idea 189–191
  prices and markets 180
  world of 173
SPICESS 293, 301, 351
stalactites 362, 386
stalagmites 362, 386
standard of living 179, 192
standard of proof 132, 144
state or territory parliament 106
statute laws 125, 144
Statute of Labourers 652
steppes 544, 589
sternpost rudder 565, 589
stirrup 619, 666
stockbrokers 202
stock market 202–203
Stolen Generations 152, 153
stream deposition 367
subjects in Year 8 4
subjugate 528, 534
submission, writing 77–81
Sui dynasty 543
summary offences 132
superstition 608, 666
supply 206–207
  and demand 205
  and demand graphs 183–185
  changes in 209
  shift in 209
supremacy 528, 534
surface waves 444
surgery 679
surveys, writing and conducting 74–77
  and conducting survey 74
sustainability 298
  contour lines on map 306–309
  occupations use 300
  recognising land features 302–304
  simple cross-sections 317–323
  skills 300–302
sustainable communities 299
sustained eye contact 45, 74
swash 394, 422

T

Tang dynasty 543, 560
target market 246, 255
  defnition 246
tariffs 219, 220, 233
Tatars 561, 589
taxation 197
technology
  further advances in 284
  impacts of 285–287
tectonic forces 358
  role of 357
tectonic plate 366, 386
tectonic plate movement 432
TEEL planning structure 70
telecommunications 264
telephone service 217
term deposit 202
terra nullius 167
tertiary education 220
tertiary industries 286
texture 329
Tha Phae Gate 541
thatch 599, 666
thematic maps 331, 331–334
  understanding 331–334
  useful 331–332
theologian 696, 702
thesis statement 53
three-field system 551, 589
time travel brochure 584–587
tithe barns 599, 666
Tolpuddle Martyrs 93
tone 329
towns 644–646
  growth of 644–646
  rise of merchant class 646
trades 178–179, 192, 552
  and spread of disease 684–690
  growth of 684
  open up 700
  routes 565
  settlements and 684
  towns and 639
  wealth and slavery 567–569
trade union 93, 121
transition phrases 70
translating information 36–39
transport 357, 386
transportation 93, 121, 159, 167
treaties 92, 121
Treaty of Tordesillas 580
trebuchets 624, 666
tree change 499–501, 508
trend line 32, 54
trends 31, 31–36, 54
  in graphs and charts 32–37
trespass 132, 144
trial by jury 85
tributaries 415
trust 241, 242, 255
trustee 242, 255
tsunamis 443–451, 446, 450
  impacts of 449–451
  Japanese 447
Turks 546, 638, 640
turning points 518

U

unconscionable conduct 223
underdog effect 109
underground landscapes 362–364, 385
unemployment benefits 200, 233
unemployment rates 261
uneven urbanisation 482–484
United States and Australia, urbanisation in 487–488
  causes of 488–489
  comparison of 487
  consequences of 489–490
unlimited liability 237, 255
unsolved mysteries 541–542
urban 481, 508
  percentage of population living in 478
urbanisation 481, 508, 509
  Australia 484–485
  causes of 488–489
  coastal 484
  ecological footprint 487
  global 481–482
  other consequences of 490–492
  people on move in China 503–505
  uneven 482–484
urban population 341
urban sprawl 297, 485, 486, 508
used in studying 301–302
useful 54

V

values 641–643
  Spain 641–643
values, religious 163
vassal states 558, 589
Venice 696
Venn diagram 47

vernacular 630, 666
vertical aerial photos 324, 326
video conferencing 265
Vietnam War in 1967 150
violent material 92
volcanic eruption 457, 462–466, 464
  fertile soils 462–466
  geothermal energy 466
  prepare for 466
  worst 462
volcanic loam 465, 470
volcanic mountains 452–457
  Great Rift Valley 454
  hotspots 455
  Mount Taranaki 456
  rifting of Iceland 454
  rift zones 452–454
  shapes 457
  subduction zones 452
voluntary standards 228
voters 111
  individual 111
voting 104

W

wages 200
  and employee relations 218
wants 192
  individuals 192
wars 556
waterfall 412
water, landscapes formed by 391
  depositional coastal landforms 397–401
watermill 617, 617–618
watershed 412, 415, 422
waves 394
  change 394–397
weapons and armour 621
weathering 357, 386
welfare 186
  identify opportunities in 186
welfare payments 216
Western Australian 141–143, 404
  coastal erosion 404
  court case investigation 141–143
  landscapes 373–374
Western Europe 557, 570
  emerging power of 570–572
Western Roman Empire 543
Westminster system 60
  deconstruct-reconstruct method 65–68
  skills in 61–62
wetlands 486
White Australia 149, 167
Wilderness Society 116
Wit Stwosz 533
women 615–616
  and men, changing roles of 268
work 259, 286
work–life balance 260, 286
work, skills for 300–301
World Heritage Convention 380
world landscapes 354
  and landforms 352
world's mountains 435
  and ranges 435–437
worst volcanic eruptions 462
writing 63–64
  and conducting survey 74–77
  inquiry questions for research 63–64
  submission 77–81
written sources 540, 598, 672–673
  festival of lost trades 661–662

Y

Yersinia pestis 675
Yosemite Valley 433
young mountains 432
Yunnan Province in China 675