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FOR QUEENSLAND 2nd Edition

7

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Introduction

The Humanities subjects teach us about people – their conflicts and common ground. Allowing us to explore what has changed and what has stayed the same – across space, time, and cultures. Additionally, these disciplines inspire us to consider how we might respond in a world that is facing the challenges of climate change, pandemics, military tension, and economic uncertainty.

We have much to learn about resilience from the world’s most ancient cultures – Australia’s First Nations peoples. I acknowledge the Turrbal and Yuggerah peoples on whose land I wrote my contributions to this text and extend that respect to the traditional owners of the lands on which you live and learn. We also acknowledge the elders past, present and emerging who have taught and continue to teach us about the history of this country, its geography, the economy and the richness that diversity, inclusion and equity can bring to our experience as citizens. It is fitting that this text opens with a study of the Deep time history of Australia.

While you are a year 7 student today, you are also a future solution seeker. The skills you learn in your Humanities classroom this year will ensure that you are able to understand and tackle complex problems, communicate ideas clearly, adapt to change, be creative and think critically.

This text has deliberately taken an inquiry approach – where open ended questions are posed to challenge you to seek your own answers and understanding. You will also have opportunities to collaborate with your peers, as you learn through thinking routines, developing an independent, analytical and empathetic mind.

The Australian Curriculum Humanities and Social Sciences learning area has as one of its aims “to ensure that students develop a sense of wonder, curiosity and respect about places, people cultures and systems throughout the world, past and present, and an interest in and enjoyment in the study of these phenomena”.

Year 7 Humanities will introduce you to the wonders of the ancient world and the life-giving resource of water. It will develop your understanding of what makes a place liveable and will deepen your understanding of laws, democracy and the economy.

Most of all we hope that as you use this text you will have fun and develop a love of learning about our past, places, people and our planet.

- Kathleen Collin, series author

About the authors and contributors

Kate Buchanan (*lead author: Geography*) is a Geography and Humanities teacher at her current school. She has worked in Queensland schools for six years and has experience teaching Geography, History and Religion across Years 7–12. Prior to teaching, Kate was an urban planner and demographer. She has experience as a QCAA endorser and confirmer for Geography and as a committee member of the GTAQ. Kate is passionate about the importance of Geography as a discipline to help students understand the world and their place in it.



Kathleen Collin (*contributing author: History*) has over 25 years of History teaching experience at Independent and Catholic high schools in New South Wales and Queensland. She has held a range of roles, including Head of Faculty, Dean of Curriculum, Director of Learning and Teaching and Head of Secondary. She was a member of the writing team for the NSW Ancient History HSC Examination and an Assessor for the NSW HSC Extension History paper, and is a confirmer and external marker in Senior History for the QCE. Kathleen is now the Assistant Principal – Strategy and School Operations at her current school. She is also an executive member of the Queensland History Teachers' Association. Kathleen has always had a love of History that she gained from her father and grandfather, who inspired her passion for politics and the past. It has been a delight for her to be able to nurture her three children and numerous students' interest in the discipline as well.



Benjamin Hegerty (*lead author: History*) is a History teacher and Head of Humanities and Social Sciences at his current school in Brisbane. He is an executive member and past Vice-President of the Queensland History Teachers' Association and has contributed to the QCAA in various roles, as the Brisbane Central District Review Panel Chair for Ancient History, QCAA Subject Matter Expert for Ancient History, Lead Endorser and Lead Confirmer. Ben was involved as a contributing author for the Cambridge University Press textbook *Senior Ancient History for Queensland* and completed his Master of History through



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Nina Holland (*contributing author: Geography*) has been a high school teacher since 2003, teaching humanities subjects of Senior Geography and junior Humanities. Within this job, Nina has also created opportunities for teachers to network and share their knowledge through the development of the 'Gold Coast GeoNet'. Developing from that, Nina joined with Bond University from 2009 to 2013 to organise and run a yearly conference for Geography teachers. Nina is currently an Experience Senior Teacher with Education QLD and part of the GTAQ committed to Building Geography in Queensland as she is passionate about sharing more geography with more teachers.



Richard Leo (*contributing author: History*) is a highly experienced educator in History and Geography with over 20 years of experience in both the higher education and secondary school sectors having taught in schools across both South Australia and Queensland. He has published several articles and peer-reviewed book chapters. Richard has lectured in both Education and History at CHC in Brisbane and also acts as an Education Advisor, specialising in intercultural and interfaith pedagogies, for Together for Humanity, an inclusive educational organisation that works with school communities to foster intercultural understanding.



Jessica Prouten (*contributing author: Economics and Business, and Civics and Citizenship*) has been teaching in Queensland schools for over 15 years, teaching across a range of curriculum areas from History to English, Business, Geography and Legal Studies. She has also been involved in designing ACARA-based programs stretching business down to the primary years. Jessica is currently a Head of Department on the Gold Coast and has been involved in the implementation of the new QCE.

Alison Quin (*contributing author: History and First Nations Advisor for the series*) is descended from the Tagalak people of the Gulf Country of far north Queensland. Alison has worked in First Nations education through her career, starting as a high school teacher and moving into community-led education initiatives. Her vision is for all students in Australia to learn about and through the two knowledge traditions of this continent – First Nations and Anglo-Australian – to create a future that respects and empowers this country and its many peoples.



Natasha Rosky (*contributing author: History*) is a seasoned educator with over 20 years of experience teaching history in Australia and abroad. As a Head of the Faculty of Humanities and Social Sciences, Natasha is committed to instilling in her students a passion for history and the humanities. She is a skilled designer of inquiry-based assessments that effectively link theory and practice, and she has developed numerous resources to support students. Natasha is a reputable assessor and member of the Queensland History Teachers Association. In addition to her teaching career, she is currently pursuing a Doctor of Education at QUT, with a focus on Consent Education.



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About the illustrator

Jean-Michel Girard is an illustrator based in Québec City, Canada, who has 30 years' professional experience working around the world. While Jean-Michel is able to work in a wide variety of styles (from hyperrealism to cartoon), he has specialised in historical illustrations as he is a long-time history aficionado. His attention to historical detail is extraordinary. Jean-Michel uses digital tools but with traditional drawing methods.





Source: Photo by Mick Richards

About the cover artist

Fiona Omeenyo first appeared on the contemporary art scene in the late 1990s as one of the more prominent members of the newly established far north Queensland's renowned Lockhart River 'Art Gang'.

'My country Pathacy (Chester River near Coen) that's where my Grandmother is from. My figures are about family and country. I do my painting to carry my culture on and so my children will know our stories.'

The artist's figurative compositions connect ancestral spirits with her kin relationships. For the artist, ancestors exist simultaneously with the present-day generation. Accordingly, her themes constantly revolve around bloodline and connectivity. A continuous relationship with past and present is expressed through the artist's sense of line and space (both positive and negative).

About the cover



Fiona Omeenyo *Day on the beach* Acrylic on canvas, 72 × 102 cm

This painting by Fiona Omeenyo is called *Day on the beach* (2018).

This is a representation of the connection to a specific place, here the natural environment of Lockhart River – in particular Double Stone at Quintell Beach. This is particularly explored in the Geography subject within the Humanities and Social Sciences for Queensland series.

Publisher acknowledgements

The Publisher and Authors would like to thank Vince Wall and Brett Dascombe for their valuable contributions to the first edition of this text.

How to use this resource

Book structure

- All chapters have been closely aligned to the Australian Curriculum V.9.0 for Humanities and Social Sciences for Year 7.
- This book contains four parts, with each part covering one of the four topic areas: History, Geography, Economics and Business, and Civics and Citizenship.
- Every chapter starts with an engaging ‘Setting the scene’ story to help you jump into a new topic, and includes an activity that can be used to spark classroom discussion.
- Each chapter has a ‘Chapter overview’ that lists ‘Learning goals’ for the chapter.
- Each chapter is divided into numbered sections, and each of these sections covers content descriptors from the Australian Curriculum.
- Each chapter section starts with ‘Focus questions’ to drive your inquiries into the Humanities.
- In History, following the inquiry approach, each chapter is constructed around an over arching key inquiry question and several sub-inquiry questions. The inquiry questions are colour-coded to help students recognise their features:
 - An interrogative
 - A historical concept
 - Specific content
 - Scope and scale.
- In all chapters QR codes are included for easy access to related videos.
- At the end of each section are Developing your understanding questions. The History chapters also have Reflecting on your learning questions. At the end of each chapter are End-of-chapter assessment activities.

Activity types

This series uses a range of activity types, including the following:

- Developing concepts and skills (activities that scaffold important concepts and skills from the Australian Curriculum)
- Reflecting on your learning and Developing your understanding review questions at the end of each section (questions in both print and digital formats)
- Multiple other activity types, particularly in End-of-chapter activities, that vary from analysing historical visual sources to graph interpretation and map-reading.

Activities cover a range of different learning types and levels.

Making Thinking Visible activities

In this series, one of the common activity types we have employed is called Making Thinking Visible. These activities are inspired by the Visible Thinking routines devised by Harvard University's Project Zero group.

Visible Thinking routines are engaging classroom activities which challenge students to reflect on, and articulate, their thinking about a prompt or stimulus material. By using the same routines (such as 'See, Think, Wonder'), students develop familiarity and confidence with the rules of the activity. For more information, teachers can visit the Online Teaching Suite or the Project Zero website at <https://pz.harvard.edu/thinking-routines>.



ACTIVITY 2.23 MAKING THINKING VISIBLE

Think, pair, share

- 1 Think: Take a minute to **consider** the following question: 'Was life in ancient Egypt fair for all groups?'
- 2 Pair: Turn to a neighbour and **discuss** your responses to the question. Take turns to speak, listen carefully and ask questions of one another.
- 3 Share: Share your ideas as a whole class to **create** a list of ideas to respond to this question.

Digital resources

This series uses the interactive Edjin platform, and includes both a student and a teacher edition. In the **Interactive Textbook** version of this book, students will find the following key resources:

- Images that can be zoomed in on (this is really useful for reviewing any images to analyse at a larger size)
- Interactive Chapter quizzes and Scorcher quizzes (timed, competitive and fun tests of knowledge)
- Videos, image galleries and other multimedia materials, such as zoomable maps
- Additional geographic tools, such as a guide to using topographic maps and a series of skills videos
- Downloadable worksheets for all activities
- Suggested solutions
- Additional content to the print book
- A PDF downloadable version of this student textbook.

In the **Online Teaching Suite**, teachers will find:

- Guidance on using the digital versions of the book
- Teaching programs and teaching tips
- Curriculum grids for each topic area
- Additional activity worksheets.

Icons



This icon in the margin of the page represents additional material is in the Interactive Textbook.



This brain icon with bracketed text indicates a Deeper thinking question, or questions, to help you dive deeper into an idea within the History chapters.

Cognitive verbs glossary

Knowledge utilisation

Conduct direct an action or course

Create produce or evolve from your own thought or imagination; reorganise or put elements together into a new pattern or structure or to form a coherent or functional whole

Decide examine alternatives to choose an option; reach a resolution as a result of consideration

Determine demonstrates understanding of knowledge using varying levels of skills; establish, conclude or ascertain after consideration, observation, investigation or calculation; decide or come to a resolution

Evaluate make an appraisal by weighing up or assessing strengths, implications and limitations; make judgments about ideas, works, solutions or methods in relation to selected criteria; examine and determine the merit, value or significance of something, based on criteria

Generate produce; create; bring into existence

Investigate carry out an examination or formal inquiry in order to establish or obtain facts and reach new conclusions; search, inquire into, interpret and draw conclusions about data and information

Justify give reasons or evidence to support an answer, response or conclusion; show or prove how an argument, statement or conclusion is right or reasonable

Predict give an expected result of an upcoming action or event; suggest what may happen based on available information

Propose put forward a point of view (or an idea, an argument or a suggestion), for consideration or action

Research study in detail, especially in order to discover new information or reach a new understanding

Synthesise combine different parts or elements (such as information, ideas or components) into a whole, in order to create new understanding

Analysis

Analyse consider in detail, for the purpose of finding meaning or relationships, and identifying patterns, similarities and differences

Apply use or employ in a particular situation

Compare estimate, measure or note how things are similar or dissimilar

Consider think deliberately or carefully about something, typically before making a decision; take something into account when making a judgment; view attentively or scrutinise; reflect on

Discuss examine by argument; sift the considerations for and against; debate; talk or write about a topic, including a range of arguments, factors or hypotheses

Distinguish recognise as distinct or different; note points of difference between; discriminate; discern; make clear a difference/s between two or more concepts or items

Examine determine the nature or condition of something

Generalise to make a statement that relates to many people, things, or conditions, based on limited facts

Infer reach a conclusion on the basis of evidence or reasoning

Interpret explain the meaning of information or actions

Judge form an opinion or conclusion about; apply both procedural and deliberative operations to make a determination

Reflect on think about deeply and carefully

Suggest communicate or show an idea to consider

Comprehension

Communicate convey knowledge and/or understandings to others; make known; transmit

Describe give an account of characteristics or features

Explain provide additional information that demonstrates understanding of reasoning and/or application

Illustrate show the meaning or truth of something more clearly, especially by giving examples

Organise arrange, order; form as or into a whole consisting of interdependent or coordinated parts, especially for harmonious or united action

Represent use words, images, symbols or signs to convey meaning

Sequence place in a continuous or connected series; arrange in a particular order

Retrieval

Demonstrate prove or make clear by argument, reasoning or evidence, illustrating with practical example; show by example; give a practical exhibition

Identify establish or indicate who or what someone or something is

Recognise identify or recall particular features of information from knowledge; identify that an item, characteristic or quality exists; perceive as existing or true; be aware of or acknowledge

Select make a choice between options

Use operate or put into effect; apply knowledge or rules to put theory into practice



PART

1



History

What is History?

People have always been interested in who they are and where they come from. They have often asked questions about themselves, such as ‘What happened?’, ‘Why did it happen?’ and ‘How did it happen?’ These questions, in some cultures, have led to the study of a field of knowledge called ‘history’.

The word ‘history’ comes from the ancient Greek language and means ‘to inquire’ or to seek to know. The person often referred to as the first historian was an ancient Greek man called Herodotus. Herodotus and other early historians used memories and records of past events to make sense of their world. By learning about the history of our world, we too can use what we learn about the past to help us understand our moment in time and to plan for the future.



▲ **Source A** Uncovering evidence of the past: an archaeologist excavates ancient human remains at an archaeological site. Archaeology is the study of the buildings, graves, tools and other objects that belonged to people who lived in the past, in order to learn about their culture and society – a process you will learn about in the chapters that follow.

The ancient Greeks understood time as linear – that is, like a line joining the past, present and future in order. This is called **chronological order**. Historians often show this understanding of time passing through a diagram known as a **timeline**. Determining chronological order and creating and interpreting timelines are some of the skills you will develop in the following chapters. However, not all cultures understand time as a line. For example, Aboriginal and Torres Strait Islander peoples bring past, present and future together through connections to place. We apply different ways of knowing when we learn about different past peoples who understand the world in a different way.

The skills and knowledge that you gain in history will give you a new understanding and appreciation of the world today. Through your studies of history, you will learn how to find and understand historical sources. You will learn to think creatively and critically about information that you study. Finally, you will come to your own conclusions about historical issues based on the evidence available.

Using historical sources

People can have quite different **perspectives** of the same events, so when historians are devising answers about what happened in the past, they need to base their proposed answers on evidence. A **primary source** is made at the time of what is being studied, while a **secondary source** is a later description or interpretation. Historians need to think carefully about whether a source is primary or secondary and the limits of what a source can tell us about the past. Historians often work with **artefacts**, objects from the past time being studied. **Oral histories** are the spoken or performed knowledge of the past that has been systematically passed down through generations of people.



THINKING DEEPER

If a historian 100 years from now tried to write a history of what your school was like while you were a student there, what might be some primary sources they could use? Can you think of any possible issues with the accuracy of their interpretations of these sources?

chronological order the method of arranging events in the order in which they occurred, from earliest to latest

timeline a graphical representation of the passing of time, usually arranged by periods, and on which important events are marked in chronological order

perspective the way we see something, a point of view or attitude to something

primary source a source of information about the past created in the time being studied

secondary source a source of information about the past created after the time being studied

artefact an object that is made by a person, such as a tool or a decoration; it is usually of historical interest

oral history the recording of past events in a spoken form, including through song, story or dance



analyse consider in detail for the purpose of finding meaning or relationships, and identifying patterns, similarities and differences

evaluate examining and judging the merit or significance of something

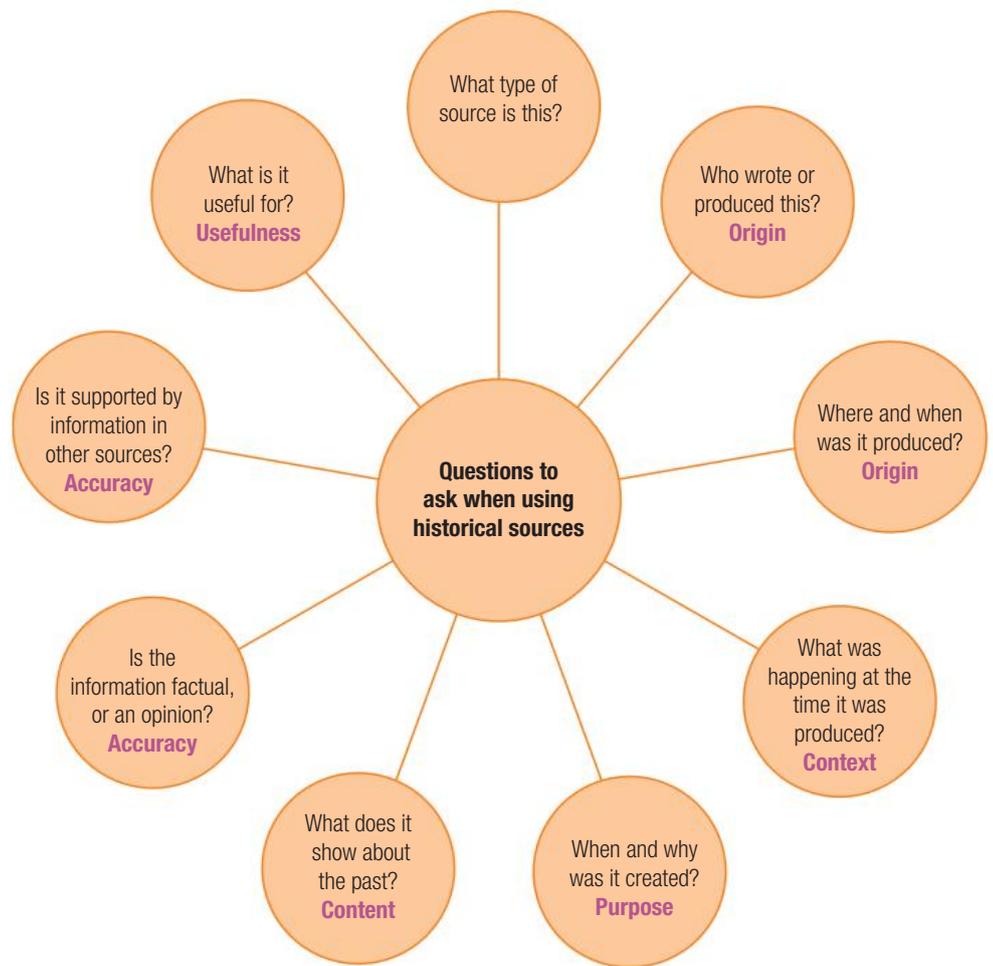
origin analysis of a source to establish who created the source as well as where and when it was produced

context the analysis of sources to understand the nature of society and the historical period in which the source is created, the significant event/s related to the source, and the language and ideas of the time

purpose analysis of a source to establish the original reason for its creation

accuracy the analysis of a source to establish correctness by identifying purpose, corroborating the information with another source and assessing bias

usefulness the analysis of a source to determine how relevant it is in relation to historical questions



▲ **Source B** Questions to ask when using historical sources. Depending on the source, some of these questions may not always be relevant or easy to answer.

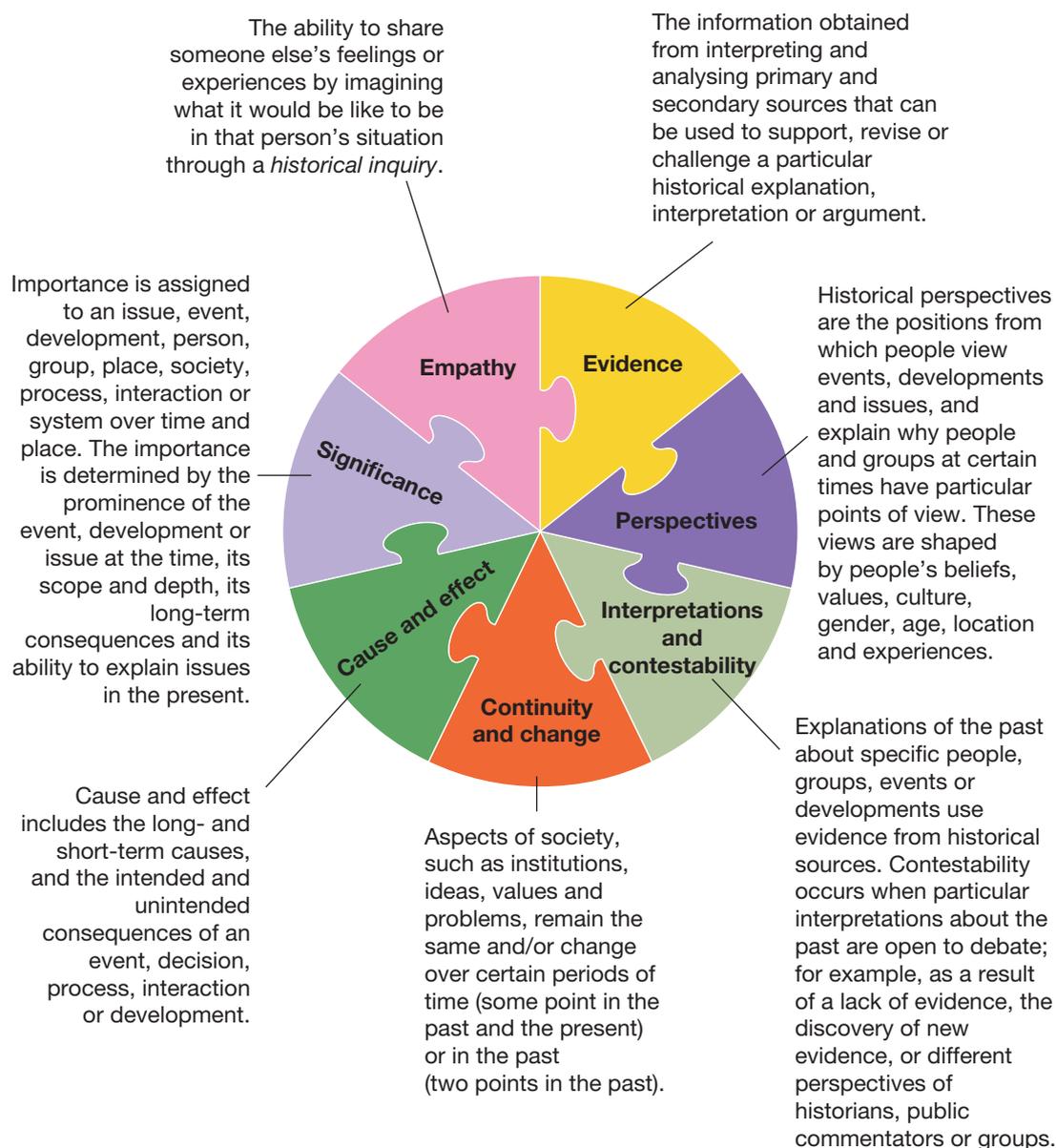
As a historian, you will need to **analyse** and **evaluate** evidence from primary and secondary sources to be able to form your own opinions about the lives of people in the past. As you will learn, the key concepts to consider when working with historical sources are the **origin**, **context**, **purpose**, **accuracy** and **usefulness** of sources. Source B shows some of the questions you could consider when analysing and evaluating information from the sources you encounter in the following chapters.

Introducing historical concepts and skills

Historical concepts and skills help to guide the way you question and think about an issue. The six concepts from the Australian Curriculum: History V9.0 that are used in the following chapters on History are: **evidence, perspectives, interpretations and contestability, continuity and change, cause and effect and significance.**

We will also have a special emphasis in this book on the development of **empathy** – an important part of trying to understand the lives of people who came before us. As you work through the History chapters, you will come across these seven historical concepts, and will learn more about them.

History concepts



▲ **Source C** Adapted from ACARA, 'Understand this learning area: History 7–10', Australian Curriculum: History V9.0



UNIT

1

Deep time history of Australia

▲ **Source D** A Bininj knowledge site in western Arnhem Land. Historians have used scientific techniques to date the site to around 20 000 years old.

Overview

In this topic, you will explore the 65 000 years or more of human history on the continent now called Australia. We will learn about the people who lived here through deep time history, and how those past times connect to the many vibrant First Peoples and cultures of today. We will explore the beliefs, values and practices that contribute to sustaining relationships between First Peoples and Country.

Studying Aboriginal and Torres Strait Islander history means studying both an ancient and a contemporary society. This chapter brings together Aboriginal and Torres Strait Islander ways of knowing about the past as well as historians' ways of knowing about the past. It shares some of the First Peoples' stories of what has come before now. Through this chapter, you will develop skills to respectfully engage with First Peoples' cultural heritage.

While learning about First Peoples through deep time history, you will develop an understanding of how historians and archaeologists investigate history, including the range of sources that can be used. This chapter utilises oral histories and archaeological evidence.

Learning goals

After completing this unit, you should be able to answer these questions:

- How do we investigate the deep time history of Australia using historical concepts and skills?
- Why and where did the earliest human societies develop?
- How did people migrate to and around the Australian continent?
- What emerged as defining characteristics of First Peoples' societies?

Protocols

For many First Peoples, people who have passed away need to be treated with respect and their image or name should be avoided. Aboriginal and Torres Strait Islander peoples should be aware that this chapter may contain images, names and links to footage of people who have passed away. Aboriginal and Torres Strait Islander students and teachers learning from this chapter can apply their own cultural protocols for working with references to people and objects from the past.

Aboriginal and Torres Strait Islander peoples are contemporary peoples who have the longest continuing cultures on Earth. There are more than 260 distinct First Peoples. Each has its own languages, cultures, knowledge systems and histories. In studying this living culture, we respect diversity and apply integrity by identifying the clan, nation, language group and/or place that particular knowledge comes from.

The term 'First Peoples' will be used to refer to the people of the past and the people of the present to convey continuity. Terms such as 'Europeans', 'settlers' and 'settler-colonisers' are used to describe arrivals since 1788.

Wherever possible, offensive terms have been avoided; however, we have opted to retain offensive terms in original sources as these are of **historical significance**.

Through the deep time history that this chapter is focused on, this continent was not called Australia. First Peoples focused on Country rather than the entire continent. However, in this text, the continent will be called Australia for easier reading.

First Peoples and history

Until very recently, the First Peoples were not able to contribute to histories written about Australia. The discipline of 'history' came to this continent with the First Fleet. When **settlers** wrote their versions of the history of Australia, it began in 1788 and was about the activities of settlers from their **perspectives**.

This means that there is a need to deliberately include First Peoples' activities and perspectives in history. This chapter recognises that the First Peoples and settler historians have different ways of knowing the continent now known as Australia, and different ways of knowing the history of this place. As you go through this chapter, you will develop your skills to think about the different perspectives that are found when you study the past and how to work with these in respectful ways.

historical significance

relating to the long-term importance of an event, this is a term people today apply to things that happened in the past

settlers people who move to a new place and establish a permanent society

perspective

the way we see something, a point of view or attitude to something



CHAPTER 1: How have First Peoples sustained a regenerative relationship with the Australian continent through deep time?

Setting the scene: people and place

Acknowledgement of Country

Munyara yunda! Hello, my name is Ada. I acknowledge all the First Peoples and their Countries that we are living and learning on. I pay my respects to the Elders, past and present.





This is a photo of **Tagalaka Country**, the home of my **ancestors**. Tagalaka people have lived here and looked after this Country since the beginning. Tagalaka people belong to this Country. Those hills are the Brolga **Dreaming**. People used to travel long distances and come from all around to have a big ceremony here. There's a cattle station here now but it is still the Brolga place, and it always will be.

This Country tells us about Brolgas. People can read Country, just like a book. Different places have different knowledge stories and you have to find the right people who can tell you about that Country or that place.

In this chapter, First Peoples and scientists tell us about the long time that First Peoples have been on this continent and the ways First Peoples live here. They also share their different understandings of time and history so we can learn to be respectful historians.

– Ada

Tagalaka a First People from the Gulf Savannah region of north Queensland

Country ancestral lands and waters that people are custodians for

ancestors those who have come before in a family or kinship line

Dreaming a spiritual concept of knowledge and lore, often specific to a place or being

▲ **Source 1.1** An image of Tagalaka Country from the air



ACTIVITY 1.1

- 1 Find Tagalaka Country on the AIATSIS map of Indigenous Australia. Hint: it is in Queensland, halfway between Cairns and Normanton. It is spelled 'Takalak'. You can use the following link to help you: <https://cambridge.edu.au/redirect/10083>.
- 2 Use the AIATSIS map and your teacher's guidance to **determine** the First People's Country your school is on.
- 3 Brainstorm what you know about the history of your area, going back in time as far as you can.

Chapter overview

Key inquiry question

'How have First Peoples sustained a regenerative relationship with the Australian continent through deep time?'

Every key inquiry question should have:

- An open interrogative
- A historical concept
- Specific content
- Scope and scale.

So, let's dissect this key inquiry question: 'How have First Peoples sustained a regenerative relationship with the Australian continent through deep time?'

To answer a key inquiry question in a historical investigation, it is helpful to break the question into sub-inquiry questions.

regenerative relationship

a reciprocal and respectful relationship between First Peoples and the natural environment that sustains the health and wellbeing of both

Sub-inquiry questions

After completing this chapter, you should be able to answer these sub-inquiry questions:

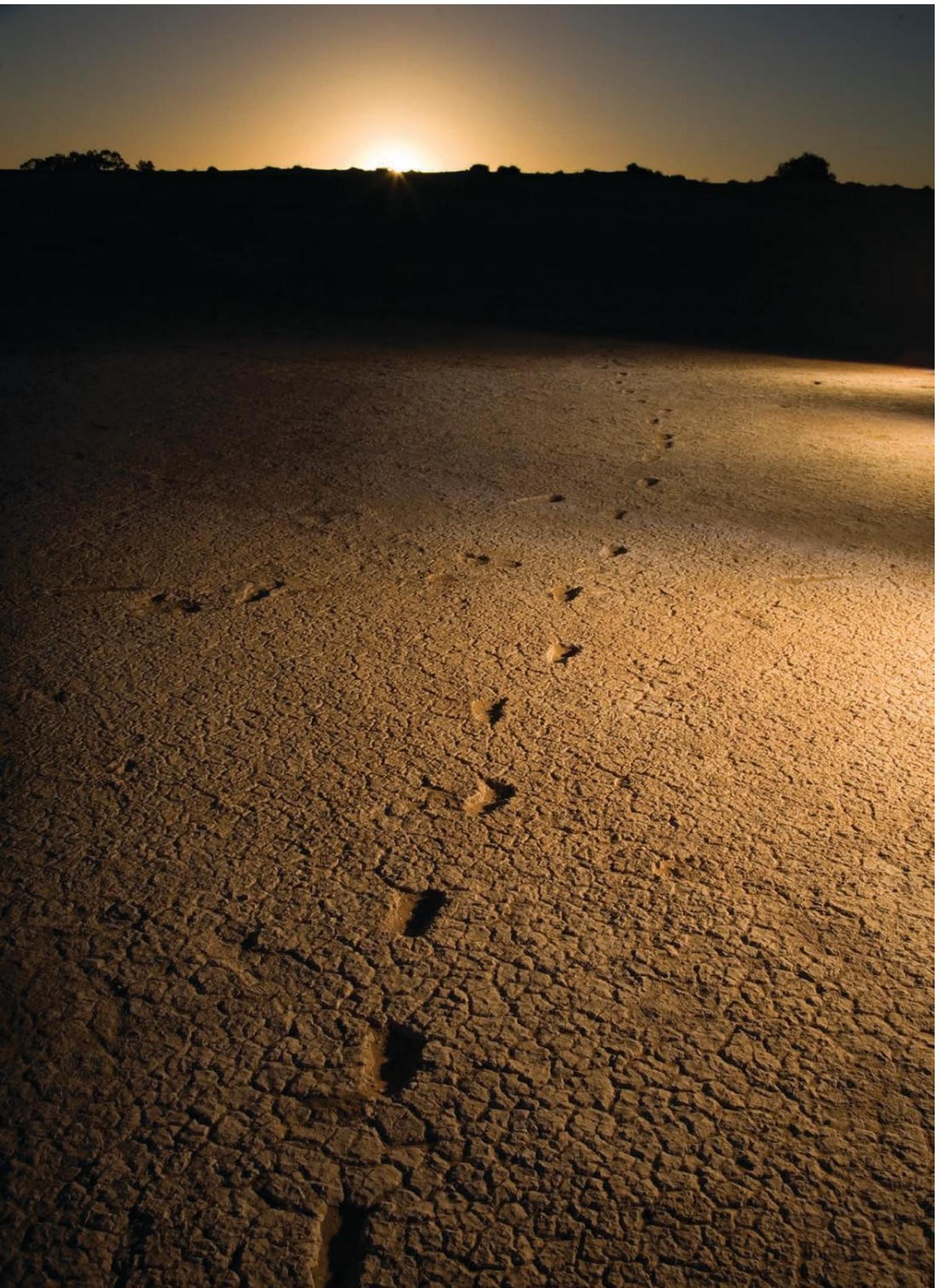
- How did the First Peoples come to the Australian continent?
- How have the First Peoples interacted with the Australian continent through deep time?
- What technological achievements have First Peoples developed?
- What are respectful ways for historians to work with First Peoples' cultural heritage?

Historical skills

After completing this chapter, you should be able to:

- Develop historical questions about the past to inform historical inquiry
- Locate and identify primary and secondary sources to use in historical inquiry
- Identify the origin, content, context and purpose of primary and secondary sources
- Identify and describe the accuracy and usefulness of primary and secondary sources as evidence
- Describe causes and effects and explain continuities and changes
- Identify perspectives, attitudes and values of the past in sources
- Explain historical interpretations about significant events, individuals and groups
- Create descriptions, explanations and historical arguments, using historical knowledge, concepts and terms that reference evidence from sources.

► **Source 1.2** Fossilised human footprints discovered in the Willandra Lakes Region, a World Heritage site, in New South Wales. These prints were made 19 000 to 23 000 years ago.



Timeline of key events



▲ Remains of Lake Mungo



► Researcher Elspeth Hayes with Mark Djandjomerr and traditional owner May Nango extracting comparative samples at a cave adjacent to Madjedbebe, an ancient site in Arnhem Land, Northern Territory. Credit: David Vadeloo / Gundjeihmi Aboriginal Corporation

65 000 BP

Earliest archaeological evidence of the First Peoples dates from this time; the artefacts are from Madjedbebe in the Northern Territory.

40 000 BP

Mungo Lady and Mungo Man lived at this time in the lands of the Paakantji, Ngyiampaa and Mutthi Mutthi peoples, which are a part of what is now known as the Willandra Lakes Region, a World Heritage area of New South Wales

20 000 BP

Peak of the Ice Age; the climate was dry and there was little rain, which made the deserts of Australia much larger. Australia is joined to nearby land masses (New Guinea and Tasmania) by 'land bridges'. However, archaeologists believe water crossing by boats or rafts was always necessary to reach mainland Australia.



▲ A representation of *Diprotodon optatum*, the largest known marsupial from the Pleistocene of Australia

50 000–25 000 BP

Evidence of megafauna living in Australia at this time has been found in many locations in Queensland. Megafauna existed alongside the First Peoples.

20 000 BP

First Peoples live through the coldest parts of the Ice Age in places like Kutikina Cave in Tasmania, which is occupied between 20 000 BP and 13 000 BP

11 000 BCE

Much of Australia's coastline begins to be changed by inundation as ice sheets covering Earth begin to melt. New Guinea and Tasmania are separated from mainland Australia. Australia's current coastline took shape around 6000 years ago.

Ngaarba Dreaming

This story is shared with the permission of Tagalaka knowledge holders.

Near the bottom of these hills is an important waterhole that always has water. All the animals know they can always come for a drink here. There are emus, nuukan and brrook (wallabies), waangu and kaani (goannas), zalk (bustards), possums, yarrngarddith (turtles), snakes, birds and ngaarba (brolgas). It's a big waterhole and there is enough for everyone. The ngaarba are starting to get worried because they know there is a lot of waal (water) – a flood is coming. They warn everyone, watch out, there's a flood coming! Everyone starts to panic because they realise the ground is flat and there is nowhere to go to escape the water. The ngaarba start building big mounds, like their nests, that rise up out of the ground – the hills you can see. This provides high ground for all the animals to go to when the floods come. This is why this is the Ngaarba Dreaming place; the ngaarba ancestors created this place, and people have travelled here from other Countries in the region to hold the Ngaarba ceremony.



What came after this topic?

- **1770 CE** British navigator James Cook arrived in Australian waters and mapped the east coast. He had contact with numerous First Peoples, sometimes violent, including the Guugu Yimithirr people at Gungahdie, what came to be known as Cooktown in the Cape York Peninsula. Cook spent 48 days at Gungahdie repairing his damaged vessel HMB *Endeavour*. Cook claimed the east coast of the continent for the British Empire.
- **1788 CE onwards** Invasion and colonisation of Australia by the British Empire. During the 1800s, much of Australia experienced a period known as the Frontier Wars between First Peoples and settlers.

7500 BCE

Sea levels rise 100 metres and the extensive plains of the Northern Territory, in what is now the Gulf of Carpentaria, are inundated. The rising sea levels had a profound impact on societies, with numerous First Peoples' oral histories preserving the details of coastal flooding and populations evacuating the coastal regions and migrating inland.

3000 BCE

There is evidence of the arrival of the dingo and the extinction of the Tasmanian tiger on mainland Australia around 5000–4000 years ago

8000 BCE

Climate settled into a pattern broadly similar to present-day Australia

7000 BCE

Evidence of stone houses from this time has been found in the Dampier Archipelago, Western Australia



▲ A typical Makassan boat. This depiction was painted by a Yolngu artist, Nagingapa Naminyamanja, in 1969.

1500 CE

Makassan peoples from Indonesia begin to visit northern Australia on a seasonal basis, trading with Aboriginal people on the mainland. There were many visits to Australia's shores during the 1600s and 1700s. Seafarers from the Dutch East India Company also regularly sailed along the Australian coastline at this time on their way to the East Indies (now Indonesia) as part of the spice trade.

Responding to the timelines

- 1 **Compare** the two understandings of time (the timeline compared to the Ngaarba Dreaming story). How might these influence how you study history and know the past?
- 2 **Describe** how the environment might have changed while the First Peoples have lived here and **propose** how they might have adapted to survive.

BP stands for 'Before Present'. This is the most appropriate dating system to use when learning about Australia's deep time. Other systems have been used for dating, so you might come across BCE: 'Before the Common Era' (sometimes, 'Before the Current Era'); CE: 'Common Era' (sometimes, 'Current Era'); BC: 'Before Christ'; and AD: 'Anno Domini' (Latin for 'the year of our lord [Jesus]'). BCE/BC is before and ACE/AD is after the year '0,' so this is why BCE/BC counts 'backwards'.



1.1 How did the First Peoples come to the Australian continent?

FOCUS QUESTIONS

- Where did humans come from?
- What routes did humans take to travel around the world?
- How did people come to the Australian continent?
- When did First Peoples come to the Australian continent?

deep time history

refers to the events and processes over vast spans of time

evolve

the process through which living things change over millions of years

fossil record

evidence of ancient life found in rocks and geological deposits that provides insights into change over geological time

DNA the genetic material that contains instructions for the development and functioning of living organisms

In this section, we will learn about the **deep time history** of humans and the techniques scientists use to investigate this. This provides a scientific understanding for how the First Peoples arrived on the Australian continent. For many First Peoples today, the ancestors created this place and its First Peoples. The First Peoples have been here ‘since the beginning’. Respectful historians can recognise and work with both these perspectives on the origins of the First Peoples.

Where did humans come from?

WHAT DO WE KNOW ABOUT EARLY HUMANS?

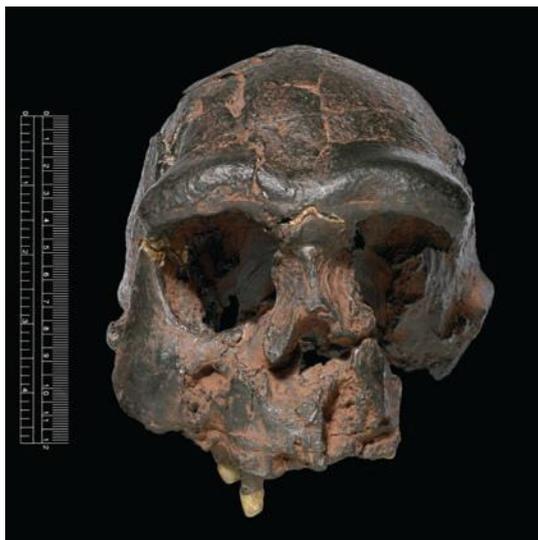
Determining the origins of humans has been the result of findings from a range of science disciplines, including archaeology, palaeontology and geology. Scientists find small clues and make inferences about what they could mean. This means that there can be differences of interpretation. New discoveries and new technologies can mean that scientists need to reconsider previously established ideas or assumptions.

Scientists now think that modern humans, *Homo sapiens*, first **evolved** in Africa and then migrated around the world. A ‘family tree’ has been compiled by looking at the **fossil record** and analysing **DNA** (deoxyribonucleic acid) from ancient fossil samples as well as modern humans.



Analysis of the DNA of several current animal species (including humans) as well as fossils indicates that the human family tree likely split from other great apes between five million and seven million years ago.

◀ Source 1.3 DNA



▲ **Source 1.4** A skull of *Homo erectus* called 'Sangiran 17'. It is 1.2 million years old. It was found in 1969 in Sangiran, Indonesia.



▲ **Source 1.5** *Homo erectus* model. Reconstruction of a specimen of *Homo erectus*. Known as Java Man, this early human species was identified based on fossil evidence first found in 1891 in archaeological sites along the Solo River, East Java, Indonesia. This model is based on the Sangiran 17 skull, found in 1969 in the Sangiran Cave, Central Java. It has been dated to between 1.3 and 1 million years ago, though estimates vary. Reconstruction by Elisabeth Daynes of the Daynes Studio, Paris, France.

The fossil record indicates that our ancestor *Homo erectus* (*Homo* meaning 'human being', *erectus* meaning 'upright' in Latin) lived in Africa and across Asia between 1.9 million and 135 000 years ago. Although there are different theories put forward by historians, fossil evidence suggests that the earliest modern humans evolved in Africa between 400 000 and 130 000 BP.



▲ **Source 1.6** Replica of a Denisovan finger bone fragment, originally found in Denisova Cave in 2008, at the Museum of Natural Sciences in Brussels, Belgium

Modern humans share this short, stocky ancestor with several other branches of the family tree who evolved and **migrated** around the world. Known species include *H. neanderthalensis* (Neanderthals) and *H. heidelbergensis*.

DNA samples suggest that *H. sapiens* interbred with other **hominins**. About 2 per cent of modern human DNA comes from Neanderthals. The discovery of the tip of a finger bone in Denisova Cave in Siberia revealed that humans share up to 5 per cent DNA with 'Denisovans'.

Recently identified human species include *H. floresiensis*, nicknamed 'hobbits' due to their small stature, who lived on the island of Flores in contemporary Indonesia until 50 000 BP. In 2019, it was confirmed that another group of early humans, *H. luzonensis*, lived on the modern island of Luzon in the Philippines around 60 000 BP.

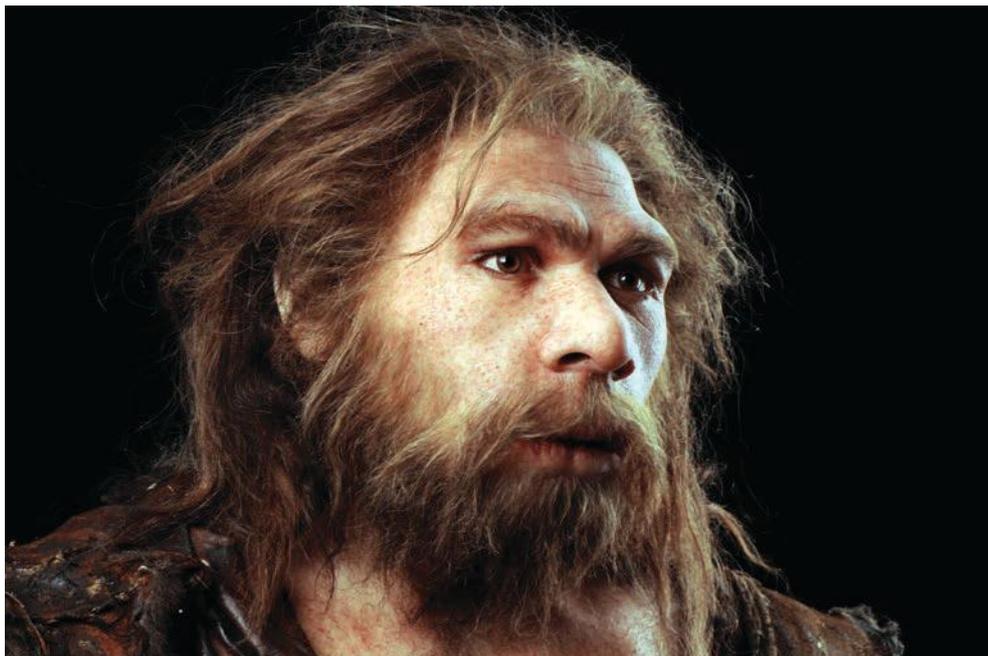
Today, *Homo sapiens* is the only surviving human species.

migrate to move from one place to another, sometimes over large distances

hominin the group that consists of modern humans, extinct humans and human ancestors

► **Source 1.7**

Neanderthal model. Reconstruction of a *H. neanderthalensis* based on the La Chapelle-aux-Saints fossils. Neanderthals did not use complex tools but had mastery of fire and built shelters. It is thought that they had language and a complex social structure, living in small family groups and hunting for food. It is not known why Neanderthals became extinct, but one theory is that they were outcompeted by modern humans (*H. sapiens*). Reconstruction by Elisabeth Daynes of the Daynes Studio, France.



► **Source 1.8**

Neanderthal DNA extraction. Technician drilling a sample of fossilised *H. neanderthalensis* bone. The sample will have its genetic material extracted and sequenced. Photographed at the Max Planck Institute for Evolutionary Anthropology, Germany.



► **Source 1.9**

Homo floresiensis. Artist's impression of a group of *H. floresiensis* with a freshly killed dwarf elephant (Stegodon species). These hominids had an average height of 1 metre. They had small brains but evidence suggests that they used fire and tools and hunted in groups. It is believed that *H. floresiensis* survived after the arrival of modern humans to the island but later became extinct.





ACTIVITY 1.2 MAKING THINKING VISIBLE

Research task: human species

Use the internet to **research** all known and possible *Homo* species and the approximate dates they lived. Find out where they lived and how scientists know about their existence.

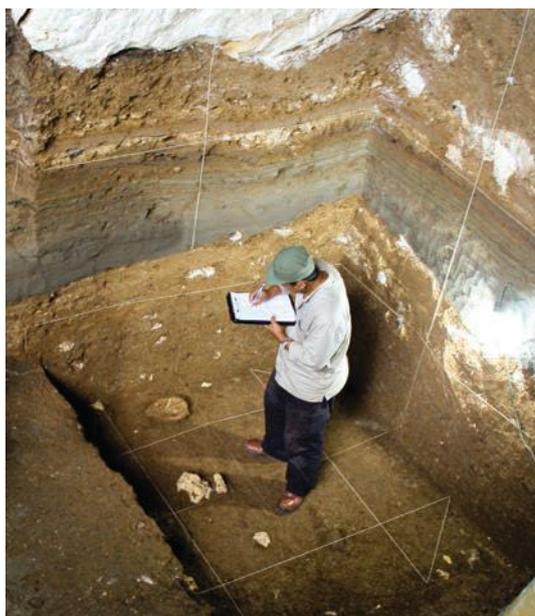
Species	Dates lived	Where lived	What evidence have scientists found?
<i>Homo erectus</i>			
<i>Homo floresiensis</i>			
<i>Homo habilis</i>			
<i>Homo heidelbergensis</i>			
<i>Homo naledi</i>			
<i>Homo neanderthalensis</i>			
<i>Homo rudolfensis</i>			
<i>Homo sapiens</i>			

HOW DO SCIENTISTS FIND AND DATE FOSSILS?

Archaeologists find locations where ancient people may have lived, such as caves.

They then dig pits with straight sides. This shows the layers (or strata) of sediments that have accumulated over time. Each layer, or stratum, is excavated one at a time. Generally, the deeper you go, the older the layers.

Finds, such as stone tools and even human remains, as well as smaller items like tool flakes, bone fragments and pollens, can be found in each layer. Some of these can be tested to see how old they are, but items like stone tools can't be tested. Instead, samples of dirt from the layer are tested to determine how old it is. This allows archaeologists to draw some conclusions about the ages of the **artefacts** they find in each stratum and the relationship between layers and artefacts. It is important to keep each stratum separate to be able to accurately date the finds. Identifying, analysing and studying these layers is called **stratigraphy**. Historians can then put artefacts and what they tell historians in order from earlier to later. This is called chronological order.



▲ **Source 1.10** Excavating Liang Bua cave, a limestone cave on the island of Flores where fossils of *Homo floresiensis* were found

artefact an object that is made by a person, such as a tool or a decoration; it is usually of historical interest

stratigraphy the archaeological term that refers to interpreting and analysing the way different layers of earth (or strata) represent the relationship between events and time periods



ACTIVITY 1.3
RESPONDING TO THE SOURCE

Early humans

Refer to Source 1.10.

- 1 **Describe** what you see in the image.
- 2 **Explain** how this pit provides stratigraphy information.
- 3 **Explain** how archaeologists can create a chronology of when *H. floresiensis* lived in this cave.

What routes did humans take to travel around the world?

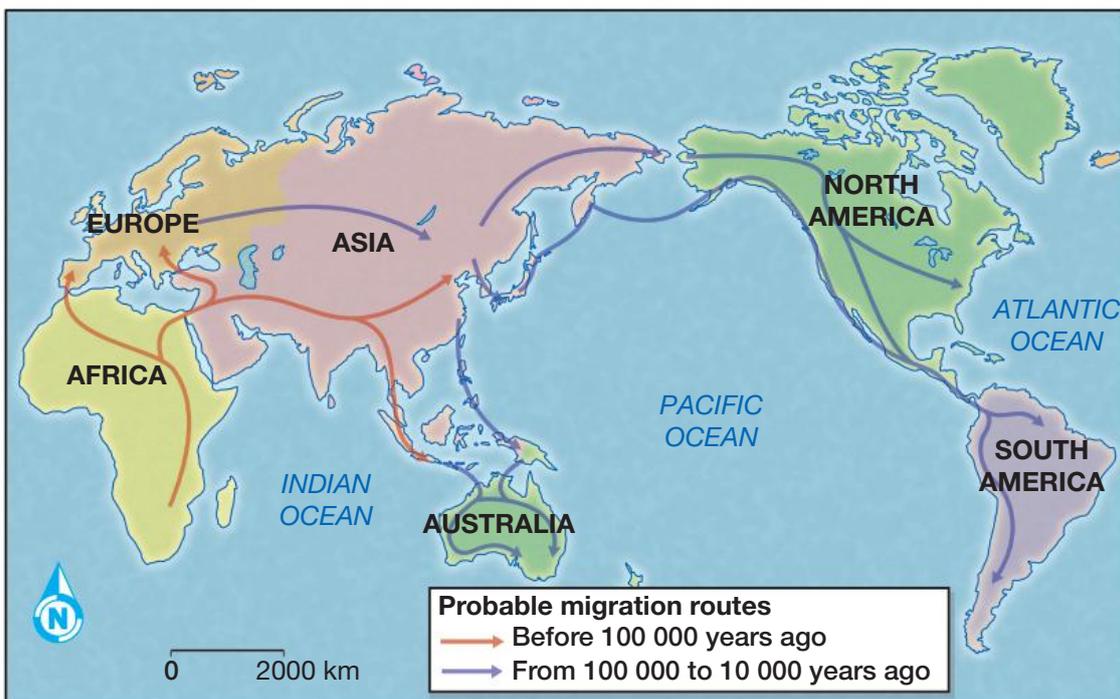
HOW DID EARLY HUMANS SPREAD AROUND THE WORLD?

According to the ‘Out of Africa’ theory, *Homo sapiens* migrated from Africa to Europe and Asia more than 100 000 years ago. It is unknown exactly why humans first migrated from Africa; however, the main theory is that there was a change in climate. It is thought that harsher droughts in Africa and increased rain in the Middle East led to a greening of previously arid regions, encouraging early humans to follow the better conditions. Other theories suggest that early humans were tracking migratory herds across the continents or that the movement of humans from the south of Africa pushed humans located in the east of Africa to move into Asia and Europe. During the last glaciation period (Ice Age), which began 115 000 years ago, ocean water became locked in ice and sea levels fell. This helped early humans to access lands by walking over **land bridges** or taking short boat trips.

land bridge a connection between two land masses that allowed humans and animals to cross to new areas



▲ **Source 1.11**
Out of Africa



▲ **Source 1.11** This map shows the migration routes of early humans, as explained by the ‘Out of Africa’ theory. Scan the QR code to watch a video explaining this in more detail.



ACTIVITY 1.4 RESPONDING TO THE SOURCE

Migration paths

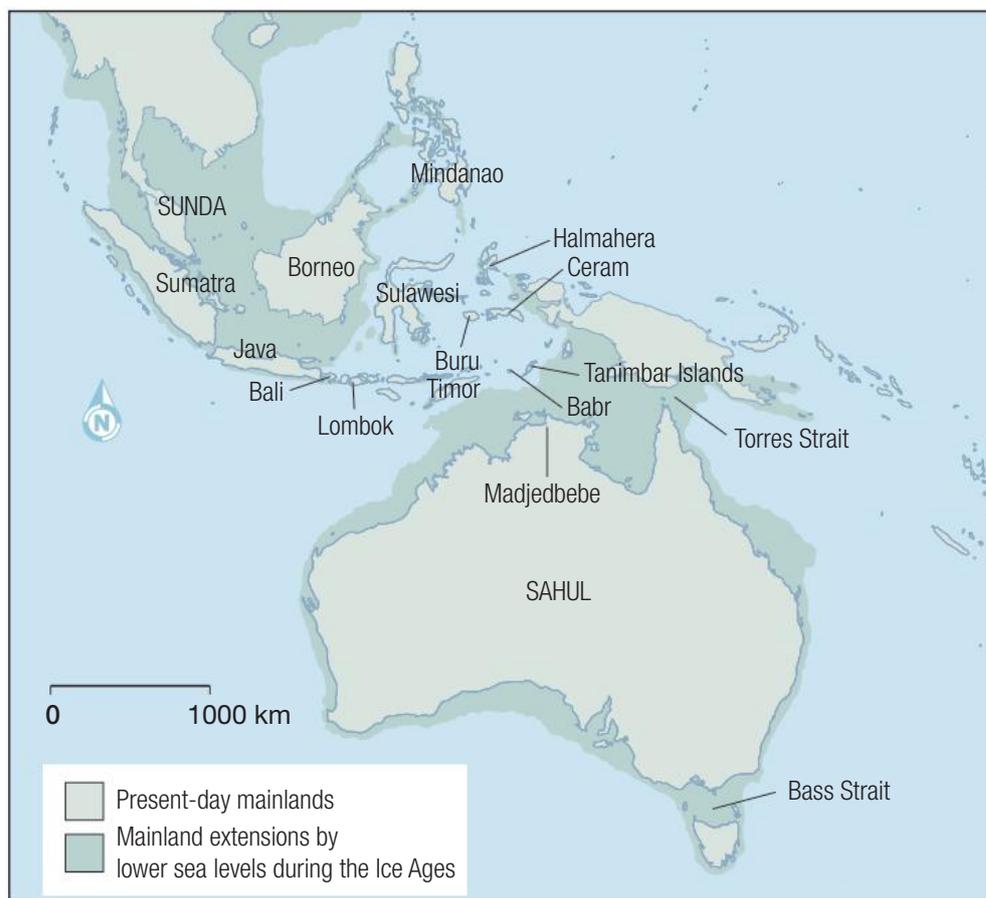
Source 1.11 shows the movement of early humans across the world. These waves of migration took place over thousands of years.

- 1 Identify** the continent where humans first emerged.
- 2 Explain** where the first humans migrated to before 100 000 years ago.
- 3 Explain** what was geologically different about Australia and its neighbouring countries at the time when First Nations peoples are believed to have first arrived.
- 4 Suggest** why human migration to North America probably occurred earlier than human migration to New Zealand.
- 5 Propose** other routes that early humans could have taken around the world and **identify** evidence you would need to look for to confirm these possibilities.
- 6** Use the internet to **research** a theory for why and how early humans migrated out of Africa and around the world. **Identify** 1–2 pieces of evidence that have been used to support this theory.

HOW DO SCIENTISTS EXPLAIN HUMANS REACHING SAHUL?

The land mass of **Sahul** connected what are now New Guinea and Tasmania to mainland Australia with land bridges. Land bridges also connected some of the islands of what is now Indonesia to South-East Asia in a land mass called Sunda. There was no land bridge between Sahul and Asia. People would have needed to travel by boat to reach Sahul.

Sahul an ancient continent that once existed; it was made up of modern mainland Australia, Tasmania, the Torres Strait Islands, New Guinea and parts of Indonesia



▲ **Source 1.12** Australia's landform 20 000 years ago

Most prehistorians take seafaring – defined as deliberate, place-to-place, open-ocean voyaging – to be a relatively recent phenomenon, dating no earlier than the terminal Pleistocene, 10 000–15 000 years ago. Others regard this assessment as too conservative, drawing attention to evidence of a more remote origin, associated with the initial colonisation of Sahul (Pleistocene Australia-New Guinea).

Archaeological evidence and demographic modelling indicate that seafaring was central to the colonisation of Sahul and parts of Near Oceania roughly 45 000 years ago.

▲ **Source 1.13** Non-Indigenous anthropologist James O’Connell and others explain that people made deliberate ocean voyages to get to Sahul. Extract from James O’Connell et al., ‘Pleistocene Sahul and the origins of seafaring’, Academia website, March 2008.

Our results demonstrate that ... the chances of randomly making the voyage to Sahul is low except when unrealistically high numbers of adults are washed off an island at unrealistically high frequencies ... [O]ur results indicate that peopling of Sahul ‘by accident’ is implausible ... [and] that Sahul was initially peopled by intentional and directed voyaging. The conclusion that large numbers of individuals were required to establish a viable population on Sahul is consistent with the genetic diversity represented in the initial founding population.

▲ **Source 1.14** Non-Indigenous scientists explain that people deliberately travelled to Sahul. Extract from Michael Bird et al., ‘Early human settlement of Sahul was not an accident’, *Scientific Reports*, 17 June 2019.

New research has revealed that the process of ‘peopling’ the entire continent of Sahul – the combined mega continent that joined Australia with New Guinea when sea levels were much lower than today – took 10 000 years.

Sophisticated models combined recent improvements in demography and models of wayfinding based on geographic inference to show the scale of the challenges faced by the ancestors of Indigenous people making their mass migration across the supercontinent more than 60 000 years ago.

▲ **Source 1.15** Non-Indigenous scientists explain how long it took people to travel around the land mass of Sahul. Extract from Corey Bradshaw et al., ‘Remapping superhighways travelled by first Australians’, News, Flinders University website, 6 February 2023.



ACTIVITY 1.5 RESPONDING TO THE SOURCES

Scientific findings

Refer to Sources 1.13–1.15. These are extracts from scientific research papers and they can be hard to understand. Use this table to find the main messages.

Select the right word/s to complete the sentences.

1	People came to Sahul by travelling across _____.	10 000 years
2	To travel deliberately from place to place, people needed to be able to _____.	accident
3	People have been skilled boat builders, navigators and travellers for _____.	open oceans
4	People did not come to Sahul by _____.	Large numbers
5	_____ of people came to Sahul at the same time.	tens of thousands of years
6	It took _____ for people to populate the entire Sahul supercontinent.	navigate

How do First Peoples explain their existence on the Australian continent?

One way to gain insights into the past is to understand how First Peoples today understand their presence in Australia. To explore how the First Peoples came to the Australian continent, historians need to know that there are different ways of understanding time and these provide different types of knowledge.

HOW DO FIRST PEOPLES UNDERSTAND TIME?

For many First Peoples today, the past is part of the present, connected in Country and knowledge stories. This connection is often described with the word ‘**everywhen**’, which means time is both the past and the present. The ancestors created the land, Country, people, animals, plants and water sources, and this is still visible where people live today. When these landscapes and events are cared for and celebrated in song, story and dance, First Peoples are maintaining and celebrating the past in the present.

everywhen

describes the eternal and interconnected nature of time in First Peoples’ understandings

terra nullius a Latin term that means ‘nobody’s land’

Australian Aboriginal people hold a sense of a much longer history that challenges the western historical imagination ... Time is multi-layered ... [There is a] connectedness between human and other living beings, and in which the Earth itself is a living force. [It is an] undated, multi-layered ‘now’, with living spirits present and walking around, conducting themselves in the everyday.

▲ **Source 1.16** Non-Indigenous researcher Ann McGrath describes how deep time connects to the present.

The human presence here [in Australia] has been revealed to be more ancient than that of Europe ... and the Australian landscape, far from being **terra nullius** is now recognized to be cultural as much as natural, imprinted with stories and law and shaped by the hands and firesticks of thousands of generations of Indigenous men and women.

▲ **Source 1.17** Settler researcher Billy Griffiths explains deep time in his book *Deep Time Dreaming: Uncovering Ancient Australia*, 2018, p. 2.



ACTIVITY 1.6 RESPONDING TO THE SOURCES

Reflecting on time

Refer to Sources 1.16 and 1.17.

- 1 **Explain** First Peoples’ understanding of time.
- 2 **Describe** your perspective of time.
- 3 How can historians respond respectfully to First Peoples’ understanding of time?

HOW DO FIRST PEOPLES UNDERSTAND THEIR ORIGINS?

Many First Peoples understand there was a creation time when the ancestors created Country and all living things, including people. This means people have been here 'since the beginning' or 'always'. Because the land and all living things are here, we are still living in the time of creation. People continue the world the ancestors created by looking after it physically and spiritually. Some First Nations people do not consider scientific information to be essential in understanding where they came from, while others find it useful.

White fellas like theorising we come from somewhere else other than Australia to lessen our connection to Country. We are from here. Our knowledge of our history is embedded in our blood and our country. Whitefellas' knowledge of our history is only as good as their technology.

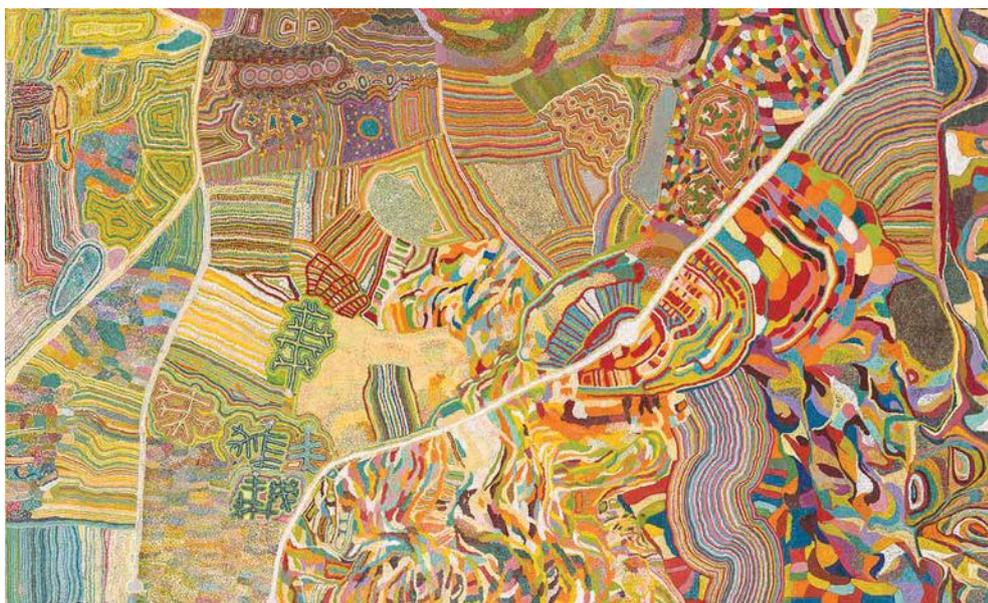
▲ **Source 1.18** Aunty Val Cooms, a Quandamooka Elder, explains her understanding of her origins.

Aboriginal people have always known that we have been on our land since the start of our time, but it is important to have science show that to the rest of the world.

▲ **Source 1.19** Kaurna Elder Lewis O'Brien. Kaurna Country is in South Australia.

We have no books, our history was not written by people with pen and paper. It is in the land, the footprints of our Creation Ancestors are on the rocks. The hills and creek beds they created as they dwelled in this land surround us. We learned from our grandmothers and grandfathers as they showed us these sacred sites, told us the stories, sang and danced with us the Tjukurpa (the Dreaming Law). We remember it all; in our minds, our bodies and feet as we dance the stories. We continually recreate the Tjukurpa.

▲ **Source 1.20** Nganyinyntja, a Pitjantjatjara woman and Elder, tells how her people's history is written in the land.



▲ **Source 1.21** This painting is called *Yarrkalpa (Hunting Ground)* and is by a group of artists called the Martumili Artists. These artists are from the Martu people and they live in central northern Western Australia. This painting tells part of the Dreaming story of the Seven Sisters, a creation and knowledge story that extends across the Western Desert. In this knowledge story, the sisters are pursued across the country and the land, foods, animals and water are created. The creation and songline can be seen in the landscape and is ever-present.



ACTIVITY 1.7 RESPONDING TO THE SOURCES

Diversity

Refer to Sources 1.18–1.21.

- 1 **Explain** how these sources show the **diversity** of First Peoples' perspectives.
- 2 **Suggest** why you think there is not one unified perspective for all First Peoples.



ACTIVITY 1.8 RESPONDING TO THE SOURCES

Refer to Sources 1.13–1.15
and 1.18–1.21.

Compare the ways the sources explain the origins of the First Peoples.



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Perspectives.

Your response should contain:

- A clear identification of the source's perspective
- Evidence from the source to demonstrate this perspective (note, this may include implied meaning)
- Discussion of how the source's origin or context may account for this perspective
- Discussion of how this perspective compares to other perspectives (in questions that use more than one source)
- Consideration of how this source's perspective is useful in responding to the question.

HOW DO FIRST PEOPLES PASS ON THEIR KNOWLEDGE?

First Peoples pass on knowledge through storytelling – spoken stories but also stories shared through art, dance and song. Telling stories is a powerful way to remember details as well as to convey abstract ideas. Each First People has its own body of traditional knowledge and its own belief system, and this knowledge has been passed on for thousands of years. Each language group has its own word to name this traditional set of knowledge and beliefs. Often these names have been translated into English using the word 'Dreaming'.

'**Dreaming stories**' are connected to specific Country, specific places or specific things in a place. For example, Tagalaka people of North Queensland have a Brolga Dreaming that connects to a specific place on their country. To be a custodian or traditional owner of a place is to also be a custodian of the knowledge of that place and be responsible for passing the traditional knowledge on to the right people. Knowledge custodians are often called **Elders**.

diversity a range of different people, ideas or things

Knowledge stories/ Dreaming stories

knowledge connected to specific Country, places or things, with deepening levels, connected to dance, song, art, ceremony and cultural practices, passed on through kinship

Elders knowledge holders respected by First Peoples, often called Aunty or Uncle

oral history the recording of past events in a spoken form, including through song, story or dance

Historians refer to the history-related content of these knowledge stories as ‘**oral history**’; however, the stories involve much more information.

He points to the sky and explains: ‘Aboriginal people, according to creation stories, that’s where we came from – up there as opposed to walking across the land bridge [from mainland Australia]’.

▲ **Source 1.22** pakana man Tony Brown explains his understanding of his people’s origins.

It’s an extraordinary thing. We don’t find this in other places around the world ... Say I’m a man from central Australia, my father teaches me stories about my Country. My sister’s children, my nephews and nieces, are explicitly tasked with the kin-based responsibility for ensuring I know those stories properly. They take those responsibilities seriously. At any given point in time, my father is telling the stories to me and his grandkids are checking. Three generations are hearing the story at once ... that’s a kind of scaffolding that can keep stories true. When you have three generations constantly in the know, and tasked with checking as a cultural responsibility, that creates the kind of mechanism that could explain why [the First Nations peoples of Australia] seem to have done something that hasn’t been achieved elsewhere in the world: telling stories for 10 000 years.

▲ **Source 1.23** Settler researcher Nicholas Reid describes how oral traditions could be accurately passed down in First Nations cultures across 300 generations in a way that does not exist in any other part of the world.



ACTIVITY 1.9 RESPONDING TO THE SOURCES

Knowledge stories

Refer to Ngaarba Dreaming (page 12), and Sources 1.16–1.23.

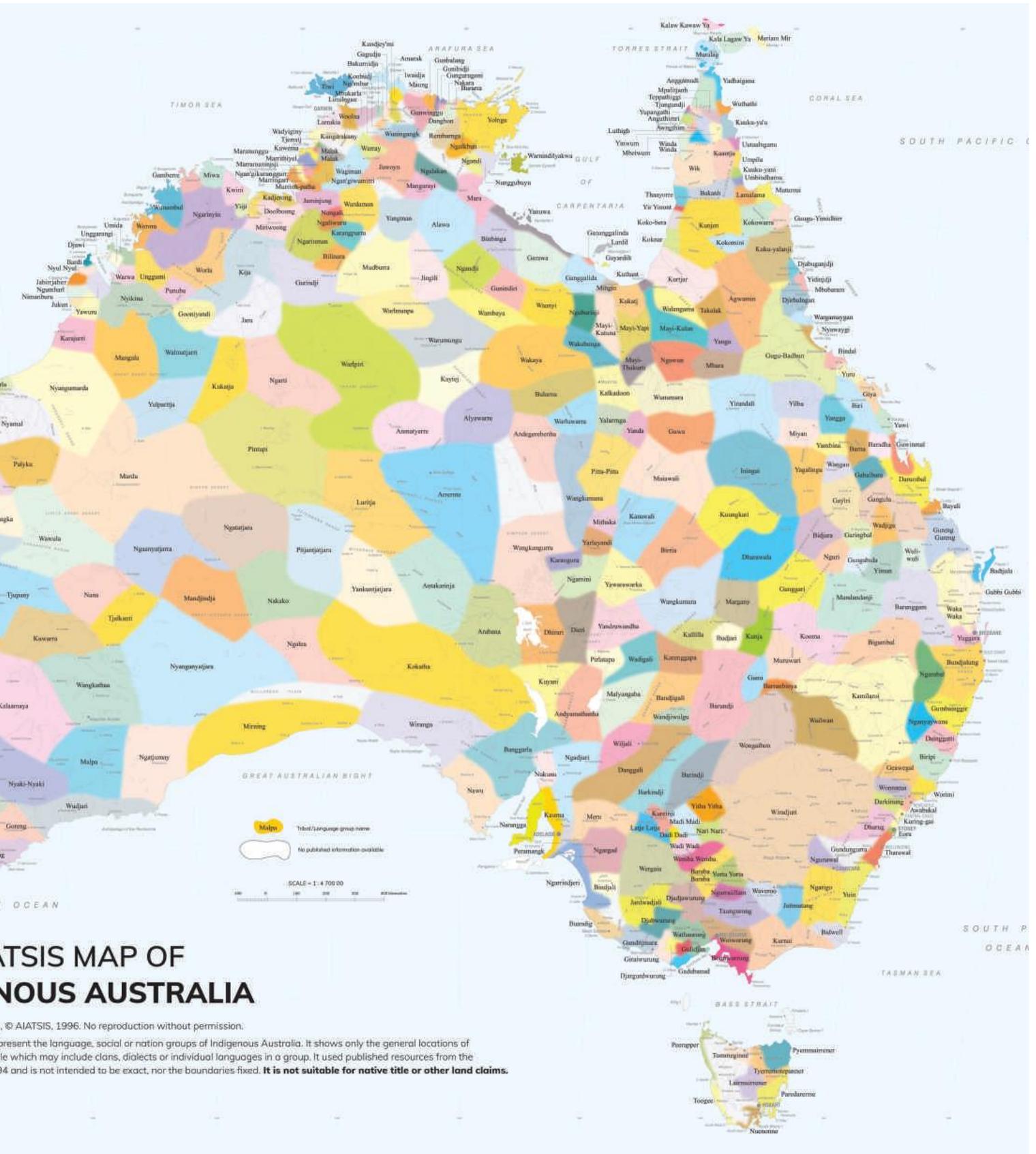
- 1 **Explain** First Peoples’ understandings of time and their origins. Use information from sources to support your explanation.
- 2 **Describe** First Nations peoples’ knowledge systems and techniques for sharing knowledge.
- 3 **Investigate** why pakana is written with a lowercase first letter.

HOW DO FIRST PEOPLES CONNECT TO PLACE?

language groups a community of people who speak a common language, often reflecting cultural, historical and ancestral ties

First Peoples consider that they have always been in place, since their ancestors created living landscapes. First Peoples know where their connections to Country are. Source 1.24 shows different **language groups** across the continent.





▲ **Source 1.24** A map of Indigenous Australia. This map attempts to represent the language, social or nation groups of Indigenous Australia. It shows only the general locations of larger groupings of people, which may include clans, dialects or individual languages in a group. It used published resources from the eighteenth century to 1994 and is not intended to be exact, nor the boundaries fixed. It is not suitable for native title or other land claims. David R Horton (creator), © AIATSIS, 1996. No reproduction without permission. To purchase a print version visit: <https://shop.aiatsis.gov.au>.



ACTIVITY 1.10 MAKING THINKING VISIBLE

See, think, wonder

Examine Source 1.24.

See

- 1 **Identify** three details that you can see when you look closely at the map.
- 2 **Identify** the source line. Source lines often explain who created the source, and when and where it was created.

Think

- 3 The source line for the map tells you where the person who created the map got their information from. Most information came from sources written by non-Indigenous people. Consider whose perspectives and information are being used to create this map, and whose perspectives and information might be missing.
- 4 How does this map differ from a map that shows the states of Australia? Why might this difference exist?
- 5 There are hundreds of distinct language groups on this map, showing the diversity of First Peoples' perspectives. How does this diversity impact on the work of historians?

Wonder

- 6 What does this map make you wonder?



ACTIVITY 1.11

Research task

Learning from local knowledge holders

Ask a local knowledge holder to share some of their knowledge with your class.

- 1 Explore with your teacher ways that you might engage with local knowledge holders. Who are the knowledge holders for your area, and who might be an appropriate person to engage with?
- 2 **Identify** ways in which your class might engage respectfully and reciprocally (which means responding to a gesture with a corresponding one) with a knowledge holder.
- 3 **Generate** a list of things you would like to know about the deep time history of your area. Share your list of questions with your class and **create** a class set of questions for your guest knowledge holder.
- 4 **Investigate** yarning, a way to learn by sharing rather than asking questions. How could your class learn from the knowledge holder through yarning?

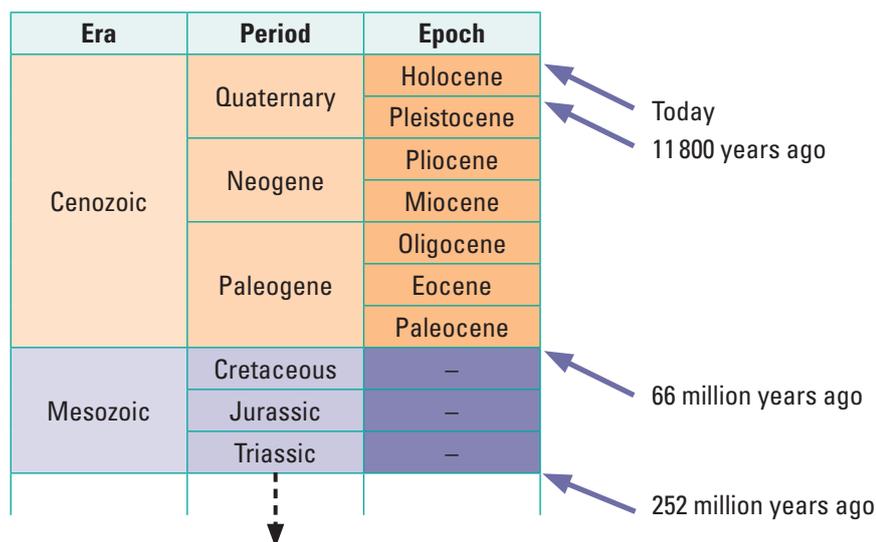
When did the First Peoples come to the Australian continent?

To explore this topic, we will learn about how historians understand time and construct timelines.

HOW DO HISTORIANS UNDERSTAND TIME?

Historians imagine time as a line joining the past, present and future in chronological order. Historians often show this understanding of time passing using a diagram known as a timeline. In this understanding, from a moment in the present, people look back at things that have already happened – these are things in the past.

‘The past’ covers a very long period, so people who work with the past develop ways to divide it to describe and study it. For example, the geological time-scale refers to processes that have happened over millions of years. Geologists call the series of Ice Ages from 1.6 million to 11 000 BP the **Pleistocene era**; our current **Holocene era** started 11 000 BP.



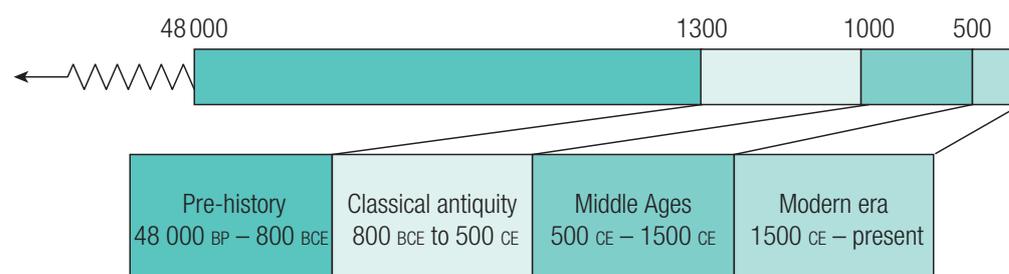
▲ **Source 1.25** This geological time-scale is not to scale and is measured in millions and billions of years. It explains key geological and life form differentiation over the lifespan of the planet.

Pleistocene era (or epoch) a long period of geological time that includes the last glacial period, where temperatures were cooler and sea levels lower (1.6 million to 11 000 years BP)

Holocene era (or epoch) a period of geological time that begins at the end of the last glacial period, where global temperatures began to warm and sea levels rose (11 000 years BP to the present)

pre-history the time of human existence before recorded history

European historians constructed a timeline that starts about 10 000 BP that was divided into Ancient, Medieval (Middle Ages) and Modern histories. The period before this was usually described as **pre-history**, which means a time before history started being recorded.



▲ **Source 1.26** A timeline representing European historical periods



ACTIVITY 1.12

Create a timeline

Australia has a deep time history – that is, it has a human history tens of thousands of years long. This activity provides two ways to understand this time.

In this activity, you will need:

- A piece of string that is 6.5 metres long
- A list of key events and dates from the deep time history of Australia
- Sticky tape
- A measuring tape.

The string represents the 65 000 years of human presence on the Australian continent. Attach your key dates/events to the timeline at the appropriate intervals. You will need to use maths and a measuring tape to work out where they sit along the timeline. You may wish to add other significant dates from around the world for comparison, such as the founding of Rome and the building of the pyramids of Giza.

Once completed, hold the timeline taut. This is the type of timeline compiled by historians. There is a clear understanding that one thing happens before or after another and there can be relationships between these events.

Now curl the timeline into a small circle on the floor, about 50 centimetres across. This conveys a First Peoples way of understanding the past, which is in the present.

deep time history of Australia the long timespan of human existence on the Australian continent, back to at least 60 000 BP

radiocarbon dating a method to determine the age of organic materials, such as hair, bones or wood, by measuring how much carbon-14 is left

luminescence dating a method to determine how long ago mineral grains were last exposed to sunlight or heat

The term ‘pre-history’ was often used to convey that meaningful human history had not started yet. Settler historians in Australia once dismissed the presence of the First Peoples before 1788 by labelling the time before their own arrival as pre-history; however, today there is increasing recognition of the extraordinary achievements of the First Peoples, demonstrated in the longevity of their cultures and the sustainable nurturing of landscapes. The term **deep time history of Australia** refers to the long period of time that people have interacted with the Australian continent.

HOW DO SCIENTISTS WORK OUT WHEN THE FIRST PEOPLES CAME TO THE AUSTRALIAN CONTINENT?

Scientists have worked out that people first arrived on Sahul at least 65 000 years ago. By using archaeology, stratigraphy and scientific dating techniques such as **radiocarbon dating** and **luminescence dating**, scientists have found physical evidence of human activity on mainland Australia that is more than 65 000 years old. This evidence was found in northern Arnhem Land at the Madjedbebe rock shelter in Mirrar Country, in the Northern Territory.

The Madjedbebe site is a sandstone rock shelter – an overhanging rock wall that is painted with art knowledge. This site contains the oldest evidence of human occupation in Australia. Working in partnership with the traditional custodians of the Mirrar Country, a team of archaeologists led by Professor Chris Clarkson from the University of

Queensland has excavated the location. The site contains evidence of very early human occupation in this area of mainland Australia during the Pleistocene era. More than 10 000 artefacts were found there, including wall paintings, charcoal from cooking fires, food remains, and artefacts such as stone axe heads, grinding stones and bone fragments.



▲ **Source 1.27** Non-Indigenous archaeologist Chris Clarkson working with local Djurruburangers at the Madjedbebe excavation site in the Mirrar Country of Arnhem Land, Northern Territory, in 2015. Evidence of human activity 65 000 years ago was found here.

We found evidence for the mixing of ochre with reflective powders made from ground mica to make a vibrant paint ...

We also found new forms of stone tools such as edge-ground hatchet heads (and even the grinding stones used to sharpen them). These were useful in cutting bark and wood, shaping wooden tools and extracting difficult-to-obtain foods from trees. The grinding stones from the site indicate a range of fruits, seeds, animals and other plants were ground up for food. These are the oldest known examples of seed-grinding stones found in Australia, if not the world. In ancient fireplaces from the site we also recovered pieces of burnt pandanus nuts, fruit seeds and yams, which give us clues to the earliest plant foods consumed at the site.

▲ **Source 1.28** Non-Indigenous archaeologist Chris Clarkson writing about the finds at the Madjedbebe site. Extract from Chris Clarkson et al., 'Buried tools and pigments tell a new history of humans in Australia for 65,000 years', *The Conversation*, 20 July 2017.



▲ **Source 1.29** Axes and grinding stones found in the excavations

Among the charred plant remains are fruit pips, nutshells, peelings and fibrous parts from tubers, and fragments of palm stem. These are the discarded leftovers of meals cooked and shared at the rockshelter tens of thousands of years ago ...

Several of these plant foods would have required processing. This included the peeling and cooking of roots, tubers and palm stems; the pounding of palm pith to separate its edible starch from less-digestible fibres; and the laborious extraction of pandanus kernels from their hard drupes.

▲ **Source 1.30** Non-Indigenous archaeobotanist Anna Florin and others explain what can be inferred from archaeological finds. Extract from Anna Florin et al., '65,000-year-old plant remains show the earliest Australians spent plenty of time cooking', *The Conversation*, 18 February 2020.

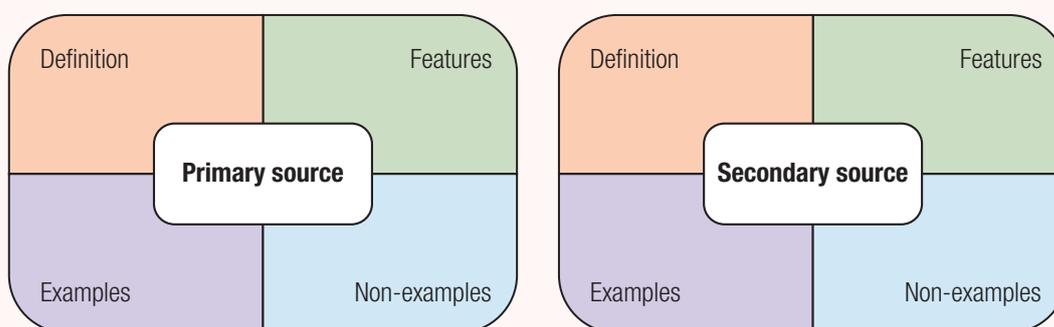


ACTIVITY 1.13 RESPONDING TO THE SOURCES

Primary and secondary sources

Primary sources are objects that were created *at the time of the event* or person you are studying. Primary sources include artefacts (like an axe head) or documents (like a diary). **Secondary sources** are things that were created *after the event* that interpret the event and help us to understand it, such as a textbook or a documentary.

- 1 Fill in the following graphic organisers to clarify your understanding of primary and secondary sources.



primary source a source of information about the past created in the time being studied

secondary source a source of information about the past created after the time being studied

- 2 Refer to Sources 1.28–1.30. **Select** one of the sources and write 2–3 lines that **identify** whether it is a primary or secondary source and **justify** your answer. Here are some questions to help you:
 - Was it created at the time being studied (deep time history of Australia)? = Primary source
 - Was it created after the time being studied (deep time history of Australia) to describe, interpret or explain? = Secondary source
- 3 Many First Peoples' knowledge stories originated in deep time and have been handed down from generation to generation. These stories can be extremely reliable and provide a valuable insight into the values, attitudes and beliefs of First Peoples. As a class, **discuss** whether oral histories are primary or secondary sources, or whether a new category is needed for historians of Australian deep time.



ACTIVITY 1.14 RESPONDING TO THE SOURCES

The life of the First Peoples

Primary and secondary sources help us to understand different perspectives and, sometimes, the reasons why people acted the way they did. When we explain what we think happened in the past, we need to use primary and secondary sources to justify our ideas. People can have quite different perspectives of the same events, so primary and secondary sources are useful tools to help us to develop our own ideas about the past.

- 1 Using Sources 1.28–1.30, **suggest** what the evidence from this site reveals about the daily life of First Peoples. **Justify** your claims using evidence from both primary and secondary sources.
- 2 **Discuss** as a class what respectful collaboration with First Peoples might reveal when researching at an archaeological site.

HOW DO SCIENTISTS INVESTIGATE THE MIGRATION OF THE FIRST PEOPLES?

Scientists use a range of techniques to work out how the First Peoples migrated across Sahul. By dating evidence at a range of sites, a picture emerges of when people were in certain locations. It is likely that people travelled along waterways and places that had more abundant food sources than across areas such as deserts. Scientists can find evidence of past climates and ecosystems to infer the pathways humans travelled.

Following an initial migration 50 000 years ago, populations spread rapidly around the east and west coasts of Australia ... The Gulf of Carpentaria was a massive freshwater lake at the time and most likely a very attractive place for the founding population.

... [T]he first Aboriginal populations swept around the coasts of Australia in two parallel waves. One went clockwise and the other counterclockwise, before meeting somewhere in South Australia. The occupation of the coasts was rapid, perhaps taking no longer than 2000 to 3000 years. But after that ... populations quickly settled down into specific territory or Country, and have moved very little since ... [These] people – once settled in a particular landscape – stayed connected within their realms for up to 50 000 years despite huge environmental and climate changes. We should remember that this is about ten times as long as all of the European history we're commonly taught.

This pattern is very unusual elsewhere in the world and underlines why there might be such remarkable Aboriginal cultural and spiritual connection to land and Country.

▲ **Source 1.31** Non-Indigenous scientists Alan Cooper, Ray Tobler and Wolfgang Haak from the University of Adelaide describe the Aboriginal migration into Australia that took place about 50 000 years ago.



▲ **Source 1.32** This image shows the routes scientists think people took to migrate across the land mass of Sahul.



ACTIVITY 1.15 MAKING THINKING VISIBLE

See, think, wonder

Refer to Source 1.32.

See

- 1 List three things you see on the map.
- 2 **Describe** the relationship between pathways and mountains.

Think

- 3 **Describe** the difference between 'super-highways' and 'secondary routes'.
- 4 **Compare** this map to a physical map (that shows features like mountains and deserts). Do these pathways align with current physical landscape features? What might have changed?
- 5 Some pathways have been drawn in where there are no archaeological sites. Why might scientists have suggested these pathways?

Wonder

- 6 What does this map make you wonder?



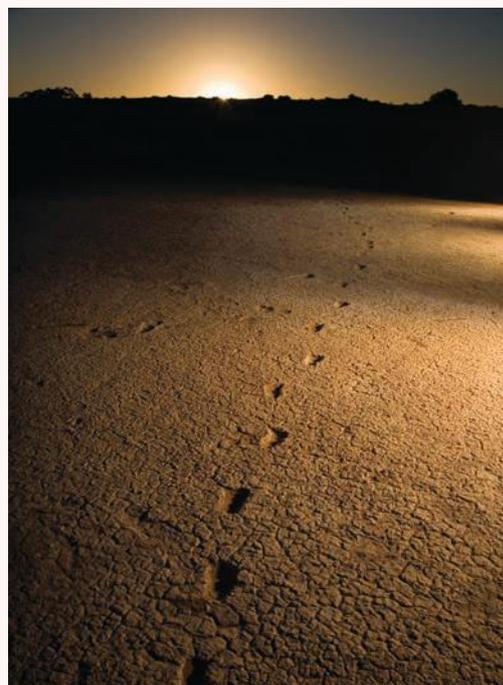
ACTIVITY 1.16 RESPONDING TO THE SOURCES

Mapping migration pathways

The following sources provide dates and locations for human activity across the continent.



▲ **Source 1.33** Basalt axe flakes discovered in the Kimberley, Western Australia. These fragments were found in the same layer of sediment as a charcoal sample that was radiocarbon dated to be 48 875 to 43 941 years old.



▲ **Source 1.34** Fossilised human footprints discovered in the Willandra Lakes Region, a World Heritage site in New South Wales. These prints were made 19 000 to 23 000 years ago.





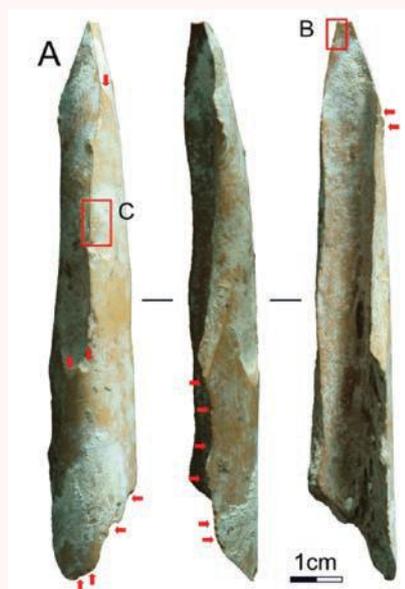
▲ **Source 1.35** A kangaroo bone fragment discovered 20 years ago in the Kimberley, Western Australia, is Australia's oldest-known piece of Indigenous jewellery. This bone artefact, which is over 40 000 years old, was excavated at Carpenter's Gap 1, a rock shelter in the traditional country of Bunuba people. Photograph provided by Michelle Langley.

It's a shaped point made on kangaroo leg bone, and at each end we can see traces of red ochre ...

This artefact was found below a deposit dated to 46 000 years ago, so it is older than that date ...

The bone we found is most consistent with those used for facial decoration.

▲ **Source 1.36** Researcher Dr Michelle Langley, discussing Source 1.35



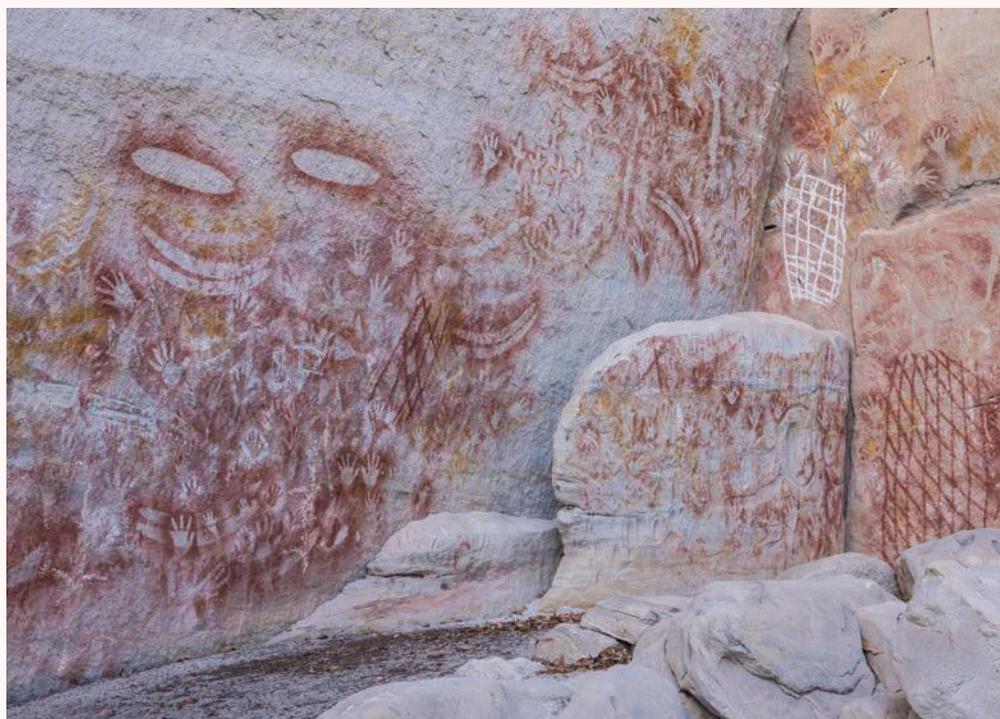
▲ **Source 1.37** Bone tools found in Riwi Cave in the Kimberley, Western Australia. These artefacts have been dated to be more than 35 000 years old. Permission granted by Gooniyandi Traditional Owners of Mimbi Community.





▲ **Source 1.38** A **shell midden** located in Weipa on the Cape York Peninsula. This midden is about 2700 years old. Some still sit on the surface, and they can extend under the ground. Often, middens are located at traditional feasting locations near the coast.

shell midden a large mound of seashells piled up as a result of being thrown away after humans consumed the shellfish within the shells



▲ **Source 1.39** Art in Carnarvon Gorge National Park. Demonstrating the richness of Australia's First Nations cultures, this fragile art is on the sandstone walls of Carnarvon Gorge National Park in Queensland's Central Highlands, near Rolleston. Ochre stencils of tools, weapons, ornaments and ceremonial objects are primary sources that provide an insight into the lives of the gorge's traditional owners. The Carnarvon Gorge system is described as a place of learning and of great spirituality by the Bidjara and Karingbal communities. There is occupational evidence of this site dating back 19 500 years, and it is thought to have been in use for at least 3650 years.





▲ **Source 1.40** Rock art in Cape York. This example of rock art is at the Giant Horse archaeological site in Queensland's Cape York. Quinkan rock art was created between 28 000 and 4000 BP and holds great spiritual significance. The art links the past with the present and is studied by archaeologists who work together with local people. In this photograph, a local Laura Ranger, Gene Ross, is sharing his traditional knowledge with a Djurrubu Ranger, Clarrie Nadjamerrek, who was visiting the site from the Northern Territory.

- 1 **Explain** what archaeology can tell us about the lives and deep time history of First Peoples. Consider what it cannot tell us.
- 2 **Generate** a question that interests you about the lives and deep time history of First Peoples.



REFLECTING ON YOUR LEARNING 1.1



Reflect on what you have learned in this section:

- 1 Take 2–3 minutes of individual reflection to **create**, from memory, a list of key ideas you recall from this section.
- 2 Swap your list with the list of one of your classmates. Take 1–2 minutes to read that list and add new things (such as details, missing ideas or a correction).
- 3 Repeat step 2 at least twice with different classmates.
- 4 Retrieve your list. Read through and review all the additions made to your list. Add any new ideas you might have had from reading three other lists.
- 5 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'How did the First Peoples come to the Australian continent?' Be sure to **consider** both First Peoples' and historians' understandings of time and place.
- 6 **Consider** how the information and sources in this section could contribute to answering the overall inquiry question: 'How have First Peoples sustained a regenerative relationship with the Australian continent through deep time?'
- 7 Reflections are personal explorations. Write, sketch, **create** or tell to explore your thinking on the content in this topic. Use these sentence starters to help you:
 - I used to think ...
 - Now I think ...

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.



1.2 How have the First Peoples interacted with the Australian continent through deep time?

- FOCUS QUESTIONS**
- How do First Peoples interact with Country?
 - How have the First Peoples responded to changes in land and landscapes?



THINKING DEEPER

One of the key historical concepts you will learn about in your studies of History in Year 7 is **change and continuity**. Historians need to think about why certain things have changed or stayed the same over time.

change and continuity the reasons why things have changed or stayed the same

cultural landscape an area shaped by the practices, beliefs and cultural traditions of First Peoples, reflecting their spiritual and historical connection

The First Peoples of Australia have the oldest continuous culture in the world. This means that First Peoples today are custodians of the cultural and intellectual heritage of their ancestors from thousands, and tens of thousands, of years ago. Historians can look to First Peoples today for insights into deep time history.

To understand how First Peoples have interacted with the Australian continent, historians need to explore how the First Peoples understand the land as a living being called ‘Country’. People and Country are connected. The First Peoples record their history in their knowledge stories. Scientists use dating techniques to determine what has happened to land through deep time and how people responded to these changes. Respectful historians can recognise and work with both these ways of knowing time and place.

How do First Peoples interact with Country?

First Peoples today understand Country as a living being that is interacted with culturally and spiritually. This provides insights into how First Peoples in the past may have interacted with and responded to changing landscapes.

WHAT IS COUNTRY?

Country is more than a boundary that sets out the land that someone owns. Country is a living thing, created by the ancestors, interacted with, known and loved as its own entity. It is given a capital letter, just like a person’s name. People and Country need each other. Country takes care of people and people need Country. More than 60 000 years of people–Country interdependence means that people and Country have found a way to be together that benefits both. Country is also a vibrant web of spiritual relationships. This makes it a **cultural landscape**, a place that people belong to, not land that belongs to people.

People have an important role in caring for Country. People need to know all the plants, animals, seasons, weather patterns, waterways, canopy, sky country and sea country and how these fit together, and take actions that make sure all these aspects of Country are healthy and thriving. Part of the important role of people is managing who is on Country and who is using which resources, to ensure nothing is exploited or damaged.

First Peoples are connected to Country in **kinship**. This means Country is like family and you treat Country like it is a person. Connections to Country are so important that they give someone their identity. Country is a living being, much like the people reading this book.

kinship a social system that establishes a person's relationships and responsibilities to other people and entities

The land is the mother, and we are of the land; we do not own the land rather the land owns us. The land is our food, our culture, our spirit, and our identity.

▲ **Source 1.41** Gai-mariagal and Wiradjuri man Dennis Foley explains his perspective on the relationship to Country. Foley is an academic and university lecturer specialising in business.

People talk about country in the same way that they would talk about a person: they speak to country, sing to country, visit country, worry about country, feel sorry for country, and long for country. People say that country knows, hears, smells, takes notice, takes care, is sorry or happy ... [C]ountry is a living entity with a yesterday, today and tomorrow, with a consciousness, and a will toward life.

▲ **Source 1.42** Non-Indigenous anthropologist Deborah Bird Rose describes how First Peoples that she has interacted with describe Country.

The first lesson from my friends around the campfire is the way they look at the world around them. They see its riches. They look at the sky and understand its meanings. They look to the land and sea around them and see additional sources of food. They look at the people who make up their family and community and they see the blessings in what they do have ... There is also interconnectedness to the natural world ... the interconnectedness to country is a source of a contented life.

▲ **Source 1.43** Eualeyai and Kamillaroi woman Larissa Behrendt explains her perspective on the Aboriginal and Torres Strait Islander connection to Country and community. Behrendt is an academic specialising in the law, a writer, a filmmaker and an Indigenous rights advocate.

To not know your country causes a painful disconnection ... It is this knowledge [of Country] that enables me to identify who I am, who my family is, who my ancestors were and what my stories are. We are indistinguishable from our country.

▲ **Source 1.44** Arrente and Luritja woman Catherine Liddle explains her perspective on the importance of Country and community. Liddle is a journalist and media expert.

We long for the land and the land longs for us ... When there is no one there on the land it grows uncared for. Everything overgrows because you don't look after it, you don't burn it, you don't hunt on it to make a balance. So things get overgrown, they get out of balance.

For us, we balance as we care for Country and it cares for us. But we are not separate from it. We are in kinship with it.

▲ **Source 1.45** Gay'wu Group of Women explain their relationship with their Yolngu Country.

In northern Australia the storm burns are usually at the end of the year, but you can apply fire to storm burn country any time of the year, as long as you have plenty of rain. This is the same for most systems that can also be shifted depending on changes in weather and climate. The indicators in the country matching with shifting seasons will show you how to adjust your fire for the right place.

▲ **Source 1.46** Tagalaka fire practitioner Victor Steffensen explains some of his fire knowledge.

The Nhunggarra [a First People] ... had to maintain and improve the habitats of all the plants that the animals fed from. They learned this by observing animal behaviours from a young age. Knowledge and rules of behaviour were also embedded in stories, dances and ceremonies.

It was the people's responsibility to keep this knowledge alive and in this way the animals were kept alive ...

▲ **Source 1.47** Non-Indigenous author Karl-Erik Sveiby with Nhunggarra man Tex Skuthorpe explain the connection between knowledge and purpose.



ACTIVITY 1.17 RESPONDING TO THE SOURCES

Connections to Country

- 1 Practise naming sources by following the models in Sources 1.41–1.47 – for example, Arrente and Luritja woman Catherine Liddle. How would you name yourself if you were a source?
- 2 **Suggest** reasons why some First Peoples have connections to more than one Country.
- 3 **Reflect on** your relationship with land or Country.
- 4 Using Sources 1.41–1.47, write a 100-word paragraph to **explain** how First Peoples connect to Country. **Justify** your explanation by discussing the diversity of First Peoples' understandings of connection to Country.



ACTIVITY 1.18

Brainstorming: experts in place

First Peoples are responsible for keeping Country strong by becoming experts in place.

In small groups, brainstorm the features of the Country around you and what you would need to know to keep it healthy and strong.

Acknowledgement of Country/ Traditional owners a formal statement or gesture of respect for the traditional owners of the land and their spiritual and cultural connection to it

Welcome to Country where a custodian introduces a person to, and grants permission to go on to, Country

WHAT ARE APPROPRIATE PROTOCOLS WHEN WRITING ABOUT PEOPLE AND COUNTRY?

Being a custodian means ensuring Country is not damaged or exploited. It is customary to ask permission to go into someone's Country and **Acknowledge** the custodians there, and for the custodian to **Welcome** you and let you know what you can and can't do there. First Peoples often explain who they are, where they are and what their relationship to that place is.

**ACTIVITY 1.19****Brainstorming: knowing place**

- 1 Identify** the First Nations Country your school is located on.
- Is there any evidence of connections to this Country at your school (e.g. language, artworks or First Nations people regularly visiting the school)?
- Brainstorm ways your school could increase its recognition of the First Nations Country it is on.



▲ **Source 1.48** Aunty Joy Murphy performs a Welcome to Country before the round 14 WNBL match between Southside Flyers and Perth Lynx at State Basketball Centre, on 19 February 2023, in Melbourne, Australia.

**ACTIVITY 1.20****Brainstorming: Acknowledging Country**

Welcome to Country and Acknowledgement of Country are ancient practices that continue into present-day Australian society. They are an example of a continuity in Australia's past and present. They are often performed at sporting and community events, as well as work and social gatherings. View some examples of these ceremonies and practices online.

- 1 Describe** some features of a Welcome to Country ceremony or Acknowledgement of Country that you have seen.
- 2 Compare** the Welcome to Country and Acknowledgement of Country practices. Include a consideration of who can conduct each ceremony.
- 3 Explain** why these practices are described in the text as a 'continuity' in Australia's past and present.
- 4 Discuss** as a class why many schools, organisations and others consider Welcome to Country and Acknowledgement of Country ceremonies an essential part of the way they organise their events, and why these are important in present-day Australian society.
- Devise as a class an Acknowledgement of Country, or Welcome to Country if appropriate.

**THINKING DEEPER
HISTORICAL CONCEPTS**

Did you know you are engaging in conceptual thinking? The historical concept in this question is Change and continuity.

Your response should contain:

- A clear statement about what stayed the same and/or what changed
- Corroborating evidence or examples that show how things stayed the same (i.e. continuity)
- Differing evidence or examples that demonstrate how things changed
- A reason that accounts for this continuity and/or change.

climate the general weather conditions usually found in a specific place

How have the First Peoples responded to changes in land and landscapes?

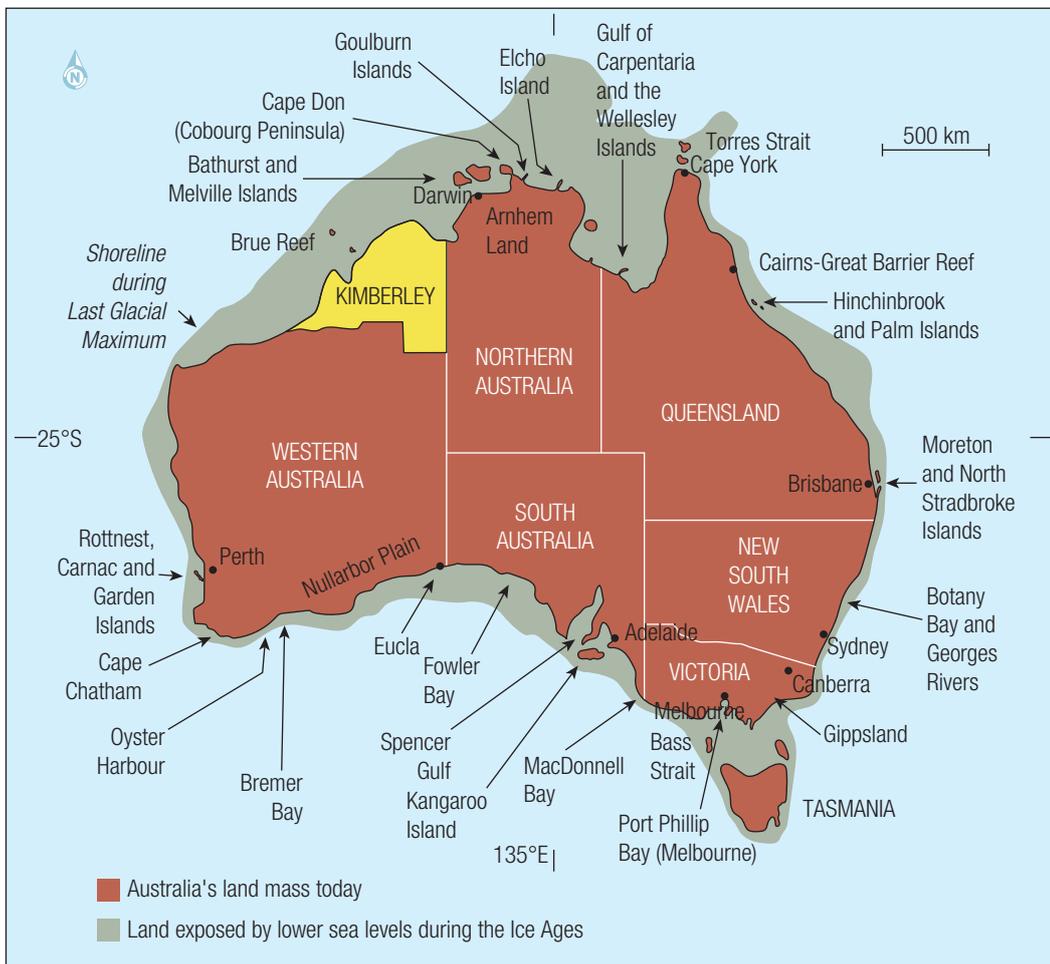
When people first came to Sahul and migrated around the continent, the world was in an Ice Age, which was cooler and drier than today.

Climate changes over the next 60 000 years changed patterns of occupation and food sources, and at times forced people to move to more sheltered areas; however, the First Peoples maintained systems of connection to the entire continent that remain today.

HOW HAVE FIRST PEOPLES RESPONDED TO LOSS OF LAND?

The most dramatic landscape change that First Peoples have lived through is the end of the Ice Age about 11 700 years ago. This marks the beginning of the era scientists call the Holocene era. Sea levels rose and ‘drowned’ one-quarter of the Sahul land mass. Sahul separated into several land masses that today we call the mainland Australian continent, Tasmania, the Torres Strait Islands and Papua New Guinea. Rising sea levels made the gaps between lands larger, and some groups were cut off from other groups entirely.

The inundation that took place after the Ice Age wasn’t a sudden flood. Sea levels rose only 1–2.5 centimetres each year.



► **Source 1.49** A map – developed by non-Indigenous researchers Patrick Nunn (from the University of the Sunshine Coast) and Nicholas Reid (from the University of New England) – showing 21 locations where recorded Aboriginal and Torres Strait Islander peoples’ knowledge stories tell of rising sea levels

However, in low-lying coastal areas, this small increase was enough to submerge areas of land hundreds of metres wide in just one year. In a single lifetime, First Peoples living near the sea may have experienced significant loss of land. Some groups had to move further inland when the seas rose. Others found that their ancestral Country located on peaks of higher ground had, over generations, become transformed into islands.

For thousands of years a land bridge, known as the Bassian Plain, connected mainland Australia to Tasmania, and First Peoples could travel back and forth between Victoria and Tasmania. Once sea levels rose, the Tasmanian First Peoples remained isolated for around 8000 years, from the end of the Ice Age until European exploration and colonisation.

Researchers Nunn and Reid summarised the following knowledge stories that were shared with them in 2016 (Sources 1.50 and 1.51).

The principal story concerns two Aboriginal peoples, the Noonuccal of North Stradbroke and the Nughies of Moreton. One version states that a bailer shell kept by the Noonuccal contained power over the winds and was coveted by the Nughies. When the keeper of the bailer discovered this, he summoned the winds and commanded them to blow so hard that the connection between the islands would be severed, something that caused the Nughies to become stranded thereafter on Moreton Island.

▲ **Source 1.50** A knowledge story about the rising sea levels in the area that separated Moreton and north Stradbroke Island near Brisbane

According to Gungganyji informants ... the barrier reef was the original coast here at a time when a man called Gunya was living here. [After he] consumed a customarily forbidden fish, the [ancestors] caused the sea to rise in order to drown him and his family. He evaded this fate by fleeing to the hills but the sea ... never returned to its original limits.

▲ **Source 1.51** A knowledge story about the rising sea levels near Cairns

In the Whitsunday Islands ... the distance became too great, with the mainland over 30 kilometres away ... the people were left to cope on their own [and] they did so by becoming specialised marine **foragers**. They developed their own artistic traditions and a distinct social and **linguistic** identity. They invented new tools to suit their particular **subsistence** needs: fishhooks from shellfish and turtle shell, spear points from bone and wood, as well as nets and shell-scraping tools.

▲ **Source 1.52** A non-Indigenous archaeologist, Scott Cane, explains the impact of rising sea levels on the Ngaro Country in Queensland's Whitsunday Islands. The Ngaro were skilled seafarers who navigated their three-piece canoes over large distances to trade, fish and hunt small whales.

forager a person or animal that goes from place to place in search of things that they can eat or use

linguistic related to language or the study of language

subsistence the state of existing by having just enough resources like food and water to stay alive



ACTIVITY 1.21 RESPONDING TO THE SOURCES

Rising sea levels

Use Sources 1.49–1.52 to answer the following questions:

- 1 **Explain** the features of the map.
- 2 **Interpret** the map and write what it conveys in your own words.
- 3 **Empathy** is the ability to share someone else’s feelings or experiences by imagining what it would be like to be in that person’s situation. Developing a sense of empathy for people in the past is one of the great skills you will learn in this subject. Brainstorm the impacts that rising sea levels may have had on First Peoples.
- 4 **Suggest** how First Peoples might have responded to rising sea levels with innovations.



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Empathy.

Your response should contain:

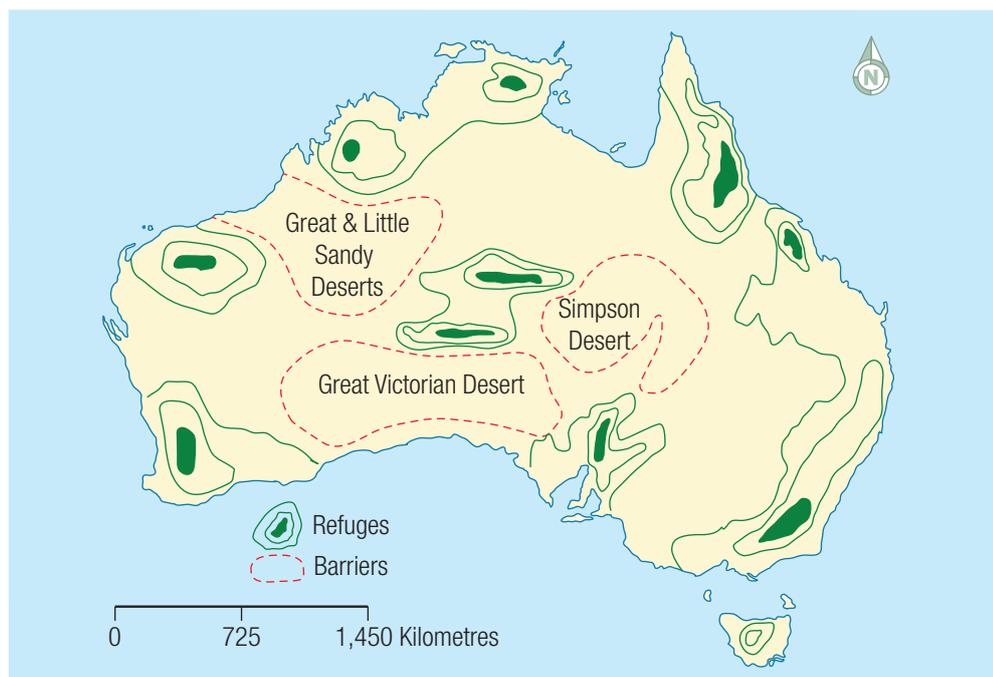
- Language that shows that you understand the values, beliefs, experiences and emotions of people from the past
- Consideration of how these values, beliefs, experiences and emotions align with or differ from your own
- Explanation of how the origin and context of the source may account for similarities or differences with your own experience.

1

empathy the ability to relate to other people

HOW HAVE FIRST PEOPLES RESPONDED TO CHANGING VEGETATION?

People arrived on Sahul more than 65 000 years ago; however, the Ice Age reached its coldest point about 20 000 years ago. As the climate changed, across Sahul many forests disappeared, waterways dried and some areas transformed into deserts. Researchers have discovered that when the climate significantly cooled, the populations of First Peoples sought sanctuary in well-watered areas and population numbers decreased.



► **Source 1.53** The black shading shows the well-watered areas where First Peoples congregated during the last Ice Age. Adapted from work by Peter Veth.

These climate changes occurred over many thousands of years. Archaeologists have discovered numerous sites across Australia that show evidence of changes in how First Peoples lived in response to these changes, from changes in food collection to expressions of

cultural thought. Allen's Cave, located in the Nullabor in the west of South Australia, was first occupied about 40 000 BP but was abandoned between 17 500 and 15 000 years ago. This appears to coincide with a period of lower rainfall and when sea levels fell. The new coastline was about 160 kilometres further to the south. The people who lived in the area probably moved to live on the new plain closer to the coastline. At the beginning of the Holocene, sea levels rose again and we can see that the cave was used more regularly again.



ACTIVITY 1.22 RESPONDING TO THE SOURCE

Refuges

Refer to Source 1.53.

- 1 **Compare** the refuges with where most people live on the continent today. **Identify** similarities and differences.
- 2 **Propose** environmental reasons for any differences or similarities.



CASE STUDY 1.1

The Kutikina Cave story

Kutikina Cave is in the south-west of Tasmania. It was rediscovered in the late 1970s by **speleologists** who noticed evidence of human occupation. Archaeologists soon realised it was a treasure trove of artefacts and the Tasmanian Aboriginal Centre suggested it be named Kutikina, meaning 'spirit'. At the time, there was a proposal to dam the nearby Franklin River, which would have flooded the cave. The importance of this First Peoples' site was one of the reasons the dam was stopped.

speleologist a scientist who studies caves, or a person who explores caves for sport

... Ros Langford yesterday stood on the edge of the most significant archaeological find in the southern hemisphere. With one more step she would be the first Aborigine in 14,500 years known to enter [Kutikina Cave] on the banks of the Franklin River ... There were several minutes of silence as Ms Langford and three other members of the Tasmanian Aboriginal Centre wandered about in what is a nearly inaccessible and almost perfectly preserved stone age home.

'You can sense the spirit here,' Mike Mansell, a member of the party said. 'This is the sort of stuff we need to get the Dreaming back. We have been cut off from the past.'

More than 15,000 years ago, Mr Mansell's ancestors ... occupied [Kutikina Cave], archaeologists believe, for about 5000 years, and have left behind more than 100,000 artefacts as clues to their battle with animals and a glacier-covered environment.

... Archaeologists, like Professor John Mulvaney from the Australian National University, believe the site is in the top five in the world ... It is regarded as the most significant find on the western Pacific rim, and marks the beginning of the southern-most extension of [humanity's] spread on the globe.

▲ **Source 1.54** A newspaper report from 1982 describing the importance of Kutikina Cave by non-Indigenous journalist Peter Ellingsen, 'Back in Fraser Cave, after 14,500 years', *The Age*, 23 December 1982



Kutikina Cave is a deep cave with holes that form skylights. The cave floor was covered with stone tool artefacts, charred animal bones and the charcoal of an ancient hearth. The stratigraphy of the site contained layers of charcoal, burnt clay, ochre, animal bone and stone tools. Throughout these layers there were also layers of sediment without evidence of occupation. Tool flakes were concentrated around the skylights, suggesting people shaped tools in these better-lit areas. A small 1.2-metre deep test-pit, which was only about 1 per cent of the total area, was dug. This pit contained 75 000 artefacts and 250 000 animal bone fragments. This cave contained some of the richest archaeological history ever discovered on the Australasian continent. Dating of these artefacts showed that Kutikina Cave was occupied during the last Ice Age, from about 20 000 to about 13 000 BP, when it was abandoned. The animal bones showed a diet dominated by wallabies.

At the time of occupation, average temperatures were 4–6°C lower than today and Tasmania had many glaciers. There would have been more open vegetation and grassy plains near Kutikina Cave. Researchers who have worked on the site think that around 20–30 people camped in the cave for a few weeks each year while they hunted in the area before moving to a new location. This way, the food resources of an area would be managed and not overexploited. The animal bone fragments are largely made up of red-necked wallabies (75 per cent) with the remainder being wombats and other species.

When the climate began to change at the beginning of the Holocene, the glaciers retreated, sea levels rose and the First Peoples of the region were cut off from the mainland as the Bassian Plain was inundated. The warming climate also meant that rainforest began to reclaim the gorges and ravines of south-west Tasmania, growing over the grassy plains that wallabies liked.



THINKING DEEPER

cause and effect

the reasons for events and the consequences of these events

One of the key historical concepts you will learn about in your studies of History in Year 7 is **cause and effect**. Historians need to think about why certain events have taken place, and what the consequences of these events may be.



▲ **Source 1.55** The entrance to Kutikina Cave. Note the dense rainforest that exists in the region today.



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Significance.

Your response should contain:

- Identification of what elements are significant in relation to the content of the question
- A clear statement about the degree of significance (i.e. very significant, somewhat significant)
- Evidence from the sources to support this judgement of significance.



ACTIVITY 1.23

Brainstorm: Kutikina Cave

- 1 Brainstorm what life may have been like for the First Peoples during this time. What made Kutikina Cave a good place to live?
- 2 **Explain** why the researchers described it as a 'significant' discovery.
- 3 **Suggest** reasons why First Peoples stopped using the cave.



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Cause and effect.

Your response should contain:

- A clear identification of the causes and/or effects relating to the question
- A clear explanation of how the causes are connected to the effects (i.e. how one event or action led to an outcome or consequence)
- Evidence or examples to support this explanation of the relationship between cause and effect.



ACTIVITY 1.24 RESPONDING TO THE SOURCE

Kutikina Cave

- 1 Read Source 1.54. In this chapter, you have been learning how to **use** two different types of knowledge to understand deep time. **Identify** where the two types of knowing about the past are being practised.
- 2 What do you think Mike Mansell means when he says 'We have been cut off from the past'? How does your learning about 'Country' in this chapter help you to understand what he means?

HOW HAVE FIRST PEOPLES RESPONDED TO ANIMAL EXTINCTIONS?

Many First Peoples' stories tell of a time of giant animals. The well-known story of the Rainbow Serpent is just one of these stories. For at least 20 000 years, the First Peoples lived alongside now-extinct large animals called **megafauna**. Physical evidence of megafauna and representations of these creatures in First Peoples' art have been found in many archaeological sites, including at Madjedbebe.

megafauna large animals over 40 kilograms, such as the elephant, rhinoceros and extinct diprotodon

Australia's extinct megafauna included animals such as:

- Macropus – the world's biggest kangaroo
- Protemnodon – a giant forest wallaby
- Thylacine – sometimes called the 'Tasmanian Tiger', a carnivorous wolf-like animal
- Zygomaturus – a giant marsupial believed to be like a modern hippopotamus
- Diprotodon – a marsupial that is a distant relative of wombats and koalas
- Megalania – a giant goanna that may have fed on the Diprotodon
- Quinkana – a land-dwelling crocodile.



▲ **Source 1.56** The skeleton of a Diprotodon as displayed at the Queensland Museum, Brisbane



▲ **Source 1.57** Part of a skeleton of a Diprotodon from Cox's Creek, Tambar Springs, New South Wales. Diprotodon was a megafauna marsupial that is a distant relative of wombats and koalas. It lived until about 44 000 years ago.



▲ **Source 1.58** Illustration of some of Australia's extinct megafauna. Can you identify Megalania, the world's largest land-dwelling lizard, Macropus, the world's biggest kangaroo, Protemnodon, a giant forest wallaby, Quinkana, a land-dwelling crocodile and Phascolonus, a giant wombat?

Since the beginning of time my ancestors have been telling stories ... as a young Adnyamathanha kid I was told the story about the Yamuti. The Yamuti was a very large and scary animal that specifically looked to steal little kids. This story was not told in a way that placed it in the past, Yamuti existed in real time. We were always told that if we ever saw the Yamuti we had to run to the nearest tree and climb high, because the Yamuti had one flaw, the Yamuti could not look up ... one of the striking descriptions of the Yamuti was that he is very big. Bigger than us kids especially.

Thousands of years ago megafauna were abundant on this land. One animal in particular was the Diprotodon, the largest marsupial to have existed. The Diprotodon was incredibly large and thought to have been a browser, eating plants like shrubs. However it's mostly believed to have been a harmless animal.

Thinking more about the Diprotodon's physical description, it is oddly similar to that of the Yamuti. Interestingly, I was even told that our understanding that a Yamuti could not look up, did show some potential of being present on a Diprotodon's skeleton ... If the Yamuti and the Diprotodon are the same animal, this shows an incredible depth of knowledge that has flowed through thousands of Adnyamathanha generations [more than 40 000 BP].

Whether or not you believe the Diprotodon is the Yamuti, our stories are derived from the truth. Something happened over 40 000 years ago that made my ancestors tell a story to protect their children.

▲ **Source 1.59** Jacinta Koolmatrie, an Adnyamathanha and Ngarrindjeri person, shares a story of a Yamuti.



ACTIVITY 1.25 RESPONDING TO THE SOURCES

Yamuti

Refer to Sources 1.56–1.59.

- 1 **Compare** the description of the Yamuti with Diprotodon.
- 2 **Suggest** what Koolmatrie's knowledge could tell historians about deep time history.
- 3 Categorise each source as a primary or secondary source and **justify** your choice.

The extinction of Australia's megafauna remains, to this day, the subject of a scientific debate. The following sources provide a selection of some **hypotheses** that have been presented to explain the extinction of megafauna in Australia.

hypothesis a theory based on facts, or a suggested answer to a question, to be proved or disproved

The megafauna extinction debate hinges on the coincidence of the arrival of Aboriginal Australians around 45 000 years ago, and the impacts they had on Australia's environment, including extinctions. Some scientists have suggested Aboriginal people drastically transformed the ecology of Australia.

The hypothesis is that through sustained burning Aboriginal people wiped out fire sensitive 'dry rainforest' that once grew across inland Australia. This changed the vegetation to flammable eucalypts and spinifex grasslands, and drove Australia's megafauna extinct.

▲ **Source 1.60** Extract from David Bowman, 'Did fire kill off Australia's megafauna?', *The Conversation*, 30 October 2013

Our study found that the demise of the megafauna in south-west Australia took place from 45 000 to 43 100 years ago and was not linked to major changes in climate, vegetation or biomass burning but is consistent with extinction being driven by 'imperceptible overkill' by humans.

▲ **Source 1.61** Extract from Karl Gruber, 'Humans killed most of Australia's megafauna: study', *Australian Geographic*, 24 January 2017

Climate change, not early humans, was likely responsible for the extinction of Australia's megafauna, according to groundbreaking research that has rewritten the ancient history of our continent.

▲ **Source 1.62** Extract from Stuart Layt, 'Groundbreaking research rewrites Australia's ancient history', *Brisbane Times*, 18 May 2020

It is generally thought from the archaeological record that people first arrived in Australia about 50 000 years ago, perhaps as long as 60 000 years back. Many of the megafauna were slow-moving and perhaps easily hunted, but they would also have been vulnerable to changes in their environment. However there is little evidence to show that early Australian people hunted the big animals.

The earliest signs of people at Willandra Lakes are more than 50 000 years old, and preserved in their campsites are the remains of what they ate. None of the Willandra megafauna have been found in campsites. In the ancient Willandra menu, meat meant mainly shellfish, yabbies, fish and a vast array of small mammals, including hare wallabies, bettongs, bandicoots, bilbies and native rats. These species could be caught in either the lake or in **lunette** burrows. Larger kangaroos are less common in the remains, but perhaps these were caught and eaten away from the lakes. Maybe megafauna too were hunted and eaten on the plains?

▲ **Source 1.63** Extract from the Visit Mungo website, visitmungo.com.au

lunette a crescent-shaped chain of dunes bordering a lake bed or valley in arid or semi-arid locations



ACTIVITY 1.26 RESPONDING TO THE SOURCES

Megafauna

- Analyse** Sources 1.60–1.63 to **identify** the hypotheses presented by each author regarding the extinction of Australia's megafauna.
- When historians have different interpretations of something such as an event, we use the term **contestability** to refer to a clash of ideas. It lets us keep in mind that not everyone agrees about the meaning of things in History. **Conduct** additional research and, with a partner, **discuss** which hypothesis you think is most convincing regarding Australia's megafauna extinction. **Justify** your choice with evidence.
- Analyse** whose voices are missing from these hypotheses and your research.
- Discuss** what kind of new evidence would contribute to this exploration. How could scientists and historians find new evidence?



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concepts in this question are Interpretation and Contestability.

Your response should contain:

- A clear identification of the interpretations of the past
- An assessment of the degree of corroboration or contestability between interpretations
- Evidence from the sources that illustrates the historical interpretations
- A judgement about which of the differing interpretations is best supported by evidence.

contestability where interpretations of the past differ



REFLECTING ON YOUR LEARNING 1.2



Reflect on what you have learned in this section:

- Take 2–3 minutes of individual reflection to **create**, from memory, a list of key ideas you recall from this section.
- Swap your list with the list of one of your classmates. Take 1–2 minutes to read that list and add new things (such as details, missing ideas or a correction).
- Repeat step 2 at least twice with different classmates.
- Retrieve your list. Read through and review all the additions made to your list. Add any new ideas you might have had from reading three other lists.
- Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'How have the First Peoples interacted with the Australian continent through deep time?' Be sure to **consider** both First Peoples' understanding of time and place and historians' understandings of history.
- Consider** how the information and sources in this section could contribute to answering the overall inquiry question: 'How have First Peoples sustained a regenerative relationship with the Australian continent through deep time?'
- Reflections are personal explorations. Write, sketch, **create** or tell to explore your thinking on the content in this topic. Use these sentence starters to help you:
 - I used to think ...
 - Now I think ...

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.



1.3 What technological achievements have First Peoples developed?

FOCUS QUESTIONS

- What techniques have First Peoples developed to cultivate food?
- What techniques have First Peoples developed to catch fish?
- What techniques have First Peoples developed to manage water sources?
- What techniques have First Peoples developed to use fire to care for Country?
- How do First Peoples use seasons and patterns in the landscape and sky?

First Peoples developed sophisticated systems of agriculture that included building dams and wells; planting, irrigating and harvesting seeds; and preserving, storing and trading surplus produce. First Peoples used complex land management alongside hunting and foraging practices. Many of these methods are still in use ‘on Country’ to this day. In many areas of Australia, large settled campsites were long-established features of First Peoples’ societies before the Europeans arrived. Primary sources, archaeological records and oral traditions give us insight into what Australia was like before the Europeans came. Research reveals that Australia’s pre-contact communities were diverse and complex, and that trade and communication between large campsites and villages were key features of the life of First Peoples in many areas.



▲ Source 1.64 Warlpiri people burning spinifex to promote growth, Tanami Desert, Northern Territory



ACTIVITY 1.27 MAKING THINKING VISIBLE

See, think, wonder

Refer to Source 1.64.

See

- 1 **Describe** what you see in the photo. Look at the kind of vegetation, how green it is, the direction of the wind and the strength of the fire.

Think

- 2 Before starting a fire, First Peoples feel the ground for moisture. **Suggest** why they would do this and what it would tell them.
- 3 How would animals respond to this fire?
- 4 Who could you ask to find out more information?

Wonder

- 5 What does this type of burning make you wonder?

What techniques have First Peoples developed to cultivate food?

WHAT ARE FIRST PEOPLES' REGENERATIVE FOOD CULTIVATION TECHNIQUES?

First Peoples on Country today continue to actively manage the land in sophisticated ways. They use unique food cultivation systems developed by their ancestors shared through the generations, as well as incorporating new techniques. These systematic ways of using the Australian landscape have also been recorded by non-Indigenous people since the earliest times of European contact, exploration and colonisation. First Peoples' food cultivation works with plants and animals to develop **regenerative** practices that avoid exploitation.

Historian Bruce Pascoe used the original journals of the first European explorers and settlers in Australia to examine how different First Peoples farmed. The historic journals that Pascoe quotes from reveal glimpses of what Australia might have been like before the Europeans came, and perhaps what ancient First Peoples' societies were like.

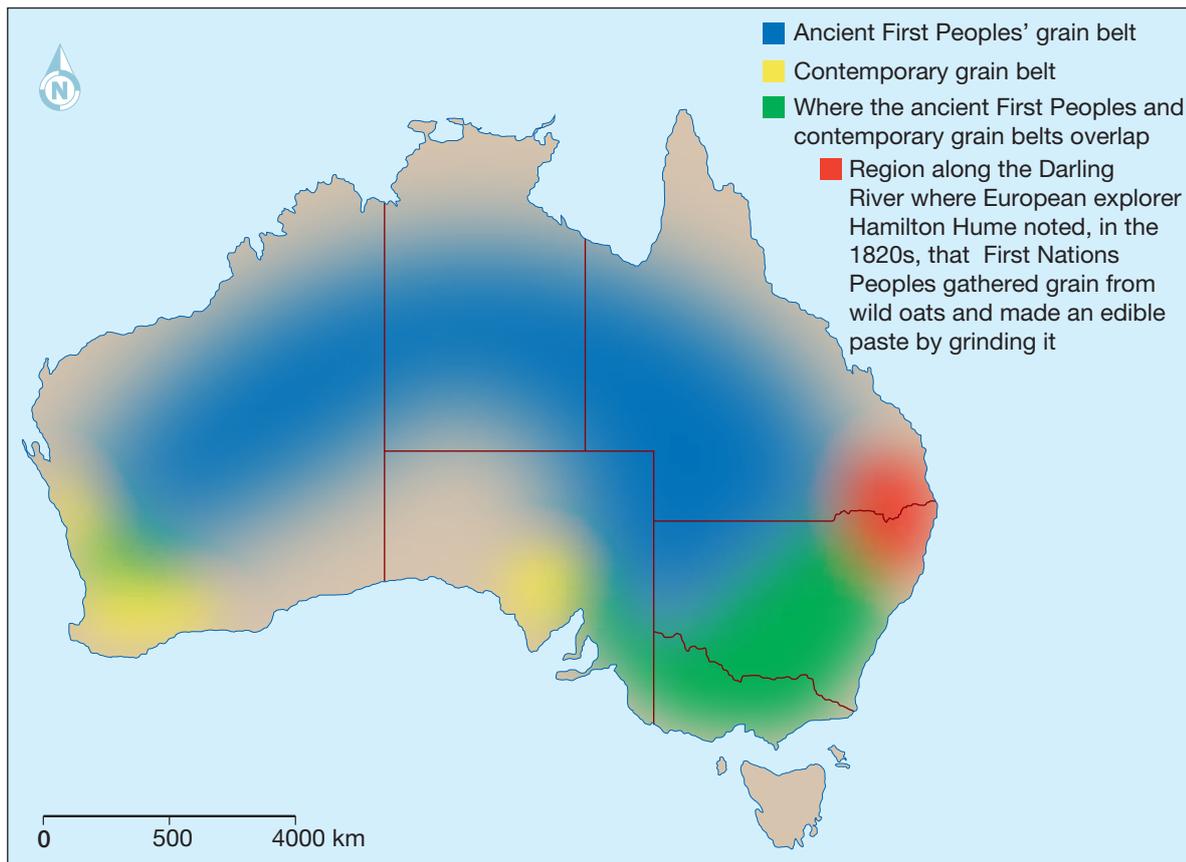
Yam cultivation was widespread in areas with more rainfall, and different varieties were grown with differing techniques according to location. A European colonist commented there were 'millions of murnong' (yams) being grown and harvested by First Peoples in south-east Australia. Other Europeans commented on the growing of **grain** crops such as millet in the more arid areas.

regenerative food cultivation

a method of farming that creates biodiverse, sustainable and resilient food systems

yam a type of root vegetable

grains small, hard, dry seeds from grass-like plants, used as a staple food source, often ground into flour for making bread



▲ **Source 1.65** This diagram shows the traditional First Peoples' grain belt compared to the modern Australian grain belt. It shows how much of the continent First Peoples were able to use for grain cultivation.

[The] women were spread over the plain as far as the eye could see, collecting murrnong ...
I inspected their bags and baskets ... and each had a load as much as she could carry.

▲ **Source 1.66** An 1841 description by George Augustus Robinson of Aboriginal and Torres Strait Islander women digging for yam, similar to a sweet potato, cited in historian Bruce Pascoe's book *Dark Emu*, 2014



▲ **Source 1.67** An illustration of a decorated digging stick. Murrnong yams were harvested using special digging sticks often made from wattle wood.



▲ **Source 1.68** A murrnong yam plant, also known as a yam daisy. This photograph shows the flower (above ground), while the edible tuber grows beneath the ground. The blooming of the flower was an indicator that the root was ready to be harvested.

The Aborigines farmed as an activity rather than a lifestyle. They grew crops of tubers such as yams, grain such as native millet, macadamia nuts, fruits and berries. People reared dingoes, possums, emus and cassowaries, moved caterpillars to new breeding areas and carried fish stock across country.

They knew that kangaroos preferred short grass, native bees preferred desert bloodwood, koalas tall eucalypts and rock wallabies thick growth. The Aborigines set templates to suit land, plants and animals. Explorers such as Eyre, Mitchell and Leichhardt noted how Indigenous Australians fired grass to bring on short green pick to attract kangaroos and other animals. To do this they had to make sure the grass was nutritious and to provide shelter so that the kangaroos would not feel vulnerable.

▲ **Source 1.69** Extract from Tony Stephens, 'The first farmers', *Sydney Morning Herald*, 1 October 2011, a review of the book *The Biggest Estate on Earth* by Bill Gammage

The Nhunggabarra did not store food in large containers and they did not use any conservation technique, such as smoking or salting ... [Instead, they used] 'live larder' technology: ... fish, eels and lobsters were trapped and stored alive in waterholes and ponds along the watercourse of every river ...

A simple log felled and positioned at precisely the right spot in a creek acted as a barrier against predators for small fish. [First Peoples] placed fresh saplings and small branches by the log every year so small fish could congregate there, creating safe havens or 'voluntary' natural coves ...

The live larders made maximum use of the natural environment and were indistinguishable from nature itself.

▲ **Source 1.70** Non-Indigenous author Karl-Erik Sveiby explains Nhunggabarra food storage techniques.

Australian National University archaeologists have found the earliest evidence of indigenous communities cultivating bananas more than 2000 years ago ... at Wagadagam on the tiny island of Mabuyag in the western Torres Strait. The site comprised a series of retaining walls associated with gardening activities along with a network of stone arrangements, shell arrangements, rock art and a mound of dugong bones. Soils from the site showed definitive evidence for intensive banana cultivation in the form of starch granules, banana plant microfossils and charcoal. Lead researcher, Kambri-Ngunnawal scholar Robert Williams, says the findings help dispel the view that Australia's first peoples were 'only hunter gatherers'.

▲ **Source 1.71** Extract from 'Indigenous banana cultivation dates back over 2000 years', Australian National University website, 12 August 2020



ACTIVITY 1.28 RESPONDING TO THE SOURCES

Food cultivation

Refer to Sources 1.65–1.71.

- 1 **Create** a mind map or visual representation of how First Peoples produce and store food.
- 2 **Identify** features of First Peoples' food production techniques.
- 3 **Explain** the connection between food production techniques, knowledge of the environment and sustaining food sources.
- 4 **Compare** First Peoples' regenerative food cultivation practices to Anglo-Australian agricultural practices today.
- 5 **Discuss** the benefits and limitations of each system.

HOW HAVE HISTORIANS UNDERSTOOD FOOD CULTIVATION AND AGRICULTURE?

From the 1700s into the 1900s, European and settler historians categorised types of societies and put them in a hierarchy. They proposed that people started as nomadic hunter-gatherers and progressed through stages to develop agriculture and villages. Associated with these stages were different political systems from no leadership to a single monarch-like leader. Settlers writing about First Peoples considered that the First Peoples were 'primitive' as they had not developed European agricultural techniques, and that it was a responsibility to teach First Peoples 'advanced' farming techniques. These ideas have been refuted today and the value of First Peoples' sustainable and regenerative agricultural practices is slowly being recognised.



▲ **Source 1.72** This graphic shows how European and settler historians understood the hierarchy of societies. Adapted from B. David and T.P. Denham, 'Unpacking Australian prehistory', in B. David et al., *The Social Archaeology of Australian Indigenous Societies*, 2006, p. 63



ACTIVITY 1.29 RESPONDING TO THE SOURCE

Food cultivation and ideas of social evolution

Refer to Source 1.72.

- 1 **Identify** features of First Peoples' food production methods. Use these to create new categories in the diagram.
- 2 Yarn about whether a hierarchical scale is a helpful way to compare food production techniques.
- 3 **Suggest** ways the achievements of First Peoples' regenerative practices could be promoted and recognised.

What techniques have First Peoples developed to catch fish?

HOW HAVE FIRST PEOPLES CAUGHT FISH IN RIVERS AND CREEKS?

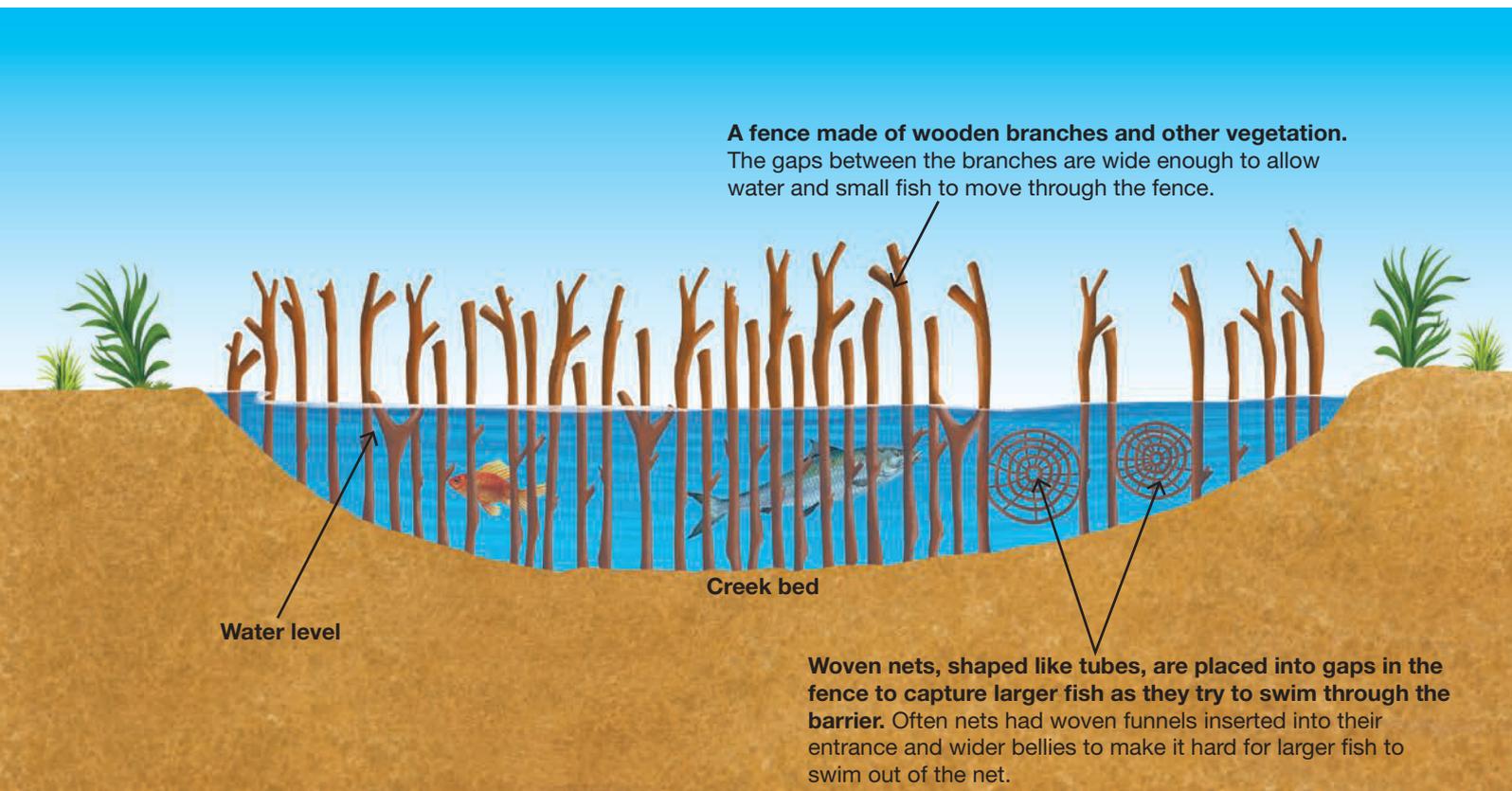
Fish traps and **fish weirs** are quite common throughout northern Australia. Fish traps and fish weirs were used to catch fish and to farm fish. The Burarra people of Arnhem Land, for example, farmed barramundi in fish traps and fish weirs. Fish traps were built in locations along sandy beaches, near mangrove forests, near rivers and creeks. Each trap is traditionally cared for by the people with custodial connection to it.

Indigenous people throughout Australia have constructed fish traps and weirs over a long period of time and there is considerable variety in types, numbers, size and location of these sites. They were designed to capture aquatic animals, predominantly fish, and the more durable of these structures (i.e. those made of stone) are still visible on Australia's coasts and rivers today. Fish were also caught in natural pools and in a variety of small portable traps ... The terms 'traps' and 'weirs' are often used interchangeably ... A 'weir' is an obstruction placed in a stream or tideway or along a shoreline to channel fish to where they can be gathered ... a 'trap' is a device placed in an area to capture and impound fish ...

fish traps methods for capturing fish in seas, rivers, creeks and streams, such as pools of shallow water against artificially built walls or fences or woven nets or baskets placed in weir and pond systems

fish weir a way of channelling fish into fish traps by using a fence or wall built into the water of a river, creek or stream; the fence allows the water to freely flow through it

▲ **Source 1.73** Non-Indigenous Queensland researchers Michael Rowland and Sean Ulm explain First Nations' fish traps and weirs.



▲ **Source 1.74** This illustration shows an example of a fish weir. Fish weirs were built across creeks and narrow rivers. Water can continuously flow through the weir. Weirs were built from materials readily available in the landscape, including wood, logs, branches, rock or coral.



▲ **Source 1.75** This illustration shows an example of a fish weir and a fish trap typical of those used in northern Australia. A fish trap is positioned behind a fish weir. A woven funnel is inserted into the mouth of a net. It depicts a barramundi fish trap used by the Burarra people of Arnhem Land. First Peoples also used these traps to farm fish.



▲ **Source 1.76** Brewarrina Fish Traps. A complex system of channels built on the Barwon River in northern New South Wales. Use the QR code to watch a video with more information about the fish traps.



▲ **Source 1.76**
Brewarrina Fish Traps



ACTIVITY 1.30 RESPONDING TO THE SOURCES

River fish traps

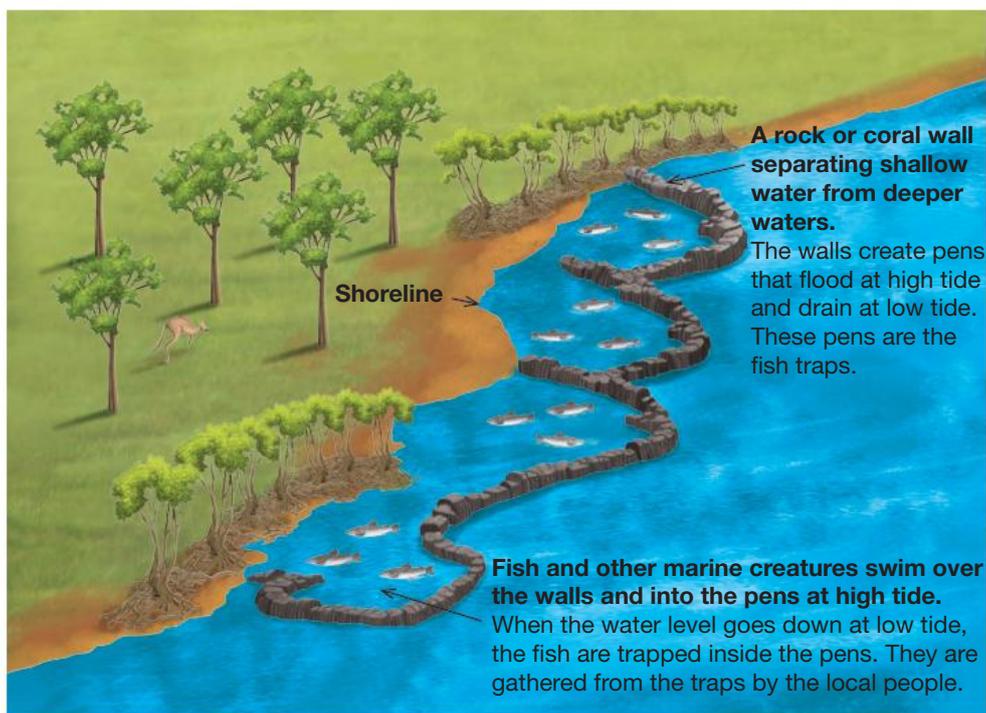
Using Sources 1.73–1.76 and additional independent research if necessary, **suggest** how fish traps might have worked in a creek or a river. Draw a diagram and share it with your partner to **compare** each other's ideas.

HOW HAVE FIRST PEOPLES CAUGHT FISH ON THE COAST?

Coastal fish traps rely on making use of the changing tides to trap fish. First Peoples have detailed and complex knowledge of tidal patterns and the seasons. This knowledge often relied on studying moon cycles and, in some areas, astronomy.



▲ **Source 1.77** An aerial photograph of the stone fish traps underwater at the Torres Strait Island of Erub. There are many documented fish traps and weirs along Queensland's coast and inland waterways. Researchers have mapped over 30 fish traps on the island of Erub alone.



▲ **Source 1.78** Coastal fish traps. This diagram shows fish traps along a coastline.



ACTIVITY 1.31 RESPONDING TO THE SOURCES

Fish traps

Use Sources 1.74–1.79 to answer the following questions:

- 1 **Compare** a fish trap and a fish weir.
Explain the difference and how they can work together.
- 2 **Explain** how fish traps work in coastal areas.
- 3 **Suggest** what might have been the advantages and disadvantages of using fish traps as a source of food.
- 4 **Explain** how these sources provide an insight into the way First Peoples managed their environment in a sustainable manner.
- 5 **Create** a model of a fish trap.



▲ **Source 1.79** Stone fish traps exposed at low tide at the Torres Strait Island of Mer. Stone fish traps consist of complex systems of rock walls. Building and maintaining these stone traps took enormous effort over many generations. The fish traps on Mer were built using approximately 3500 tonnes of lava rock that was hauled to the coast from inland areas.

What techniques have First Peoples developed to manage water sources?

Water systems vary across the Australian continent, and First Peoples managed their water supplies and resources in different ways depending on where they lived. Aboriginal and Torres Strait Islander communities across many regions of Australia built systems of rock wells. Some wells collected rainwater. Other wells collected water from underground sources. Since animals also seek fresh water, these precious water reserves often needed to be carefully protected from animal pollution and contamination.

Rock wells are common in areas of Queensland. The Gunggari people and other First Peoples carved rock 'water tanks'. Ancestors of the Wakka Wakka, Jarowait and Barrungam peoples carved wells into hard ironstone rock formations near the Bunya Mountains. One rock well in south-west Queensland is believed to be about 12 metres deep.



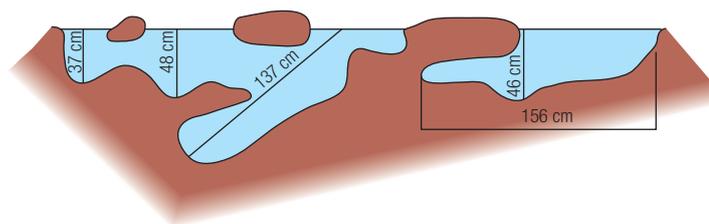
[Wells] are located along dreaming paths and at other sites of mythological significance. Many of the wells and rock holes are associated with other evidence of human occupation, including artefact scatters, scarred trees, grinding grooves and quarries. The wells represented significant quantities of water, especially for small groups, which may have stayed in any one location for only short periods. Water supplies

were often protected by placing a rock or branches over the opening. People in the Charleville area said Aboriginal people used to walk from Charleville to Maranoa downs, sinking wells along the tracks they made.

▲ **Source 1.80** In 1998, North West Natural Resources Management Cultural Heritage Strategy – a First Nations group that works with governments – commented on the wells of south-west Queensland. The illustration depicts a rock well with a stone cover, as the report described.

They'd find a big flat sandstone rock where all the water went to the middle. They'd light fires there and they'd crack all the sandstone; they dug it away. They'd light another fire. They built these wells – most were shaped like a keg. They were narrow at the top, wider in the belly and narrow at the bottom. They dug them around 4 foot (about 1 metre) deep on the tops of sandhills, where the sandstone is. Some of them have a big flat rock on top of them, some of them are just open. That's how they saved their water!

▲ **Source 1.81** Elder Lindsay Black explains how Aboriginal people made wells in the Central Highlands area of Queensland.



▲ **Source 1.82** Longitudinal section, showing the profile of Bull Gully Aboriginal Rock Wells, Victoria. The wells were strategically dug into sandstone in a natural rainwater catchment. The narrow mouths serve to reduce evaporation and pollution by animals or wind-borne debris. It is possible that the wells were, in the past, covered to further conserve water. The maximum depth of the wells is about 130 centimetres, for a capacity of approximately 160 litres, which represents a valuable water resource, particularly in dry seasons. Local residents indicated that they don't have any knowledge of the wells ever drying up.

► **Source 1.83** Water tanks, known as 'gnamma' holes, are natural cavities varying in shape and depth commonly found in hard rock and used by First Nations Peoples. They are replenished from underground stores and rainwater run-off. These gnamma holes are on top of Pildappa Rock, a granite outcrop in Eyre Peninsula, South Australia.



ACTIVITY 1.32 RESPONDING TO THE SOURCES

Water sources

Use Sources 1.80–1.83 to answer the following questions:

- 1 **Explain** how rock wells were used by First Peoples to collect and manage water supplies.
- 2 **Suggest** what knowledge First Peoples need to be able to make these water storage areas, and to be able to collect and store water.
- 3 **Research** other innovative ways First Peoples managed their water sources.
- 4 Yarn about the kind of sustainable ethos that is needed to manage water sources in this way.

What techniques have First Peoples developed to use fire to care for Country?

Fire has practical and spiritual applications for many First Peoples today. The ancestors gave fire to people and showed them how to use it to keep Country clean and strong. The right fire does many things, such as keeping waterways clear where they need to be, encouraging the growth of the right seeds for an area, providing new grass for animals that

depend on it, keeping competing undergrowth away from trees that need resources, protecting sacred parts of the landscape, allowing areas to grow without fire, and clearing selected areas. In this way, people are part of Country; Country cannot be strong without First Peoples. First Peoples pass on the knowledge stories and ceremonies about fire, and when they burn Country they are continuing the ancestors' creation.

Fire is used for cooking and warmth, and smoke has important spiritual, ceremonial and communication purposes. Fire has been used to crack rocks and to shape tools. First Peoples use fire in ceremonies such as a Smoking Ceremony. This involves smouldering particular plants on embers to produce a steamy smoke that First Peoples consider to have spiritually cleansing and healing properties. Many First Nations people have this knowledge passed on from previous generations, and researchers have found evidence of these practices through deep time. This knowledge and these practices continue today.

WHAT IS CULTURAL BURNING?

Cultural burning, sometimes called fire-stick farming, has been used by First Peoples for tens of thousands of years. It is still used today, although it is difficult in many areas for First Peoples to access Country to do cultural burning. Doing the right fire involves knowing Country in detail. The right fire is generally small and contained.

Not all Country is burnt with cultural burning. Deep gullies and rainforests, for example, are usually avoided, as are areas that contain bush foods and bush medicines. The tops of trees are also spared. This allows safe havens for birds, animals, insects, seeds and fruits. The best time to light a fire is carefully selected so it only burns what needs to be burnt. 'Cool fires' burn slowly, 'trickling' through the landscape, and can be easily put out. David Claudie, a custodian of the north Kaanju homelands of Cape York, describes the use of fire as 'Indigenous science'. Non-Indigenous historian Bill Gammage has argued that fire-stick farming made resources 'abundant, convenient and predictable' for First Peoples.

Fire is really important. It has its own dreaming. There are people and families who are responsible for the fire dreaming. They know the songs and the ceremony ...

My grandfather used to talk with the other men about the best time and place to burn. They would wait for the right wind and pick the right grass.

They were careful not to burn Country belonging to other people.

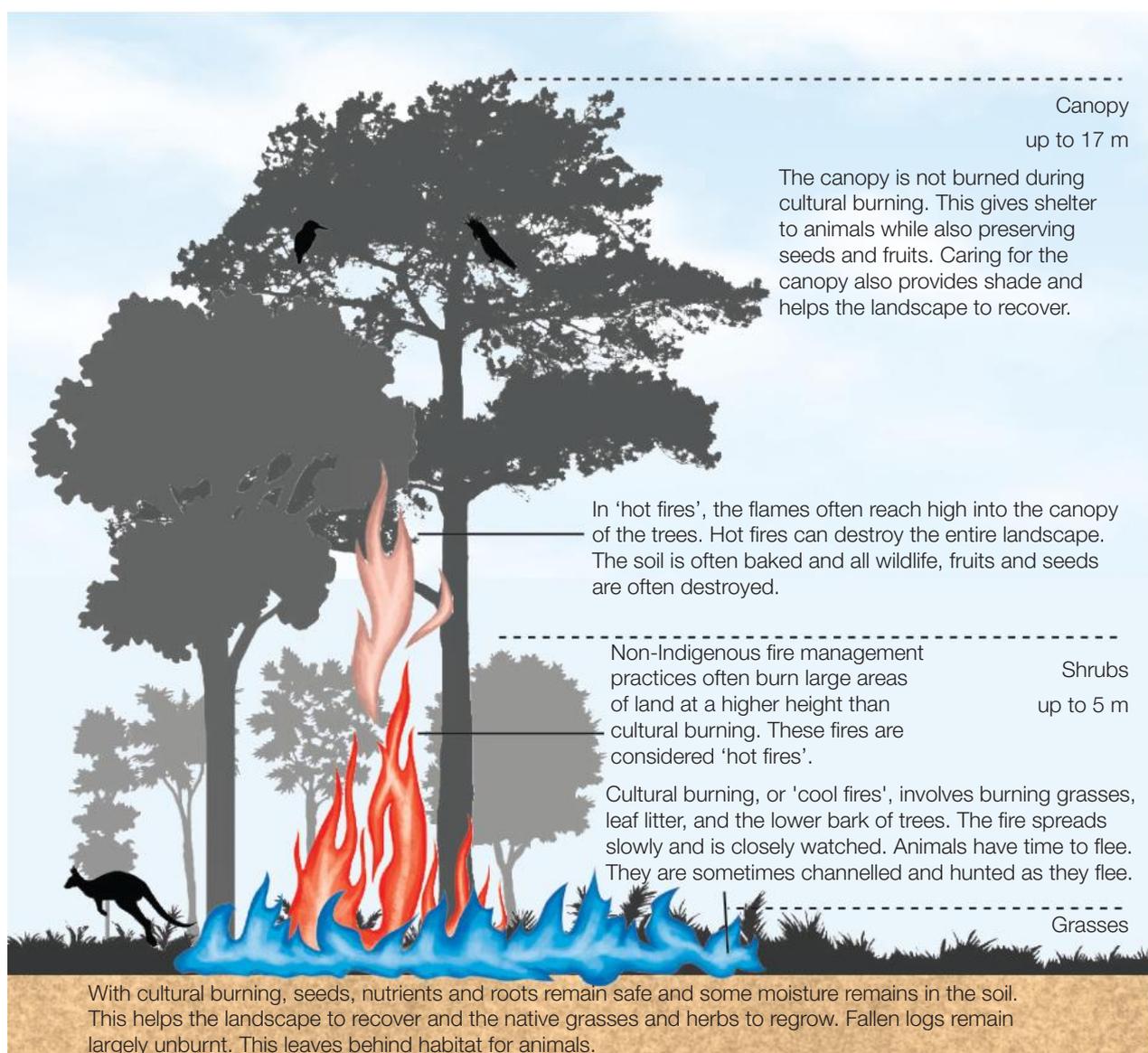
▲ **Source 1.84** Veronica Dobson – a skilled educator and Arrente woman – describes the traditional importance of fire.

That plume of smoke would indicate that you had been sitting there. That's just like the knock on the door.

You could be there for a day, you could be there for a week – until they've [worked] you out. They'll know you're there. They've seen the fire and when they're ready they will send some young blokes up to get you.

From there you should lay any weapons on the ground in front of you and walk over them to indicate your peaceful intention ... Until you've had a feed, sat down, you was looked after – then the boss would talk to you. After you've settled down, that was acceptance.

▲ **Source 1.85** Yamatji actor Ernie Dingo explains the importance of using smoke and fire as a cultural practice when visiting a different Country or area.



▲ **Source 1.86** This diagram shows an example of First Peoples' cultural burning practices.



▲ **Source 1.87** This watercolour was painted by Joseph Lycett (c. 1817). It is titled, *Aborigines using fire to hunt kangaroos*. This painting was created about 30 years after the arrival of the First Fleet.



▲ **Source 1.88** Engraved drawing of Aboriginal people hunting kangaroos, from the book *Ridpath's Universal History* by John Clark Ridpath, 1897

Fire, grass, kangaroos, and human inhabitants, seem all dependent on each other for existence in Australia. For any one of these being wanting, the others could no longer continue. Fire is necessary to burn the grass, and form those open forests, in which we find large forest-kangaroo; the **native** [*sic*] applies that fire to the grass at certain seasons, in order that young green crop may subsequently spring up, and so attract and enable him to kill or take the kangaroo with nets. In summer, the burning of the long grass also discloses vermin, birds' nests etc., on which the females and the children, who chiefly burn the grass, feed.

natives a colonial word for First Peoples that is no longer used as it has derogatory meanings

▲ **Source 1.89** This is an account, in 1848, by the Scottish explorer Thomas Mitchell, describing the fire management practices he observed being used by the First Nations Peoples he encountered. Extract from T. Mitchell, *Three Expeditions into the Interior of Eastern Australia; with Descriptions of Recently Explored Region of Australia Felix, and of the Present Colony of New South Wales*, 1848, pp. 412–13.

In eastern Tasmania, human firing increased the extent of the **mosaic pattern** of open sclerophyll forest and grassland plains. This is the optimum habitat for some of the macropods, such as the Forester Kangaroo, and the plains provided extra food for the Kangaroos, wallabies, emus, and native hens on which the Aborigines fed ... It is interesting that, through firing, man may have increased his food supply and thus probably his population. At the most general level, firing at the bush, in the same way as clearing a forest to create a field, increased the proportion of solar energy per unit of the ground that man could utilize. Perhaps we should call what the Aborigines did 'fire-stick farming'.

mosaic pattern a combination of diverse pieces of land, as in grass and adjoining forest

▲ **Source 1.90** Extract from non-Indigenous archaeologist Rhys Jones, 'Fire-stick farming', *Australian Natural History*, vol. 16, 1969, pp. 226–7



ACTIVITY 1.33 RESPONDING TO THE SOURCES

Fire

Refer to Sources 1.84–1.90. Each of the sources has been produced at a different time and contains different perspectives.

- 1 Categorise the painting in Source 1.87 as either a primary source or a secondary source if you are investigating the practices of:
 - a Europeans recording the hunting practices of First Peoples
 - b The hunting practices of First Peoples in the early 1800s
 - c The hunting practices of First Peoples in the deep time history of Australia.

Justify your answers.

- 2 **Analyse** what each source tells you about the relationship between fire and First Peoples.
- 3 **Compare** how each source understands the purpose of the burning practices and what this tells you about their perspective.
- 4 **Research** cultural burning online. **Compare** Lycett's painting (Source 1.87) with photographs of modern cultural burning practices. Have the practices changed drastically in the past 200 years? What might this indicate?

How do First Peoples use seasons and patterns in the landscape and sky?

HOW DO FIRST PEOPLES READ SEASONAL INDICATORS?

First Peoples have been able to generate sustainable and sustaining life patterns and technologies due to their extraordinary knowledge of Country, all things of it and the relationships between all things. This includes an understanding of relationships, cycles and patterns of seasons, the movement of stars, the life cycles of animals and plants, and human activities related to all of these. Careful custodianship of Country means being able to read the **indicators** – that is, identify, understand and respond to the expected changes in the environment. This knowledge was refined over tens of thousands of years and forms the living culture of First Peoples.

indicators events, such as a tree flowering, that indicate other known events will happen

WHAT HAPPENS IN SKY COUNTRY?

Just as we are standing on Country, the world above is ‘Sky Country’ and it has its own seasonal relationships and indicators. For many First Peoples, Sky Country is where people came from or will go to; it is the home of many ancestors. First Peoples see **constellations** in the night sky, know the phases of the moon and movement of planets, and can use this information as indicators, to monitor passing seasons, to navigate and to be connected to other people and knowledge.

constellation a group of stars that appear to form a recognisable pattern in the night sky

celestial a celestial, or astronomical, object is a natural thing existing outside Earth’s atmosphere

For some Torres Strait Islander people, a shark constellation, Baidam, was used to help navigate boats on long voyages, to predict the seasons for growing fruits and vegetables, and to indicate shark mating season – a dangerous time to be in the water! Europeans know this constellation as the ‘Pleiades cluster’.

In many parts of mainland Australia, the stars of the Pleiades were thought to be ancestor women travelling across the landscape. On the east coast of Australia, this constellation was used as an indicator of whale migrations. The Milky Way galaxy is known by most First Peoples and often represents a **celestial** river or stream.

Several First Peoples, including the Kamilaroi and Euahlayi people of New South Wales, watch an emu in the sky as an indicator of seasonal change and action.



▲ **Source 1.91** The emu in the sky as seen from Kuringai National Park. Credit: Barnaby Norris/Ray Norris.

This is not a constellation but a dark space in the night sky. When the emu first appears in the sky in mid-autumn, it marks the beginning of the emu breeding season. By mid-winter, the emu has changed direction and indicates the emus are sitting on their eggs. Eggs can be sustainably collected for food. By late winter, the emu appears as two circles in the night sky. This indicates that it's time for sacred ceremonies to begin at the Kamilaroi and Euahlayi circular-shaped **bora** grounds. Through spring, the emu sits at a waterhole, indicating that waterholes are full in Kamilaroi and Euahlayi Country. In late summer, the emu dips below the horizon, indicating that the waterholes are drying and that it is time to move on to new areas. The emu does not appear in the sky again until the breeding season.

bora a location where sacred rituals are held by First Peoples; there are different words in different languages



▲ **Source 1.92** A non-Indigenous researcher has speculated that this rock engraving, at the Basin Track, Ku-ring-gai Chase National Park, New South Wales, represents the Sun woman and Moon man during an eclipse, as one figure partially obscures the other (which is what happens during an eclipse).



ACTIVITY 1.34 RESPONDING TO THE SOURCE

Rock engraving

Refer to Source 1.92.

- 1 Brainstorm the kinds of evidence that would help you decide if this is a depiction of an eclipse.
- 2 Develop a position on whether you agree or disagree with the speculation that this is a depiction of an eclipse. **Justify** your position with evidence from both science and First Peoples in a 100-word paragraph.



REFLECTING ON YOUR LEARNING 1.3



Reflect on what you have learned in this section:

- 1 Take 2–3 minutes of individual reflection to **create**, from memory, a list of key ideas you recall from this section.
- 2 Swap your list with the list of one of your classmates. Take 1–2 minutes to read that list and add new things (such as details, missing ideas or a correction).
- 3 Repeat step 2 at least twice with different classmates.
- 4 Retrieve your list. Read through and review all the additions made to your list. Add any new ideas you might have had from reading three other lists.
- 5 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'What technological achievements have First Peoples developed?' Be sure to **consider** both First Peoples' understanding of time and place and historians' understandings of history.
- 6 **Consider** how the information and sources in this section could contribute to answering the overall inquiry question: 'How have First Peoples sustained a regenerative relationship with the Australian continent through deep time?'
- 7 Reflections are personal explorations. Write, sketch, **create** or tell to explore your thinking on the content in this topic. Use these sentence starters to help you:
 - I used to think ...
 - Now I think ...

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.

1.4 What are respectful ways for historians to work with First Peoples' cultural heritage?

FOCUS QUESTIONS

- What funerary customs have First Peoples practised?
- How can First Peoples, historians and scientists work together respectfully?

This chapter has been concerned with the deep time history of Australia, which is the time before Europeans arrived. Since 1788, First Peoples have faced massacres, **displacement**, **dispossession** and cultural damage and loss. First Peoples' societies have always been culturally and linguistically diverse; different histories since 1788 have added more dimensions of diversity. Scientific investigations are one way for First Peoples to reclaim their cultural heritage. This means that scientists, historians and First Peoples today must find respectful ways to work together.



▲ **Source 1.93** On 17 November 2017 at Lake Mungo, Mungo Man and the remains of other people who lived about 40 000 years ago were carried in a casket made from 5000-year-old red gum to their ancestral lands, with Aboriginal Elders leading a ceremony.

displacement forced removal of people from their ancestral lands, often resulting in loss of culture, connection and livelihood

dispossession the taking of lands and resources without consent



ACTIVITY 1.35 MAKING THINKING VISIBLE

See, think, wonder

Refer to Source 1.93.

See

1 **Describe** what you see in the photo.

Think

- 2 Who could be inside the casket?
- 3 Why might it be important that these remains are returned to ancestral lands?
- 4 The casket has been made of very old wood. Why might this have been chosen?
- 5 Who could you ask to find out more information?

Wonder

6 What does this practice make you wonder?

What funerary customs have First Peoples practised?

WHAT IS 'SORRY BUSINESS'?

Peoples all over the world have important cultural practices that guide what to do when someone passes away. For many First Peoples, the death of a family member and period of mourning is known as 'Sorry Business' in Aboriginal English. It is a significant time and various protocols, ceremonies and rituals can be practised in which people are expected to participate. There is cultural diversity across the Australian continent.

For many First Peoples, if Sorry Business is not completed properly a deceased person's spirit cannot find its way home to the ancestors and will be restless and unhappy. It is an important cultural obligation to ensure deceased spirits are taken care of and returned to their ancestral home.

For example, the Yolngu Peoples of Arnhem Land used log coffins, or hollow logs, in which to hold the bones of those who have died. Today, these log coffins are valued as works of art.



▲ **Source 1.94** *Aboriginal Memorial*, an artwork at the National Gallery of Australia (NGA) in Canberra, is created in the style of Yolngu log coffins.

Hollow logs made for a burial ceremony are large. Smaller hollow logs may be made to keep the bones of the deceased at the home of the family for a period of time. The hollow logs can also represent the deceased person – the designs on the log are the same as the designs painted on the body during the burial rites. Many of the hollow logs have a small aperture [a small opening or hole] either carved or painted towards the top. Yolngu believe that this provides the soul of the deceased with a viewing hole to look through and survey the land.

▲ **Source 1.95** The NGA's description of why hollow logs were made

In Torres Strait Islander communities, Sorry Business includes ‘tombstone unveiling ceremonies’ or a ‘tombstone opening’. This ceremony refers to the ritual of a decorated headstone being unveiled for the family and community to remember a loved one. This reinforces the connections between the living and those who have gone, and marks the completion of an extensively decorated tombstone and the family’s final goodbye. The entire family is involved with the ceremony, which lasts a whole day and ends with feasting and dancing.

The in-laws, who arranged and performed the burial now have a tombstone made. People have sent in money. The family wraps the tombstone in cloth and decorates it. They then give a feast for the in-laws after ‘going to rest’ prayers and hymns are said. The oldest man in the village may speak of the person’s life. Gifts of cloth, produce, money, garden are given by the family to the in-laws to say thank-you for arranging the funeral. The head in-law returns the thanks and calls everyone to eat together.

The two-way sharing between in-laws and family is paralleled by a reciprocal balance between the living and the departed one, whose spirit is freed to a new world. This new rite is of first-order importance among the Meriam and other Torres Strait Islanders: it completes a two-stage burial rite, which was outlawed by the missionaries. Wherever Torres Strait Islanders are, and more [than] half of them live today in towns of North Queensland, tombstone unveiling ceremonies continue to have a central place in their lives today.

▲ **Source 1.96** Non-Indigenous anthropologist Nonie Sharp describes a ‘Tombstone Opening’ ceremony.

How can First Peoples, historians and scientists work together respectfully?

Since 1788, some settlers have shown interest in the funerary practices of First Peoples but generally the approach has been disrespectful. Many funeral grounds or markers have been destroyed and remains of deceased people have been disturbed or destroyed, often deliberately.

Scientists have also often disregarded First Peoples’ funerary customs and associated understandings, believing that their interest in the science of human remains is more important than First Peoples’ relatives receiving proper funerary rites.

These circumstances have led to mistrust and difficult relationships.



ACTIVITY 1.36

Building trust

- 1 **Reflect on** your own cultural practices around funerary customs. What would it feel like if these were not completed properly?
- 2 **Suggest** ways that historians and scientists could build trust with First Peoples.



CASE STUDY 1.2

Respecting First Peoples' funerary traditions: the story of Mungo Man

Lake Mungo, in the Willandra Lakes region in south-west New South Wales, is home to the Paakantyi, Mutthi Mutthi and Ngiyampaa peoples. Each has their own understanding of their origins. Today, Lake Mungo is a semi-arid desert environment, but thousands of years ago this was a lush area surrounding a lake filled with water. Scientists have determined that the lake has been dry for about 10 000 years.

Lake Mungo is one of the most significant archaeological sites in Australia. When researchers – led by a non-Indigenous geologist and archaeologist, Jim Bowler – began to study the area in the late 1960s and early 1970s, they found evidence of the traditions of First Peoples in the area. This included evidence of funeral practices in which bodies were washed with ochre and cremated. Australian archaeologists excavated the remains of 'Mungo Man' and removed the bones from the area. Over the years, research teams took many other bones and artefacts that they found in that area 'out of Country' for study. This was not an uncommon practice at the time around the world. The researchers made many important scientific discoveries about the length of human settlement in Australia and about ancient customs and practices – especially those regarding funeral practices.

The excavations, however, came to be widely criticised. Paakantyi, Mutthi Mutthi and Ngiyampaa peoples actively campaigned to have the remains returned. In November 2017, 'Mungo Man' and the ancestral remains of 104 other people were returned to Elders and reburied according to traditional custom, on Country, at Lake Mungo.

Let remains alone

Aboriginal people have demanded that excavation of archaeological remains from Lake Mungo in western New South Wales cease ... A lawyer acting on behalf of the people had written to the archaeologists concerned to say they should stop and return all finds to the traditional owners. A similar letter had been sent to the National Parks and Wildlife Service asking that permits no longer be given for this type of archaeological work. Some other groups had also written letters about interference with burial sites in other areas.

The Lake Mungo excavation was described as a 'crisis' ... [and] draft laws which had been drawn up for the protection of sacred sites were criticised ... There were also calls made for the Australian Government to consider legislation to control the trade in valuable Aboriginal artefacts. Some of these were even being sold overseas.

▲ **Source 1.97** Adapted from 'Let remains alone, Aborigines say', *The Canberra Times*, 28 September 1974, p. 7

The recovery and management of the remains of ancestors is an issue of great sensitivity to Aboriginal people. This sensitivity comes from both cultural beliefs and the treatment of Aboriginal people by governments, scientists and others in the recent past. Many ancestral remains and other remains, both ancient and modern, were taken and studied without permission. Some were scattered, sent overseas and kept in collections. This is still a controversial issue today and not all remains have been returned to their Country and their people.

▲ **Source 1.98** An extract from the Visit Mungo website, written by the Willandra Lakes Traditional Tribal Groups Elders Council and New South Wales National Parks and Wildlife Service, 2021



▲ **Source 1.99** In November 2017, the remains of 'Mungo Man' and 104 other ancestors were returned to their Country at Lake Mungo. Proper ceremonies were conducted.

A 42000-year-old man finally goes home

Traditional owners say the return of the remains of the historic Mungo Man, who was removed by scientists from his resting place more than 40 years ago, will provide closure and is a step toward reconciliation.

More than four decades ago **anthropologists** removed the ancient skeleton of an Aboriginal man – the discovery of which rewrote Australian history.

Now he has been returned home to his descendants, travelling for days in a hearse from Canberra ...

Traditional owners hosted a welcome home ceremony attended by hundreds to celebrate the historic return of the 42,000-year-old remains of Mungo Man to his original resting place.

'Today is one of those catalytic moments that we need to enhance Australian society, and bring empathy into, understanding the Aboriginal culture,' said Paakantyi man Michael Young, who is also a member of the Aboriginal Advisory Group for Mungo Man's return ...

Mungo Man was buried with his limbs stretched out, his hands crossed across his groin and was covered in ochre that had been brought from more than 200 kilometres away.

anthropologists

scientists engaged in the study of humankind, both from past and present societies





It was some of the earliest uncovered evidence of ritualistic burial in the world, and proved that early Aboriginal Australians had a robust belief and burial system – around the same time as Neanderthals were roaming Europe.

After his remains were uncovered he was moved to Australian National University in Canberra where he was kept for about 40 years.

Geologist Jim Bowler found Mungo Man and said the profound scientific discoveries could not have taken place if he was not moved ...

'The Aboriginal people voiced their objection, we were intruding into their history, not our history.' ...

While many are celebrating the historic return of Mungo Man, there are major concerns there is still no final resting place for him ...

Mr Bowler said state and federal governments should do more to create a respectful final place of rest ...

'He needs a major memorial, a major identification of his iconic status. In the pages of earliest Australian history his name stands out, and we have failed to make a final resting place for a historic remains.'

▲ **Source 1.100** Extracts from non-Indigenous journalist Isabella Higgins, 'Mungo Man returned to ancestral home where he died 40,000 years ago', ABC website, 17 November 2017



▲ **Source 1.101** First Nations Peoples and others gather for a traditional on-Country funeral ceremony for Mungo Man's remains and the remains of others. Mungo Man was the ancestor of the Mutthi Mutthi, Ngijampaa and Paakantyi peoples. These three communities worked together for 40 years to achieve a government decision in 2015 to repatriate (return) his and other remains.



ACTIVITY 1.37 RESPONDING TO THE SOURCES

Mungo Man

Refer to Sources 1.97–1.101.

- 1 **Discuss:** Why do you think non-Indigenous scientists felt they could take the remains of buried First People?
- 2 **Reflect:** If you were a scientist interested in the deep time history of Australia, how would you have acted in this situation?
- 3 **Identify:** What does respectful deep time history research look like?



REFLECTING ON YOUR LEARNING 1.4



Reflect on what you have learned in this section:

- 1 Take Identify minutes of individual reflection to **create**, from memory, a list of key ideas you recall from this section.
- 2 Swap your list with the list of one of your classmates. Take 1–2 minutes to read that list and add new things (such as details, missing ideas or a correction).
- 3 Repeat step 2 at least twice with different classmates.
- 4 Retrieve your list. Read through and review all the additions made to your list. Add any new ideas you might have had from reading three other lists.
- 5 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: ‘What are respectful ways for historians to work with First Peoples’ cultural heritage?’ Be sure to **consider** both First Peoples’ understanding of time and place and historians’ understandings of history.
- 6 **Consider** how the information and sources in this section could contribute to answering the overall inquiry question: ‘How have First Peoples sustained a regenerative relationship with the Australian continent through deep time?’
- 7 Reflections are personal explorations. Write, sketch, **create** or tell to explore your thinking on the content in this topic. Use these sentence starters to help you:
 - I used to think ...
 - Now I think ...



Conclusion: end-of-chapter reflection

PART 1: LEARNING FROM FIRST NATIONS PEOPLES

- 1** In small groups, use resources from this chapter to **create** a detailed mind map on how First Nations Peoples sustained the environment for thousands of years. You may want to use a mix of words, symbols and drawings in your mind map.
- 2** Using your group's mind map, write a short paragraph about one particular aspect (such as fire management or bush food).
- 3** Share your paragraph with your group and discuss how the practices of ancient First Nations Peoples can be valuable today.

PART 2: REFLECTING ON THE CHAPTER

- What has been the most important thing you have learned in this chapter? Everyone will have a different response!
-



End-of-chapter assessment

1 Project

Investigating deep time history

A project assesses students' responses to a single task, stimulus, question, situation or scenario that gives students authentic opportunities to demonstrate their historical knowledge, understanding and skills.

Using additional background research, **create** a short presentation (2–3 minutes) in response to the question: 'What is the deep time history of where you live?'

2 Investigation

Testing a hypothesis

An investigation assesses students' abilities to identify, select, analyse, organise and draw conclusions about evidence from primary and secondary sources. This involves testing a hypothesis or answering a research question.

Using information and evidence from this chapter, and additional research, **create** a short presentation (2–3 minutes) assessing the accuracy of the following hypothesis: 'The First Peoples arrived on the Australian continent more than 65 000 years ago'.

3 Investigation

Answering a research question

Using the evidence included in this chapter and additional background research, **create** a short presentation (2–3 minutes) responding to the question: 'How have First Peoples sustained a regenerative relationship with the Australian continent through deep time?'

Hints: you could **research** what science techniques have revealed; the knowledge stories that First Peoples have shared; and the continuous practices that First Peoples still use.

Digital resources

Visit the Interactive Textbook or Online Teaching Suite to access:

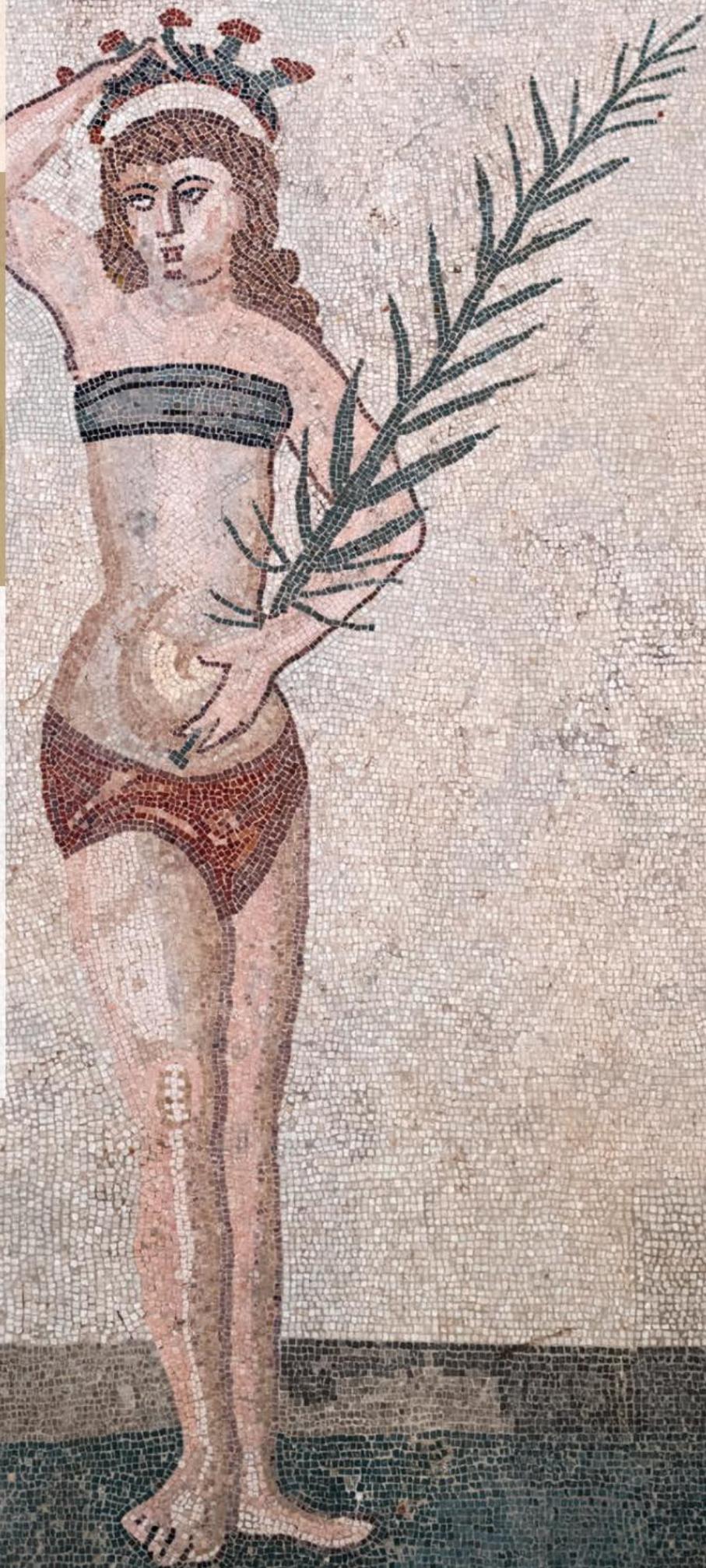
- General Capability Project
- Interactive chapter quiz
- Interactive Scorcher quiz
- Videos, image galleries and other extra materials.



UNIT

2

The ancient world



Overview

In Unit 1, you investigated the historical significance of the ancient past in Australia and the histories of early First Nations Peoples of Australia. In this unit, you will inquire into the history of one of the three most significant civilisations of the ancient world: Egypt, Rome or China. You will investigate their physical features, key groups and individuals, beliefs and practices, key historical events, achievements and legacies.



▲ **Source A** Evidence of ancient societies



▲ **Source B** Key features of ancient societies



▲ Ancient world timeline

As you inquire into the experiences of people in the ancient world, consider how our society and values in Australia today may compare to, or even be influenced by, the ideas and skills developed in these ancient societies, which included democracy, architecture, religion and engineering. What do you notice about your own world that might have originated in one of these ancient civilisations?

Learning goals

After completing Unit 2, you should be able to answer these questions:

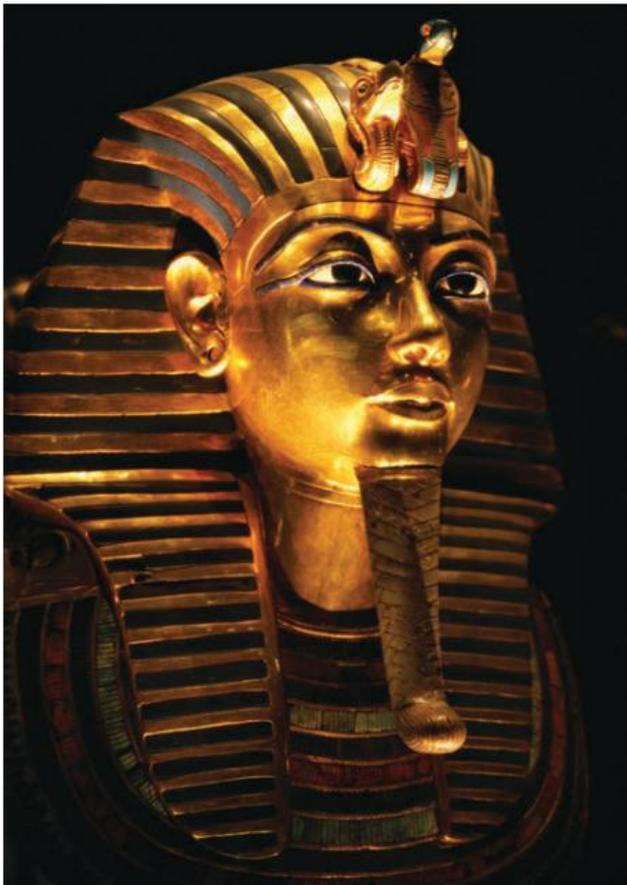
- How do we know about the ancient past?
- Why, where and when did the earliest societies develop?
- What emerged as the defining features and achievements of ancient societies?
- What have been the significant legacies of ancient societies?

◀ **Source C** Ancient Roman mosaic of a female athlete Excavations in Sicily in Italy in 2019 have revealed one of the most spectacular, colourful and varied collections of Roman mosaics in the world. The villa and artwork contained within date to the early fourth century CE, and are beautifully preserved due to the extensive landslides and floods that covered their remains. The entire complex has been designated as a UNESCO World Heritage site. This mosaic shows a Roman woman perhaps receiving gifts for a sporting performance.



CHAPTER 2: Ancient Egypt: what made ancient Egypt a successful civilisation?

Setting the scene: a history mystery – how did King Tutankhamun die?



▲ Source 2.1 The death mask of Tutankhamun

Have you seen this picture before? The death mask of King Tutankhamun is one of the most famous ancient artefacts ever discovered. Made from thick sheets of beaten gold, inlaid with semiprecious stones, this priceless mask is a powerful reminder to us today of the incredible wealth and success of the ancient Egyptian civilisation. Found in Tutankhamun's tomb by British archaeologist Howard Carter in 1922, this mask was one of over 5000 artefacts revealed when the tomb was discovered. The contents of Tutankhamun's tomb tell us a great deal about ancient Egypt and the life of Tutankhamun. However, to this day, the cause of Tutankhamun's death at the age of 18 remains a mystery to historians and archaeologists around the world.

The most popular theories are:

- **Theory one:** Tutankhamun was murdered, perhaps by a close associate such as his vizier (the pharaoh's most important adviser), Aye (also spelled Ay).
- **Theory two:** Tutankhamun died as a result of a chariot accident – he may have died instantly when the accident occurred, or he may have died later through blood poisoning from an infected wound.
- **Theory three:** Tutankhamun died from a disease such as malaria from a mosquito bite.

You are now going to begin your inquiry into the success of the ancient Egyptian civilisation by testing your skills as a historian. How do you think Tutankhamun died? How can evidence be useful in supporting your theory?



ACTIVITY 2.1

Step 1: Analyse and evaluate

- 1 Individually, in pairs or in small groups, use the following questions to help you **analyse** and **evaluate** the evidence for Tutankhamun's death (see Sources 2.3–2.12 on the following pages). Try to **determine** which theory each piece of evidence might support.
 - a **Describe**. What is this and who might have made it? When and/or why might it have been made?
 - b **Analyse**. What is a key detail from the evidence that might relate to the investigation, and how does it shape your thinking?
 - c **Evaluate**. How useful or reliable do you think it is and why? How might it **corroborate** or contrast with evidence from other sources?

Step 2: Synthesise

- 2 **Synthesise** your evidence by organising the sources into groups. You may wish to do this on the class whiteboard or on paper. Use the three theories as headings to help you do this. Which theory appears to have the most evidence to support it?

Step 3: Hypothesise

- 3 Develop a **hypothesis** regarding how Tutankhamun died, using at least three pieces of evidence to support your argument. Present your hypothesis and evidence to the class in a format chosen by your teacher. Formats include a presentation, poster, paragraph, mind map, role play, magazine article or short video.

Step 4: Reflect

- 4 **Reflect on** your learning by making a list of what else you would like to know about ancient Egypt and the success of this civilisation. Share this list with your class before you begin this chapter. By the end of this chapter, see what questions you have found answers to!

analyse consider in detail for the purpose of finding meaning or relationships, and identifying patterns, similarities and differences

evaluate examining and judging the merit or significance of something

corroborate to confirm an idea or conclusion by providing new evidence that supports earlier evidence

synthesise combine different parts or elements (information, ideas, components) into a new whole, in order to create new understanding

hypothesis a theory based on facts, or a suggested answer to a question, to be proved or disproved



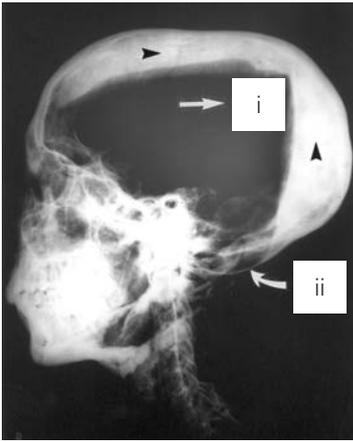
ACTIVITY 2.2 RESPONDING TO THE SOURCE

View Source 2.2, the video 'Tutankhamun's burial chamber'. Imagine you were an archaeologist discovering these scenes for the first time. **Identify** three things that we might learn about Egyptian religious beliefs and/or practices from these scenes.



▲ **Source 2.2**
Tutankhamun's burial chamber

Evidence



◀ **Source 2.3** This scan of Tutankhamun's skull shows i) where bone fragments have been dislodged and ii) a bulge in the skull. Was this caused by a blow from a blunt object or by a heavy fall? Remember that when Tutankhamun died, the **embalmers** who removed his brain likely damaged the skull.

embalmer a priest (or someone else) in ancient times who treated human remains with spices and other materials to help preserve the remains and stop them decaying

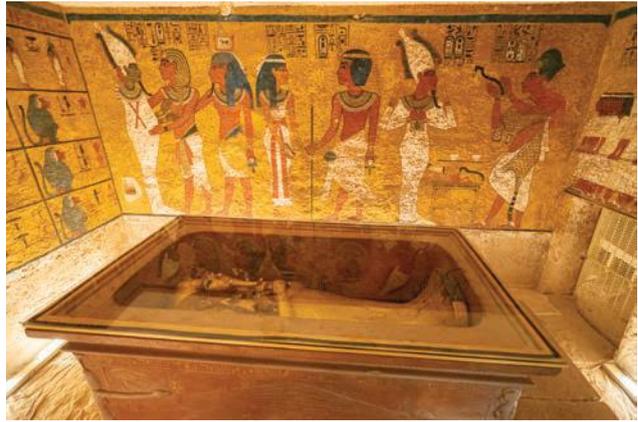
My husband is dead and I have no son. People say that you have many sons. If you send me one of your sons, he will become my husband for it is repugnant to me to take one of my servants (or subjects) as a husband.

▲ **Source 2.4** A letter likely written by Tutankhamun's wife, Ankhsenamun, asking the king of the Hittites to send his son to marry her following Tutankhamun's death. It is possible that she perceived her life to be in danger by someone wishing to take Tutankhamun's place.

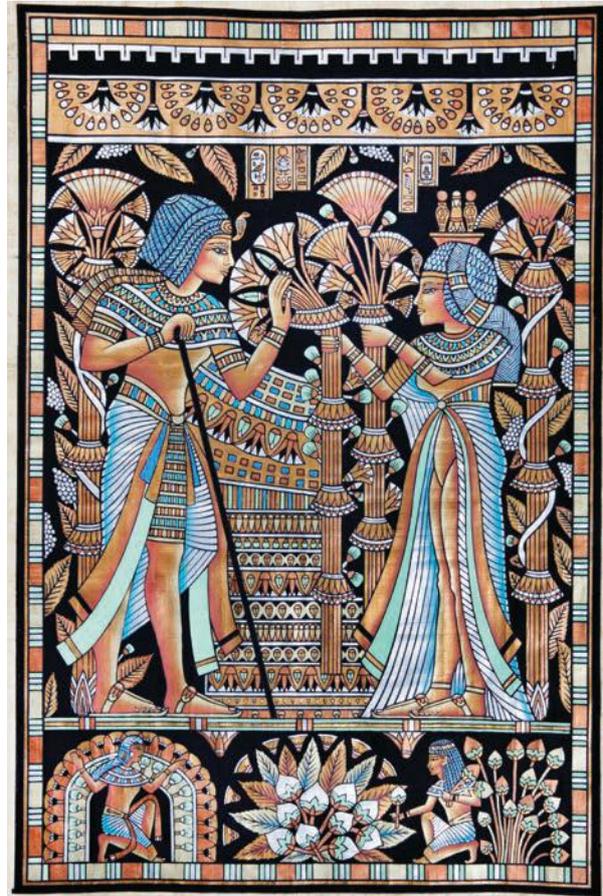
... I was ready to send my son to be king. But you were already on the throne and I did not know. Concerning what you have written to me: 'Your son has died, but I have not caused him any ill.'

When the queen of Egypt wrote me again, you did not ... But if you had ascended to the throne in the meanwhile, you should have sent my son back to his home ... your servant Hani holds us responsible ... What have you done with my son?

▲ **Source 2.5** A letter from the Hittite king to Aye. Aye was Tutankhamun's vizier and replaced him as Egyptian pharaoh after his death. In this letter, the Hittite king complains that the son he sent to marry Ankhsenamun, with the intention of becoming pharaoh of Egypt, had disappeared.



▲ **Source 2.6** This painting is on the wall of Tutankhamun's tomb. It shows the vizier Aye (far right) performing the 'opening of the mouth' funerary ceremony on the dead king (second from right), so that his soul could eat and drink in the afterlife. Aye later became pharaoh of Egypt.



▲ **Source 2.7** This image was copied from an ivory chest found in Tutankhamun's tomb. This picture features Tutankhamun and his wife, Ankhsenamun. Tutankhamun is depicted supporting his weight with a walking stick. Over 100 walking sticks were discovered among the contents of Tutankhamun's tomb, and CT scans of his body suggest that Tutankhamun had a fractured lower leg and a deformed foot at the time of his death, possibly caused by injury or a genetic condition.



▲ **Source 2.8** Tutankhamun's hunting chariot. This photograph from 1923 shows two men examining a chariot found in Tutankhamun's tomb. Hunting with a bow and arrow while riding on a chariot appears to have been one of Tutankhamun's preferred pastimes. This would not have been an easy skill to master and was a high-risk activity, as a fall from a chariot could result in broken limbs or worse.



▲ **Source 2.9** This photograph from the *New York Times* shows Howard Carter examining Tutankhamun's coffin. The discovery of Tutankhamun's tomb was a huge media event, which led to the archaeologists rushing their examination of the body and their unwrapping of the mummy. As a result, items and even body parts went missing and the body was damaged. This may have affected the accuracy of **forensic** studies of the body.

forensic relating to scientific methods of investigating history or crime, and may involve scientific tests of human remains

... a tall, blunt object, it seemed, had struck the king with great force. No weaponry we knew of could have caused the necessary injury.

However, we felt that another theory was worth investigating again: the possibility that Tutankhamun died in a chariot accident, and that, more specifically, the fatal impact was caused by a chariot wheel ... Had the king been kneeling or crouching down and struck by the wheel of the chariot, he would undoubtedly have suffered massive injuries to his torso ...

▲ **Source 2.12** This extract from an article in the BBC's *History Extra* magazine describes possible explanations for the fact that Tutankhamun's body was missing ribs at the time of embalming.

... studies revealed areas of patchy skin changes on the pharaoh's left cheek and neck ... they must have had malaria tropica, the most severe form of malaria ... Unfortunately, there is also no distinct evidence in ancient Egyptian texts of treatments for malaria, and there are no references to the fevers and chills associated with the disease. However, the Nile Delta and the fringes of the Nile Valley were marshy areas and thus excellent breeding grounds for the mosquito genus *Anopheles* ... A sudden leg fracture possibly introduced by a fall might have resulted in a life-threatening condition when a malaria infection occurred. Seeds, fruits, and leaves found in the tomb, and possibly used as medical treatment, support this diagnosis.

▲ **Source 2.10** This extract from a 2010 article describes the forensic studies of Tutankhamun's corpse. The accuracy of these studies would be affected by the age and condition of the corpse.



▲ **Source 2.11** This colourised photo shows some of the contents of Tutankhamun's tomb at the time it was discovered. Over 5000 items were discovered in the tomb. The items were haphazardly organised in the tomb, which might suggest his burial was conducted in a hurry. This may indicate a sudden, unexpected death, rather than a gradual decline in health.

Chapter overview

Introduction

The ancient Egyptians were one of the world's earliest and most impressive civilisations. Over 5000 years ago, they began the process of organising themselves into a large society that included a centralised government, organised religious beliefs and practices, monumental architecture, written literature and a clear social hierarchy. Incredibly, this civilisation survived for over 3000 years, and managed to maintain many of its valued traditions and cultural practices virtually unchanged for much of that time. Without a doubt, the longevity of the civilisation of the ancient Egyptians must be considered one of the great success stories of human history.

As you read this chapter, use the information and sources provided to build your knowledge and understanding of the unique features that characterise the civilisation of ancient Egypt, and consider how they help you to answer the key inquiry question below.

Key inquiry question

'What made ancient Egypt a successful civilisation?'

Every key inquiry question should have:

- An open interrogative
- A historical concept
- Specific content
- Scope and scale.

So, let's dissect this key inquiry question: 'What made ancient Egypt a successful civilisation?'

To answer a key inquiry question in a historical investigation, it is helpful to break the question into sub-inquiry questions.

Sub-inquiry questions

After completing this chapter, you should be able to answer these sub-inquiry questions:

- What are the different methods and sources of evidence used by historians and archaeologists to investigate ancient Egypt?
- How did ancient Egypt's physical features influence its success?
- How important was the role of the pharaoh to ancient Egypt's success?
- What was life like for key groups in ancient Egypt and how did they contribute to its success?
- What role did religious beliefs, values and practices play in ancient Egypt's success?
- How did ancient Egypt benefit from contact and conflict with other societies?
- What role did individuals, such as Hatshepsut, play in making ancient Egypt successful?

Historical skills

After completing this chapter, you should be able to:

- Develop historical questions about the past to inform historical inquiry
- Locate and identify primary and secondary sources to use in historical inquiry
- Identify the origin, content, context and purpose of primary and secondary sources
- Identify and describe the accuracy and usefulness of primary and secondary sources as evidence
- Describe causes and effects and explain continuities and changes
- Identify perspectives, attitudes and values of the past in sources
- Explain historical interpretations about significant events, individuals and groups
- Create descriptions, explanations and historical arguments, using historical knowledge, concepts and terms that reference evidence from sources.

► **Source 2.13** An ancient Egyptian bas-relief of the god Horus



Timeline of key events

What came before this topic?

c. 3500 BCE People arrived in Egypt and settled along the Nile River Valley



▲ Aerial image of the Nile River



► Detail of hieroglyphic inscriptions

c. 3000 BCE
Hieroglyphic script is developed
Early Dynastic Period

c. 2613–2181 BCE
The great pyramids at Giza are built (4th dynasty)
Old Kingdom Period

c. 1493 BCE
Under Hatshepsut, a voyage to Punt opens up new trade routes and brings back exotic riches to Egypt (18th dynasty)
New Kingdom Period

c. 3150 BCE
King Narmer of Upper Egypt conquers Lower Egypt and unifies the two lands. This marks the beginning of Egypt being ruled by a single, powerful pharaoh (1st **dynasty**).
Early Dynastic Period

c. 2670 BCE
The first stone pyramid is built at Saqqara (3rd dynasty)
Early Dynastic Period

c. 2040–1640 BCE
The high point of ancient Egyptian art and architecture
Middle Kingdom Period

dynasty a succession of rulers from the same family; in ancient Egypt and China, some dynasties included rulers that were not related to the ruling family. The 3000 years of ancient Egyptian civilisation are traditionally divided into approximately 30 to 32 dynasties



▲ The Step Pyramid of Djoser at Saqqara

Old Kingdom the term used to group the pharaohs of the 4th to 6th dynasties. The capital of Egypt at this time was at Memphis and the chief god was Re (also spelled Ra). The Great Pyramids at Giza were constructed during this time

Middle Kingdom the term used to group the pharaohs of the 11th to 13th dynasties. The capital of Egypt at this time was Thebes. Osiris and Amun were prominent gods and it is considered a time of great wealth and culture, with many remarkable literary works produced and new genres of writing created

New Kingdom the term used to group the pharaohs of the 18th to 20th dynasties. The capital of Egypt at this time was at Thebes and the chief god was Amun-Re. Egypt expanded its empire widely during the New Kingdom and the chariot was introduced. Pharaohs were generally buried in the Valley of the Kings. Notable pharaohs of this period were Amenhotep III, Hatshepsut, Thutmose III, Akhenaten, Tutankhamun and Ramses II

Responding to the timeline

1 The following terms are used on this timeline. **Determine** their meaning.

a c. (circa)

b BCE

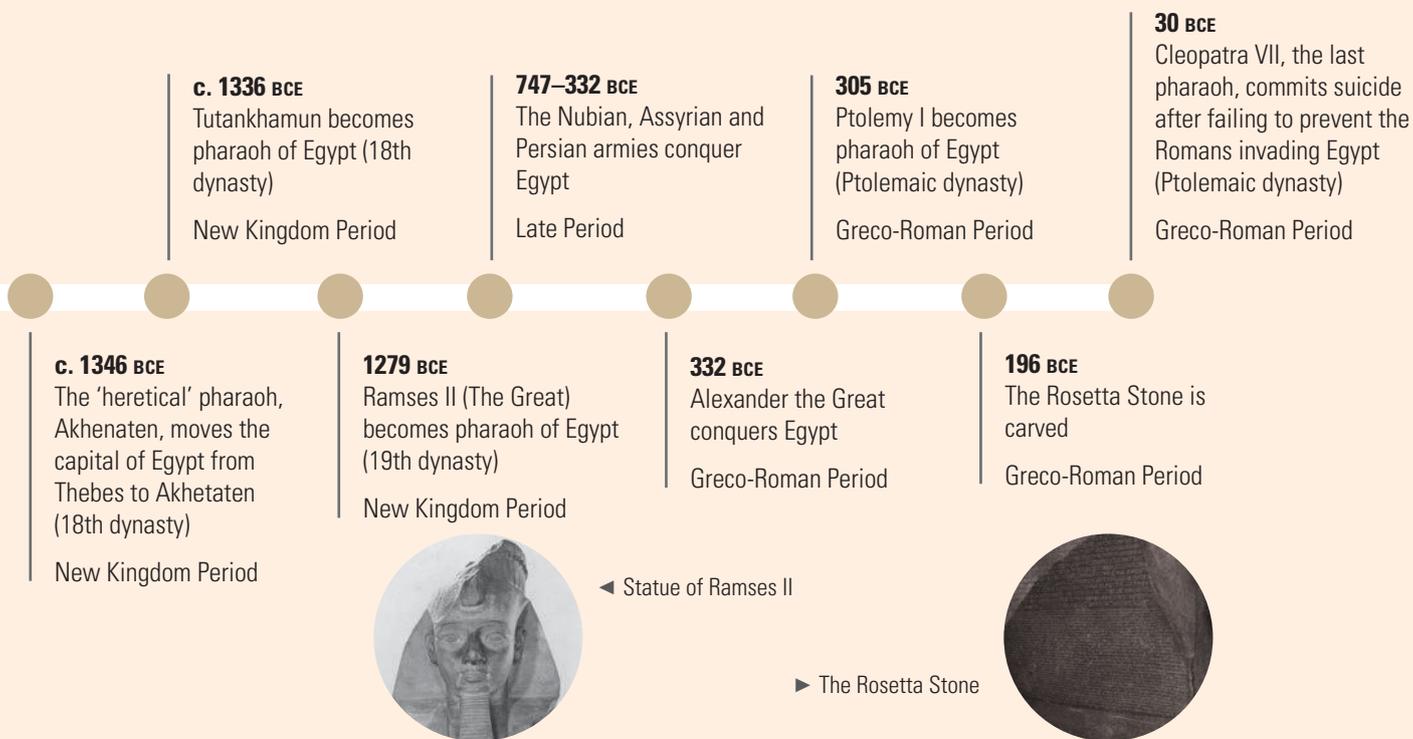


What came after this topic?

30 BCE After Cleopatra VII's death, Egypt lost its independence and became part of the Roman Empire



▲ Relief of Cleopatra VII at the Dendera Temple



»

- 2 What is a dynasty? Try to **explain** this concept to a friend. Where else in the world, either today or in the past, have countries been ruled by dynasties?
- 3 **Identify** the period of ancient Egyptian history when young King Tutankhamun ruled.
- 4 **Determine** approximately how many years there were from the time of the foundation of ancient Egypt under King Narmer to the end of ancient Egypt's independence with the death of Cleopatra VII.
- 5 **Identify** the dynasty and kingdom during which the famous great pyramids of Giza were constructed.
- 6 **Research** one of the significant individuals mentioned on this timeline. **Create** a biographical profile poster to put up on the wall of your classroom. You may wish to use the following headings to help structure your poster:
 - Historical context
 - How they were perceived by their contemporaries
 - Early life
 - Their overall role in Egyptian history.
 - Achievements



2.1 What are the different methods and sources of evidence used by historians and archaeologists to investigate ancient Egypt?

FOCUS QUESTIONS

- How do we know about ancient Egypt?
- Why is conserving the remains, material culture and heritage of ancient Egypt important?

How do we know about ancient Egypt?

ARCHAEOLOGICAL EVIDENCE

The ancient Egyptians were very good at keeping records and preserving important information. In learning about the lives of

people in ancient Egypt, we are fortunate to have access to a wide range of **primary sources**, such as **monuments**, buildings and statues, wall paintings and **inscriptions**, as well as **artefacts** such as statuettes, furniture, dining implements, jewellery and weapons that have been uncovered through excavation of Egyptian tombs and other sites. Ancient Egyptians produced literary works such as poetry, hymns, fictional tales, instructions, letters, and **funerary texts**, many of which are preserved through inscriptions on tomb walls, stone tablets, or on the walls of buildings, statues and monuments such as obelisks. Egyptians also wrote on coffins, **papyrus scrolls**, wooden writing tablets and amulets known as **scarabs**. In addition, we can learn about the daily lives of ancient Egyptians through scientific analysis of mummified bodies, using techniques such as DNA (deoxyribonucleic acid) testing and CT (computerised tomography) scanning. This has contributed to our understanding of ancient Egyptian life expectancy, health conditions, physical appearance and diet.

primary source a source of information about the past created in the time being studied

monument a structure, such as a large building, constructed for the purpose of commemorating an important person or event

inscription words written or cut in something, such as a written record carved in stone

artefact an object that is made by a person, such as a tool or a decoration; it is usually of historical interest

funerary text written records relating to funerals, often found written on the interior walls of ancient Egyptian tombs

papyrus scroll a material used as a type of paper by ancient Egyptians; multiple pages could be joined together and rolled into an early form of a book known as a scroll

scarab an amulet that was often worn or carried by ancient Egyptians, which was carved to look like the Egyptian scarab beetle; it was used as an early form of communication, with information carved into the flat surface on the underside of the scarab



THINKING DEEPER

Most of the artefacts that have been excavated from ancient Egypt have been found in the tombs of individuals from the wealthy ruling class. How might this affect the usefulness of these sources when learning about the lives of ancient Egyptians?



ACTIVITY 2.3

- 1 Use the information you have just read to **create** a mind map titled 'Sources for ancient Egypt'. Consider using sub-categories such as 'written sources', 'non-written sources' and 'scientific analyses of human remains' to help you organise your information.
- 2 Classify the following sources as either primary or secondary sources for learning about life in ancient Egypt:
 - a A twenty-first-century website article about Egypt from an Egyptian tour company
 - b A statuette made by Pharaoh Akhenaten
 - c The Great Pyramids of Giza
 - d A chapter about ancient Egypt from a twenty-first-century textbook
 - e Jewellery discovered in an ancient Egyptian tomb
 - f A letter written by an ancient Egyptian scribe on a papyrus scroll.
- 3 Using the information on the previous page, **identify** what the following source of evidence for ancient Egypt is (Source 2.14). **Describe** the features of this artefact and explain what it might have been used for. You may wish to **conduct** additional research online to help answer this question.



▲ **Source 2.14** An artefact created during the reign of Pharaoh Thutmose III, c. 1380 BCE

READING EGYPTIAN HIEROGLYPHS

The inscriptions on tombs and temples in ancient Egypt were written in a pictorial form known as hieroglyphs. Following the conquest of Egypt by Alexander the Great in 332 BCE, Greek became the official language, and the use of hieroglyphs was forgotten. For hundreds of years, historians were not able to translate ancient Egyptian hieroglyphs; however, in 1799 a soldier, digging a trench at the town of Rosetta, uncovered a stone engraved with the same text written in three different languages (see Source 2.15). French leader Napoleon Bonaparte's scholars identified that the Rosetta Stone contained Greek and Coptic, which scholars could read, and Egyptian hieroglyphs. In the 1820s, French historian and scholar Jean-François Champollion, building on earlier efforts by the British scholar Thomas Young, was finally able to produce the first accurate translation of Egyptian hieroglyphs, paving the way for future historians and archaeologists.



ACTIVITY 2.4

1 Discuss: The Rosetta Stone has been on display in the British Museum, London, since 1802. It is believed to have been transported from Egypt to England in secret by a British soldier during a war between Britain and France. It is the most visited object in the British Museum. Many Egyptians today believe it should be returned to Egypt, but representatives of the British Museum argue that it will be better preserved, and will also be able to be seen by more people, if it remains in the British Museum. With a partner or as a class, **discuss** responses to the following question: 'Should the British Museum return the Rosetta Stone to Egypt?'

2 If time permits, **conduct** a little more research into the arguments for and against the return of the Rosetta Stone to Egypt. **Consider** issues like how this artefact was originally acquired, and the benefit to tourism and historical knowledge. The article 'Rosetta Stone: a new museum is reviving calls to return the artefact to Egypt', on The Conversation website, might be a useful starting point for your research.

3 In your class, **create** an 'attitude scale' from one end of the classroom to the other. At each end, place the absolute opposing viewpoints:

- The Rosetta Stone should be returned to Egypt.
- The Rosetta Stone should not be returned to Egypt.

a Each student is to stand along the scale in the place that represents their attitude to the return of the Rosetta Stone to Egypt. Students are to **justify** why they are standing where they are.

b After hearing the viewpoints of others in the class, students can move to a different position on the attitude scale. Again, students are to **justify** why they are standing where they are.



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Significance.

Your response should contain:

- Identification of what elements are significant in relation to the content of the question
- A clear statement about the degree of significance (i.e. very significant, somewhat significant)
- Evidence from the sources to support this judgement of significance.



▲ **Source 2.15** The Rosetta Stone, believed to have been created in c. 196 BCE



REFLECTING ON YOUR LEARNING 2.1

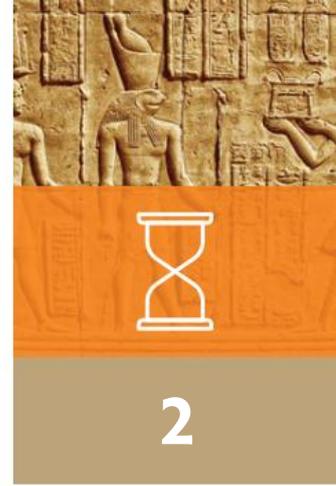


Reflect on what you have learned in this section:

- 1** Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'What are the different methods and sources of evidence used by historians and archaeologists to investigate ancient Egypt?'
- 2** How could the information and sources in this section contribute to answering your overall inquiry question: 'What are the different methods and sources of evidence used by historians and archaeologists to investigate ancient Egypt?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.

2.2 How did ancient Egypt's physical features influence its success?



FOCUS QUESTIONS

- Where in the world was ancient Egypt?
- What challenges did Egypt's geography and climate pose to the success of the ancient Egyptian civilisation?
- How did the inundation of the Nile River help the ancient Egyptians to overcome the challenges posed by Egypt's geography and climate?
- How did ancient Egyptian farmers use the Nile River?
- How did the ancient Egyptians use the Nile River for transport?
- How else did the physical features of ancient Egypt support the success of the ancient Egyptian civilisation?

Positioned in the north of Africa, Egypt sits alongside the **Nile River** in the Sahara Desert. Before 3100 BCE, Egypt consisted of a series of separate villages situated alongside the Nile River. Most people lived near the narrow strip of land by the Nile's banks (known as the Black Land) as it was the best place to grow crops and to farm animals. The rocky, sandy desert land further away from the Nile River was known as the Red Land, because of the colour of the soil. There was little rain in the Red Land, making it harder for plants and animals to grow, so fewer people settled there. As the villages in the Black Land grew, two larger groupings emerged in the north and in the south, known as **Lower Egypt** and **Upper Egypt** (see Source 2.16). Lower Egypt, the northern region around the Nile Delta (the mouth of the Nile River), was flatter and had fertile soil. Upper Egypt, the southern region of the Nile Valley between Memphis and Aswan (and later on, down to the region of Kush), was narrower and drier and had only a thin strip of fertile land along the banks of the Nile River.

Nile River the main river running through Egypt

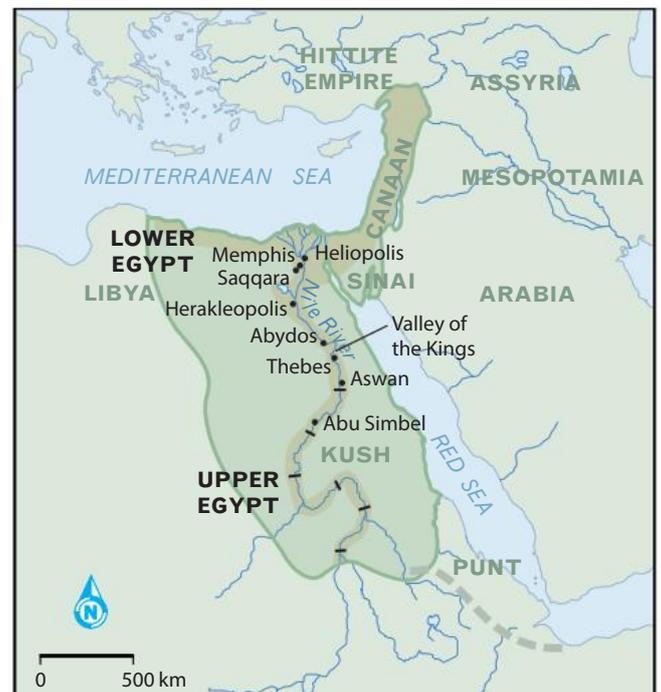
Lower Egypt the northern region of Egypt around the Nile Delta. The major city in this region was Memphis. The land here was flat, fertile and closer to sea level (thus the label of 'Lower' Egypt)

Upper Egypt the southern region of Egypt, stretching along the Nile Valley from Memphis in the north to Aswan in the south. The major city in Upper Egypt was Thebes



ACTIVITY 2.5 RESPONDING TO THE SOURCE

- 1 The region where the Nile River meets the Mediterranean Sea is known as the Nile Delta. **Examine** Source 2.16 and **conduct** some research to find out why it is called a 'delta'.
- 2 It can be confusing that Lower Egypt is to the north of Upper Egypt. **Examine** Source 2.16 and **conduct** some research to find out why the region to the south is called Upper Egypt.



▲ **Source 2.16** A map of ancient Egypt, c. 1500 BCE

What challenges did Egypt's geography and climate pose to the success of the ancient Egyptian civilisation?

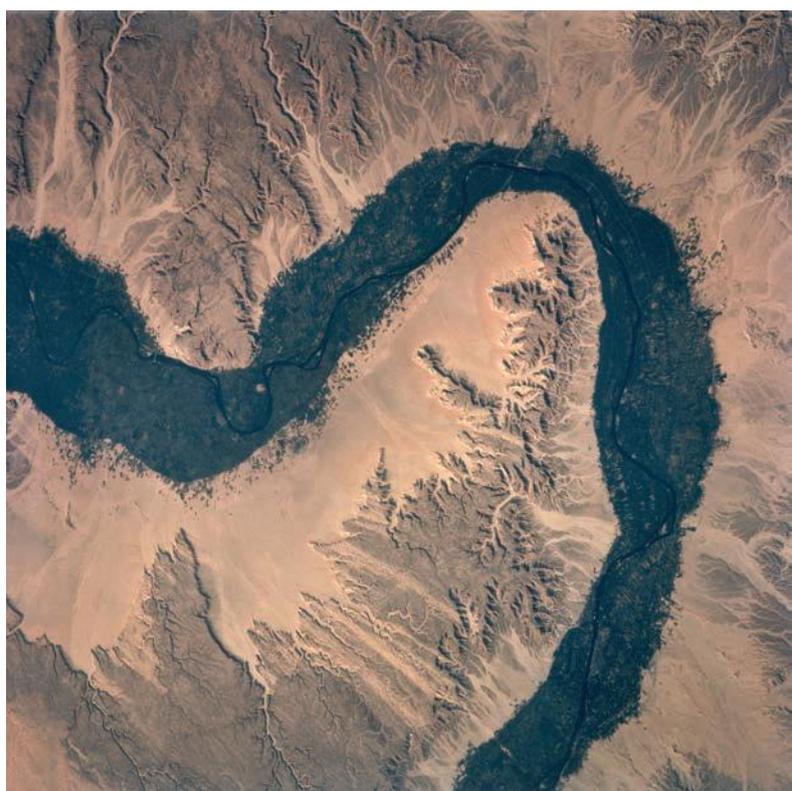
THE NILE RIVER

When we look at satellite images of present-day Egypt (see Sources 2.17 and 2.18), we can see the dark, fertile soil that surrounds the Nile River. The lush green stands out next to the harsh yellow sand of the Sahara Desert. As the Nile River flows down from the mountains in the south to the Mediterranean in the north, it creates a long, narrow strip of fertile farmland, which weaves through the desert like a ribbon.

2



▲ Source 2.17 A satellite image of present-day Egypt



▲ Source 2.18 This image of the Nile River was taken from the space shuttle *Columbia* in 1996. You can see that the regions alongside the river are a rich and fertile green.



ACTIVITY 2.6 RESPONDING TO THE SOURCES

- 1 Even though Sources 2.17 and 2.18 are satellite images of present-day Egypt, the geography of ancient Egypt was similar. Imagine you are viewing Egypt from space: **describe** the geography of the place you see.
- 2 Based on the satellite images in Sources 2.17 and 2.18, **infer** what challenges the geography of Egypt might present for the people who live there.
- 3 **Describe** which areas of Egypt might be most likely to sustain life. Why?
- 4 Does Source 2.18 depict the Nile River in Upper Egypt or Lower Egypt? **Explain** how you know.

EGYPT'S CLIMATE

The climate of ancient Egypt was probably like the climate of Egypt today. Egypt has a hot summer between May and October, and a mild winter from November to April. Temperatures range from very hot during the day to very cold at night-time. Sometimes, it snows in the south near the mountains. There is little rainfall for most of the year, so people rely on the Nile River as a source of fresh water.

▼ **Table 2.1** Present-day climate data for Cairo. In ancient times, this city was called Memphis.

Cairo's climate	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average temperature (°C)	13.1	14.1	17.4	20.7	24.1	27	27.6	27.6	25.8	23.5	19.2	15.1
Minimum temperature (°C)	7	7.4	10.5	12.9	16.2	19.3	20.7	20.8	19.1	16.8	13.1	9.1
Maximum temperature (°C)	19.3	20.9	24.3	28.5	32.1	34.8	34.6	34.5	32.5	30.2	25.4	21.1
Precipitation/rainfall (mm)	5	3	2	1	0	0	0	0	0	0	3	4

▼ **Table 2.2** Present-day climate data for Brisbane, Queensland

Brisbane's climate	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average temperature (°C)	24.9	24.7	23.5	21.3	18.2	15.6	14.6	15.4	17.7	20.4	22.7	24.2
Minimum temperature (°C)	20.3	20.2	18.8	16	12.8	10	8.6	9.1	11.5	14.8	17.4	19.3
Maximum temperature (°C)	29.6	29.2	28.3	26.6	23.6	21.2	20.6	21.7	24	26.1	28	29.2
Precipitation/rainfall (mm)	162	167	135	93	83	67	63	41	34	90	104	129



ACTIVITY 2.7 RESPONDING TO THE SOURCES

- Table 2.1 shows present-day climate data (temperature and precipitation) for Cairo, which is in the same place as the ancient city of Memphis. **Analyse** this information to answer the following questions:
 - What is the month with the highest average temperature?
 - What is the month with the lowest average temperature?
 - How much rainfall does Cairo get each year?
 - How would you describe Cairo's climate?
- Determine** what types of challenges the climate of ancient Egypt might have presented for the people who lived there.
- In pairs, **compare** the climate of Brisbane (Table 2.2), or the place where you live (visit <https://cambridge.edu.au/redirect/9482> for a climate data website), to the climate of Cairo. With your partner, **discuss** what main differences and/or similarities you notice. Which climate would each of you prefer to live in and why?



ACTIVITY 2.8
MAKING THINKING VISIBLE

Colour, symbol, image

This thinking routine encourages you to distil ideas and present them in a new form, and to give reasons for your choices. Copy and complete the table below, either on paper or on computer.

COLOUR What colour best represents ancient Egypt's climate and geography? (place in the box below)	SYMBOL What symbol best represents ancient Egypt's climate and geography? (place in the box below)	IMAGE What image best represents ancient Egypt's climate and geography? (place in the box below)
Why did you choose this colour?	Why did you choose this symbol?	Why did you choose this image?

2

inundation the yearly flooding of the Nile River

silt rich, fine soil carried in the waters of a river

How did the inundation of the Nile River help the ancient Egyptians to overcome the challenges posed by Egypt's geography and climate?

In ancient times, heavy summer rain fell each year in the mountains of Ethiopia. This water travelled north, causing the Nile in Egypt to flood

and spill over the riverbanks. This process is called the **inundation**.

The predictability of the Nile floods allowed the Egyptians to develop an annual calendar of 12 months, divided into three seasons. These seasons, based on the Nile fluctuations, were:



Akhet (Inundation): June–September, when the Nile flooded agricultural land



Peret (Emergence): October–February, the time of planting, when the water levels receded



Shomu (Harvest): March–May, the time of harvest

When the floodwaters receded, a layer of thick black dirt, called **silt**, was deposited along the banks of the river. The silt carried by the inundation was full of rich minerals, which provided the ancient Egyptians with the ideal conditions for growing their crops. However, the Egyptians had to watch and measure the water levels carefully, as each year the level of inundation was different.

A large inundation could flood and destroy whole villages. A small inundation could mean there was not enough water for the farms, resulting in failed crops and thirsty animals. Without enough water, people would certainly go hungry. Many large-scale building projects – such as the construction of the great pyramids at Giza – were probably completed by Egyptian farmers during the inundation season, when they were unable to work on their farms.

▲ **Source 2.19** The fluctuations in the Nile River. This diagram depicts the seasonal inundation of the Nile River.

Praise to you, O Nile, that comes from the earth, and comes to nourish Egypt. He that spills out, giving the fields water to drink and making the people strong. He makes one man rich and loves the other. He that waters the meadows, he that Re created to feed all cattle. He that gives drink to desert places which are far from water. He that makes barley and wheat, so that temples can keep festivals ...

If the inundation is poor, then men can no longer live and breathe, and all men are poor. The foods of the gods are short, and millions of men will die. When the river rises, the whole land is joyful, all jaws begin to laugh and every tooth is shown.

When the Nile floods, offerings are made to you, cattle are slaughtered for you, birds are fattened for you, prayers are said for you. You are fruitful, O Nile, you are fruitful.

▲ **Source 2.20** An excerpt from the 'Hymn to the Nile', a prayer from the people of Egypt to the Nile River (19th dynasty, c. 1292–1190 BCE)

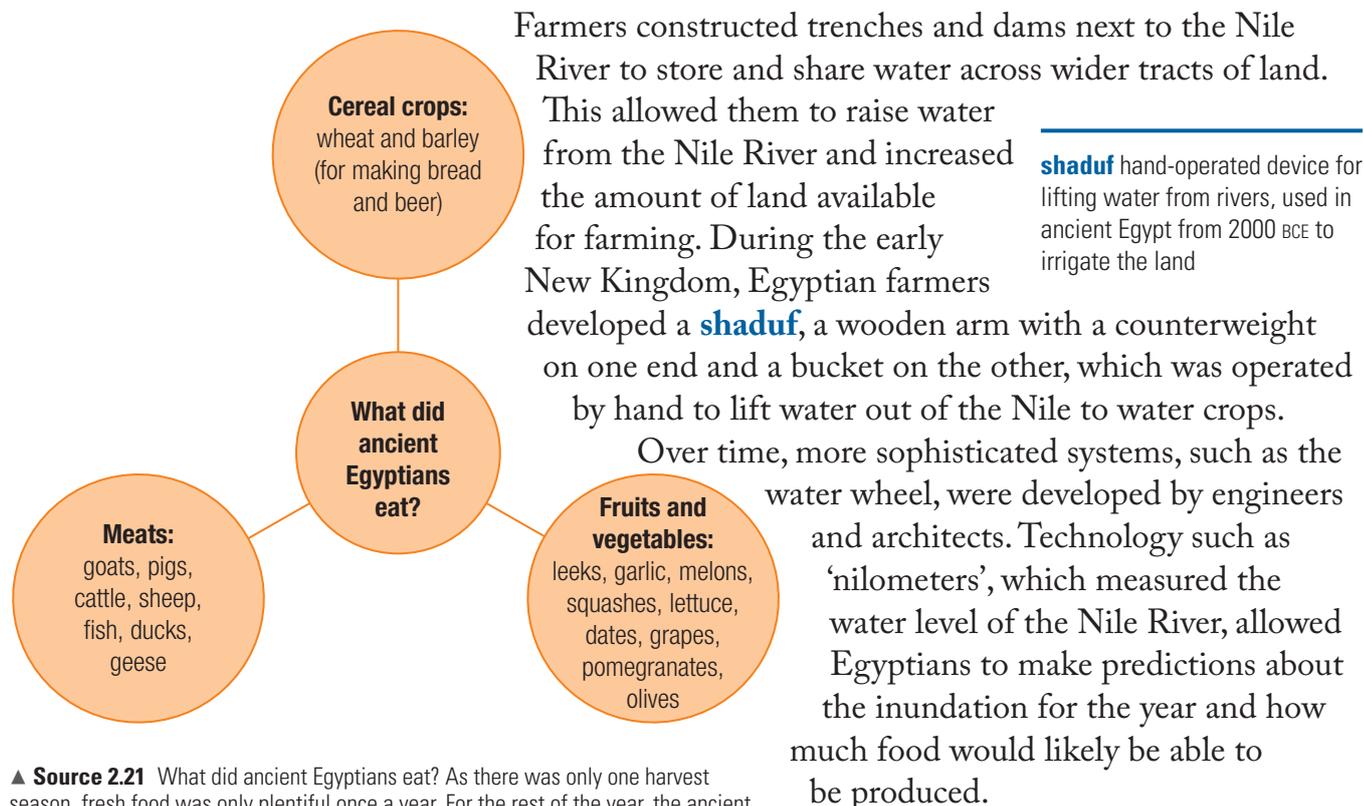


ACTIVITY 2.9 RESPONDING TO THE SOURCE

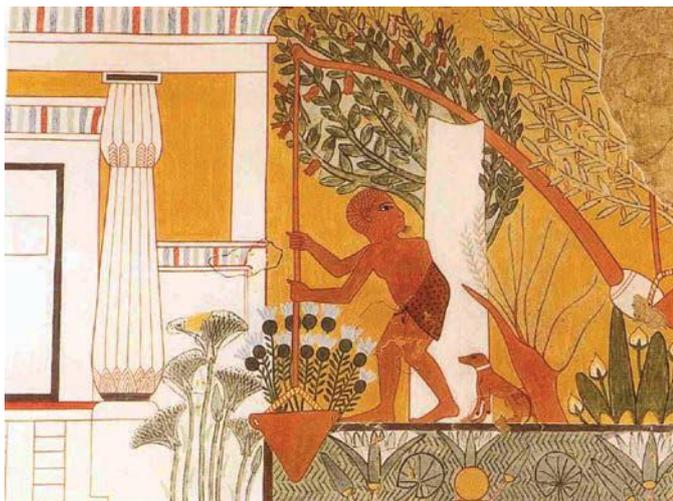
Form pairs or small groups. **Select** one person to take on the role of an ancient Egyptian priest, who will perform the 'Hymn to the Nile' from Source 2.20 to your group. Try to come up with some hand gestures to help bring your performance to life. After your performance, **discuss** the following questions as a group and use quotes from the hymn to support your answers to Questions 2 and 3:

- 1 Why might this hymn have been created?
- 2 In what ways does the hymn **suggest** the Nile River was important to the lives of people in ancient Egypt?
- 3 What does the hymn **suggest** the consequences were if the Nile did not flood?

How did ancient Egyptian farmers use the Nile River?



▲ **Source 2.21** What did ancient Egyptians eat? As there was only one harvest season, fresh food was only plentiful once a year. For the rest of the year, the ancient Egyptians relied on salted or dried food.



▲ **Source 2.22** An ancient Egyptian garden. This scene of a garden was painted in the tomb of Ipuy at Thebes (19th dynasty, c. 1279–1213 BCE).



ACTIVITY 2.10 RESPONDING TO THE SOURCE

- 1 What technology is the person using in Source 2.22? **Describe** the features of this technology and **explain** how it enabled ancient Egyptians to grow more food for Egypt's increasing population.
- 2 The image in Source 2.22 was painted on the interior wall of the tomb of an ancient Egyptian nobleman named Ipuy. **Explain** why Ipuy might have chosen to have this painting in his tomb.

How did the ancient Egyptians use the Nile River for transport?

Boat travel was the main form of transport in ancient Egypt. The Nile River acted as a kind of highway for the Egyptians, connecting their major cities. Large wooden ships with square sails and oars were used to transport trade goods (such as grain and linen), to transport statues of gods or the mummified bodies of pharaohs to their burial sites as part of religious ceremonies, and to carry heavy stones from stone quarries to construction sites. Smaller boats made from papyrus were used for travelling short distances and were also used by wealthy Egyptians for fishing and hunting. Wheeled vehicles, such as chariots, were not widely used until they were introduced around the beginning of the New Kingdom.



▲ **Source 2.23** An ancient Egyptian ship. This depiction of an Egyptian ship is from the tomb of Menna, a scribe of the king (18th dynasty). Notice the square (or rectangular) shape of the sail. Why do you think one person is dangling over the side?



▲ **Source 2.24** An ancient Egyptian boat. This painting is from the tomb of Ipuy at Thebes (19th dynasty, c. 1279–1213 BCE).



ACTIVITY 2.11 RESPONDING TO THE SOURCES

- 1 What do you think the boats in Sources 2.23 and 2.24 are being used for? **Explain** your answer.
- 2 **Compare** the similarities and differences in the design of the boats depicted in Sources 2.23 and 2.24. **Explain** the reasons for the differences in their designs.

How else did the physical features of ancient Egypt support the success of the ancient Egyptian civilisation?

The land around the Nile provided the ancient Egyptians with many natural resources. As Egypt was hot and dry, Egyptians used the flax plant to create linen cloth for clothing that was cool and lightweight. Men wore kilts that went from waist to knee, while women wore shifts from chest to knee. Sometimes, farmers are shown wearing loin cloths. In winter, woollen cloaks were worn during the evening for warmth. The **papyrus** plant is best-known for its use as a writing material, but had a range of other uses, including making sandals, boats, ropes, baskets, mats and toys. Copper from mines in the eastern desert was used to make weapons, containers and tools, while knives, axes and other tools were made from flint (a sharp stone). Egyptian gold mines in the eastern desert and in Nubia to the south provided gold for jewellery and decorative ornaments.

papyrus a plant that was common in the Nile Delta; ancient Egyptians had many uses for papyrus, including as an early form of paper

Mud bricks made from the Nile's clay provided the building materials for most brick houses, including the pharaohs' palaces. Houses for commoners were often two-roomed buildings, with a roof on which the family slept at night. The kitchen was usually a wood fire in the rear yard of the house. Bathrooms, as we know them, did not exist. People used pots as toilets and washed either in rivers or with water channelled from them.



Furniture was minimal, except for stools, as wood was scarce. The houses of wealthier Egyptians were located close to the floodplain, so that the occupants could enjoy any breeze available from the water. These houses often had water features or ponds containing fish, and were usually decorated with **frescoes**. There would have been more furniture, such as beds with headrests, in the houses of the wealthy.

▲ **Source 2.25** This depiction of daily life is on the walls of a tomb located near the Step Pyramid of Djoser (c. 2670 BCE).

fresco a style of painting on the plaster that covers a wall, where the paint is applied while the plaster is still wet



ACTIVITY 2.12 RESPONDING TO THE SOURCE

- 1 **Describe** the clothing worn by the Egyptians in Source 2.25. How was this clothing well-suited to life in Egypt?
- 2 Do you think the people in Source 2.25 are from a higher class or a lower class of Egyptian society? **Explain** what makes you think this.



ACTIVITY 2.13 MAKING THINKING VISIBLE

+1 routine

- 1 Having worked through Section 2.2, individually write down key points you can take away from the text. What have you learned about how the Nile River enabled life to be successful in ancient Egypt? Try to do this without rereading the text.
- 2 Now, pass your notes to the person on your right. This person should take 1–2 minutes to read through your notes and then add one new note to the page. This can be new information, an elaboration on another note, or a connection between ideas.
- 3 Continue to pass notes around the room twice more.
- 4 Return all notes to the original owners.
- 5 Read and **reflect on** the additional notes made on your page and **consider** new ideas you may have picked up from reading other students' work.



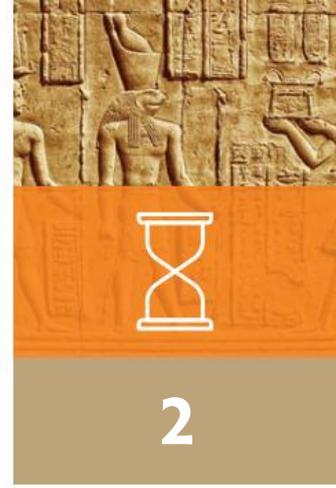
REFLECTING ON YOUR LEARNING 2.2



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned, and to answer the question: 'How did ancient Egypt's physical features influence its success?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient Egypt a successful civilisation?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.



2.3 How important was the role of the pharaoh to ancient Egypt's success?

FOCUS QUESTIONS

- Who was the first pharaoh?
- What was the role of the pharaoh?
- How did ancient Egyptians know if their pharaoh was successfully fulfilling their duties?

Who was the first pharaoh?

The **unification** of Egypt under King Narmer in approximately 3150 BCE is considered to be the start of ancient Egyptian civilisation. For the first time, the regions of both Lower Egypt and Upper Egypt were brought under the control of a single, all-powerful ruler. This became the first example in the world of a nation-state, where one central government ruled an area of land with clear and fixed boundaries, and where the people felt themselves to be a part of the same nation and obeyed its rules. King Narmer ruled Egypt from his new capital city, Memphis, and his example became the model for all future pharaohs to follow.

What was the role of the pharaoh?

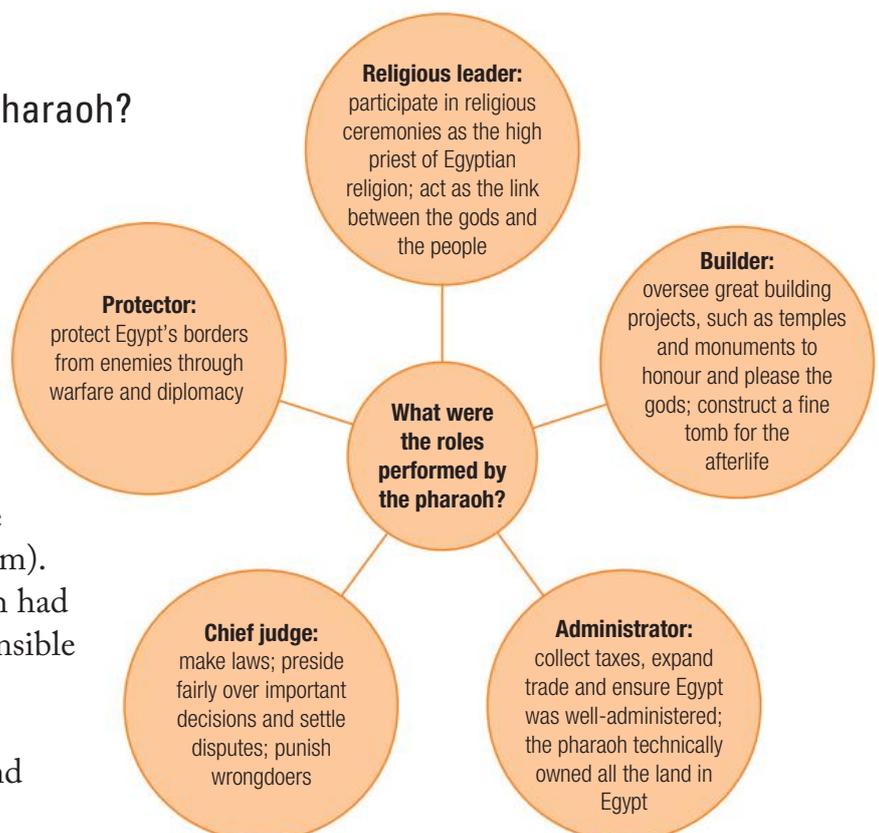
As the **intermediary** between the people and the gods, the **pharaoh** was considered to be a god on Earth. The ancient Egyptians thought the pharaoh was the human form of the god Horus, and that he was descended from the great god Re (who became Amun-Re in the New Kingdom). They believed that the pharaoh had magical powers and was responsible for keeping the gods pleased with the people of Egypt, and maintaining a state of order and harmony, known as **ma'at**.

unification the process of combining things or people

intermediary one who comes between. The pharaoh was the intermediary, or link, between the gods and humans on Earth

pharaoh a term used today to describe the kings of Egypt. It derives from the ancient Greek *per aa*, meaning 'the one who lives in the great house'. The rulers of ancient Egypt from the Old Kingdom onwards were called kings, with the title of pharaoh not appearing until sometime in the New Kingdom. The term 'pharaoh' has become virtually interchangeable today with the title of 'king', and will generally be the preferred term used throughout the chapter on ancient Egypt

ma'at the ancient Egyptian concept of truth, balance, justice and order – Ma'at is the god of divine balance



▲ **Source 2.26** This diagram shows the many roles performed by the pharaoh.

Ensure that a man may say even in your absence that you punish fairly ...

Do not be evil; kindness is good. Make your name remembered through people’s love for you ...

Respect your nobles, feed your people ... Strengthen Egypt’s borders, keep Egypt’s frontier well-defended ...

Make your officials wealthy, so that they act by your laws ... poor men will not be honest ... and will be susceptible to bribery.

Do justice ... do not oppress the widow, do not expel a man from his father’s property ... be careful not to punish wrongfully; do not kill, as it does not benefit you, but punish instead with beatings or with imprisonment ...

Guard your borders, secure your forts ...

Make great monuments that are worthy of the god, as this will also keep your name alive ...

Attend monthly religious ceremonies, wear the appropriate attire, visit the temple ... enter the sanctuaries and eat bread in the temple, give substantial offerings to the gods ...

Maintain your monuments with your wealth ... god will recognise you for this service. Do not destroy the monuments of others, but quarry new stone for your monuments ...

Do not ignore my advice, which provides the laws of kingship and instructs you so that you may rule the land and reach the afterlife successfully!

▲ **Source 2.27** An adapted extract from a famous set of instructions preserved on papyrus, known as ‘The Teaching for Merikare’ (9th–10th dynasty)



ACTIVITY 2.14 RESPONDING TO THE SOURCES

- 1 In Source 2.27, what advice does the older pharaoh give Merikare on how to be a successful pharaoh? **Analyse** Source 2.27 and **identify** instructions for how to fulfil the various roles of a pharaoh.

A pharaoh’s roles	Advice for how to successfully fulfil this role
Religious leader	
Chief judge	
Administrator	
Builder	
Protector	

- 2 Using Source 2.27 and the information on the roles of a pharaoh in Source 2.26, **create** a job advertisement for the next pharaoh of ancient Egypt. Your job advertisement may include the following features:

- A company logo
- A position description, outlining the key roles and responsibilities of the job
- Some information about the benefits of the role to encourage applicants to apply.

Try to make your job advertisement as visually appealing as possible! You may wish to look up other job advertisements online to get a sense of other kinds of details that may be relevant. You may complete this electronically, or in hard-copy form, such as a poster.

How did ancient Egyptians know if their pharaoh was successfully fulfilling their duties?

As most of ancient Egypt's population could not read or write, visual depictions of the pharaoh in statues or on the walls of public buildings were an important way for pharaohs to reassure their people that they were successfully performing their duties, such as pleasing the gods and protecting Egypt's borders. As time went on, the idea of the 'warrior pharaoh' became very important and it became typical for Egyptian rulers to show themselves crushing their enemies or demonstrating feats of physical excellence. This visual language is explored in Table 2.3, which shows some of the common symbols (and their meanings) used in depictions of pharaohs in ancient Egypt.

▼ **Table 2.3** Some features commonly found in depictions of pharaohs, and their meanings

	The dual crown, or pschent – this was made up of two earlier crowns: the tall, white crown of Upper Egypt and the shorter red crown of Lower Egypt	Symbolises the union of Egypt under one ruler
	A 'uraeus' cobra, with its head raised, ready to attack; this was often accompanied by an image of a vulture	Symbolises royalty and protection; when accompanied by a vulture, means the unification of two lands
	A flail or whip	Symbolises the pharaoh's authority to make their people obey them
	A rounded 'crook' or shepherd's staff, used to pull sheep back to the herd	Symbolises the pharaoh's role in guiding their people
	Large, jewelled collars and beautiful headdresses	Symbolises great wealth and prosperity
	False beard	Signifies their status as a living god and their association with Osiris, the king of the underworld
	Ankh, appearing as a cross with a loop at the top	Symbolises eternal life





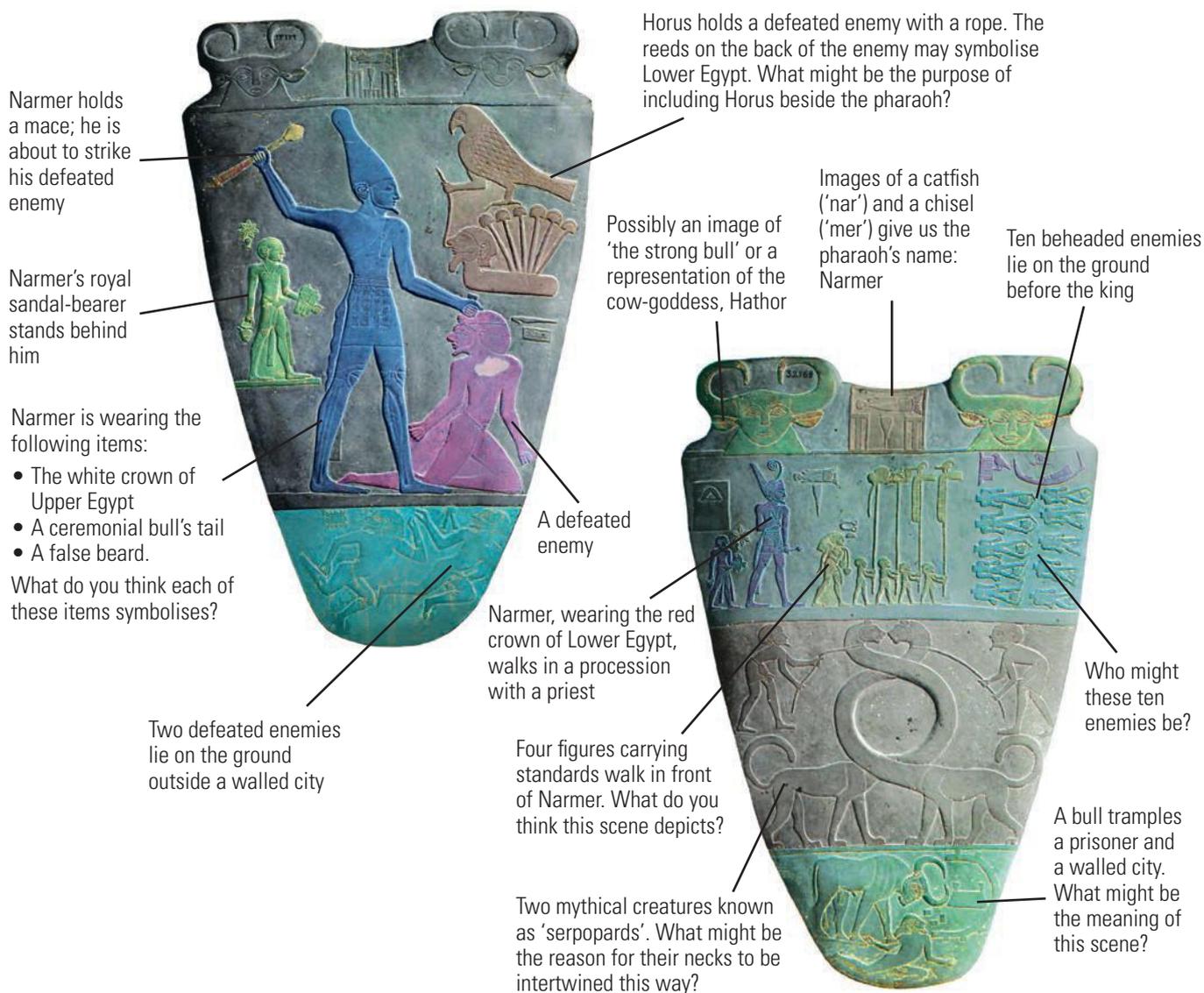
	<p>Figure with arms crossed in front, holding flail and crook, wrapped in mummy bandages</p>	<p>Signifies that the pharaoh has joined Osiris, the king of the underworld; this image is normally associated with death and funerary practices and commonly features on coffins</p>
	<p>Pharaohs were always depicted as larger than any other figure except for gods</p>	<p>Symbolises divine status, and the belief that the pharaoh represented the whole of Egypt</p>
	<p>'Smiting' pose, with an outstretched arm about to strike a defeated enemy</p>	<p>Signifies a warrior pharaoh who is able to protect Egypt against enemy threats</p>



▲ **Source 2.28** An artist's impression of three types of crown worn by pharaohs: the dual crown or pschent (left), the red crown of Lower Egypt (middle), the white crown of Upper Egypt (right). What other features can you identify?

SOURCE SPOTLIGHT: THE NARMER PALETTE

The symbols and images used on the Narmer Palette, created in the 1st dynasty (Source 2.29), provide a good example of early depictions of the pharaoh. These symbols and images must have worked, as they were used by almost every pharaoh for the next 3000 years, until the death of Cleopatra VII!



▲ **Source 2.29** The Narmer Palette. This image shows the front and reverse sides of the Narmer Palette, from Hierakonpolis (1st dynasty, c. 3150 BCE). Some features have been highlighted in different colours to assist your analysis of this source.



ACTIVITY 2.15 RESPONDING TO THE SOURCE

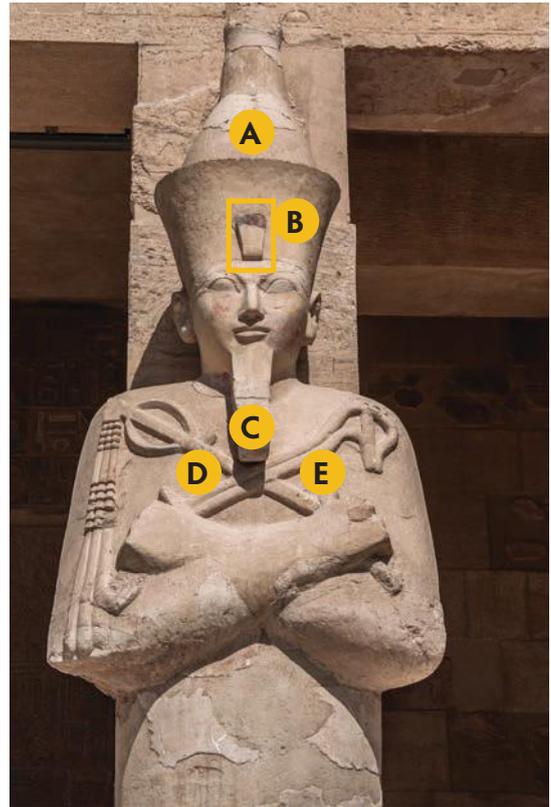
- 1 With a partner, or in a small group, **analyse** the features of the Narmer Palette in Source 2.29. Share your theories for the questions that accompany the annotations. You may wish to **conduct** some research online to help with your analyses of these features.
- 2 **Compare** the size of the king to the size of other figures in this source. **Explain** this difference.
- 3 On one side of the palette, King Narmer can be seen wearing the white war crown of Upper Egypt, and on the other side he is wearing the red crown of Lower Egypt. **Interpret** what message this may have been intended to convey to anyone who viewed this source.
- 4 **Identify** and make a list of as many features on this source as you can that support the idea that King Narmer wished to be seen as a great warrior and conqueror. **Explain** how each feature might support this image of the king.



**ACTIVITY 2.16
RESPONDING TO THE SOURCE**

Copy the table below into your notes, then use it to record the symbols on the statue of Hatshepsut in Source 2.30. **Explain** the probable meaning of each of these symbols.

	Symbol	The meaning of the symbol
A		
B		
C		
D		
E		



▲ **Source 2.30** Hatshepsut was a female pharaoh during the New Kingdom (18th dynasty). This statue of Hatshepsut (1508–1458 BCE) is from her mortuary temple at Deir el-Bahri.



**ACTIVITY 2.17
MAKING THINKING VISIBLE**

I used to think ... now I think ...

- 1 Take a minute to **consider** what ideas you had about pharaohs before beginning this section. When you are ready, complete the following phrase: 'I used to think that pharaohs ...'
- 2 Now, think about how your ideas about pharaohs have changed as a result of the information and sources you have read in this section. When you are ready, use a few sentences to **explain** your ideas, beginning with the following phrase: 'Now I think that pharaohs ...'
- 3 As a whole class, **discuss** how your ideas about pharaohs have changed as a result of what you have learned in this section. What questions do you still have about pharaohs?



REFLECTING ON YOUR LEARNING 2.3

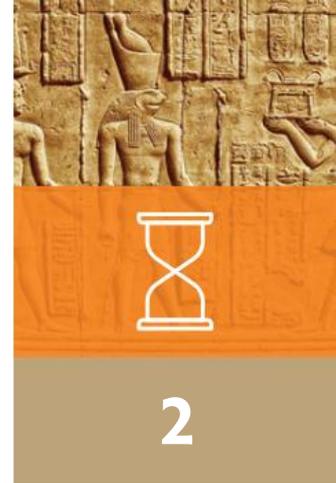


Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'How important was the role of the pharaoh to ancient Egypt's success?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient Egypt a successful civilisation?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.

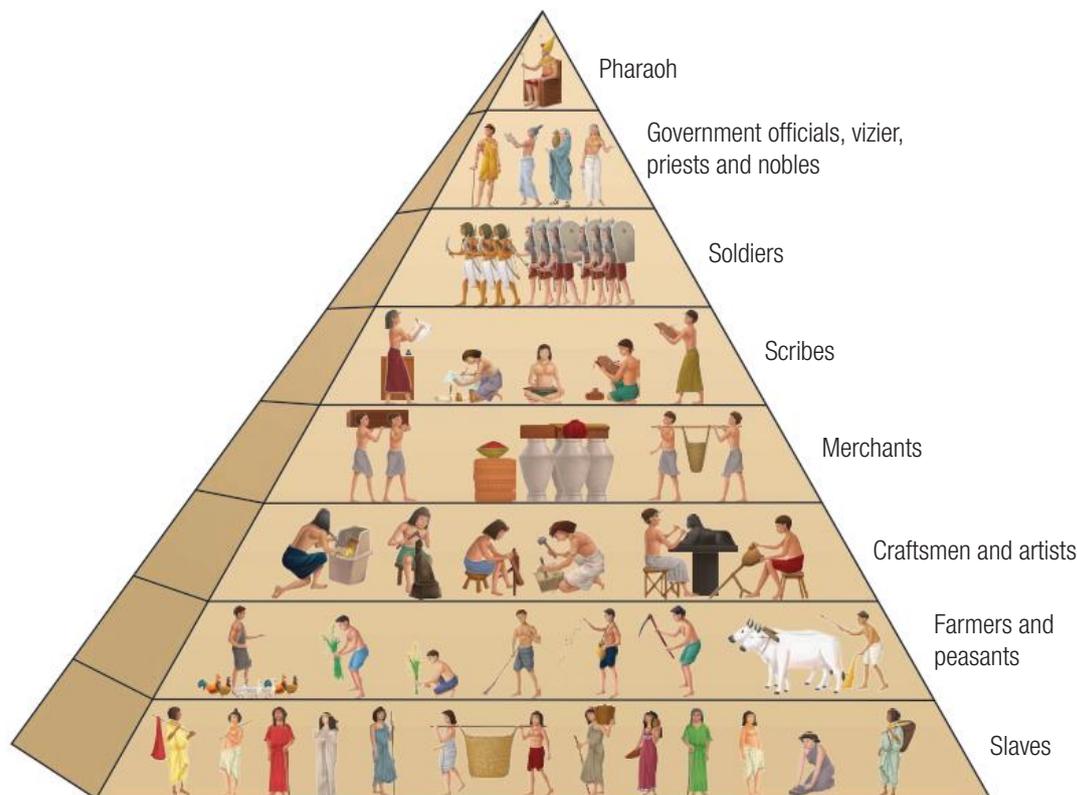
2.4 What was life like for key groups in ancient Egypt and how did they contribute to its success?



FOCUS QUESTIONS

- How was society organised in ancient Egypt?
- How did life compare for different groups in Egyptian society?
- What were the roles of women in ancient Egypt?
- What were the roles of the vizier and scribes in ensuring ancient Egypt was successfully managed?

How was society organised in ancient Egypt?



▲ **Source 2.31** This diagram shows the structure and rigid social order of ancient Egyptian society.



ACTIVITY 2.18 RESPONDING TO THE SOURCE

- 1 Examine** Source 2.31.
 - a** Which groups in ancient Egyptian society had the most power? What kinds of roles might they have performed? What does this **suggest** ancient Egyptian society valued?
 - b** Which groups in ancient Egyptian society had the least power? What kinds of roles might they have performed? What does this **suggest** ancient Egyptian society did not value?
- 2 Explain** how a rigid social order might have helped maintain peace and stability in ancient Egypt.

How did life compare for different groups in Egyptian society?



ACTIVITY 2.19

Visit the British Museum's 'Ancient Egypt' website (<https://cambridge.edu.au/redirect/9483>). Read about a day in the life of a nobleman compared to a farmer.

- 1 Copy the table below into your notes. Then, use the table to **compare** the daily life of an Egyptian noble with a commoner.

Noble	Farmer

- 2 Do you think the source suggests the nobleman had a better life than the farmer? **Justify** your answer.

What were the roles of women in ancient Egypt?

Women in ancient Egypt had similar legal and economic rights and status to men. They were able to own property, including land, slaves and livestock. Also, unlike in other ancient societies, women could be involved in legal proceedings without a male being present.

Despite their legal and economic status being greater than women in most other ancient civilisations, most women in ancient Egypt were restricted to roles and occupations related to the home and family, such as managing the household, cooking and making clothes. Young girls were generally taught homemaking skills and were expected to marry at around 12 or 13 years of age. These were generally arranged marriages.

Poorer women were not generally taught to read or write and probably helped their husbands work in the fields, or took on jobs as weavers, cooks, singers, musicians or dancers. Wealthy women would have had a higher level of literacy and would likely have had servants do the housework and cooking for them and could sometimes become physicians and priestesses. Royal women would have had private tutors who trained them in reading and writing, in preparation for their life at court.

So while the most common female title in Egypt's 3000-year history was 'lady of the house' (housewife), many women worked in the temple hierarchy. Other women were overseers and administrators, or they held titles ranging from doctor, guard and judge to treasurer, vizier (prime minister) and viceroy.

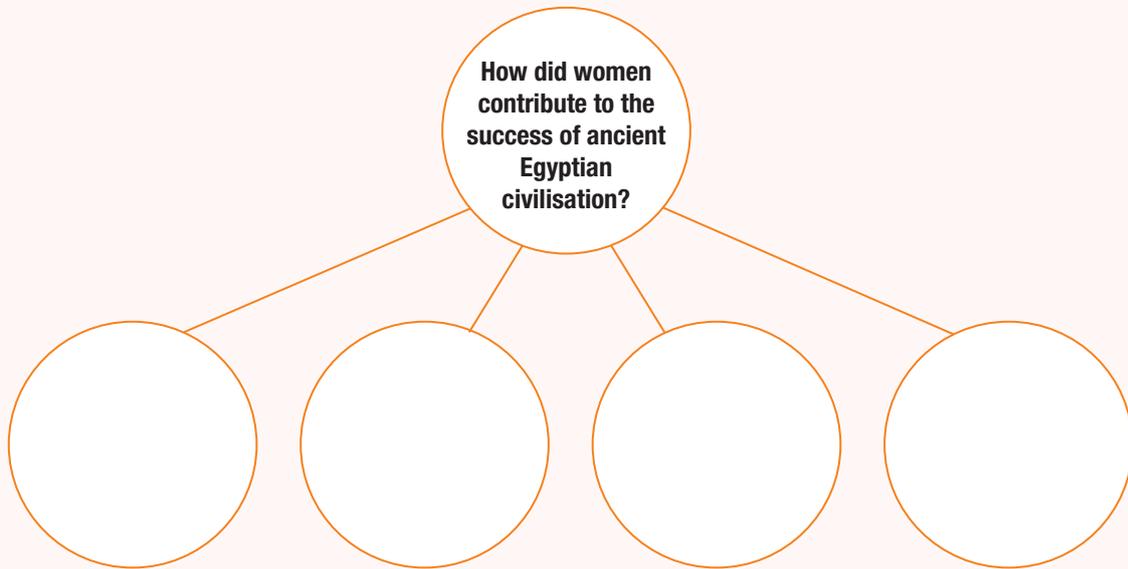
And some women were also monarchs, from the regents who ruled on behalf of underage sons to those who governed in their own right as pharaoh, a term simply meaning 'the one from the palace'. Yet some Egyptologists still downgrade female rulers by defining them by the relatively modern term 'queen', which can simply refer to a woman married to a male king. And while the c. fifteenth-century BCE Hatshepsut ruled as a pharaoh in her own right, she is still often regarded as the exception that proves the rule – even though the evidence suggests there were at the very least seven female pharaohs, including Nefertiti and the great Cleopatra.

▲ **Source 2.32** Historian Joann Fletcher describes some of the roles of women in ancient Egyptian society.



ACTIVITY 2.20 RESPONDING TO THE SOURCE

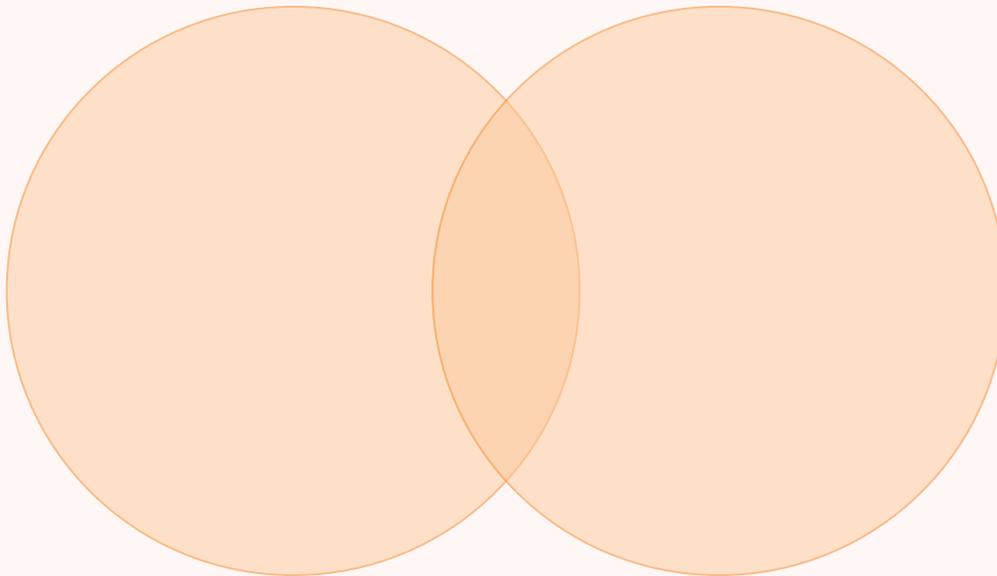
- 1 In pairs or small groups, use the information in Source 2.32 to **create** a mind map to **analyse** the question: 'How did women contribute to the success of ancient Egyptian civilisation?'

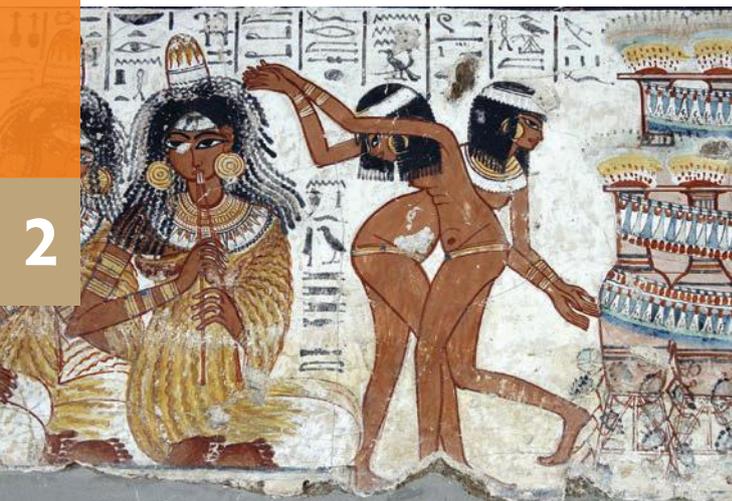


- 2 **Compare** the experience of women in ancient Egypt with women in Australia today. What similarities and what differences are there? Represent your ideas in the form of a Venn diagram.

Women in ancient Egypt

Women in Australia today





▲ **Source 2.33** This wall painting is from the tomb of Nebamun, a nobleman of the 18th dynasty (c. 1370 BCE).



▲ **Source 2.34** This wall painting is from the tomb of Nebamun, a nobleman of the 18th dynasty (c. 1370 BCE).

Tetos to her father, greetings. If you are well and things are otherwise according to your wish, it would be as we wish. I myself am well, and so are my mother and everyone in our household. When you sail upriver, please bring ... 2 shuttles, 2 medium-sized boxes and 3 smaller ones, 2 caskets, a case for alabaster ornaments, 2 tubes, 2 probes, an unguent box with a ring base and a Sikyonian goblet, 5 staters' weight of myrrh, 3 of nard oil, myrrh oil, oil for the girl for the head ... of purple and 2 rings, a golden mirrorbox, medium-white linen cloths with purple; and with respect to the slave girl ... take care that you manage matters concerning her securely and that nothing thus gets in your way. And bring up also 2 combs, 2 hairnets, 2 scarlet ones, 2 hair clasps, earrings for the girl, a stater of sea-purple dye. Farewell ...

▲ **Source 2.35** A shopping list of luxury items written by an Egyptian woman named Tetos and sent to her father. It was written on papyrus sometime around the late third or early second century BCE. Tetos probably lived somewhere near Crocodilopolis, just to the south of the city of Memphis.

I am unhappy [that you have not come home], because after having cared for myself and your child through such bad times and been driven to hardship owing to the price of wheat, I thought that now at least, once you got home, I would enjoy some rest. But you have not even thought about coming home, nor given any regard to our situation, how I was in want of everything even while you were still here, not to mention this long lapse of time and such crises, during which you have sent us nothing. Moreover, since Horos, who delivered the letter, reported that you have been released from captivity, I am thoroughly ill-pleased. So, since your mother also is distressed, please both for her sake and for ours return to the city, if nothing more pressing holds you back...

▲ **Source 2.36** An extract from a letter written around 168 BCE (on papyrus) from an Egyptian woman named Isias to her brother Hephaestion. Hephaestion appears to have claimed to have been unable to return home due to having been detained in a temple in Memphis. This version is adapted from the original.

Haynchis to Zenon, greeting. Taking beer from the large beer shop I sell 4 drachmas (worth) daily, and pay regularly. But Demetrios the vine dresser (gardener in a vineyard) has deceived my daughter and taken her away, and keeps her in hiding, saying that he is going to live with her without me. But she was managing the store (with me) and supported me, since I am old. Now, therefore, I sustain loss since she is gone, and I myself do not have the necessities. But he also has another wife and children so that he cannot live with the woman he deceived (Haynchis' daughter). I ask you then to help me because of my old age and [make him] give her back to me. Farewell.

▲ **Source 2.37** A letter from an Egyptian woman named Haynchis to Zenon, written on papyrus in c. 253 BCE. Haynchis lived in the city of Philadelphia, south-west of Memphis. Zenon was the most important person in Philadelphia and the people of the city wrote to him frequently to ask for his assistance in resolving their problems. This version is adapted from the original.



ACTIVITY 2.21 RESPONDING TO THE SOURCES

- 1 What occupations can you **identify** in Source 2.33?
- 2 **Identify** which social class the women portrayed in Source 2.33 might have belonged to. Where do you think they belong on the social pyramid in Source 2.31?
- 3 **Identify** which social class the seated women in Source 2.34 most likely belonged to. Refer to evidence from the source to **justify** your response.
- 4 **Propose** why Nebamun may have chosen to have the images in Source 2.33 and Source 2.34 painted on the walls of his tomb.
- 5 **Identify** which social class the author of Source 2.35 might have belonged to. What evidence do you have to support your opinion?
- 6 **Explain** what Sources 2.35–2.37 might reveal about the roles women played in ancient Egyptian society.



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Perspectives.

Your response should contain:

- A clear identification of the source's perspective
- Evidence from the source to demonstrate this perspective (note, this may include implied meaning)
- Discussion of how the source's origin or context may account for this perspective
- Discussion of how this perspective compares to other perspectives (in questions that use more than one source)
- Consideration of how this source's perspective is useful in responding to the question.

What were the roles of the vizier and scribes in ensuring ancient Egypt was successfully managed?

VIZIER

The **vizier** was one of the most powerful and wealthy people in ancient Egyptian society. Viziers were appointed by the pharaoh and were usually members of the royal family. This was the case of Nebet, the first female vizier in ancient Egypt's history, who was appointed by her son-in-law, the pharaoh Pepi I (6th dynasty). It was the vizier's job to oversee the running of the country (much like a modern-day prime minister). The vizier's responsibilities included:

- Making sure that there was enough grain
- Supervising **irrigation** projects
- Collecting taxation
- Settling disputes between nobles.

People like tax-collectors, judges, scribes and the treasury all reported to the vizier, who in turn advised the pharaoh.

SCRIBES

Scribes assisted the government by keeping written records of the activities in their village, supervising workers, and overseeing the payment of wages and the use of resources from the royal storehouses. As only 1 per cent of ancient Egypt's population learned to write, scribes occupied a highly respected position in ancient Egyptian society.

vizier the most important adviser and helper of the pharaoh

irrigation the practice of supplying land with water so that crops and plants will grow

This is the best of all jobs. There is no other position like it in the land. Every other worker has a boss, but the scribe is his own boss. If you can learn how to write, this will be very good for you.

▲ **Source 2.38** A description of the role of the scribe, from *The Satire of the Trades*, written by a scribe named Kheti sometime during the Middle Kingdom (11th–12th dynasties, c. 1240–1640 BCE)

Do not desire the property of an official,
 And do not fill (your) mouth with too much food extravagantly;
 If [the official] sets you to manage his property,
 Respect his, and yours will prosper.
 ... Do not witness a false statement ...
 ... If you find a large debt against a poor man,
 Make it into three parts;
 Release two of them and let one remain:
 ... Do not corrupt the people of the law court,
 Nor put aside the just man,
 ... Do not falsify the **oracles** on a papyrus
 And (thereby) change the intentions of God.

▲ **Source 2.39** Extracts from a literary work known as the *Instruction of Amenemope*, likely written by the scribe Amenemope to pass on advice for a successful life to his son. It was probably composed sometime during the late New Kingdom (c. 1300–1075 BCE).

oracle advice or instructions supposedly from the gods, spoken by a priest or priestess who claimed to be able to listen to the gods

hieroglyphs pictures or symbols that represent words or concepts

hieratic a simplified version of the hieroglyphic script intended for everyday use

Writing

Hieroglyphs are the most famous form of Egyptian writing, but they were not used all the time. The simpler **hieratic** script was used more for everyday writing. Many symbols of the hieratic script are simplified versions of the more complex hieroglyphic script. Very few people learned to read and write; this became the specialist job of priests and scribes.

Hieroglyph symbol	Hieratic symbol	Hieroglyph symbol	Hieratic symbol

▲ **Source 2.40** This diagram shows a sampling of some hieroglyphic scripts beside the hieratic scripts. It is clear that hieratic script is simplified hieroglyphs.



▲ **Source 2.41** This frieze is on the wall of the tomb of Menna. It shows scribes recording information about crops during a harvest. It was painted during the New Kingdom (18th dynasty).



ACTIVITY 2.22 RESPONDING TO THE SOURCES

- 1 Use evidence from Sources 2.38 and 2.39 to **identify** some tasks that a scribe might have completed. **Explain** how these scribes might have felt about their jobs. Provide evidence from the sources to support your response.
- 2 **Identify** the group in ancient Egyptian society that would have been responsible for the following tasks.

Role/task	Group
Managing the household	
Keeping accurate records of financial transactions	
Fighting in battle against Egypt's enemies	
Entertaining household guests through song and dance	
Supporting the pharaoh in the management and administration of the country	



ACTIVITY 2.23 MAKING THINKING VISIBLE

Think, pair, share

- 1 Think: Take a minute to **consider** the following question: 'Was life in ancient Egypt fair for all groups?'
- 2 Pair: Turn to a neighbour and **discuss** your responses to the question. Take turns to speak, listen carefully and ask questions of one another.
- 3 Share: Share your ideas as a whole class to **create** a list of ideas to respond to this question.



REFLECTING ON YOUR LEARNING 2.4



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'What was life like for key groups in ancient Egypt and how did they contribute to its success?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient Egypt a successful civilisation?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.



2

2.5 What role did religious beliefs, values and practices play in ancient Egypt's success?

FOCUS QUESTIONS

- What were the religious beliefs, values and customs of the ancient Egyptians?
- What does the evidence relating to death and funerary customs reveal about ancient Egypt?
- Why was the burial of a pharaoh considered to be so important to the success of ancient Egypt?

What were the religious beliefs, values and customs of the ancient Egyptians?

polytheistic

worshipping more than one god

The ancient Egyptians were **polytheistic**. The different gods they believed in had different roles and responsibilities, which made some gods more important than others.

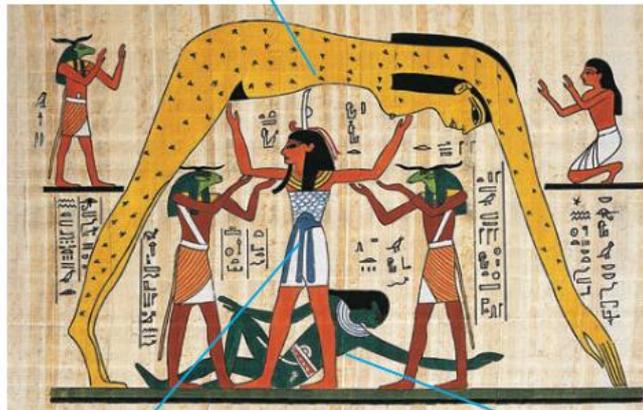
The ancient Egyptians worshipped their gods by singing hymns, writing poetry, and making sacrifices to them at temples and in their own homes. Sometimes, they would pray to particular gods depending on their needs, such as praying to the Nile flood god, Hapi, to bring fresh water for a good harvest. Gods this important were worshipped officially by the pharaoh and by priests in special temples devoted to particular gods, whereas 'local' gods were worshipped in towns and villages.

Ordinary ancient Egyptians did not practise their religion in the same way as people today. That is, today people might visit a church or a mosque, whereas in ancient Egypt, the temples were special places where priests took responsibility for praying to the gods and leaving offerings to make them happy. The pharaoh, as the highest priest in the land, could enter temples to talk to the gods who lived there. Ordinary people could give offerings and donations, as well as attend public ceremonies and events for their favourite gods.



▲ Source 2.42 The myth of Osiris

The topmost god, covered with stars, is Nut. She is the sky god. Here, she arches out over Earth. It was thought that Nut would swallow the sun at the end of each day and it would travel through her body to be reborn at dawn.



Supporting Nut is the air god, Shu. We can see he is assisted by other deities, one with a ram's head. Shu was said to be Nut's father.

Lounging on the bottom is the Earth god, Geb. Geb was thought to cause earthquakes and the growth of crops.

▲ Source 2.43 The creation of the world. An artist's reconstruction of a scene from the 'Greenfield Papyrus', discovered in a tomb in Thebes. The drawing shows the creation of the world according to ancient Egyptians (21st–22nd dynasty, c. 950–930 BCE).

▼ **Source 2.44** This is an artist's impression of the main gods of ancient Egypt.



Atum God of the sun, who emerged from the sea and created all the other gods



Tefnut Goddess of rain, often shown as a woman with the head of a lioness and a disc representing the sun



Osiris God of fertility, agriculture and chief judge in the afterlife. Often shown with green skin, the green of the Nile Valley and as partially mummified. When the pharaoh died, he ascended into the heavens to become united with Osiris.



Nephthys Goddess of death and the home, normally shown with a headdress shaped like a house and a basket



Shu God of peace, lions, air and wind. Often depicted with feathers on his head, representing dry, warm air.



Geb God of Earth, vegetation and snakes



Isis The wife of Osiris, and goddess of motherhood and magic. Sometimes worshipped as a sky goddess as she could transform into a bird. Usually represented as a woman wearing a sheath dress with a throne-style headdress and sometimes shown with wings.



Thoth God of wisdom, writing and medicine. Usually depicted with a male body and the head of an ibis (a sacred bird in Egypt). His long beak resembled the scribe's pen and he recorded judgements of people in the afterlife.



Nut Goddess of the sky, usually depicted with a water pot on her head



Seth God of chaos, violence, deserts and storms. The Egyptians did not have an idea of good and evil, but rather order versus chaos. Represented as a male body with the head of an unknown animal – a curved snout and blunt ears. It has been argued that he resembles a camel, a donkey or an aardvark.



Amun-Re A god that became popular in the New Kingdom, due to his association with the pharaohs of the 18th and 19th dynasties. Amun was originally the god of air, but he was combined with the sun god, Re. Usually shown as a male wearing a golden double-plume headdress.



Anubis God of embalming and the dead. Represented as a male body with a black jackal head, usually carrying an ankh.



ACTIVITY 2.24 RESPONDING TO THE SOURCE

- Examine** the descriptions and images of the Egyptian gods in Source 2.44. **Suggest** how Egypt's unique location on the Nile River might have influenced the development of beliefs for at least three of these gods.
- Copy the table below into your notes. This table lists some requests that ancient Egyptians may have asked of their gods. Using the information in Source 2.44, **identify** the god(s) that they might have sought assistance from for each request.

Request	Which god(s) could ancient Egyptians have sought assistance from?
For a relative to enter the afterlife	
For the Nile inundation to reach the required level	
For success in a battle	
For good fortune in the household	
For a plentiful harvest	
For a new mother to have a safe birth	
For a medical procedure to be successful	



▲ **Source 2.45** Hapi, the Nile flood god. This **bas-relief** shows Hapi carrying produce such as grain. This bas-relief is at the Temple of Khnum in Esna (Ptolemaic and Roman period, c. 180–145 BCE).

bas-relief a method of sculpture where stone is cut from around a shape, giving the shape the appearance of projecting out from the stone



ACTIVITY 2.25 RESPONDING TO THE SOURCES

- Ancient Egyptian pharaohs often built statues depicting themselves as Osiris. After viewing the video 'The Myth of Osiris' in Source 2.42, **suggest** what message the pharaohs were trying to send to their people.
- The body shape of the Earth god, Geb, is often depicted the same way as seen in Source 2.43. **Suggest** how his body shape might be interpreted to represent two mountains and a valley.
- Suggest** why Geb was often depicted with green on his body.
- Shu, the air god, is represented with a feather on his head. Why was a feather associated with this god?
- Examine** Source 2.45 closely. What is Hapi carrying in his hands? Why is he carrying this?
- Why would ancient Egyptians have considered it important to worship gods such as Shu, Nut, Geb and Hapi?

7 Discuss this question with a partner: 'Why might the ancient Egyptians have chosen to explain the Earth, sky and heavens through stories of gods with human characteristics?'



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Empathy.

Your response should contain:

- Language that shows that you understand the values, beliefs, experiences and emotions of people from the past
- Consideration of how these values, beliefs, experiences and emotions align with or differ from your own
- Explanation of how the origin and context of the source may account for similarities or differences with your own experience.

What does the evidence relating to death and funerary customs reveal about ancient Egypt?

WHAT DID ANCIENT EGYPTIANS BELIEVE HAPPENED AFTER DEATH?

Ancient Egyptians believed in a cycle of life, death and rebirth. Every evening, they saw the sun 'die' in the west, go through a period of rejuvenation, and be 'reborn' the following morning in the east. They believed that after death, they would journey through the underworld to be reborn in the afterlife. Many tombs contain everyday items like hairbrushes and water jugs; this suggests that ancient Egyptians thought life after death would continue in much the same way as life before death.

WHAT WERE THE BURIAL PRACTICES OF ANCIENT EGYPTIANS?

Some societies bury their dead in coffins, while others cremate them in fire. The ancient Egyptians did far more. This is because the ancient Egyptians believed that without an appropriate burial, a person's soul or life force would not reach the afterlife.

When a person died in ancient Egypt, their body was taken to an embalmer, who helped to ensure the body would last forever. The embalmer preserved the body so that it would not decay, giving the deceased a physical body in which to live in the afterlife. Many of the Egyptian gods were influenced by their landscape, so it is no surprise that their burial practices were influenced by it too. There is a chance that **mummification** was discovered by accident in the hot Egyptian sun. The ancient Egyptians became so good at the craft of embalming that many mummies found today are in excellent condition.



▲ **Source 2.46** One of many well-preserved Egyptian coffins discovered in October 2020

mummification a method of preserving a corpse by removing the internal organs and drying out the body

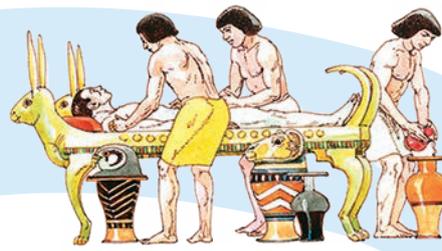


ACTIVITY 2.26 RESPONDING TO THE SOURCE

What was the purpose of mummification? **Identify** the steps from Source 2.47 on the following page that suggest the deceased was expected to live on in the afterlife.

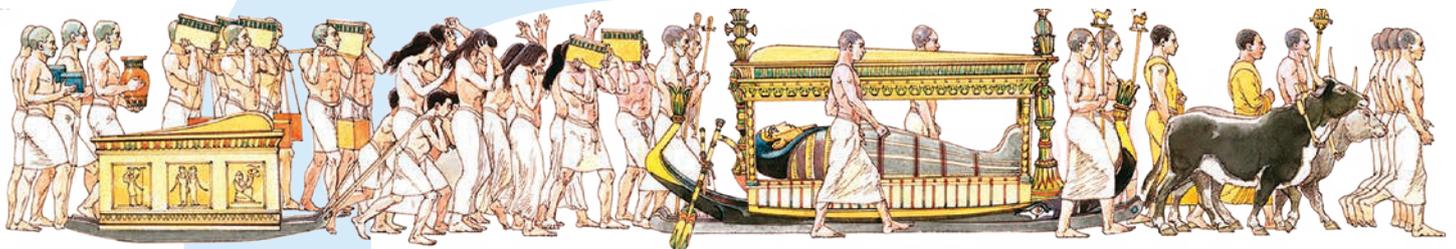
▼ **Source 2.47** The mummification process. This exact process would only have been performed on wealthy people.

The body is laid out and washed. Any missing body parts are replaced with wooden substitutes.



The internal organs, except for the heart and kidneys, are removed. These organs are placed in **canopic jars**. The brain is removed through the nose, using a long hook, and the body is packed with natron.

The wrapped body is placed in a decorated wooden sarcophagus. The sarcophagus was decorated elaborately depending on how wealthy the person was.



There is a procession led by people wailing and crying (some of them official mourners paid to cry). The body crosses the Nile River in a boat, landing on the western side of the river. This symbolises the journey into the afterlife. Prayers are read by the priest and animals are sacrificed.

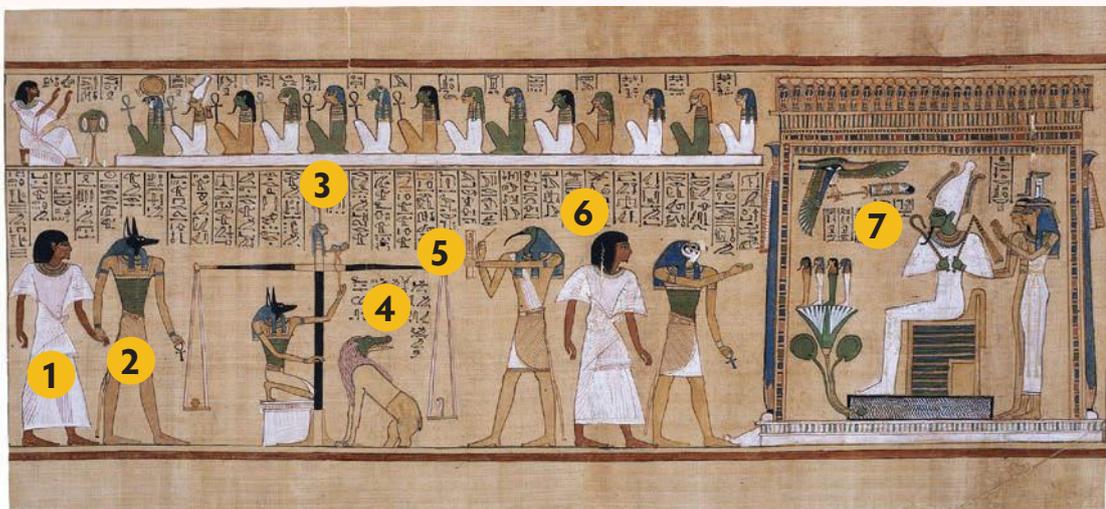
canopic jars jars for preserving the internal organs of the deceased, as part of the process of mummification; different jars were made for different organs



The sarcophagus is taken to the tomb, where the priest performs an important ceremony called 'The Opening of the Mouth'. Offerings are made to the deceased to keep the person nourished in the afterlife. Ancient Egyptians would often mummify animals, such as cats or birds, to protect and comfort the deceased.



ACTIVITY 2.27 RESPONDING TO THE SOURCE



▲ **Source 2.48** A deceased person being tested before they can reach the afterlife. This ancient drawing depicts someone who has just died being judged in the presence of Osiris (the king of the underworld). Historians refer to this drawing as the 'Judgement of Hunefer' (19th dynasty, c. 1310 BCE).

Source 2.48 depicts what many ancient Egyptians believed happened once they died, and the tests that the deceased would face to reach the afterlife. Copy the table below into your notes. Using the table, **organise** each event to match its correct place in the sequence of events shown in the 'Judgement of Hunefer'. The first is done for you.

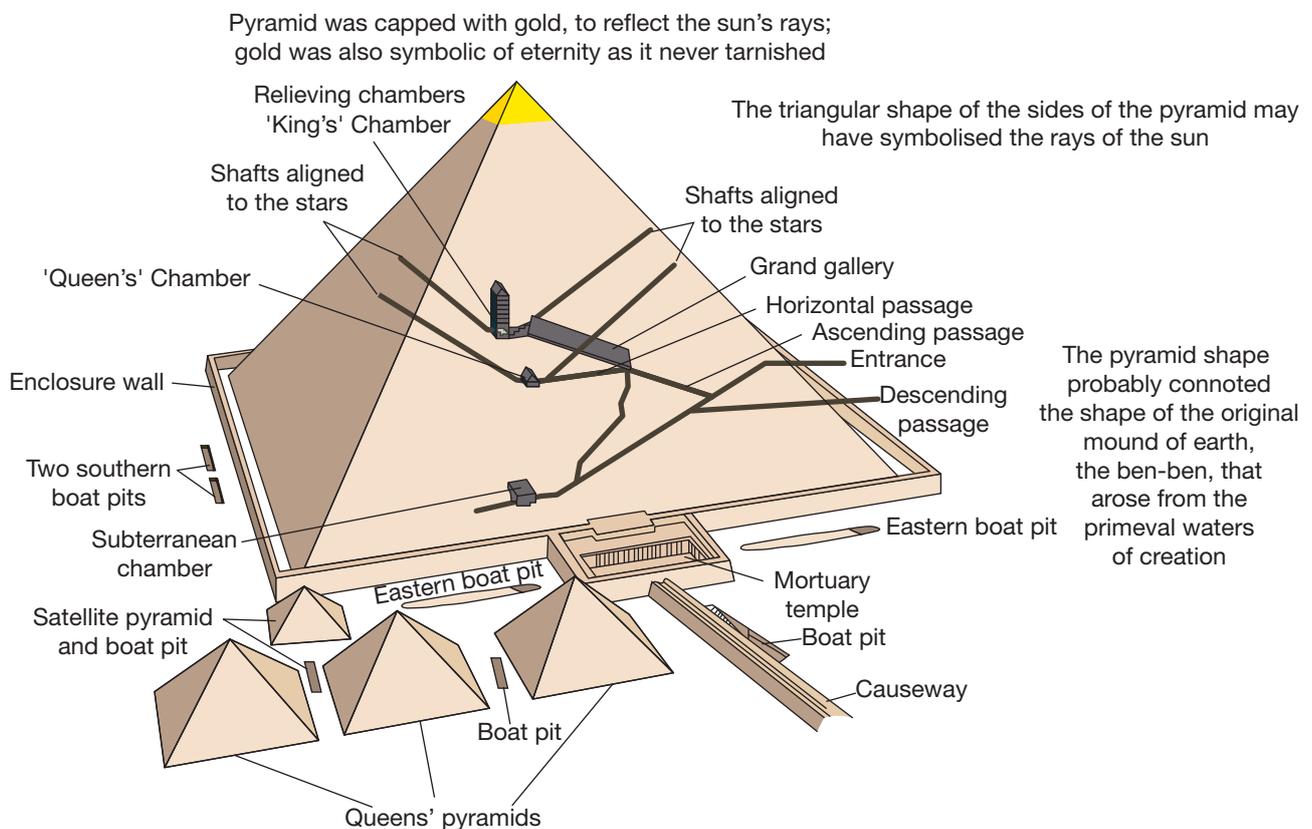
Event	Sequence
Osiris is seated under the canopy. He is with his sisters Isis and Nephthys. Among other titles, Osiris is the Lord of the Underworld and the Judge of the Dead. Once Hunefer has been proven righteous before Osiris, he can pass through to eternity in the Field of Reeds.	
Ammit will consume Hunefer if his heart is too heavy with sin. Ammit 'the Devourer' is depicted here as a fearsome beast. He is part crocodile, part lion and part hippopotamus. Once consumed by Ammit, the dead cease to exist.	
Hunefer is the dead person in this image. He is being led into the judgement hall by Anubis. Hunefer was a royal scribe and the Book of the Dead was produced for him.	1
Anubis leads Hunefer into the hall. This jackal-headed god is the god of embalming and the dead. He was thought to oversee the process of mummification. In fact, many priests would wear a mask of Anubis during mummification ceremonies. A smaller Anubis can be seen weighing the heart.	
Ma'at is the small figure atop the scales. We can recognise this god by her ostrich feather, which represents truth. But ma'at was also a concept: ma'at was the ethical principles ancient Egyptians lived by, such as honour and truth.	
Horus is the falcon-headed god and can be seen leading Hunefer. If Hunefer has told the truth, Horus will lead him forward to the throne of Osiris to worship the god of the underworld.	
Thoth is to the right of the scales. Thoth is ibis-headed and records the results of the weighing. It is said that Thoth gave written language to the Egyptians, so many scribes took him as their patron. Thoth is a god of equilibrium and balance, so it is not surprising to see him associated with Ma'at (divine balance).	

Why was the burial of a pharaoh considered to be so important to the success of ancient Egypt?

Ancient Egyptians believed a pharaoh was somewhere between a representative of the gods and an actual god. Therefore, it was extremely important that the pharaohs were in good health, well looked after and replaced quickly when they died. Ancient Egyptians believed that dead pharaohs joined Osiris (the king of the underworld) in the afterlife, and that pharaohs continued to look after Egypt even in death.

The most famous tombs of ancient Egypt are the Giza pyramids, but there are many more. The Giza pyramids were built to the west of the Nile River, where the sun sets, as this location was thought to be closer to the resting place of the gods. The most well-known pyramids were all built in the Old Kingdom period, when the chief god was the sun god Re. The Middle Kingdom and the New Kingdom did not build pyramids in the same style as the Old Kingdom and they were not as large. In the New Kingdom, most pharaohs were buried in underground tombs in the Valley of the Kings, near the ancient city of Thebes.

The pyramid of Khufu, sometimes referred to as the Great Pyramid of Giza, is the largest pyramid of three built by the pharaoh Khufu. It was constructed during the Old Kingdom and has three main chambers. Source 2.49 shows the layout of the buildings and the Great Pyramid's interior.



▲ **Source 2.49** The Great Pyramid of Giza. This diagram shows the layout of one of the pyramids built by the pharaoh Khufu (4th dynasty).



ACTIVITY 2.28 RESPONDING TO THE SOURCE

- 1 **Examine** Source 2.49. How were the pyramids powerful symbols of the pharaohs' importance? How did the pyramids symbolise the pharaohs' special connection to the sun god Re?
- 2 **Propose** a reason why the queens' pyramids were built so close to the pharaoh's pyramid.
- 3 **Suggest** why Khufu's pyramid in Source 2.49 has shafts aligned to the stars. What could this indicate about ancient Egyptian beliefs about what happened to the pharaoh when they died?
- 4 You can see in Source 2.49 that there were multiple boat pits located beside the pyramid. **Conduct** some research to answer this question: 'Why were boats buried near the tombs of the pharaohs?'
- 5 Research task: How were the great pyramids at Giza constructed? Individually, in pairs or small groups, **research** the theories surrounding the construction of the great pyramids. **Decide** which theory you think is the most convincing and why. You might present your findings to your class as either:
 - a An annotated poster that visually depicts the different theories and the strengths and limitations of each one
 - b A short spoken presentation to a small group or to the whole class.



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Contestability.

Your response should contain:

- A clear identification of the interpretations of the past
- An assessment of the degree of corroboration or contestability between interpretations
- Evidence from the sources that illustrates the historical interpretations
- A judgement about which of the differing interpretations is best supported by evidence.



▲ **Source 2.50** The Great Sphinx, believed to have been by King Khafre in c. 2500 BCE, is situated close to the Great Pyramids at Giza, in the modern city of Cairo. Featuring a lion's body and human head (believed to be the head of King Khafre), the Sphinx is a symbol of protection and represents Re-Horakhty, a form of the sun god.



ACTIVITY 2.29

- 1 **Discuss:** A coffin similar to the one shown in Source 2.51 was sold to a private buyer by Christie's Auction House in New York on 28 October 2019. It was sold for US\$3 255 000. The money raised went towards supporting a private museum owned by a British investment banker. With a partner or as a class, **discuss** responses to the following question: 'Should ancient Egyptian coffins be able to be bought and sold?'
- 2 If time permits, conduct a little more research into the sale and purchase of ancient Egyptian coffins. Consider issues such as how these coffins were originally acquired, the rights of the deceased, the benefit to tourism and historical knowledge, and whether these items should be allowed to be privately owned.
- 3 In your class, **create** an 'attitude scale' from one end of the classroom to the other. At each end, place the absolute opposing viewpoints:
 - Ancient Egyptian coffins should not be allowed to be bought and sold.
 - Ancient Egyptian coffins should be allowed to be bought and sold.
 - a Each student is to stand along the scale in the place that represents their attitude to the buying and selling of ancient Egyptian coffins. Students are to **justify** why they are standing where they are.
 - b After hearing the viewpoints of others in the class, students can move to a different position on the attitude scale. Again, students are to **justify** why they are standing where they are.



▲ **Source 2.51** Ancient Egyptian coffins similar to this one have been sold through public auction houses around the world. Painted wooden coffin from Deir el-Bahri (c. 18th dynasty).



REFLECTING ON YOUR LEARNING 2.5



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'What role did religious beliefs, values and practices play in ancient Egypt's success?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient Egypt a successful civilisation?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.

2.6 How did ancient Egypt benefit from contact and conflict with other societies?

FOCUS QUESTIONS

- How did warfare and military expansion contribute to the success of the ancient Egyptian civilisation?
- How did ancient Egypt benefit from trade with foreign nations?



2

From the time of the Old Kingdom to the New Kingdom, ancient Egypt significantly expanded the size of its territory. Pharaohs would have been very proud of Egypt's military strength and advertised their victories in prominent locations, such as on the walls of temples. The pharaohs also expanded Egypt's trade connections and secured Egypt's borders through peace treaties. As you read the information that follows, consider how the conquest of land, the expansion of trade, and peace treaties contributed to the growth and success of ancient Egypt.

How did warfare and military expansion contribute to the success of the ancient Egyptian civilisation?

The map in Source 2.52 shows the change in Egypt's borders from the Old Kingdom to the New Kingdom.



◀ **Source 2.52** The change in Egypt's borders from the Old Kingdom to the New Kingdom. This map shows the expansion in the extent of territory controlled by ancient Egypt from the Old Kingdom to the New Kingdom.



ACTIVITY 2.30 RESPONDING TO THE SOURCE

Examine Source 2.52.

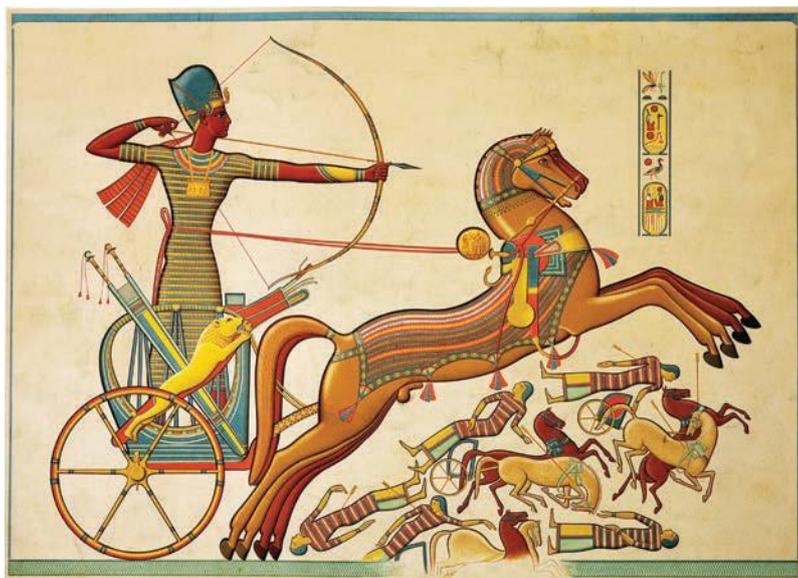
- 1 **Compare** ancient Egypt's territory in the Old Kingdom with the territory it controlled in the New Kingdom. **Describe** what differences you notice.
- 2 **Describe** which foreign kingdoms Egypt may have encountered and successfully overtaken.
- 3 **Suggest** what this expansion indicates about ancient Egypt's military strength in comparison with that of its neighbours.

An example of military success: the Battle of Kadesh

The Battle of Kadesh took place in 1274 BCE, during the reign of the pharaoh Ramses II. Egypt and the Hittite empire had been enemies for a long time. Ramses II was young, ambitious and keen to prove that he was a great pharaoh. He wanted to claim Kadesh, controlled by the Hittites, for Egypt. This takeover of land would expand Egypt's trade connections, while also driving away the Hittites and increasing Egypt's territory. To achieve this, Ramses II set out to Kadesh with over 20 000 soldiers, including 2000 chariots. Ramses II defeated the Hittite army in battle but was unable to capture the city of Kadesh. Interestingly, both sides of the battle claimed a decisive victory!

EFFECTS OF THE BATTLE OF KADESH

As Ramses II had caused the enemy to retreat, he returned to Egypt to tell of his victory in battle. This helped to solidify his power because the people perceived him to be a powerful leader. Ramses II had many images of his 'victory' carved into temple walls so that every Egyptian knew of how he 'defeated' the Hittites in battle. This helped reinforce Ramses II's image as a great and powerful pharaoh.



▲ **Source 2.53** This coloured engraving of a bas-relief is from the walls of the Abu Simbel temple. The engraving depicts Ramses II at the Battle of Kadesh. The image was created in the late nineteenth century based on copies of drawings of the inscriptions on the temple walls (19th dynasty, c. 1275 BCE).

PEACE TREATY WITH THE HITTITES

Another interesting outcome of the Battle of Kadesh was an eventual peace treaty between Ramses II and the Hittites. This peace treaty set 90 years of peace between the two civilisations and allowed for increased trade and the sharing of technological advancements. It is considered to be the world's first peace treaty; a copy of this treaty is now mounted on the wall of the headquarters of the United

Nations in New York City. Nine years after the peace treaty between Egypt and the Hittites was agreed upon, the alliance was strengthened with a diplomatic marriage between Ramses II and Maathorneferure, the eldest daughter of Hattusili III, the Hittite king.

The following is an account of the Battle of Kadesh, attributed to pharaoh Ramses II himself:

There was no officer with me, no charioteer, no soldier. My infantry and my chariotry had run away before the enemy and no one stood firm together with them ...

Amun came when I called to him; he gave me his hand and I rejoiced ... I found that my heart grew stout and my breast swelled with joy. Everything which I attempted I succeeded ... I was before the enemy like Seth in his moment. I found the enemy chariots scattering before my horses. Not one of them could fight me. Their hearts quaked with fear when they saw me and their arms went limp so they could not shoot. They did not have the heart to hold their spears. I made them plunge into the water like crocodiles. They fell on their faces, one on top of another. I slaughtered them at my will ... Those who fell down did not rise ...

▲ **Source 2.54** An account of the Battle of Kadesh, from an inscription on the walls of the temple of Abu Simbel (19th dynasty, c. 1275 BCE)



ACTIVITY 2.31 RESPONDING TO THE SOURCES

- 1 **Explain** or list the outcomes of the Battle of Kadesh.
- 2 **Describe** how Ramses II is depicted in Source 2.53.
- 3 **Compare** the depictions of Ramses II in Sources 2.53 and 2.54. What similarities and/or differences are there between how he is represented in the two sources?
- 4 Sources 2.53 and 2.54 were located on the exterior walls of Ramses II's temple at Abu Simbel. **Suggest** who the audience might have been and why Ramses II wanted these carved onto his temple walls.
- 5 How realistic do you think the depictions of Ramses II are in these sources? **Describe** how these sources might be useful to historians.
- 6 Develop a paragraph to respond to the following question: 'Should the Battle of Kadesh be seen as a great moment in ancient Egyptian history?'



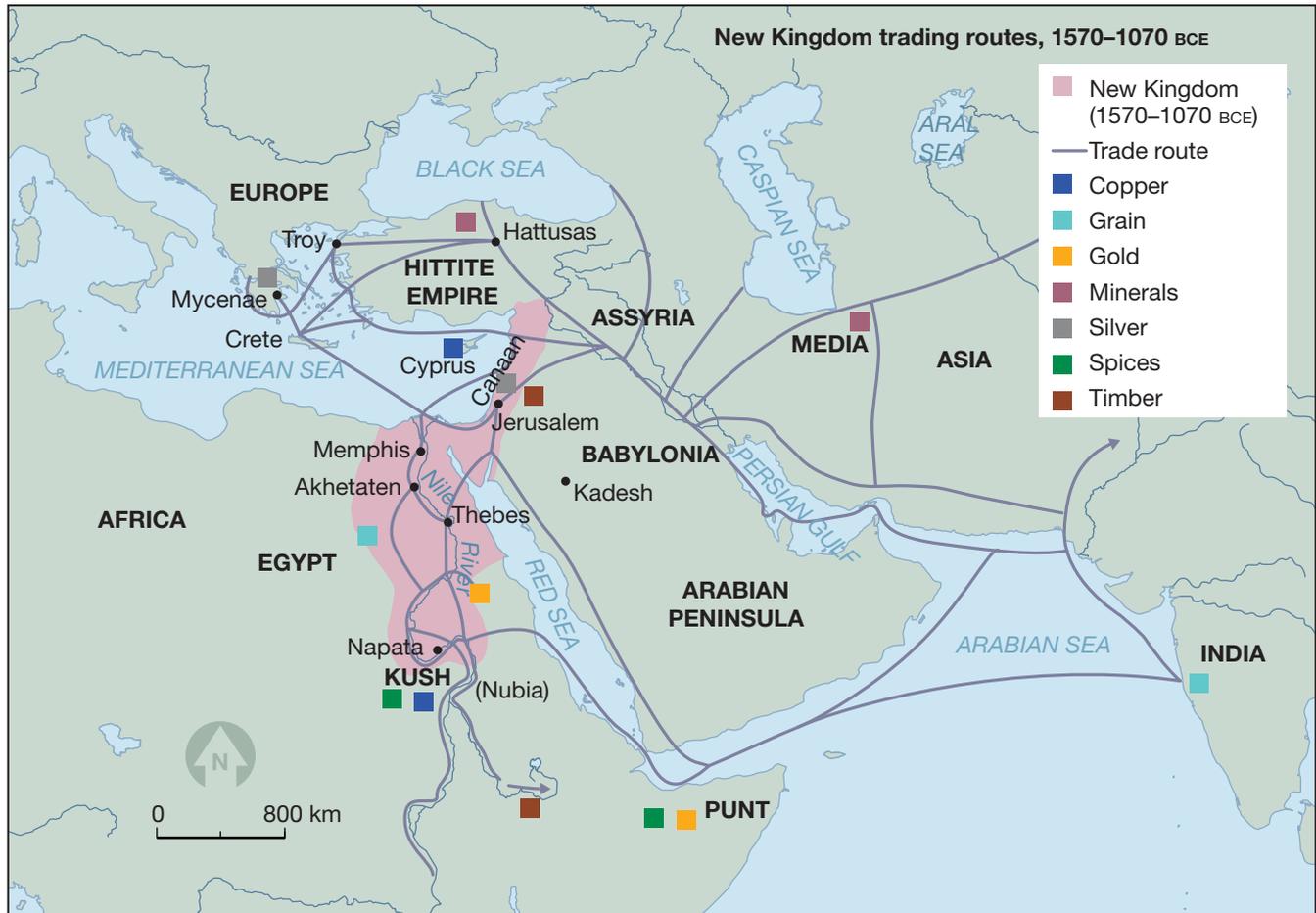
THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Cause and effect.

Your response should contain:

- A clear identification of the causes and/or effects relating to the question
- A clear explanation of how the causes are connected to the effects (i.e. how one event or action led to an outcome or consequence)
- Evidence or examples to support this explanation of the relationship between cause and effect.

How did ancient Egypt benefit from trade with foreign nations?



▲ **Source 2.55** This map shows the New Kingdom's trade routes, trading partners and some of the goods that were traded during 1570–1070 BCE.



ACTIVITY 2.32 RESPONDING TO THE SOURCE

Examine Source 2.55.

- Identify** the main goods that Egypt exported.
- Identify** the main goods that Egypt imported. Why might ancient Egypt have needed to import these goods?
- In the period between the Old Kingdom and the New Kingdom, ancient Egypt conquered the region of Kush (Nubia). **Identify** what Egypt's motivation might have been to gain control over this region.
- Earlier in this section, you read about how Ramses II wanted to gain control of the region around Kadesh, which is south of the Hittite empire. Summarise what might have been his objective in gaining control over this region.



ACTIVITY 2.33 MAKING THINKING VISIBLE

Headlines

This routine draws on the idea of using newspaper-type headlines as a vehicle for summing up and capturing the essence of an event, idea, concept, topic, etc. It can be done on computer or on paper.

- 1 a **Create** a headline for an ancient Egyptian magazine or newspaper article written during the reign of Ramses II, which captures the most important aspect of the outcomes of the Battle of Kadesh. Once finished, share these headlines with a partner, then with your class.
- b You may wish to use one of the two online headline-generating tools below to bring your headlines to life. Take a screenshot or save the image to your class notes.

Online headline-generating tools:

Website tool one: <https://cambridge.edu.au/redirect/9484>

Website tool two: <https://cambridge.edu.au/redirect/9485>.

- 2 If you wish to extend yourself further, design the front cover of the magazine or newspaper article on the Battle of Kadesh. Your front cover should include:
 - Your headline
 - An image with a reference and caption
 - Three interesting dot points identifying key features of the battle.



REFLECTING ON YOUR LEARNING 2.6

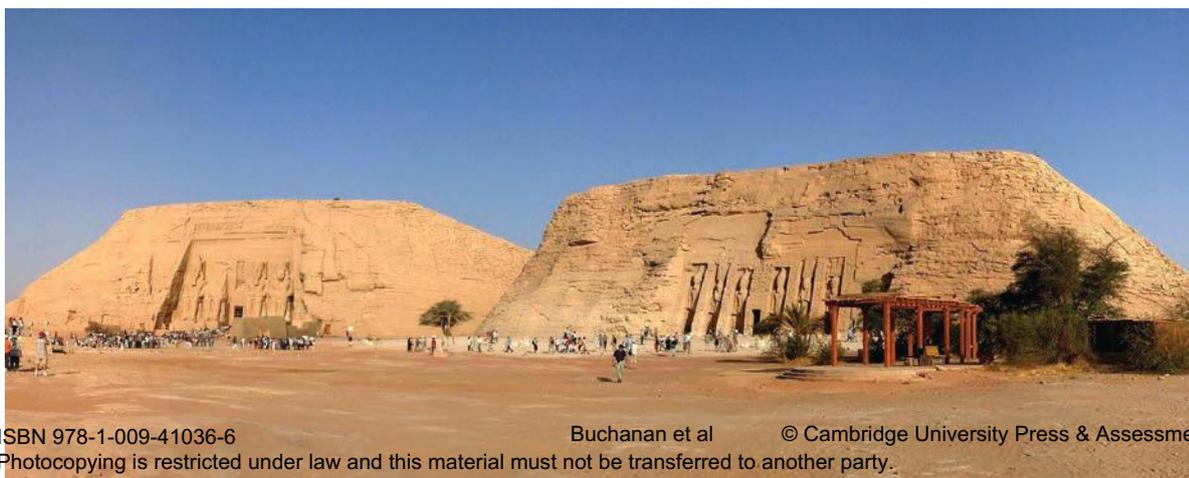


Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: ‘How did ancient Egypt benefit from contact and conflict with other societies?’
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: ‘What made ancient Egypt a successful civilisation?’

Complete the Quiz and the ‘Developing your understanding’ questions in the Interactive Textbook.

▼ **Source 2.56** The Abu Simbel temples were built by Ramses II in c. 1260 BCE to commemorate his victory at the Battle of Kadesh. The temples feature four huge statues of Ramses II, along with smaller statues of his family and Egyptian gods. The walls of the temples feature inscriptions and images recounting the events of the Battle of Kadesh and celebrating Ramses II’s leading role in the victory. The location of these temples in Nubia (to the south of Egypt) suggests that the temples were used by Ramses II as a way of demonstrating Egypt’s strength to its neighbours.





2

2.7 What role did individuals, such as Hatshepsut, play in making ancient Egypt successful?

FOCUS QUESTIONS

- How did Hatshepsut come to power?
- What were Hatshepsut's main achievements?

To answer the inquiry question (What made ancient Egypt a successful civilisation?), it can be useful to look at the impact particular individuals had on the success of the civilisation. While the female pharaoh Hatshepsut had some unique circumstances due to her gender, her methods of gaining and maintaining power were similar to many other pharaohs. Therefore, her actions can be used as an example of the ways pharaohs helped increase the success of their civilisation.

Some questions to consider as you read the information and sources in this section are:

- Can the actions of individuals help make a civilisation successful?
- Why weren't there more female leaders in the ancient world?
- What obstacles did female leaders in ancient times have to overcome?
- What can we learn about overcoming challenges and adversity from the examples of female leaders of the past?

Hatshepsut (1507–1458 BCE), ruling in the 18th dynasty, faced significant challenges at the start of her reign. Hatshepsut was a female pharaoh in a society where pharaohs were almost always male. Her reign was constantly under threat from **usurpers** and nobles who thought she was not the rightful pharaoh. Look at the sources on the next page and determine how Hatshepsut gained and maintained control over Egypt and how she demonstrated to her people that she was an effective pharaoh.

How did Hatshepsut come to power?

When the pharaoh, Thutmose II, died, the next in line to the throne of Egypt was his and Hatshepsut's two-year-old son, Thutmose III. As Thutmose III was too young to become pharaoh, Hatshepsut took on the role of **regent**, meaning she was crowned as pharaoh and ruled in Thutmose III's place until he was old enough to do so himself. Controversially, Hatshepsut did not **relinquish** her position as pharaoh when her son came of age, but she held on to the position until her death. Evidence from the time suggests that it is likely that when Thutmose III was old enough, he and his mother ruled as **co-regents**;

usurper one who tries to take power illegally or through force

regent a person who exercises power in a kingdom if the expected king or queen is too young

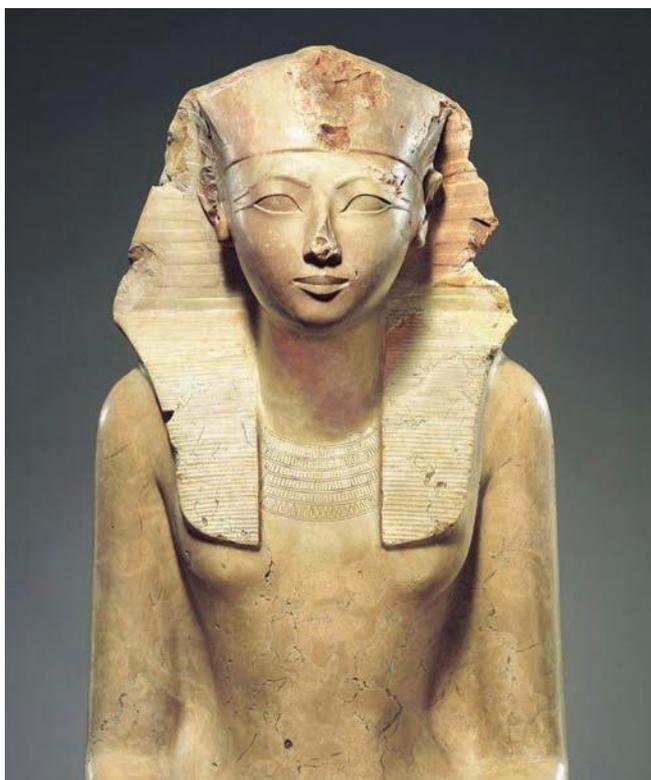
relinquish voluntarily give up something

co-regents two rulers who rule a kingdom jointly

however, where they are depicted together, Hatshepsut is almost always shown as the dominant partner. Probably due to her unconventional situation, Hatshepsut tried to present images of herself that would reassure her people of her right to rule. At her temple at Deir el-Bahri, images and accompanying text present Hatshepsut as the daughter of the god Amun-Re himself, and other images present her real father, Thutmose I, declaring Hatshepsut to be his chosen successor. Additionally, statues and imagery of Hatshepsut at the temple depict her in the traditional clothing of the male pharaohs, including the false beard, and with a masculine body shape.

The god Amun-Re says: '... Hatshepsut shall be the name of this my daughter ... She shall exercise the excellent kingship in this whole land. My soul is hers, my property is hers, my crown is hers, that she may rule the Two Lands.'

▲ **Source 2.57** An adapted version of an inscription called the 'Divine Birth' inscription, from the walls of Hatshepsut's temple at Deir el-Bahri (18th dynasty). This inscription records an event where the god Amun-Re declared Hatshepsut to be his daughter, but the details of this event were fabricated by Hatshepsut for political reasons.



▲ **Source 2.59** This statue of Hatshepsut was probably created early in her reign (18th dynasty). It is currently on display at the Metropolitan Museum of Art in New York.



▲ **Source 2.58** This scene is called the 'Coronation scene'; it is from an inscription on the walls of Hatshepsut's temple at Deir el-Bahri (18th dynasty). It is a fictional scene, invented by Hatshepsut, that depicts Thutmose I presenting Hatshepsut to his people as his chosen successor. However, this never occurred.



▲ **Source 2.60** This statue of Hatshepsut shows her kneeling and making an offering to Amun-Re (18th dynasty).



ACTIVITY 2.34 RESPONDING TO THE SOURCES

- 1 Interpret** what is said in Source 2.57. Who was supposed to have said these words?
- Develop a theory for why Hatshepsut might have ordered this (the words in Source 2.57) to be written on the walls of her temple at Deir el-Bahri.
- 3 Interpret** the main message conveyed by the image in Source 2.58. **Suggest** why Hatshepsut might have thought it was important to have this image shown on the walls of her temple at Deir el-Bahri.
- With a partner, **compare** the images of Hatshepsut in Sources 2.59 and 2.60. **Identify** similarities and differences between them and **suggest** reasons why her depiction might have changed over time.



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Change and continuity.

Your response should contain:

- A clear statement about what stayed the same and/or what changed
- Corroborating evidence or examples that show how things stayed the same (i.e. continuity)
- Differing evidence or examples that demonstrate how things changed
- A reason that accounts for this continuity and/or change.

What were Hatshepsut's main achievements?

Hatshepsut's reign lasted 20 years – far longer than any previous female ruler of Egypt.



▲ **Source 2.61** Hatshepsut's enormous temple at Deir el-Bahri. The purpose of this temple was to serve as a site for ancient Egyptians to worship and pay respect to Hatshepsut after her death. Her actual burial place was in the Valley of the Kings, on the other side of the cliffs behind the temple.

One of her main achievements was sending a trading voyage to a foreign land called Punt, which resulted in Egyptian ships bringing back an impressive array of exotic, valuable goods. We know Hatshepsut considered this to be a significant event of her reign, as she publicised inscriptions containing an account of the voyage, as well as images of the ships and goods, on the walls of her temple at Deir el-Bahri. Hatshepsut is not particularly known as a warrior pharaoh, though some successful military campaigns did occur during her reign. She constructed hundreds of statues, monuments and buildings, including:

- The two tallest obelisks in the world at the time, at the entrance to the Temple of Karnak
- The Red Chapel at Karnak
- Her most famous legacy, the huge mortuary temple at Deir el-Bahri.

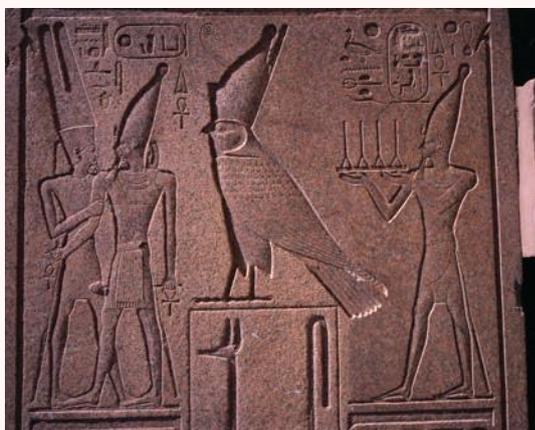


ACTIVITY 2.35 RESPONDING TO THE SOURCES

Hatshepsut faced some unique challenges in ensuring she had a stable and secure reign over Egypt. They can be summarised as:

- She had to establish that her rule was legitimate.
- She had to demonstrate that her gender was not an issue.
- She had to show her people that she could successfully fulfil her role as pharaoh.

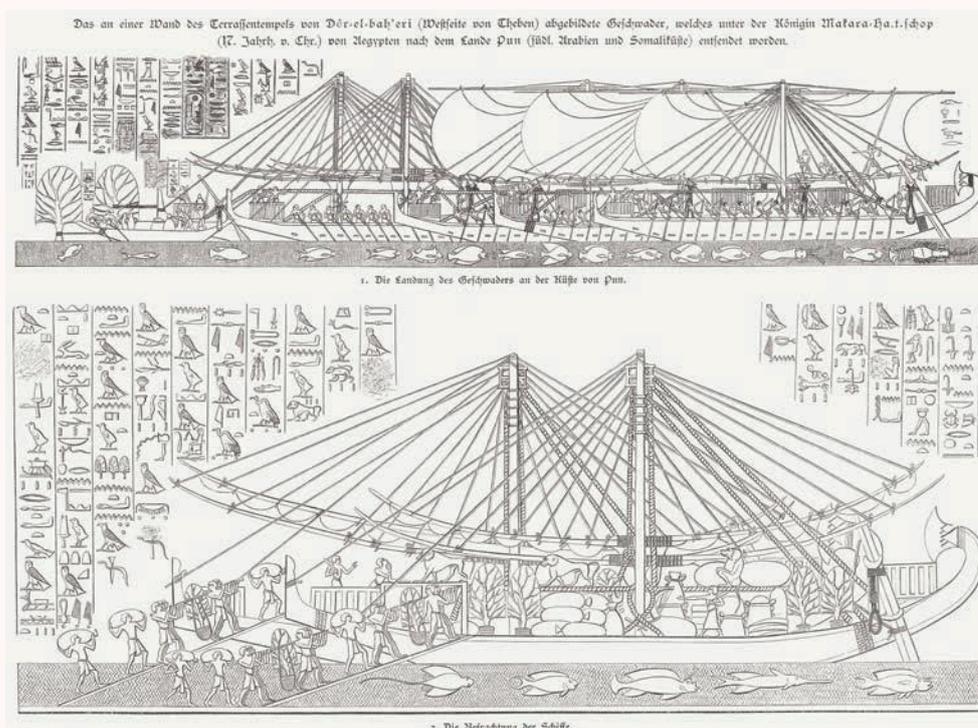
Copy the analysis table on the next page into your notes, then use Sources 2.62–2.65 to complete the table. In the table, **explain** how Hatshepsut successfully overcame these challenges. You may wish to **conduct** some additional research online.



▲ **Source 2.62** Hatshepsut and the god Horus. This is from a fallen obelisk at Karnak temple.



▲ **Source 2.63** Statues of Hatshepsut from her mortuary temple at Deir el-Bahri. Hatshepsut is depicted with a variety of symbols associated with Osiris (the king of the underworld), including the double crown, false beard, crook and flail (in the shape of an ankh).



▲ **Source 2.64** Hatshepsut's trading voyage to Punt. This image shows Hatshepsut's boats being loaded with the many goods that were brought back to ancient Egypt. This is a copy of an image inscribed on the walls of Hatshepsut's mortuary temple at Deir el-Bahri.



The loading of the cargo boats with great quantities of the marvels of the land of Punt, with all good woods of the divine land, heaps of gum of anti (incense) and trees of green anti, with ebony, with pure ivory, with green (pure) gold of the land of Amu, with sandalwood, cassia wood, with balsam, resin, eye paint, with monkeys, greyhounds, with skins of panthers of the south, with inhabitants of the country and their children (slaves).

Never were brought such things to any king since the world was.

▲ **Source 2.65** A description of Hatshepsut’s trading voyage to Punt, listing the many valuable and exotic items that were brought back to ancient Egypt. This was inscribed on the walls of Hatshepsut’s mortuary temple at Deir el-Bahri, next to the image of the boats being loaded with the valuable goods.

Analysis table

Source	Describe the source – what is it?	Analyse the source – what does it say or show? What impression might it give of Hatshepsut?	Evaluate the source – how might this have helped Hatshepsut overcome one of the challenges she faced during her reign?
2.62			
2.63			
2.64			
2.65			



ACTIVITY 2.36

- Investigate** the reign of Hatshepsut, or another female pharaoh of ancient Egypt, such as Nefertiti or Cleopatra.
- In pairs, use your research to **create** a script for either a 1–2-minute podcast or for a role-play interview with this pharaoh. The topic of the script is: ‘Great female pharaohs of ancient Egypt’.
- In your podcast or interview, **consider** topics such as:
 - Historical context
 - Early life
 - Achievements
 - How they were perceived by their contemporaries.



REFLECTING ON YOUR LEARNING 2.7



Reflect on what you have learned in this section:

- Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: ‘What role did individuals, such as Hatshepsut, play in making ancient Egypt successful?’
- How could the information and sources in this section contribute to answering your overall inquiry question: ‘What made ancient Egypt a successful civilisation?’

Complete the Quiz and the ‘Developing your understanding’ questions in the Interactive Textbook.



Conclusion: end-of-chapter reflection

STEP ONE: REFLECT ON YOUR SUB-QUESTIONS

At the end of each section of this chapter, you were asked to **reflect on** how the information in the section related to the overall inquiry question:

‘What made ancient Egypt a successful civilisation?’

- 1 For each of the sub-questions below, write a brief response (approximately 2–3 sentences) to the sub-question. Do you feel that you have a good understanding of each section of this chapter?
 - What are the different methods and sources of evidence used by historians and archaeologists to investigate ancient Egypt?
 - How did ancient Egypt’s physical features influence its success?
 - How important was the role of the pharaoh to ancient Egypt’s success?
 - What was life like for key groups in ancient Egypt and how did they contribute to its success?
 - What role did religious beliefs, values and practices play in ancient Egypt’s success?
 - How did ancient Egypt benefit from contact and conflict with other societies?
 - What role did individuals, such as Hatshepsut, play in making ancient Egypt successful?

(If you prefer a visual approach, you could do this as a mind map instead.)

STEP TWO: REFLECT ON THE KEY INQUIRY QUESTION

- 2 Now, based on what you have learned in this chapter, write a short paragraph in response to the question: ‘What made ancient Egypt a successful civilisation?’

STEP THREE: FUTURE QUESTIONS

- 3 Based on your learning in this chapter, what questions do you have about ancient Egypt?
- 4 **Reflect on** the questions you or your classmates raised at the beginning of the chapter, at the end of the ‘Setting the scene’ activities. Have you answered most of these questions? Which questions have not been answered?



End-of-chapter assessment

1 Project 1

A project assesses students' responses to a single task, stimulus, question, situation or scenario. A project gives students authentic opportunities to demonstrate their historical knowledge, understanding and skills.

Scenario

The use of replica artefacts is becoming more common in museums, particularly in Australia, as it saves the time and cost of transporting the originals and reduces the risk of damaging priceless items by shipping them overseas.

Your task is to **create** a display for a new ancient Egypt exhibition at the Queensland Museum. Your display will consist of a replica of an ancient Egyptian artefact, as well as a two-paragraph object label to **describe** the artefact to museum visitors.

Step 1: Select *one* of the following areas to focus your research on:

- Warriors and warfare (armour, weapons, fighting techniques, historical battles and wars)
- Daily life (health, government, laws, housing, women's lives, children's lives)
- Religion (beliefs, rituals, death and burial, gods)
- Architecture (pyramids, temples, tombs, monuments)
- Another topic with your teacher's approval.

Step 2: Complete some background research on your topic and **identify** an artefact that is relevant and useful for gaining a better understanding of the topic.

Step 3: Copy the analysis table below into your notes. Then use it to **analyse** your artefact.

Step 4: Create a replica of your artefact. If you are unable to complete this step, just use a photo of the original artefact.

Step 5: Use your analysis table to help you write the two-paragraph object label that will accompany the artefact. It must include paragraphs on the following topics: What are the features of the artefact? How is this artefact useful for learning about ancient Egypt? A quick Google image search for 'museum object label' will provide you with plenty of examples and ideas for how to format and present your own object label.

Analysis questions	Your response
What are the features of the artefact? <ul style="list-style-type: none">• What is the artefact? (source type)• When was it created (and by who, if known)? (origin)• What was happening at the time the artefact was made that is relevant to the inquiry? (context)• Why might this artefact have been created? (motive)• Who might the artefact have been created for? (audience)	
How is this artefact useful for learning about ancient Egypt? <ul style="list-style-type: none">• What evidence does the artefact provide about your chosen topic? (explicit and implicit information)• Overall, how is this artefact useful for learning about the ancient Egyptian civilisation and/or reasons for its success? (usefulness)	

Step 6: Include a reference list that shows at least *four* sources of information for your object label.

Length: 400–600 words

2 Project 2

Scenario

You are the mighty pharaoh of Egypt, but your power is unexpectedly challenged by a young rival. Write a short persuasive speech to remind your people of the amazing things you have done for them and how you have contributed to the success and glory of Egypt.

Step 1: You may **select** from one of the following individuals (or get confirmation from your teacher if you would like to **research** another individual):

- Khufu
- Hatshepsut
- Thutmose III
- Amenhotep III
- Akhenaten
- Ramses II
- Cleopatra VII

Step 2: Design a handout to accompany your speech. Include an image, a headline that highlights why your pharaoh is a success, and *three* interesting dot points or facts about your pharaoh's greatest achievements.

Step 3: Create a timeline that accurately displays *five* key events from the life of your pharaoh. Ensure that you follow the conventions of a timeline.

Step 4: Write the speech. It must include paragraphs on *at least two* of the following topics: What have been your military achievements? How have you kept the gods happy? How have you spread Egypt's influence through trade, peace treaties or other forms of diplomacy? How have you impressed your people with great building projects? How have you respected tradition? How have you overcome challenges or adversity? What makes you an inspiring example to your people?

Step 5: Include a reference list that shows at least *four* sources of information for your article.

Length: 400–600 words

3 Practice examination question

Statement

'Some of the qualities expected of successful pharaohs were that they pleased Egypt's gods, protected Egypt as great warriors, built fine monuments and expanded Egypt's influence through trade and diplomacy.'

Question

Based on the above information, does Hatshepsut deserve to be considered a successful pharaoh?

Using Sources 2.57–2.65 in Section 2.7, write a paragraph to present an argument in response to this question. Make sure you include in-text references (i.e. Source X) where you refer to evidence.

Digital resources

Visit the Interactive Textbook or Online Teaching Suite to access:

- General Capability Project
- Interactive chapter quiz
- Interactive Scorcher quiz
- Videos, image galleries and other extra materials.





CHAPTER 3: Ancient Rome: what made ancient Rome a successful civilisation?

Setting the scene: Pompeii – a historical time capsule

In the first century CE, Pompeii was a wealthy and successful city in the Roman Empire. It was a busy tourist town where Romans went to holiday.

Located on the coast of Italy, the people of Pompeii traded their wheat, grapes and olives for valuable items from other parts of the Roman Empire. The streets of Pompeii were decorated with beautiful murals and sometimes were graffitied with phrases like ‘Aufidius was here’, ‘Marcus loves Spendusa’ and ‘Romula hung out here with Staphylus’.

People moved through the streets of Pompeii to visit temples to worship their gods, such as at the Temple of Apollo, and they socialised and made business deals in the public baths. However, Pompeii prospered under the shadow of an active volcano – the great Mount Vesuvius.

On 24 August 79 CE, Mount Vesuvius erupted, covering the entire city of Pompeii in a layer of volcanic ash and toxic gases. People were killed where they stood. The eruption preserved the city like a historical time capsule, which has allowed archaeologists and historians to learn a great deal about life in the Roman Empire by studying the well-preserved artefacts from Pompeii. And new discoveries are being made all the time!

▼ **Source 3.1** The ruins of Pompeii





ACTIVITY 3.1

Time capsule

In this activity, you will use evidence to **create** a written or spoken presentation about daily life in the Roman Empire.

Question

What might the evidence from Pompeii suggest about the lives of ancient Romans?

Instructions

Step 1: Select

- 1 Either individually, in pairs or in small groups, choose one of the following topics for your investigation:
 - Food and diet
 - Entertainment and leisure activities
 - Work, business and trade
 - Religious beliefs
 - Home, family and daily life
 - Social structure.

Step 2: Analyse and evaluate

- 2 **Identify** which of the 10 sources provided below (Sources 3.2–3.10 and Table 3.1) might be relevant and useful for your chosen topic. Use the following questions to help you **analyse** and **evaluate** the evidence relating to your chosen topic. If you have time, you may wish to **conduct** additional research to locate other information and sources.

Describe	<ul style="list-style-type: none"> • What is this and who might have made it? • When and/or why might it have been made?
Analyse	<ul style="list-style-type: none"> • How might this relate to your investigation? • What insights might it provide about life in Pompeii in relation to your topic?
Evaluate	<ul style="list-style-type: none"> • How useful or reliable do you think it is and why? • How might it corroborate or contrast with evidence from other sources?

Step 3: Synthesise

- 3 **Synthesise** your evidence by organising the sources into groups. You may wish to do this on the class whiteboard or on paper.

Step 4: Hypothesise

- 4 Develop a **hypothesis** about what daily life in Pompeii was like – specifically focus on your chosen topic. Use at least three of the pieces of evidence to support your argument. Present your hypothesis and evidence to the class in a format chosen by your teacher. Formats include a presentation, poster, paragraph, mind map, role play, magazine article or short video.

Step 5: Reflect

- 5 **Reflect on** your learning by making a list of what else you would like to know about ancient Rome and the success of this civilisation. Share this list with your class before you begin this chapter. By the end of this chapter, see what questions you have found answers to!

analyse consider in detail for the purpose of finding meaning or relationships, and identifying patterns, similarities and differences

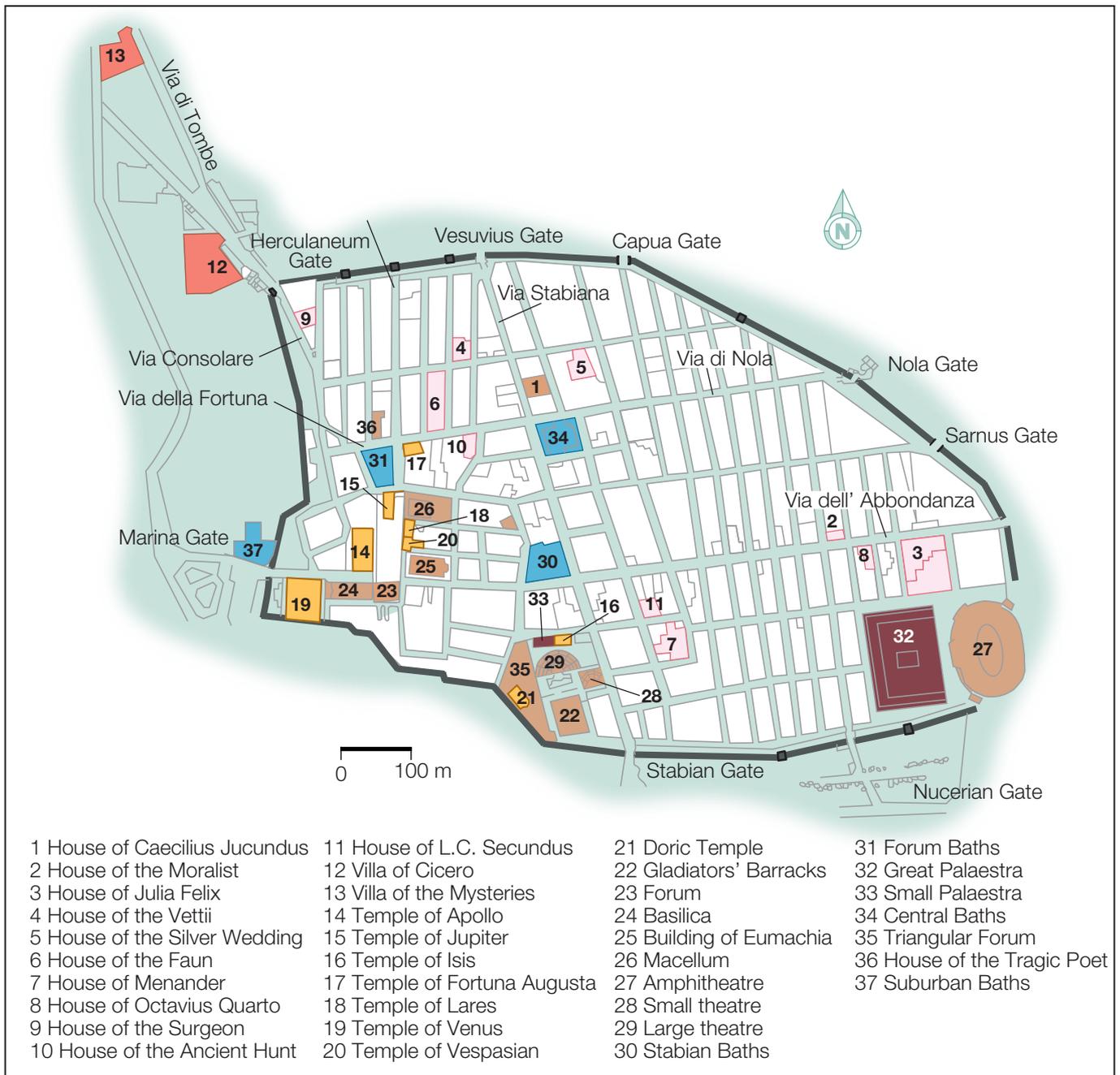
evaluate examine and judge the merit or significance of something

corroborate confirm an idea or conclusion by providing new evidence that supports earlier evidence

synthesise combine different parts or elements (information, ideas, components) into a new whole, in order to create new understanding

hypothesis a theory based on facts, or a suggested answer to a question, to be proved or disproved

Evidence



▲ Source 3.2 A map of Pompeii



▲ Source 3.3 Aerial footage of Pompeii and Mount Vesuvius.



ACTIVITY 3.2 RESPONDING TO THE SOURCES

Use the map of Pompeii (Source 3.2) to **identify** the two semi-circular buildings that appear at the beginning of the video 'Aerial footage of Pompeii and Mount Vesuvius' (Source 3.3). What might these reveal about the types of entertainment and leisure activities enjoyed by people in Pompeii?

▼ **Table 3.1** Everyday objects discovered at Pompeii (P) and Herculaneum (H)

Area of life object relates to	Object description
Household	<ul style="list-style-type: none"> • Cradle (H) • Tripod (P) • Bronze kitchen utensils (P) • Bronze heaters (P) (H) • Lamps (P) (H) • Brazier (H) • Three-legged table (P) • Day couch (P) • Bell for calling servants (H) • Bronze handles (H)
Commerce	<ul style="list-style-type: none"> • Wine and olive presses (P) • Amphorae (containers) (H) • Cart packed with wine jars (P) • Lava millstones (P) • Dolia (P) (H) • Bronze scales (P) • Glass jars (H)
Food	<ul style="list-style-type: none"> • 81 carbonised loaves of bread (P) • Eggs and fish on a table (P) • Carbonised eggs (H) • Bread, cakes, fruit on a table (H) • Beans and grains on a counter (H) • Jar full of nuts under a counter (H)
Entertainment	<ul style="list-style-type: none"> • Gladiator's helmet (P) • Pair of dice (H) • Black and white backgammon pieces (H)
Medicine	<ul style="list-style-type: none"> • Surgical instruments: needles, probes, gynaecological forceps, catheters, pincers, scalpels and scissors (P)
Transport	<ul style="list-style-type: none"> • Gig for transportation of people (P) • Boat (H) • Woven cord: horses; 'sandals' (H)

amphora a container generally used in ancient Rome to hold wine or oil

dolia (singular: dolium) large rounded earthenware jars with a wide mouth

Aulus Clodius Flaccus [presented] a procession, bulls, bull-fighters, and their fleet-footed helpers, three pairs of stage-fighters, boxers fighting in bands, and Greek-style fighters; also [he presented] games with every musical entertainment, pantomime, and Pylades; and he gave 10 000 sesterces to the public coffers ...

... at the games of Apollo [he presented] in the Forum a procession, bulls, bull-fighters, and their fleet-footed helpers, and boxers fighting in bands; on the next day in the Amphitheatre [he presented] by himself thirty pairs of athletes and five pairs of gladiators, and with his colleague [he presented] thirty-five pairs of gladiators and a hunt with bulls, bull-fighters, boars, bear and the other hunt-variations ...

▲ **Source 3.4** An inscription on the tomb of a Pompeian *duumvir* (town councillor) named Aulus Clodius Flaccus

Wall inscription from the Estate of Julia Felix:

For rent, for the term of five years, from the thirteenth day of next August to the thirteenth day of the sixth August thereafter, the Venus bath, fitted up for the best people, shops, rooms over shops, and second-storey apartments in the property owned by Julia Felix, daughter of Spurius.

Wall inscription:

Umbricia Januaria declares that she has received from Lucius Caecilius Jucundus 11 039 sesterces, which sum came into the hands of Lucius Caecilius Jucundus by agreement as the proceeds of an auction sale for Umbricia Januaria, the commission due him having been deducted ...

Inscriptions on jars:

Finest fish sauce by Umbricius Abascantus

Scaurus's finest mackerel sauce

Best finest mackerel sauce from the workshop of Aulus Umbricius Abascantus

Scaurus's finest mackerel sauce from Scaurus's workshop.

Graffiti on a wall:

The gladiatorial troupe of Aulus Suettius Certus will fight at Pompeii on the 31 May. There will be a hunt and awnings. Good fortune to all Neronian games.

▲ **Source 3.5** Some inscriptions and graffiti from Pompeii



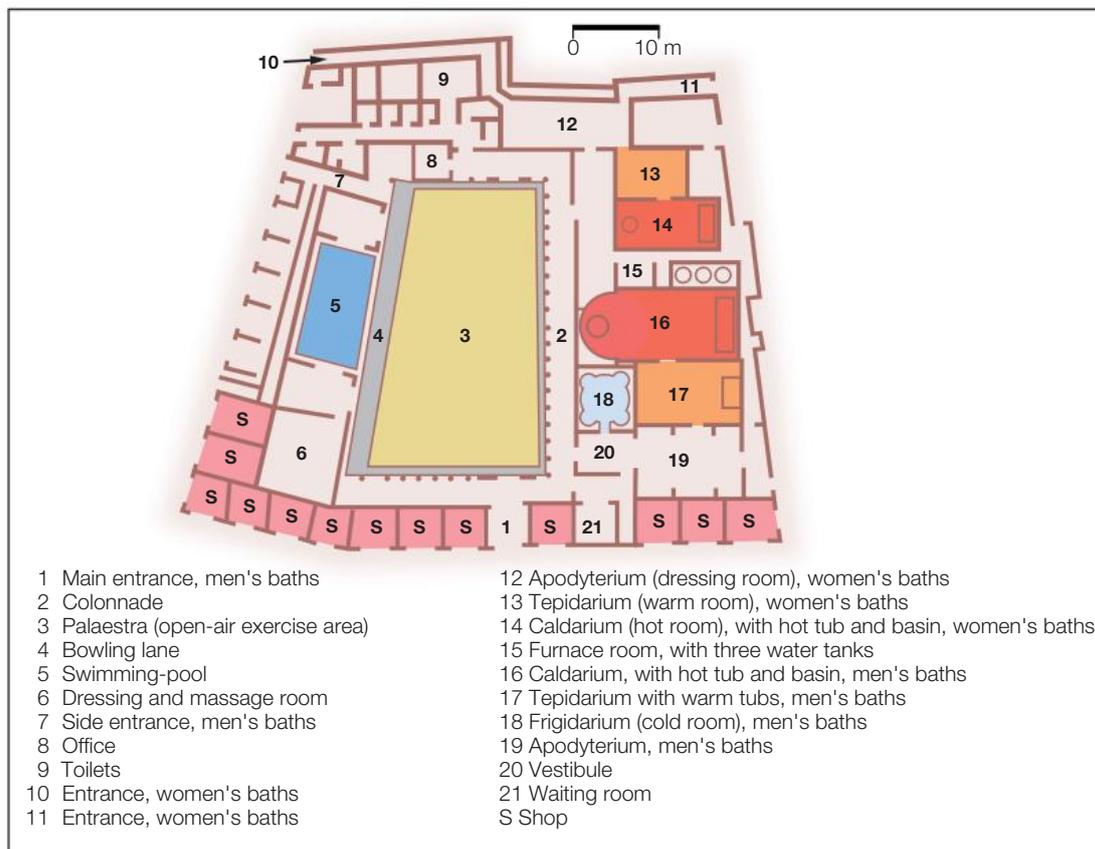
▲ **Source 3.6** These remains of a Roman theatre are in Pompeii, overlooking Mount Vesuvius.



▲ **Source 3.7** This statue of the priestess Eumachia is in Pompeii's Forum.



► **Source 3.8** These are the remains of a *thermopolium* (a fast-food restaurant) in Pompeii. Evidence indicates that beneath the holes in the marble counter were jars with food or wine.



▲ **Source 3.9** This plan shows the layout of the Stabian Baths in Pompeii. The shops would have sold bath supplies such as snacks, towels and oils.



ACTIVITY 3.3 RESPONDING TO THE SOURCES

View Source 3.10 (video). The section of the street frontage with the metal gate is the main entrance to the baths. Use Source 3.9 to **identify** what the spaces along the street (to the left and right of the main entrance) were used for.



▲ **Source 3.10** The Stabian Baths and Via dell'Abbondanza today.

Chapter overview

Introduction

Ancient Rome was one of the greatest civilisations in human history. It was an enormous empire that lasted for hundreds of years. Evidence of the success of this civilisation and the effect it has had on today's world is all around us – in the shape of our sporting stadiums, the format of the calendars on our walls, and the laws and political institutions of our nation. As you learn more about the extraordinary civilisation of ancient Rome, you might just start to notice how much your own world today has been influenced by ancient Romans.

As you read this chapter, consider how the information and sources you encounter help you to answer the key inquiry question below.

Key inquiry question

'What made ancient Rome a successful civilisation?'

Every key inquiry question should have:

- An open interrogative
- A historical concept
- Specific content
- Scope and scale.

So, let's dissect this key inquiry question: 'What made ancient Rome a successful civilisation?'

To answer a key inquiry question in a historical investigation, it is helpful to break the question into sub-inquiry questions.

Sub-inquiry questions

After completing this chapter, you should be able to answer these sub-inquiry questions:

- What are the different methods and sources of evidence used by historians and archaeologists to investigate ancient Rome?
- How did ancient Rome's location and physical features influence its success?
- What was life like for different social classes in ancient Rome and how did they contribute to its success?
- What was life like for women in ancient Rome and how did they contribute to its success?
- What was life like for slaves in ancient Rome and how did they contribute to its success?
- What role did religious beliefs, values and practices play in ancient Rome's success?
- How did ancient Rome benefit from contact and conflict with other societies?
- What role did individuals, such as Julius Caesar, play in making ancient Rome successful?

Historical skills

After completing this chapter, you should be able to:

- Develop historical questions about the past to inform historical inquiry
- Locate and identify primary and secondary sources to use in historical inquiry
- Identify the origin, content, context and purpose of primary and secondary sources
- Identify and describe the accuracy and usefulness of primary and secondary sources as evidence
- Describe causes and effects and explain continuities and changes
- Identify perspectives, attitudes and values of the past in sources
- Explain historical interpretations about significant events, individuals and groups
- Create descriptions, explanations and historical arguments, using historical knowledge, concepts and terms that reference evidence from sources.

► **Source 3.11** The ruins of the Colosseum in modern-day Rome



Timeline of key events

What came before this topic?

- **1000 BCE** Evidence that Rome was settled
- **1000–700 BCE** Latins (including Romans), Etruscans, Sabines and Samnites settled in Italy
- **c. 750–400 BCE** Greek settlements in southern Italy and other parts of the Mediterranean were established



► A statue of an Etruscan woman (c. 425 BCE)

found when something new is created by a people – generally a city or place

509 BCE

Rome becomes a republic, and the government develops. Rome expands to control more of the Italian peninsula by defeating neighbouring territories.

59 BCE

Julius Caesar is made Consul of Rome

49 BCE

Julius Caesar becomes unpopular in Rome and a civil war begins between his supporters and those who oppose him; in 45 BCE, Julius Caesar wins and becomes the sole leader of Rome

753 BCE

According to legend, King Romulus **founds** the city of Rome – he is succeeded by a line of kings who rule Rome



▲ A statue of the myth of the founding of Rome, showing a she-wolf nursing Romulus and Remus

264–146 BCE

Rome takes on its greatest challenge: it fights and wins three wars against the great African city-state and empire of Carthage. Rome keeps invading territories across the Mediterranean and fights successful wars in Greece and the Middle East to control most of the area.



▲ The legend of Romulus and Remus (video)

58–51 BCE

As a consul, Julius Caesar conquers Gaul (modern-day France) and tries to invade Britain but is forced to withdraw



▲ A statue of Julius Caesar

What came after this topic?

- **30 BCE** After Queen Cleopatra VII's death, Egypt lost its independence and became part of the Roman Empire
- **c. 500 CE** The Roman Empire is separated into smaller kingdoms, run by barbarian rulers (even Italy is split into separate states)
- **800 CE** The Frankish ruler, Charlemagne (Charles the Great), creates an empire covering what are now France, northern Spain, Italy, Germany, Austria, Czechia, Hungary, Italy and Croatia
- **1453 CE** The Christian Byzantine or eastern Roman Empire continues until it finally collapses and is taken over by the Islamic Turks



▲ A portrait of Charlemagne, who was one of the most powerful kings during the medieval period in Europe



◀ A statue of Augustus

27 BCE

The rule of the first Emperor, Augustus, begins; he is the great-nephew of Julius Caesar – the republic of Rome becomes the Roman Empire

79 CE

Pompeii and Herculaneum are buried by the eruption of Mount Vesuvius

c. 200 CE

The borders of the Roman Empire come under increased attacks by 'barbarian' tribes – under pressure, several costly wars weaken the empire

313 CE

Emperor Constantine accepts Christianity as a religion after centuries of Christians being persecuted and shunned – Christianity later becomes the official religion of the Roman Empire

barbarian someone from another place who spoke a different language; for ancient Romans, a barbarian was any person who was not part of the Roman Empire

sack to invade and destroy a city

44 BCE

A group of Roman senators murder Julius Caesar

64 CE

A big fire occurs in Rome – Emperor Nero blames the Christians, who are a new religious community

80 CE

The Colosseum in Rome is opened

283 CE

The Roman Empire is split into the eastern and western empires

402–410 CE

The Goths and Vandals ('barbarian' tribes) take control of parts of the Roman Empire – in 410 CE, Alaric the Goth **sacks** the city of Rome itself

Responding to the timeline

- 1 The following terms are used on this timeline. What do they mean?
 - a c. (circa)
 - b BCE
- 2 Use the timeline to **identify** three challenges faced by ancient Romans. These could be natural disasters, major changes or attacks.
- 3 **Create** two historical questions about significant events shown on the timeline. These questions should **identify** what you would like to learn more about as you move through the chapter.
- 4 **Research** one of the significant individuals mentioned on this timeline. **Create** a biographical profile poster to put up on the wall of your classroom. You may wish to use the following headings to help structure your poster:
 - Historical context
 - Early life
 - Achievements
 - How they were perceived by their contemporaries
 - Their overall role in Roman history.



3.1 What are the different methods and sources of evidence used by historians and archaeologists to investigate ancient Rome?

- | | |
|------------------------|---|
| FOCUS QUESTIONS | <ul style="list-style-type: none"> • How do we know about ancient Rome? • Why is conserving the remains, material culture and heritage of ancient Rome important? |
|------------------------|---|

How do we know about ancient Rome?

ARCHAEOLOGICAL EVIDENCE

Remember Pompeii, buried under the volcanic ash of Mt Vesuvius at the start of the chapter? Today, you can visit the site of Pompeii and wander around the remains of the city, where you will encounter streets, houses, shops, bathhouses, theatres and cemeteries that lay buried for hundreds of years. The excavation of this city and discovery of artworks, graffiti and thousands of artefacts has helped archaeologists and historians to learn about many aspects of life in the Roman Empire, including what people did for work and leisure and what their political and religious views may have been. Using scientific techniques such as **CT scans** and **DNA testing**, archaeologists can analyse human remains excavated from Pompeii to gain deeper understanding into the health conditions of ordinary people at the time.

Archaeological discoveries continue to be made in the city of Rome itself, as well as throughout the cities and places that once comprised the Roman Empire. One archaeological site where much has been learned about the ancient Romans is ‘Vindolanda’, which is a fort in the north of the United Kingdom. Roman soldiers were sent to Vindolanda to protect the border of the empire. Over the years, many **artefacts** have been found there. These artefacts tell a range of stories about what life was like as an ordinary soldier. Many messages and letters were written on thin pieces of timber, which survived because they were preserved in the mud. Some of the messages talk about how cold life was on the border and how the soldiers needed to be sent certain clothes to try to keep warm. These kinds of artefacts give a wonderful insight into the everyday life of ancient Romans in the military.

WRITTEN SOURCES

Roman people also produced a wide range of written sources, including histories of the city and its people, biographies of famous personalities, **memoirs** and letters written by political and public figures, and official and legal documents. When working with these sources, it is important that we consider that these documents were mostly written from the **perspective** of wealthy and powerful Romans (almost exclusively men),

CT scan a computerised tomography (CT) scan takes a series of X-ray images from around a body to create three-dimensional images of the body

DNA testing scientific test of the chemical in the centre of cells that carries genetic information about a person; it can be used to identify characteristics of a deceased individual, such as their likely physical appearance, and to identify genetic relations between deceased individuals

artefact an object that is made by a person, such as a tool or a decoration; it is usually of historical interest

memoir a book or piece of writing detailing a person’s personal experiences with other people, places and events

perspective the way we see something, a point of view or attitude to something

Archaeological evidence	Written sources	Organic material
<ul style="list-style-type: none"> • Artefacts <ul style="list-style-type: none"> • Household items • Religious items • Coinage • Weapons and armour • Art <ul style="list-style-type: none"> • Wall frescoes • Sculpture • Architecture <ul style="list-style-type: none"> • Domestic buildings • Religious and political buildings • Infrastructure – aqueducts, roads, sewer systems • Epigraphic sources <ul style="list-style-type: none"> • Inscriptions on walls • Ancient graffiti • Human and animal remains 	<ul style="list-style-type: none"> • Histories • Letters • Memoirs and autobiographies • Political and philosophical writings • Legal and official documents 	<ul style="list-style-type: none"> • Preserved garbage and human waste • Preserved food items: fruits, bones, plants, nuts, seeds, bread • Cosmetics

who represented less than 1 per cent of the population of the Roman Empire. However, insight into the lives of ordinary people can also be found in legal documents, **inscriptions** on tombstones, and **graffiti** found carved into the walls of buildings.

inscription words written or cut in something, such as a written record carved in stone



THINKING DEEPER

Virtually all of the written evidence that exists from ancient Rome was written by men from the wealthiest classes of Roman society. How might this affect the usefulness of these sources when learning about the lives of ancient Romans?

ORGANIC MATERIAL

Organic material can also provide an insight into the lives of Romans. Preserved bread and grapes have been discovered at Pompeii, and fish bones, plants, fruits and nuts have been identified within human waste and garbage discovered in a **cesspit** beneath the Roman city of Herculaneum. Scientific analyses of organic material such as these helps archaeologists to better understand many aspects of Roman life, such as what people ate. Additional knowledge about the Romans can be gained through chance discoveries of less common items, such as a small sealed Roman pot containing a cream, discovered during an archaeological dig at a site in London, which has been chemically analysed to learn more about the use of cosmetics in ancient times.

graffiti unauthorised words or drawings in public places

organic material remains of living organisms, such as animals or plants

cesspit a pit for the disposal of waste water and sewage

Throughout this chapter you will encounter a wide range of sources on life in ancient Rome. As you read and analyse these sources, consider what they might reveal about the lives of Romans and the reasons for the success of the Roman Empire. You might also reflect on the similarities and differences between the experiences of the Romans and the world today.



ACTIVITY 3.4 MAKING THINKING VISIBLE

See, think, wonder

This routine encourages you to make careful observations and thoughtful interpretations. It helps stimulate curiosity and sets the stage for inquiry.

The Roman fort of Vindolanda was situated in the north of the United Kingdom. **Examine** the image of the Roman fort of Vindolanda in Source 3.12. Then **discuss** your answers to each of the following questions with a partner:

- 1 What do you see (or notice) in this image?
- 2 What does this image make you think life for the people living in or near Vindolanda may have been like? What does it suggest about the nature of life in the Roman empire?
- 3 What does this image make you wonder? What questions do you have?



▲ **Source 3.12** The Roman fort of Vindolanda, situated just south of Hadrian's Wall in northern England. It was used by the Romans from c. 85 CE to 370 CE



ACTIVITY 3.5

Using historical sources

- 1 **Identify** whether the site shown in Source 3.12 is a primary or secondary source for life in the Roman empire. **Explain** the reasoning for your answer.
- 2 Classify the site shown in Source 3.12 as either archaeological evidence, a written source or organic material. **Explain** the reasoning for your answer.
- 3 With a partner or in a small group, develop a list of reasons why it is important to conserve the archaeological site of Vindolanda. You may wish to **conduct** additional research online to inform your response.



REFLECTING ON YOUR LEARNING 3.1



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'How do historians and archaeologists know about what life was like in ancient Rome?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient Rome a successful civilisation?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.

3.2 How did ancient Rome's location and physical features influence its success?



FOCUS QUESTIONS

- Where was ancient Rome located?
- What were the advantages of ancient Rome's geographical location?

Rome began as just one city, but the rulers of Rome conquered all of Italy, then expanded into Europe and North Africa as the Roman Republic, and at its greatest extent as the Roman Empire, they added control of the Middle East and territory as far north-west as Scotland. Ancient Rome maintained control over its vast empire for hundreds of years. As you read through the information and sources in this section, think about how Rome's location and physical features may have created the conditions that allowed it to become such a successful civilisation.

Where was ancient Rome located?

Ancient Rome was located close to the western coastline of Italy, on the banks of the Tiber River. The early settlers of Rome may have chosen this site because of the presence of a small island in the river – the only one of its kind along the Tiber – which made the river easier to cross at that point. Unlike some other rivers in Italy, the Tiber River could be navigated by boats from the mouth of the river for many kilometres inland, meaning the Romans had easy access to the Mediterranean Sea.



▲ Source 3.13 The growth of the Roman Empire between 275 BCE and 117 CE.



ACTIVITY 3.6 RESPONDING TO THE SOURCE

Examine Source 3.13.

- 1 **Describe** the growth of the Roman Empire from 275 BCE to 117 CE.
- 2 **Suggest** how Rome's geographical location may have played a part in the successful growth of the empire.
- 3 Using Google Maps, **identify** which present-day countries were part of the Roman Empire.

What were the advantages of ancient Rome's geographical location?

Latium the region of central Italy where the city of Rome was located

surplus an amount left over when needs are met

Italian peninsula the region now covered by the country of Italy, from the Alps in the north, to the central Mediterranean Sea in the south

The region surrounding ancient Rome, called **Latium**, had very good conditions for growing food, with nutrient-rich volcanic soil and a generally mild climate. As Rome expanded to include the territory of its neighbours – the Latins and Etruscans – the Romans used the Tiber River to transport goods from these regions to the city. From there, **surplus** goods could be transported to the sea to be traded with other cities. Rome's location in the middle of the Mediterranean Sea region was very useful for the ancient Romans. This location made it easier for ancient Romans to travel, trade and eventually conquer territory all across Europe and North Africa, and to manage their empire from a central location. The ancient Romans used the sea so much for transport and trade that they named it *mare nostrum*, which translates as 'our sea'. Geographic features such as mountains and hills may have deterred invaders and made the region easier to defend. The **Italian peninsula** is home to two large mountain ranges: the Alps in the north (which separate Italy from the rest of Europe) and the Apennines (which run in a line from north-west to south-east through the centre of Italy). The Alps offered Italy some protection from enemies, particularly in winter, when the mountain passes became dangerous to get through. In 218 BCE, the Carthaginian general Hannibal invaded Italy (see Sources 3.14 and 3.15), but this was a rare achievement and his army suffered significant losses.



ACTIVITY 3.7

Think: what geographical features would set up a city for long-term success?

Imagine you had the opportunity to choose a suitable location to build a new city. The city would need to support a population of one million inhabitants. What geographical features or resources would you look for when choosing the ideal site for this city?

- 1 With a partner or in a small group, develop a list of all the geographical features that the site of a new city would ideally have to ensure its long-term success.
- 2 Then, with your partner or group, narrow down this list to the three most essential features – these are the features that the city could not survive without.
- 3 Share your ideas as a class. Did everyone agree on the most important features for a city?



▲ **Source 3.14** The route of Hannibal's invasion. This map shows Hannibal's route from Carthaginian territory in Spain to where he crossed over the Alps and then invaded the Roman Republic in 218 BCE.

The dreadful vision was now before their eyes; the towering peaks, the snow-clad pinnacles soaring to the sky ... the people with their wild and ragged hair, stiff with frost ... There was great confusion and excitement amongst the men, and still more among the terrified horses ... the horses were soon out of control ... in the confusion many men were flung over the sheer cliffs which bounded each side of the pass and fell to their deaths thousands of feet below. But it was worst for the pack-animals. Loads and all, they went tumbling over the edge almost like falling bricks.

▲ **Source 3.15** Roman historian Livy, writing around the end of the first century BCE, describes the experiences of Hannibal's army attempting to cross the Alps.



ACTIVITY 3.8 RESPONDING TO THE SOURCES

- 1 Use Source 3.14 to **describe** the natural features that protected ancient Rome.
- 2 Use Source 3.15 to **explain** how the mountainous region of the Alps created problems for Hannibal's invasion of Italy in 218 BCE.

The city of Rome itself was built on seven hills, which may have provided the city with further protection in the early years of its development, helping the farmers and villagers who lived there to defend their territory from invaders.

The following sources by ancient Roman writers describe some of the reasons for the choice of Rome's location.

... with good reason did the gods and men choose this site for the founding of the city. Rome's hills provide a healthy environment, the Tiber is favourable for navigation upstream to inland crops and downstream to the sea, and the sea itself is close enough for trade and yet far enough that we are not in danger of invasion by foreign fleets. Consider too Rome's location at the centre of Italy. This site is uniquely suited by nature for the expansion of a city – as is proven by the size itself of our city while yet so young.

▲ **Source 3.16** Roman historian Livy, writing around the end of the first century BCE, records an account of a speech supposedly spoken by a Roman general in around 390 BCE.

The entire region of Latium is blessed with fertility, except for a few areas which are marshy and **pestilential** ... and some other areas that are mountainous and rocky. Even these places, however, are not entirely barren and useless, since they provide abundant **pasturage** and wood, as well as some fruits that do well on marshy or rocky soil ...

The Romans enjoy an amazing **abundance** of quarries and timber, as well as rivers that accommodate the transportation of such materials ...

▲ **Source 3.17** Roman geographer Strabo, writing around the beginning of the first century CE, describes the benefits of Rome's location.



▲ **Source 3.18** A bird's-eye view of ancient Rome. This image is a modern reconstruction of what the ancient city of Rome would have looked like.

pestilential occupied by widespread, troublesome or harmful plants or animals

pasturage area covered with grass or plants suitable for the grazing of livestock

abundance a great quantity of something



ACTIVITY 3.9 RESPONDING TO THE SOURCES

- 1 Copy the table below into your notes. Use the information in Sources 3.16 and 3.17 to complete the table.

Source	Describe: Who is it by? (origin)	Analyse: What information does this source provide about Rome's location?	Evaluate: How does this information help answer the inquiry question: 'What made ancient Rome a successful civilisation?'
3.16			
3.17			

- 2 Which of these sources suggests there was a problem with the site of ancient Rome? **Identify** this problem and, with a partner, **discuss** how the people of ancient Rome might have overcome it.
- 3 Look at Source 3.18. **Identify** the location of the island in the Tiber River. Why might this have influenced the choice of where Rome was founded?



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Cause and effect.

Your response should contain:

- A clear identification of the causes and/or effects relating to the question
- A clear explanation of how the causes are connected to the effects (i.e. how one event or action led to an outcome or consequence)
- Evidence or examples to support this explanation of the relationship between cause and effect.



ACTIVITY 3.10 MAKING THINKING VISIBLE

+1 routine

- 1 Having worked through Section 3.2, individually write down key points you can take away from the text. What have you learned about how ancient Rome's location and physical features helped the civilisation to be successful? Try to do this without rereading the text.
- 2 Now, pass your notes to the right. The person next to you should take 1–2 minutes to read through your notes and then add one new note to the page. This can be new information, an elaboration on another note, or a connection between ideas.
- 3 Continue to pass notes around the room twice more.
- 4 Return all notes to the original owners.
- 5 Now, you may read and **reflect on** the additional notes made on your page and add ideas you may have picked up from reading other students' work.



REFLECTING ON YOUR LEARNING 3.2



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'How did ancient Rome's location and physical features influence its success?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient Rome a successful civilisation?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.



▲ **Source 3.19** The modern Roman cityscape



3.3 What was life like for different social classes in ancient Rome and how did they contribute to its success?

- FOCUS QUESTIONS**
- Who were the nobles and what was their role in Roman society?
 - What was the role of the plebeians in ancient Rome?

republic the political system in Rome from c. 509 BCE to c. 27 BCE, where citizens were protected by the law and had the power to elect their political leaders

patrician any member of a group of citizen families who formed the ruling class of the early Roman Empire; the patricians owned land and held political power

plebeian commoner, free Roman citizen who was not a patrician

consuls the political leaders of ancient Rome, elected each year by the citizens

Senate a powerful political body in ancient Rome, consisting of hundreds of nobles (senators) who had previously served in government – the consuls were expected to follow the advice given by the Senate on important decisions

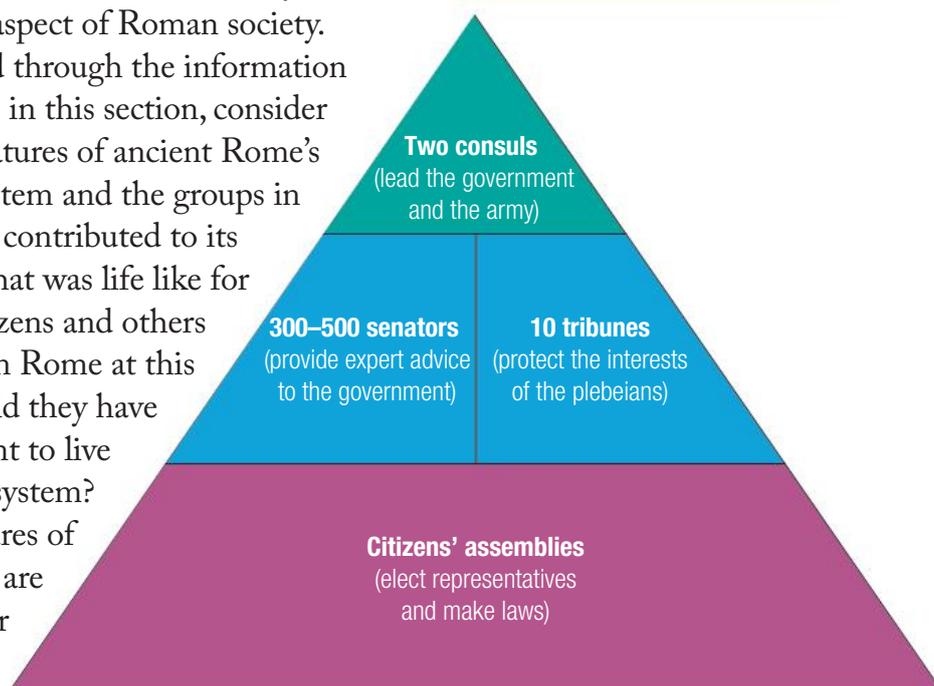
In 509 BCE, the last king of Rome was overthrown, and a **republic** (a form of government where citizens vote for their head of state) was created. In this new type of government, the **patricians** and **plebeians** had the power to meet in groups called citizens' assemblies to elect representatives to rule on their behalf. The elected rulers of Rome, the **consuls**, were assisted by a **Senate**, a group of experienced nobles who provided advice and guidance. The Roman republic lasted until the rule of Julius Caesar, who ruled as a consul but was assassinated by fellow Romans who thought he had become too powerful. Julius Caesar was eventually replaced by his great-nephew, Augustus, who became the first emperor of Rome.

From this time on, the political institutions of the republic continued, but under the control of the emperors of Rome, who had total authority over every aspect of Roman society. As you read through the information and sources in this section, consider how the features of ancient Rome's political system and the groups in this society contributed to its success. What was life like for Rome's citizens and others who lived in Rome at this time? Would they have been content to live under this system? What features of this society are similar to or Australia today?



THINKING DEEPER

What similarities and differences do you notice between the government of the Roman republic and Australia's system of government?



▲ **Source 3.20** The government of the Roman republic

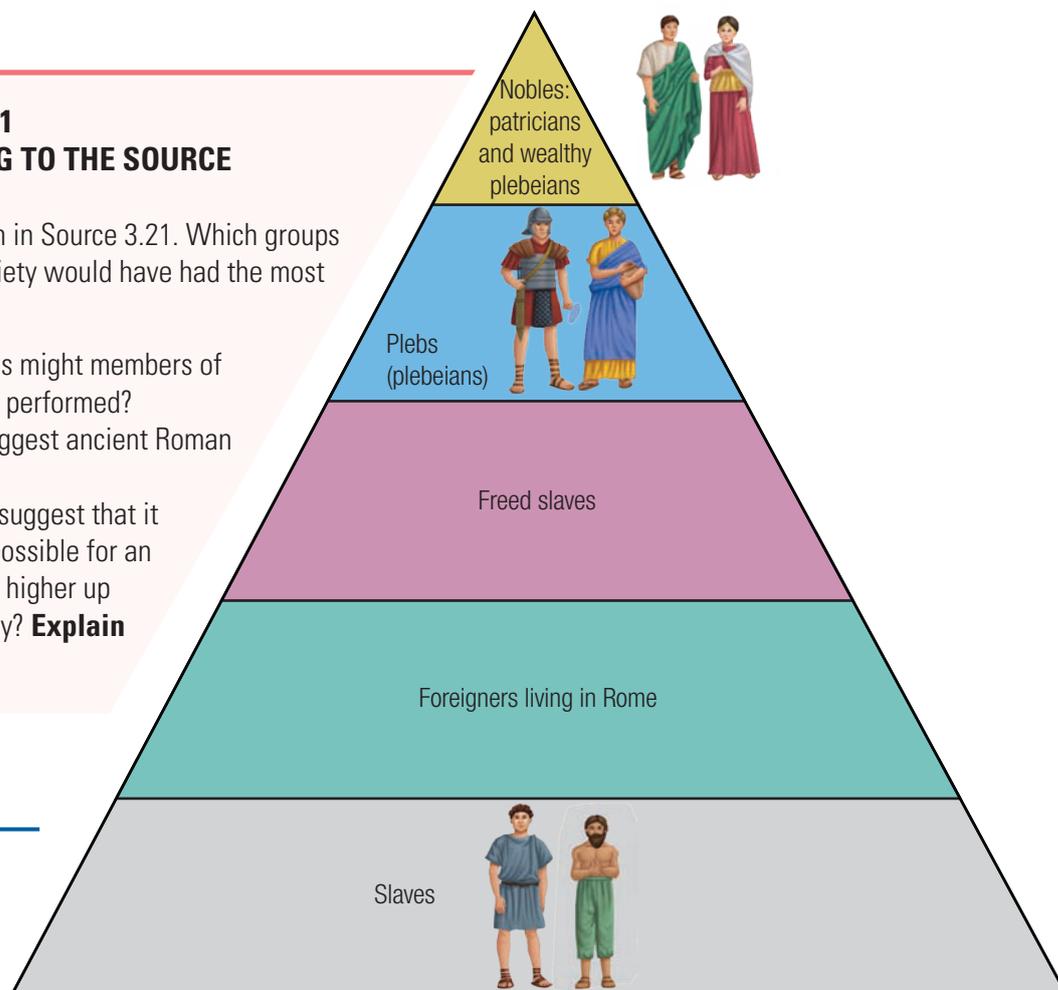


ACTIVITY 3.11 RESPONDING TO THE SOURCE

Examine the diagram in Source 3.21. Which groups in ancient Roman society would have had the most and least power?

- 1 What kinds of roles might members of these groups have performed?
- 2 What does this suggest ancient Roman society valued?
- 3 Does Source 3.21 suggest that it might have been possible for an individual to move higher up the social hierarchy? **Explain** your answer.

hierarchy an organised structure in order of rank or status by factors such as wealth or social group



▲ **Source 3.21** The social **hierarchy** of ancient Rome in the late republic period. There had been a change from the early republic period, when only patricians were members of the nobility. Note the size of each layer in the diagram is not related to the proportion of people in that group. Most Romans were plebeians.

Who were the nobles and what was their role in Roman society?

During the time of the early Roman kings, the patricians were the nobility of Rome. When the last king of Rome was overthrown in 509 BCE, the patricians took on the role of ruling the Roman republic. Their descendants became the ruling nobility of Rome and only Romans born into patrician families could be members. For a little over 100 years, the position of consul, which was the top leadership position in Rome, could only be held by patricians. The rest of Rome's **citizens** belonged to the group known as the plebeians.

Dionysius of Halicarnassus, a Greek historian writing around 20 BCE, described the creation of the patricians and plebeians by Romulus, the first king of Rome:

After Romulus had distinguished the more powerful members of society from the less powerful, he then set up laws and established what things were to be done by each of the two groups. The patricians were to serve as priests and magistrates, lawyers and judges. The plebeians were to till the land, herd livestock, and work for wages as craftsmen, tradesmen, and labourers.

▲ **Source 3.22** Dionysius of Halicarnassus's description of Romulus founding Rome

citizen male person in ancient Rome who was recognised as having the rights of citizenship. The children of Roman citizens automatically became citizens. Women were not considered to be citizens. Citizenship could be granted to ex-slaves who had been freed or to foreign non-citizens as a reward for service



ACTIVITY 3.12 RESPONDING TO THE SOURCE

- 1 Based on your analysis of Source 3.22, **identify** the roles allocated to patricians and the roles allocated to plebeians by Romulus.
- 2 The event described by Dionysius of Halicarnassus was supposed to have taken place around 750 BCE. **Explain** why Dionysius's description of events cannot be considered to be completely historically accurate.

Over time, the plebeians became angry that the patricians had more power and, from around 500–287 BCE, they rebelled against the patricians' control of Rome. By 287 BCE, the plebeians had won full legal and political equality with patricians and there was a new nobility in Rome, consisting of the patricians as well as wealthy plebeians, many of whom were richer than the patricians. Members of this new nobility occupied the highest positions in Roman politics (including being consuls and senators) and were responsible for governing Rome and providing leadership for Rome's armies and religious groups. These men spent much of their time in Rome's Forum: the administrative, political, economic and religious centre of the city.

What was the role of the plebeians in ancient Rome?

The remainder of Rome's poorer working citizens are referred to as the plebeians (plebs). The plebs were the ordinary working citizens of Rome. Being free citizens gave the plebs several rights and privileges in Roman society



▲ **Source 3.23** This photograph shows the remains of Rome's Forum today. What effect do you think the size and scale of these buildings would have had on visitors to ancient Rome?

(see Source 3.24) and raised them in status above non-citizens and slaves. As you can see from Source 3.22, the plebs were farmers, craftsmen, tradesmen, shopkeepers, soldiers and labourers. Unless they were extremely wealthy, most plebs did not generally have important roles in society.

From 287 BCE, the plebs had their own special political assembly, called the Council of the Plebs, which could pass laws that were in the interests of the plebs, and that applied to everyone, including patricians. This assembly was led by 10 **tribunes** (all plebs), who had the power of veto over any political decisions made in Rome. This allowed them to protect the rights of the common people by being able to block any decision made by the consuls or by any other political body in ancient Rome. It is important to note that only men who were not slaves were considered to be citizens in Rome. This meant that women did not have a role to play in government and could not vote. The rights of women varied over time, but they were never given political privileges.

tribune one of 10 plebs elected each year to lead the Council of the Plebs; the tribunes were expected to act in the best interests of the plebs



▲ **Source 3.24** The benefits of Roman citizenship, which was open to men only. Free citizens in ancient Rome had many rights and privileges.



ACTIVITY 3.13

Evaluate political institutions

1 **Explain** why it might have been important for ancient Rome's long-term success that its citizens were able to vote for their leaders.

2 **Identify** two similarities and two differences between the political institutions of ancient Rome and Australia today.



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Change and continuity.

Your response should contain:

- A clear statement about what stayed the same and/or what changed
- Corroborating evidence or examples that show how things stayed the same (i.e. continuity)
- Differing evidence or examples that demonstrate how things changed
- A reason that accounts for this continuity and/or change.



ACTIVITY 3.14 MAKING THINKING VISIBLE

Think, pair, share

- 1 Think: Take a minute to **consider** the following question: 'Was life in ancient Rome fair for all groups?'
- 2 Pair: Turn to a neighbour and **discuss** your responses to the question. Take turns to speak, listen carefully and ask questions of one another.
- 3 Share: Share your ideas as a whole class to **create** a list of ideas to respond to this question.



REFLECTING ON YOUR LEARNING 3.3



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'What was life like for different social classes in ancient Rome and how did they contribute to its success?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient Rome a successful civilisation?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.

3.4 What was life like for women in ancient Rome and how did they contribute to its success?

FOCUS QUESTIONS

- What was the role of women in ancient Rome?
- How did women contribute to ancient Roman society?

What was the role of women in ancient Rome?

Like most societies in the ancient world, Rome was a **patriarchal** society, meaning that women's lives were generally controlled by male relatives, such as their fathers or husbands. Women in ancient Rome were not considered to be citizens in the way that men were and were not allowed to vote or be involved in politics. Unless a woman had three or more children, she was also required to have the approval of a male guardian for decisions on legal or business matters. The decision about who a woman would marry was made by her father. The legal minimum age for marriage was 12, although the average age that Roman girls were married was probably closer to 14 years old.

In some aspects of their lives, Roman women had more independence than women in other parts of the ancient world, such as in Greece or the Near East: they were able to inherit property, run a business and accumulate considerable wealth. There is evidence of women in the Roman Empire acting as **benefactors** for their communities, building monuments and lending their public support to male candidates in election campaigns. Women could also serve as high-ranking priestesses in religious cults. They were also able to divorce their husbands.

The role played by women in ancient Roman society depended on their social status. Women from the wealthy, governing class were valued for being honest and dutiful wives and mothers. Married women from the nobility were expected to bear children and look after the household. Overseeing the spinning, weaving and sewing of clothes were considered to be part of their role. Women from the lower social classes were much more likely to be involved in manual labour as they were required to work to earn a living and support their families financially. Evidence suggests that lower-class women performed a diverse range of roles in society, including as weavers, fish-sellers, laundresses, shopkeepers and butchers.



3

patriarchal a system of society or government controlled by men

benefactor someone who provides another person or group with money or other help to support them

Why should I mention your personal virtues – your modesty, obedience, affability, and good nature, your tireless attention to wool making, your performance of religious duties without superstitious fear, your artless elegance and simplicity of dress? Why speak about your affection toward your relatives, your sense of duty toward your family (for you cared for my mother as well as you cared for your parents)? Why recall the countless other virtues which you have in common with all Roman **matrons** worthy of that name?

matron a freeborn, respectable woman in ancient Rome

▲ **Source 3.25** This text is from an inscription dated around the end of the first century BCE, discovered in Rome. It was written by a husband to honour his wife, Turia. What insights does it provide into the character and behaviour expected of Roman women?

Why should we pay taxes when we do not share in the offices, honours, military commands, nor, in short, the government, for which you men fight between yourselves, with such harmful results?

▲ **Source 3.26** A speech made by Hortensia, a Roman woman, at a large public meeting in Rome in 42 BCE. Hortensia was the leader of a large group of women who were objecting to proposed taxes on women's luxury items.



ACTIVITY 3.15 RESPONDING TO THE SOURCES

- 1 Use Source 3.25 to **identify** the qualities expected of the 'ideal' Roman woman.
- 2 **Explain** what Sources 3.25 and 3.26 suggest about the status of women in ancient Roman society.



ACTIVITY 3.16

How did women contribute to ancient Roman society?

The following four primary sources provide insights into the various roles performed by women in ancient Rome. Read and **analyse** Sources 3.27–3.30, then copy and complete the analysis table.

fuller a laundry worker in ancient Rome who also processed and sold cloth

Eumachia daughter of Lucius, public priestess, made (this building) with her own money ... She dedicated it in her name and in the name of her son, M. Numistrius Fronto.

▲ **Source 3.27** An inscription on a large public building in the centre of Pompeii, which was probably used by the **fullers**, who operated laundries and also cleaned, processed and sold cloth, mainly woollen. The inscription mentions the name of Eumachia, the patron of the fullers in Pompeii, who paid for the building's construction.

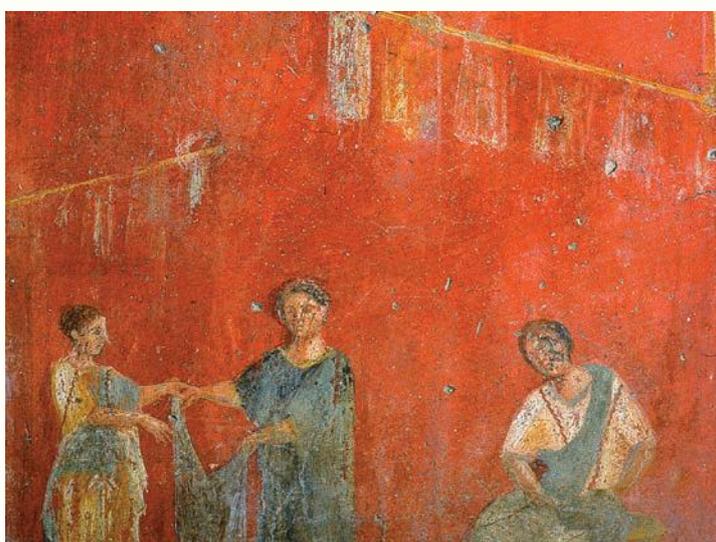
For rent, in the estate of Julia Felix, daughter of Spurius: elegant baths for respectable people, shops with upper rooms, and apartments. From the 13th August next, to the 13th August of the sixth year, for five continuous years. The lease will expire at the end of the five years.

▲ **Source 3.28** This is a translation of a landlord's advertisement written on the side of a large building estate in Pompeii. This building estate featured gardens a pool and its own private bathing complex.





◀ **Source 3.29** A public religious procession. A **frieze** from ancient Rome, created between 13 and 9 BCE by the Emperor Augustus. It depicts a public religious procession. The adult figures in the front row, from left to right, are the Emperor Augustus, his daughter Julia, and his close friend Agrippa.



frieze a space on the side or front of an ancient Roman building, which often featured some form of sculpted, moulded or painted decoration

◀ **Source 3.30** This fresco is from a *fullonica* (laundry) in Pompeii called the *Fullonica of Veranius Hypsaesus*. This fresco shows female workers putting up clothes for drying. Laundries in ancient Rome offered services such as washing clothes, removing stains and processing newly manufactured fabric for making clothes (around first century CE).

Analysis table

Copy and complete the table

Source	Describe the source – what is it?	Analyse the source – what does it say or show about the roles of women in ancient Rome?	Evaluate the source – how might women have benefited Roman society through the role depicted in this source?
3.27			
3.28			
3.29			
3.30			



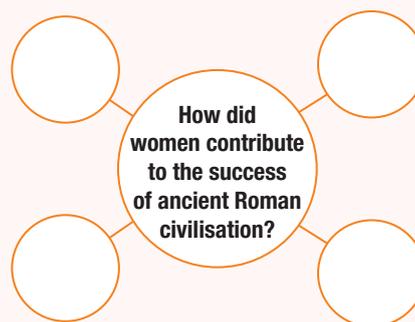
**ACTIVITY 3.17
RESPONDING TO THE SOURCE**

1 Examine Source 3.29, which shows a royal woman being featured in a public artwork beside an emperor. Why might the emperor Augustus have chosen to include his daughter Julia alongside him on this public monument? What might this reveal about the role played by royal women in ancient Roman society?

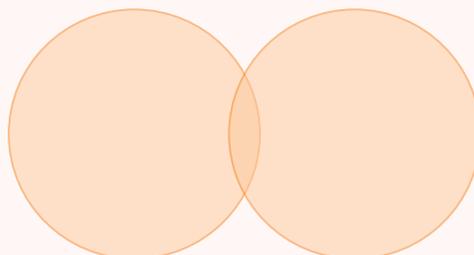




- 2 In pairs or small groups, use the information and sources in this section to **create** a mind map (using a structure similar to one shown at right) to respond to the question: 'How did women contribute to the success of the ancient Roman civilisation?'
- 3 **Compare** the experience of women in ancient Rome with the experience of women in Australia today. What similarities and what differences are there? **Represent** your ideas in a Venn diagram.



Women in ancient Rome Women in Australia today



ACTIVITY 3.18 MAKING THINKING VISIBLE

Podcast or role play

Great women in ancient Rome and its empire

- 1 **Investigate** the life and career of a prominent woman who lived in ancient Rome or within its empire – for example, Agrippina the Elder, Agrippina the Younger, Livia Drusilla, Octavia the Younger or Boudicca.
- 2 Use your research to **create** a script for either a 1–2-minute podcast or for a role-play interview with this woman. The topic of the script is: 'Great women in ancient Rome and its empire'.

In your podcast or interview, **consider** topics such as:

- Historical context
- Early life
- Achievements
- How they were perceived by their contemporaries.



REFLECTING ON YOUR LEARNING 3.4



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'What was life like for women in ancient Rome and how did they contribute to its success?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient Rome a successful civilisation?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.

3.5 What was life like for slaves in ancient Rome and how did they contribute to its success?



3

FOCUS QUESTIONS

- What was the role of slaves in ancient Rome?
- What was the role of gladiators in ancient Rome?

What was the role of slaves in ancient Rome?

Enslaved persons, or slaves, made up a significant portion of the population in ancient Rome. They were considered to be property and could be bought, sold, given as gifts and rented out to others. Slaves were bought and sold at slave auctions in the marketplace.

Many slaves had been captured in war, but others were convicted of crimes and forced into slavery as punishment. Children could be sold into slavery by their families if they could not afford to look after them. Those born to mothers who were slaves automatically became slaves.

One important feature of Roman life was that when slaves were freed, they could become Roman citizens, although they had fewer rights than citizens who had been born free.

This ensured that the Roman citizen population was constantly expanding and was open to people from many backgrounds and cultures. Freed slaves took on the names of the families that had freed them and had obligations to their ex-owners.

As Source 3.31 shows, slaves carried out a wide variety of roles in ancient Roman life.

mosaic a decorative pattern or image made from pieces of coloured stone, glass or ceramic

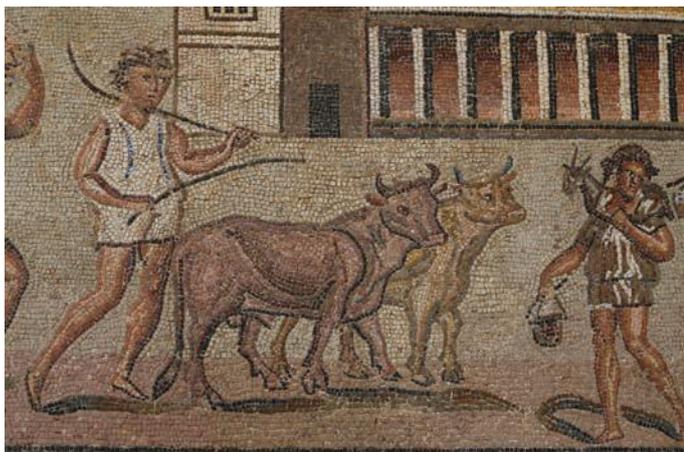
province territories or regions outside of Rome that were controlled by Rome as they were part of the empire



▲ Source 3.31 Slaves performed a wide range of roles in ancient Roman society.



▲ Source 3.32 Household slaves carrying wine amphorae to serve guests. This **mosaic**, called the 'Butler's Mosaic', is from Dougga, Tunisia, which was a **province** of ancient Rome (second century CE).



▲ **Source 3.33** Workmen with oxen. This work was typically performed by slaves. Oxen were used to tread on grain stalks to separate the grain, which was a staple food of Roman society. This mosaic is from a villa in North Africa, which was part of the Roman Empire (2nd–3rd century CE).

By the light of lamps long tunnels are cut into the mountains ... The miners carry the ore out on their shoulders, each man forming part of a human chain working in the dark, only those at the end seeing the daylight ... men may not see daylight for months on end.

▲ **Source 3.34** Pliny the Elder, a Roman historian and scholar, describing the work of slaves in the gold mines of ancient Rome (c. 77 CE)



▲ **Source 3.35** A slave's collar. The inscription reads: 'I ran away. Hold me; when you will have brought me back to my master Zoninus, you get a gold coin' (fourth century CE).



ACTIVITY 3.19 RESPONDING TO THE SOURCES

- 1 **Analyse** Source 3.31. Would it be accurate to claim that slaves in ancient Rome were uneducated? Use information from the source to support your answer.
- 2 Sources 3.32 and 3.33 show slaves performing different roles. **Identify** these roles. **Explain** how these roles might have contributed to Roman society.
- 3 **Describe** the object in Source 3.35. **Suggest** what its purpose might have been.
- 4 **Infer** what the inscription on the object in Source 3.35 reveals about how owners viewed their slaves. (The translation of the inscription is in the source caption.)

What was the role of gladiators in ancient Rome?

Some slaves played the less desirable role of **gladiator**. Gladiators were men trained to fight each other in public displays of combat. This

gladiator a man trained to fight with other men in the Roman arena for the entertainment of Roman audiences

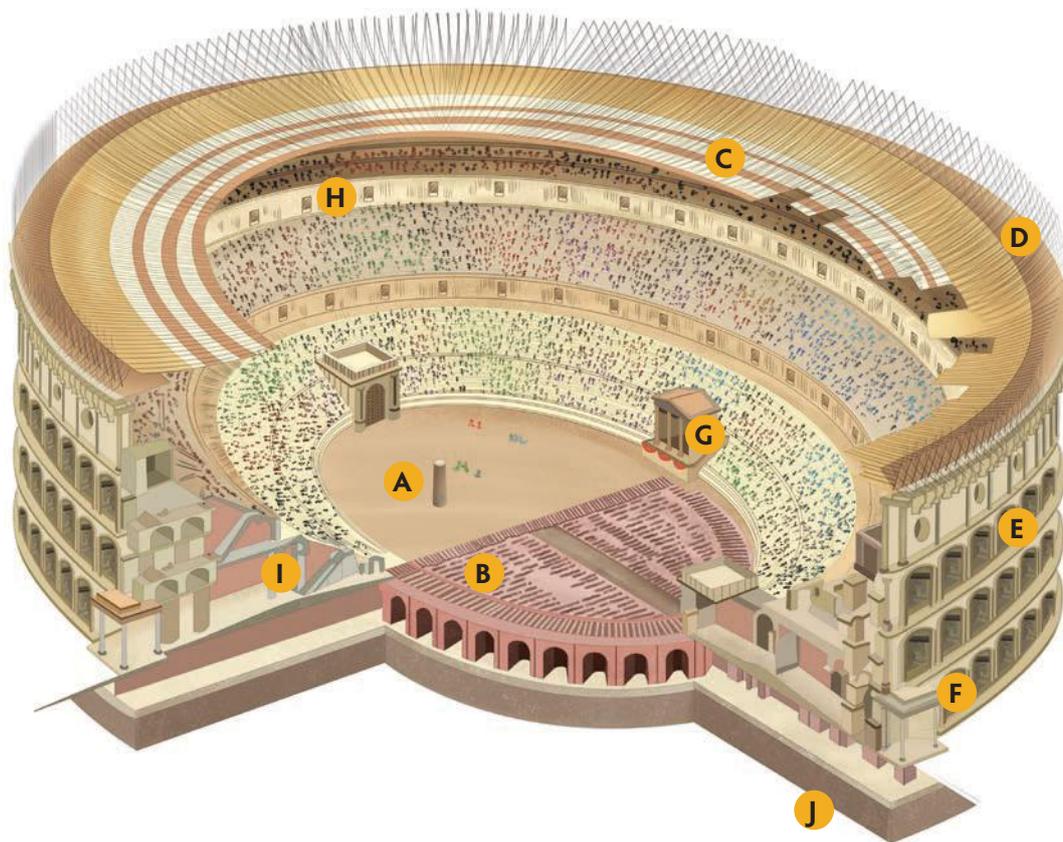
was a popular form of entertainment in ancient Rome. Public gladiatorial displays were sponsored by wealthy families and politicians, which made them popular with the citizens of ancient Rome. Later in Rome's history, large-scale gladiatorial displays were used by Roman emperors to increase their popularity among their subjects.

Fights were often between two gladiators: one might be a highly agile fighter who carried a net and was lightly armed; and the other could be

a heavily armed, slower-moving fighter. At the end of a fight, the losing gladiator could have their life spared, assuming they had survived combat.

Most gladiators were slaves, purchased by their owners for the purpose of training them to become fighters at gladiatorial schools. Others were prisoners of war, criminals or slaves who had displeased their master and were sold to gladiatorial schools as punishment. Some were even free-born men who signed up to become gladiators as they had no other form of income. Gladiators who were slaves generated income for their owners, who hired them out as a form of entertainment. Because of this, and because gladiators were highly skilled and expensive to train and maintain, it was actually in the owners' best interests that their gladiators survived combat.

▼ **Source 3.36** The Colosseum. This diagram is an artist's impression of the features of the Colosseum in Rome, which hosted large-scale gladiatorial displays. The Colosseum had room for around 80 000 people. What effect might watching gladiators fighting have had on the people of Rome?



- A** The central arena, which was covered with sand; it could be set up with boulders or trees for some events
- B** The hypogeum, which had tunnels, compartments and animal pens beneath the surface of the arena; the Romans used a complex system of pulleys, counterweights and ropes to lift things into the arena, including scenery and animals in cages
- C** Sails, which protected spectators from the sun and rain
- D** Gilded bronze shields that supported the sails
- E** Archways containing statues
- F** The façade, which was made of a type of limestone called travertine
- G** The emperor's special box
- H** Several levels of seating – seats closer to the arena were more expensive. Behind the wealthy citizens sat the middle-class citizens. Next came slaves and foreigners, and finally, in the standing areas only, were the poor. Women were also in this top tier, separated from the poor by a row of columns; they sat on wooden bleachers.
- I** The public entrances where tickets were sold; these entrances had staircases giving access to the upper levels
- J** Exits



THINKING DEEPER

Compare the Colosseum to sporting stadiums today – perhaps one that you have been to. What similarities or differences do you notice between modern sporting stadiums and the Colosseum?

manumission the act of releasing a person from slavery; this appears to have been more common in ancient Rome than in other ancient societies of the time

While gladiatorial combat was very dangerous, and the chance of being killed was quite high, successful gladiators could become famous and earn a fortune. Once they had earned enough money or impressed their owner sufficiently, many gladiators were **manumitted**, meaning they bought or were granted their freedom. Gladiators who lived past the age of 30 may have become trainers or managers at gladiatorial schools. There is also evidence to suggest that, in between their fights, gladiators socialised with others outside the training schools and had families.

In the arena, different kinds of gladiators used different kinds of weapons. The *murmillo*, for example, wore a helmet decorated with the image of a fish, and fought with a *gladius* (short sword) and a long, rectangular shield. The *retiarius* attempted to capture his opponent

with a net and stab them with a trident. A third type of gladiator, the *secutor*, carried a long, rectangular shield and wore a smooth-sided helmet that covered his face.

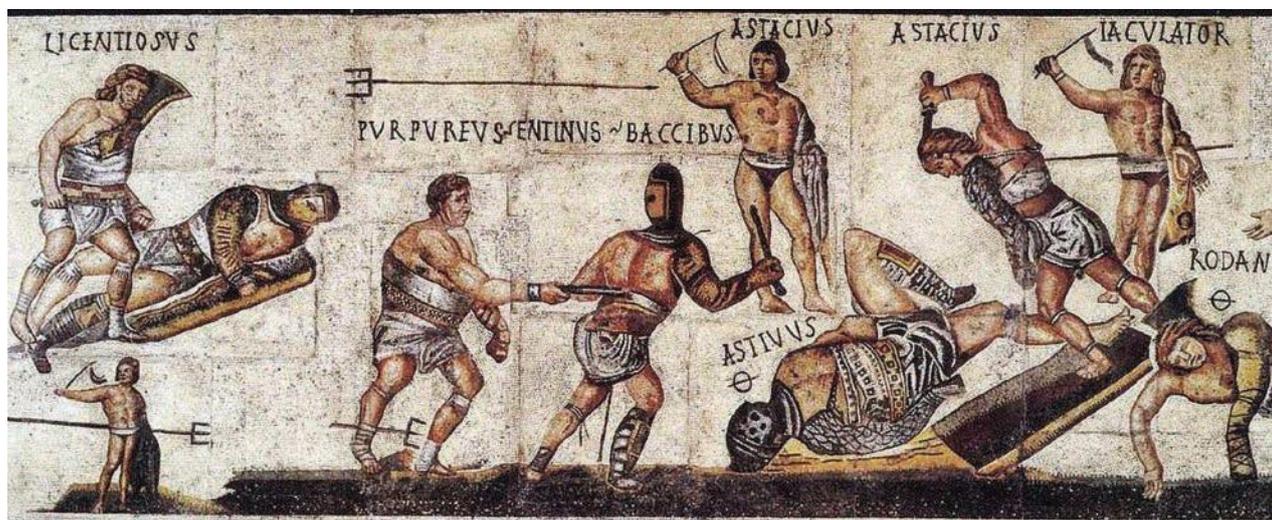


CELADUS, THE THRACIAN, MAKES ALL THE GIRLS SIGH.

CRESCENS, THE NET FIGHTER, HOLDS THE HEARTS OF ALL THE GIRLS

▲ **Source 3.37** Different kinds of gladiators used different kinds of weapons. This is an image from a historical re-enactment of a gladiatorial battle featuring two types of gladiator: a *scissor* (left), who was armoured and carried a sword and an arm guard with a hooked blade that might be used to catch a net; and a *retiarius* (right), who carried a net that could be used to snare opponents, as well as a dagger and a trident (a three-pronged spear).

▲ **Source 3.38** A translation of graffiti inscribed on the wall of a Pompeii building. Although gladiators were at the bottom of the ancient Roman social ladder, some became very popular and gained followings of fans and admirers. There is a possibility, however, that graffiti such as this may have been written by the gladiators themselves!



▲ **Source 3.39** Detail from a mosaic in the Villa Borghese in Rome, showing gladiators fighting (c. 320 CE)

Lavish entertainments won voter support and might even erase public memory of political blunders since the voters could forgive a man's sins if he provided impressive spectacles. In the republican period, the [games] were often used by the upper class as a political tool to maintain the support of the lower class. In the imperial period, the emperor did not, of course, have to worry about winning votes. But he did need to keep the people happy and contented, since an unhappy populace might riot and demand a new emperor.

▲ **Source 3.40** Historian Jo-Ann Shelton explains the role played by public spectacles (such as gladiatorial shows) in ancient Rome.



ACTIVITY 3.20 RESPONDING TO THE SOURCES

- 1 **Analyse** the diagram of the Colosseum in Source 3.36. How did the design of the Colosseum reinforce the greater status of the emperor compared to the Roman people? Identify a feature of the Colosseum to support your response.
- 2 **Compare** the equipment used by the *scissor* and *retiarius*, shown in Source 3.37. With a partner, **discuss** which type of gladiator would have had an advantage in combat. Make sure you **explain** your answer.
- 3 **Analyse** Source 3.39 to **identify** two types of gladiator shown in the scene. **Suggest** why the owners of this villa chose to use this image to decorate their home.
- 4 Explore what Sources 3.38 and 3.39 suggest about the attitudes that ordinary Romans had towards gladiators.
- 5 Some gladiators were criminals forced to become gladiators as punishment, or enemies of Rome who had been captured in war. They did not receive training or defensive equipment in their fights. **Suggest** how this might have influenced crime rates in ancient Rome.
- 6 **Identify** three ways the author of Source 3.40 suggests that gladiatorial games benefited ancient Roman society.
- 7 **Discuss** this question with a partner: 'What sport or form of entertainment in today's world do you think is the most similar to that of the gladiators, and why?'
- 8 View the video in Source 3.41. **Explain** how we can tell from this mosaic which gladiators won or lost their battles.



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Empathy.

Your response should contain:

- Language that shows that you understand the values, beliefs, experiences and emotions of people from the past
- Consideration of how these values, beliefs, experiences and emotions align with or differ from your own
- Explanation of how the origin and context of the source may account for similarities or differences with your own experience.



▲ **Source 3.41**
Third-century mosaic showing *secutor* versus *retiarius*.



ACTIVITY 3.21 MAKING THINKING VISIBLE

Colour, symbol, image

This thinking routine encourages you to distil ideas and present them in a new form, and to **justify** the reasons for your choices. It can be done on computer or on paper.

COLOUR What colour best represents life for slaves in ancient Rome? (place in the box below)	SYMBOL What symbol best represents life for slaves in ancient Rome? (place in the box below)	IMAGE What image best represents life for slaves in ancient Rome? (place in the box below)
Why did you choose this colour?	Why did you choose this symbol?	Why did you choose this image?



REFLECTING ON YOUR LEARNING 3.5



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: ‘What was life like for slaves in ancient Rome and how did they contribute to its success?’
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: ‘What made ancient Rome a successful civilisation?’

Complete the Quiz and the ‘Developing your understanding’ questions in the Interactive Textbook.



▲ **Source 3.42** A photograph of the ruins of the *Ludus Magnus* (meaning ‘Great Gladiatorial Training School’) in Rome, the site of the largest gladiatorial training school in Rome. Situated directly beside the Colosseum, this is where gladiators from around the Roman Empire would come to live and train in preparation for the gladiatorial games.

3.6 What role did religious beliefs, values and practices play in ancient Rome's success?



FOCUS QUESTION

What role did religious beliefs play in everyday life in ancient Rome?

In ancient Rome, religion had a very important place in the daily lives of the people. The ancient Romans were polytheistic, meaning they worshipped more than one god. They believed there were many gods who had different roles to play in determining events in the world.



- King of the gods
- God of sky and thunder
- Patron god of Rome

Jupiter



- God of fresh water and the sea, earthquakes, hurricanes and horses
- Often depicted with his trident

Neptune



- God of war, guardian of agriculture
- The embodiment of aggression and what was considered manliness

Mars



- Twin brother of Diana
- God of music, healing, light and truth

Apollo



- God of fire, volcanoes, metalwork and the forge

Vulcan



- God of translators and interpreters, trade and travel
- Messenger of the gods

Mercury



- Queen of the gods
- Wife and sister of Jupiter
- Protector of Rome's women

Juno



- Goddess of agriculture and harvests
- Protector of farmers, pastoralists, and plebeians

Ceres



- Goddess of wisdom, arts, trade and strategy
- Born from the head of Jupiter – she leapt out of his head, fully grown and wearing armour!

Minerva



- Mother of the Roman people
- Goddess of love, beauty, fertility and desire

Venus



- Twin sister of Apollo
- Goddess of the hunt, the moon and birth

Diana



- The sacred fire of the Vestal Virgins
- Goddess of hearth, home and family

Vesta

▲ **Source 3.43** An artist's impression of the main gods of Rome

To keep the gods happy and to ensure they supported everything the ancient Romans did, the people of Rome left offerings and performed sacrifices for the gods. People would leave offerings to particular gods and ask for help in their lives. For example, a person might leave an offering to the god Apollo, the god of healing, if they were unwell. If they were preparing for battle, they might pray to Mars, the god of war.

Ancient Romans worshipped the gods in the many temples that were built across the Roman Empire. People also worshipped the gods in their homes and set up shrines for their household and favourite gods.

As ancient Rome was a polytheistic society, Romans were very accepting of other gods. When the Romans conquered other societies and incorporated them into the Roman Empire, they allowed the conquered people to keep their own gods, rather than forcing them to adopt the Roman gods. This made it easier for Rome's new subjects to accept living under Roman rule and contributed to the stability of the Roman Empire. In some cases, as the empire expanded, the Romans even began to worship some of these foreign gods themselves, such as the Egyptian god Isis, who had a temple built for her in Pompeii.

Over time, the role of the emperor became partly religious. After the death of the first Roman emperor, Augustus, it was believed that all emperors would become gods when they died. Across Rome's empire, its subjects built temples to honour and worship the deceased emperor and his family. These temples were a way of displaying loyalty to Rome and were a reminder to the locals of the fact that they were part of the empire.

When thinning a grove of trees, it is essential to observe the following Roman ritual. Sacrifice a pig as a ... offering and repeat the following prayer: 'Whether you are a god or goddess to whom this grove (of trees) is sacred ... I pray in good faith that you will be benevolent and well-disposed to me, my home, my family, and my children. For these reasons therefore be honoured by the sacrifice of this pig ...'

▲ **Source 3.44** Advice written around 160 BCE from Roman author Cato the Elder to Roman farmers on how to ensure the forest spirits were soothed when a grove of trees was cut down. For Roman farmers, religion was a necessary aspect of farming and successful harvests.

... after they have captured a town, when brutality in victory might be expected, the Romans pay honour to the gods of the conquered people. They invite to Rome gods from all over the world, and they make them their own ... and thus, while the Romans were adopting the religious rites of all nations, they also won for themselves an empire.

▲ **Source 3.45** An extract from a work titled *Octavius*, written around 197 CE by a Christian writer named Minicius Felix. This source provides an insight into how Rome treated the religious beliefs of its subjects.



ACTIVITY 3.22 RESPONDING TO THE SOURCES

- 1 Copy the table below into your notes. This table lists some requests that ancient Romans may have asked of their gods. Using the information in Source 3.43, **identify** the god(s) that they might have sought assistance from for each request.

Request	Which god(s) could ancient Romans have sought assistance from?
For a safe voyage across the sea	
For good fortune in romantic relationships	
For success in a battle	
For good fortune in the household	
For a plentiful harvest	
For a new mother to have a safe birth	
For a public musical performance to be successful	

- 2 **Suggest** how the ancient Romans' beliefs in the gods might have affected their everyday actions and behaviour.
- 3 **Analyse** Source 3.44. What advice did Cato give farmers? What might Cato have believed would occur if the advice was not followed?
- 4 **Explain** what Source 3.44 suggests about what the ancient Romans believed in relation to the role played by gods and spirits in everyday life.
- 5 Use evidence from Source 3.45 to **describe** the author's view of how Rome treated the religions of the societies it conquered. How might this have helped the long-term success of the empire?



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Perspectives.

Your response should contain:

- A clear identification of the source's perspective
- Evidence from the source to demonstrate this perspective (note, this may include implied meaning)
- Discussion of how the source's origin or context may account for this perspective
- Discussion of how this perspective compares to other perspectives (in questions that use more than one source)
- Consideration of how this source's perspective is useful in responding to the question.



ACTIVITY 3.23 MAKING THINKING VISIBLE

I used to think ... now I think ...

This activity shows you a routine for reflecting on how and why our thinking has changed.

- 1 Take a minute to **consider** what ideas you had about religion in ancient Rome before beginning this section. When you are ready, complete the following phrase: 'I used to think that religion in ancient Rome ...'





- 2 Now, **compare** how your ideas about religion in ancient Rome have changed as a result of the information and sources you have read in this section. In just a few sentences, write down what you now think about religion in ancient Rome. When you are ready, complete the following phrase: 'Now I think that religion in ancient Rome ...'
- 3 As a whole class, **discuss** how your ideas about religion in ancient Rome have changed as a result of what you have learned in this section. What questions do you still have about religion in ancient Rome?



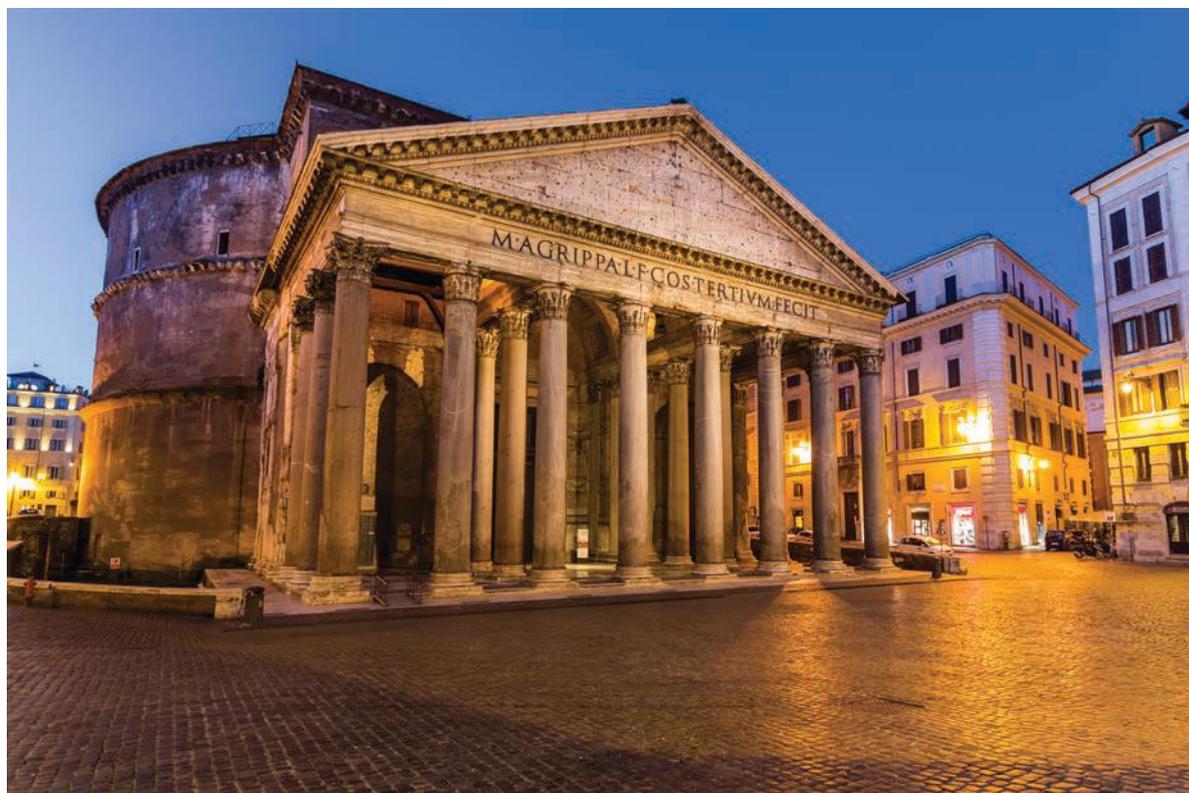
REFLECTING ON YOUR LEARNING 3.6



Reflect on what you have learned in this section:

- 1 Based on the information and sources you have encountered in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'What role did religious beliefs, values and practices play in ancient Rome's success?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient Rome a successful civilisation?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.



▲ **Source 3.46** The Pantheon in modern Rome

3.7 How did ancient Rome benefit from contact and conflict with other societies?

FOCUS QUESTIONS

- What role did Rome's army play in the development of the empire?
- How did ancient Rome benefit from contact and trade with other societies?
- What was life like for those living under Roman rule?
- How did the Roman Empire end?



3

As you can see in the timeline and map at the beginning of this chapter, ancient Rome grew from being a small settlement to a city that controlled one of the largest empires the ancient world had ever seen. Rome's navy controlled the Mediterranean Sea, and its army conquered most of Europe, North Africa and the Near East. As you read through the sources and information in this section, consider how Rome was able to build and maintain control over a large empire for such a long time. How did Rome benefit from this empire? What did the people conquered by Rome think about their rulers? What do you think was the main factor in the success of Rome's empire?

What role did Rome's army play in the development of the empire?

The ancient Roman army was incredibly large, very well trained and highly organised. It enabled Rome to invade and conquer neighbouring peoples, even those who were as adept at fighting as they were themselves. The ancient Roman army was divided into legions, which were groups of around 5000 **legionaries** and a further 5000–6000 **auxiliary** soldiers. There were approximately 30 legions stationed around the Roman Empire, mainly on the borders of the empire where it was less peaceful.

legionary a soldier in a Roman legion, which was a section of the Roman army

auxiliaries non-citizen troops recruited from non-Roman tribes

As if born for the sole purpose of wielding arms, they never take a break from training, never wait for a situation requiring arms. Their practice sessions are no less strenuous than real battles. Each soldier trains every day with all his energy as if in war ... no confusion causes them to break from their accustomed formation, no fear causes them to shrink back, no exertion tires them. Certain victory always attends them since their opponents are never equal to them ...

The Romans are never caught unexpectedly by an attack of the enemy. Whatever hostile territory they invade, they do not engage in battle until they have built a camp ...

Absolute obedience to the officers creates an army which is well behaved in peacetime and which moves as a single body when in battle – so cohesive are the ranks, so correct are the turns, so quick are the soldiers' ears for orders, eyes for signals, and hands for action ...

I have discussed the army at some length not so much wishing to praise the Romans as wanting to console those they have conquered and to deter those thinking about revolt.

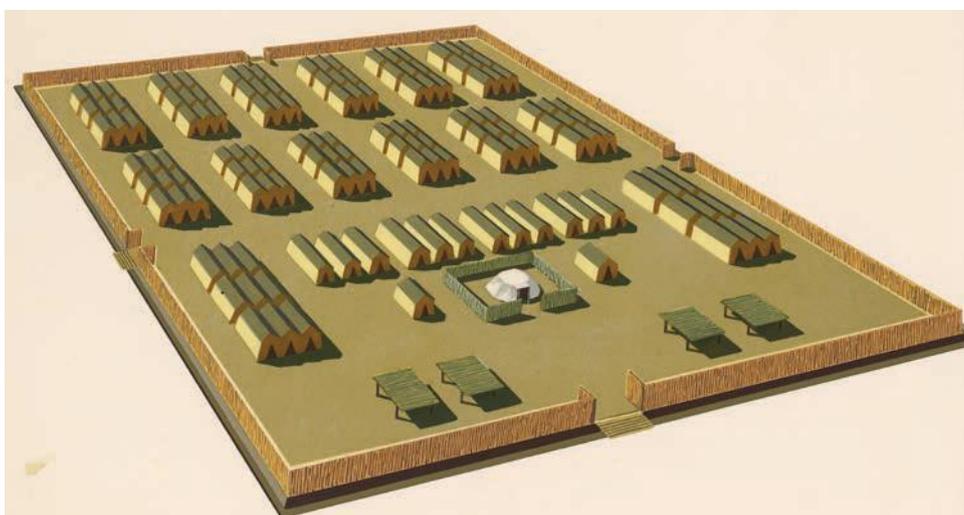
▲ **Source 3.47** A description of the reasons for the success of the Roman army, written by an author named Flavius Josephus, in the late first century CE. Originally from Jerusalem, Josephus participated in a rebellion against Rome and was taken prisoner but was later freed and became friends with the emperor, Vespasian. He was highly impressed with Rome's military strength.

We see that the Roman people have subjugated the whole world by no means other than thorough training in the use of weapons, strict discipline in military camps, and practice in warfare ... we owe our success against all other people to our skilful selection of recruits; to our teaching, as I mentioned earlier, of the use of weapons; to our hardening the soldiers with daily exercise; to our acquainting them in field manoeuvres with everything that can happen on the march and in battles; and to our severe punishment of idleness ...

Young soldiers must very frequently be required to carry loads up to [twenty kilograms] and to march at the military pace (approximately thirty kilometres in five hours), for on arduous expeditions there will be pressing need for them to carry food supplies as well as arms ...

Every recruit must learn how to construct a camp. Nothing else is found to be so advantageous and so necessary in war. If a camp is built correctly ... it is like carrying around a walled city with you everywhere ...

▲ **Source 3.48** A description of the qualities of the Roman army, by an author named Vegetius, writing in the late fourth century CE. Almost nothing is known about Vegetius' background.



◀ **Source 3.49** A Roman soldiers' camp. This image is an artist's impression of a Roman legionary camp.

► **Source 3.50** Scenes of the Roman army. This section of Trajan's column – a monument built in the city of Rome by the emperor, Trajan – tells the story of his victory over an enemy called the Dacians. The scenes on this monument provide us with a valuable insight into the practices of the Roman army (c. 106 CE). The Roman soldiers are shown wearing their heavy armour and carrying large rectangular shields. The soldiers in the top left corner have formed a shield wall to protect from arrows and other missile attacks. The soldiers in the bottom centre of the image have constructed fortifications and are using a ranged missile weapon known as a ballista.





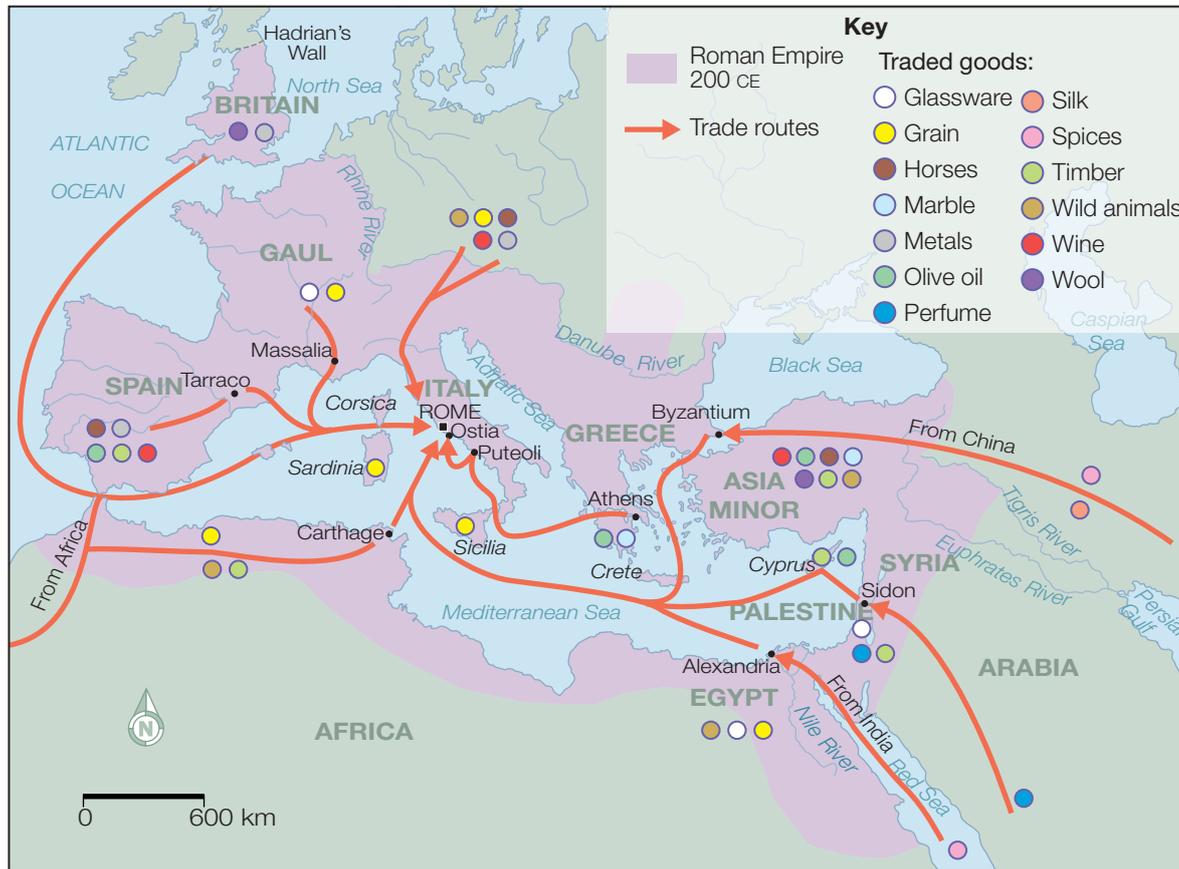
ACTIVITY 3.24 RESPONDING TO THE SOURCES

- 1 Use Sources 3.47, 3.48 and 3.49 to **identify** and **explain** at least three advantages the Roman army had over its opponents.
- 2 In Source 3.47, Josephus mentions his reasons for writing about the Roman army. **Identify** those reasons.
- 3 **Compare** Sources 3.47 and 3.48. In what ways does the information in Source 3.48 corroborate the information in Source 3.47?
- 4 **Identify** what new information Source 3.48 provides about the Roman army that was not stated in Source 3.47.
- 5 Between the authors of Sources 3.47 and 3.48, which one would you consider to be a more reliable source of information on the Roman army? **Explain** your response.
- 6 With a partner or in a small group, **analyse** the images on Trajan's column (Source 3.50). **Discuss** your answers to the following questions:
 - a What details do you notice in the scenes that might provide evidence of the strengths and advantages the Roman army had as a fighting force?
 - b Given that this was a monument made by ancient Romans to celebrate Rome's victory over the Dacians, how reliable do you think it is as a source of information about this battle?
 - c What does the creation of a sculpture like this tell us about the image of ancient Rome that the Romans wanted to project?
- 7 **Create** an enlistment poster to attract new recruits to the Roman army. You may wish to **conduct** some additional research online to help with this task. Your poster should include:
 - a At least one image
 - b A call to action (e.g. 'Enlist now!')
 - c At least three reasons why new recruits would benefit from joining the Roman army.

How did ancient Rome benefit from contact and trade with other societies?

The Roman army's successful invasion of territories – as shown in Trajan's column (Source 3.50) – gave ancient Rome access to valuable goods. For example, gold, silver and salt were taken from Dacia, and after Britain was conquered, it supplied lead, tin and woollen products to Rome.

The Roman Empire was also wealthy because of trade. Goods were traded within the empire and with neighbours. Within the empire, wine, olive oil and pottery were produced and swapped with neighbours in Africa and the Middle East, often for luxury items that the Roman Empire could not produce, such as silks, spices and dyes. People were also traded as slaves across the Mediterranean Sea. There is even evidence suggesting that the Roman Empire traded with China and India. Ships were used to transport goods, and roads were built to move goods across the land. Today, many Roman roads still exist. The roads were originally built to move tradeable goods and to allow the army to move around the empire.



▲ **Source 3.51** Trading valuable goods. This map shows the Roman Empire’s main trade routes, and the goods traded, around 200 CE.

Large continents lie all around the Mediterranean, and from them, to you, flow constant supplies of goods. Everything is shipped to you, from every land and from every sea – the products of each season, of each country, of each river and lake, the crafts of Greeks and other foreigners. As a result, if anyone wants to see all these items, he must either travel through the whole world to behold them, or live in this city. Everything that is grown or manufactured by each people is not only always present here, but is present in abundance. So many ships land here bringing cargo from all over, during every season, after every harvest. And thus the city seems like a common market for the world. You can see so many cargoes from India or, if you wish, from Arabia Felix ... clothing from Babylonia and ornaments from foreign lands beyond arrive here ... Egypt, Sicily, and the cultivated part of Libya are your farms. The arrival and departure of ships never cease ... Everything comes together here: trade and commerce, the transportation industry, agriculture, metallurgy, every skill which exists now and has existed, all that is produced and grows.

▲ **Source 3.52** A description of the city of Rome by the Greek writer Aelius Aristides, who lived in the second century CE

Now that all the races ... were conquered ... the Scythians and the Sarmatians sent ambassadors seeking friendship; the Seres [Chinese] too and the Indians ... brought elephants amongst their gifts as well as precious stones and pearls ...

▲ **Source 3.53** A description of the visit of representatives from India and China to Rome, which occurred sometime between 27 BCE and 14 CE. It was written by a Roman historian named Florus in around 100 CE, approximately one hundred years after the event.



ACTIVITY 3.25
RESPONDING TO THE SOURCES

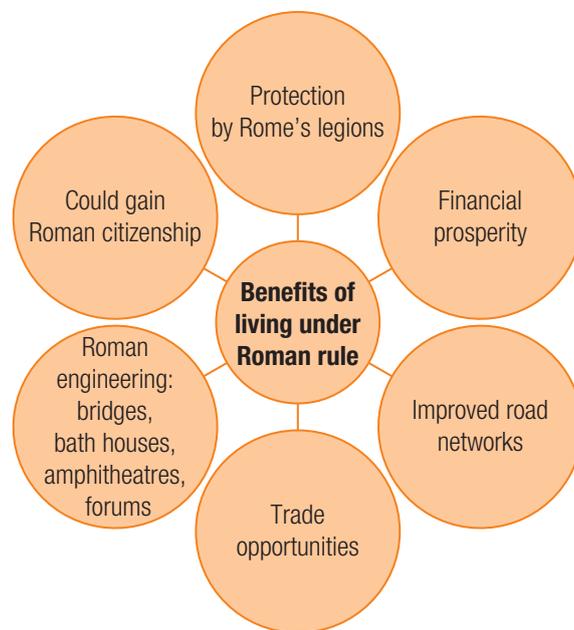
- 1 Use the map in Source 3.51 to **describe** the items Rome imported from:
 - a Egypt
 - b China
 - c Greece.



- 2 **Identify** three items imported by Rome described in Source 3.52.
- 3 **Describe** two items gifted to Rome by people from India and China, mentioned in Source 3.53.
- 4 Use the information about Florus provided in the caption of Source 3.53 to **identify** one reason why Florus's description of events might not be completely accurate.

What was life like for those living under Roman rule?

While there were occasional rebellions and revolts against Roman rule, for the most part Rome's subjects were probably content to be part of the Roman Empire – not that they had a choice! Being a subject of Rome meant access to Roman citizenship, the benefits of Roman technology and culture, and relative peace under the protection of Rome's legions. In fact, the term *pax Romana* ('the Roman peace') was coined by the ancient Romans to describe life in the Roman Empire.



▲ **Source 3.54** The possible benefits of living under Roman rule

Tyranny and war always existed in Gaul until you yielded to our authority ... (we) have imposed on you only this one demand: that you pay the costs of keeping peace here [through taxation].

In other respects we are equals. You yourselves often command our legions and govern this and other provinces. You are in no respect excluded or shut out. Although you live far from Rome, you enjoy as much as we do the benefits of praiseworthy emperors ...

... if the Romans are driven out – may the gods forbid! – what situation could exist except wars among all these races? ... you have gold and natural resources, which are the chief causes of war. Therefore, love and cherish peace and the city of Rome, which you and I, conqueror and conquered, hold with equal rights.

▲ **Source 3.55** Part of a speech by a Roman general who prevented a revolt by Rome's subjects in Gaul, present-day France, in 70 CE. The speech was actually written by the historian Tacitus, who wrote it based on what he thought the general might have said.

... the Romans, whose oppression you have in vain tried to escape by obedience and submission. Plunderers of the world they are, and now that there is no more territory left to occupy their hands which have already laid the world waste, they are scouring the seas. If the enemy is rich, they are greedy; if the enemy is poor, they are power-hungry ...

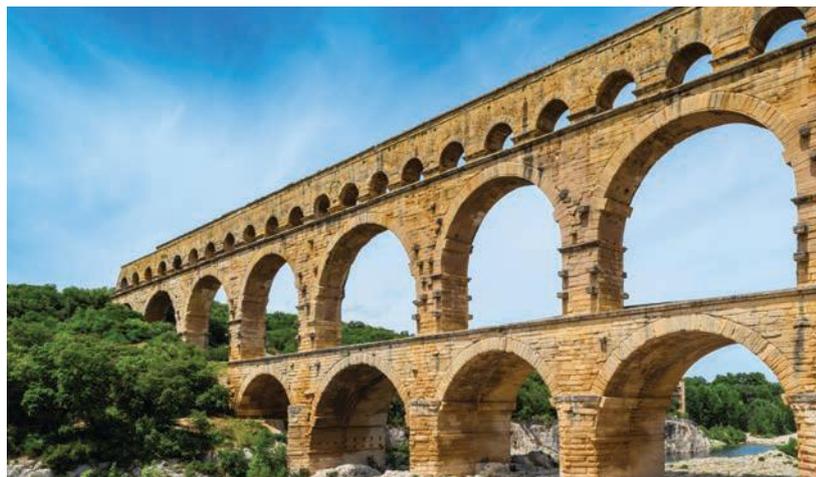
They rob, they slaughter, they plunder – and they call it 'empire.' There they make a waste-land, they call it 'peace.'

Nature has planned that each man love his children and family very dearly. Yet these are torn from us by conscription to be slaves elsewhere ... our possessions and our money are consumed in providing tribute; our farmland and our yearly produce are consumed in providing them with grain; our very bodies and hands are worn down while clearing forests and swamps for them, who beat and insult us.

▲ **Source 3.56** Part of a speech made at the end of the first century CE by a British war chief named Calgacus, encouraging Rome's subjects in Britain to revolt against Roman rule. The speech was actually written by the historian Tacitus, who wrote it based on what he thought the chief might have said.



▲ **Source 3.57** This Roman bath house is located in Bath, England. How might Roman infrastructure such as bath houses have benefited the people in Rome's empire?



▲ **Source 3.58** This aqueduct (named the Pont du Gard) still stands in France today. It was built during the first century CE to transport water to the Roman colony of Nemausus (now Nîmes). How might Roman engineering such as aqueducts have benefited the people in Rome's empire?



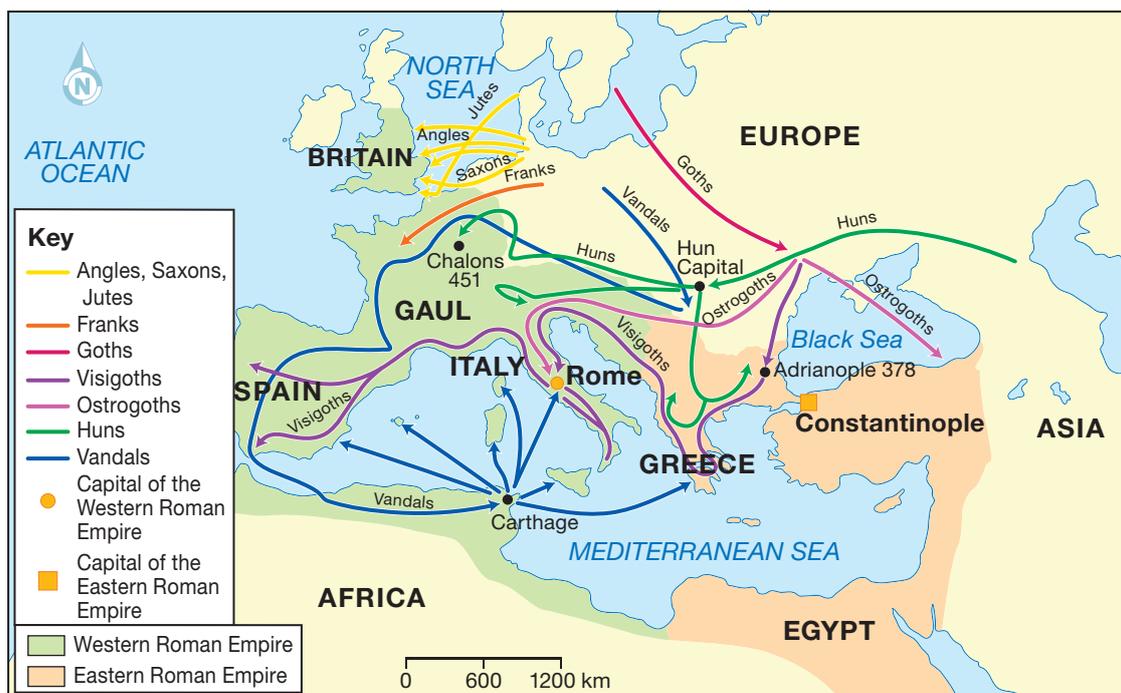
ACTIVITY 3.26 RESPONDING TO THE SOURCES

- 1 Using Sources 3.55 and 3.56, make a list of all of the positives and negatives of life under Roman rule that you can **identify**.
- 2 Overall, does it seem like there were more positives or negatives to life under Roman rule?
- 3 Who is the author of Sources 3.55 and 3.56? **Explain** some of the issues in relation to the reliability of these sources.
- 4 **Conduct** some research into the design and purpose of two Roman technologies that were common across its empire: the bath house (Source 3.57) and the aqueduct (Source 3.58). **Discuss** this question with a partner: 'Would the bath house or the aqueduct have brought greater benefit to Rome's subjects?'

How did the Roman Empire end?

The Roman Empire ended during the fifth century CE. Historians argue over when and how it ended and what caused the empire to weaken. One reason was undoubtedly the invasion of barbarian tribes from a number of the empire's frontiers. These invasions occurred from early in the third century CE.

Germanic tribes invaded from the east, Vandals came from Africa to the south, and Goths from the north, led by Alaric, invaded and sacked Rome in 410 CE (Source 3.59). The Roman Empire was unable to defeat these invading peoples. Ultimately, the western half of the empire was broken up into smaller kingdoms, ruled by the barbarian tribes who had managed to defeat the once invincible Roman army.



▲ **Source 3.59** The invasion of the Roman Empire. This map shows which groups invaded the Roman Empire, and the routes they took (c. 100–500 CE).



ACTIVITY 3.27 MAKING THINKING VISIBLE

Generate, sort, connect, elaborate

This is a routine for organising your understanding of a topic through concept mapping. You will **create** a concept map to help you make connections between your ideas.

- 1 With a partner, **consider** the following question: ‘Should the Roman Empire be remembered today as a period of peace and harmony, or fear and oppression?’
- 2 Review and **reflect on** what you have learned about the features of the Roman Empire in this chapter. You may **conduct** additional research if you wish.
- 3 **Generate** a list of ideas on the topic you have explored.
- 4 Structure your ideas on a blank page, placing central ideas in the middle of the page and more loosely related ideas towards the outside of the page.
- 5 Connect your ideas with lines to show which concepts have something in common or are connected in some way. Write a short explanation along the line to **explain** how the ideas are connected.
- 6 Elaborate on your concept map by adding new ideas and concepts that come to mind.



REFLECTING ON YOUR LEARNING 3.7



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: ‘How did ancient Rome benefit from contact and conflict with other societies?’
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: ‘What made ancient Rome a successful civilisation?’

Complete the Quiz and the ‘Developing your understanding’ questions in the Interactive Textbook.



3.8 What role did individuals, such as Julius Caesar, play in making ancient Rome successful?

FOCUS QUESTIONS

- How did Julius Caesar come to power?
- What were Julius Caesar’s main achievements?
- Hero or villain: how was Julius Caesar perceived by his contemporaries?



▲ **Source 3.60** Known as the ‘Tusculum portrait’, this is believed to be the only surviving portrait of Julius Caesar that was produced during his lifetime (c. 100–44 BCE).

To answer the inquiry question (What made ancient Rome a successful civilisation?), it can be useful to look at the impact particular individuals had on the success of the civilisation. Julius Caesar (100–44 BCE) is well known for being assassinated for trying to rule Rome as a dictator for life. However, his political and military career can be used as an example of the ways individual Romans helped to increase the success of their civilisation. Some questions to consider as you read the information and sources in this section are:

- How did individuals like Julius Caesar contribute to ancient Rome’s success?
- What methods did ancient Romans like Julius Caesar use to gain success?
- How should we view Julius Caesar today?

How did Julius Caesar come to power?

Julius Caesar was one of the most famous political and military leaders of ancient Rome. He was a very popular politician and a highly successful general who won many battles in the region of Gaul, now modern-day France. Caesar contributed to his own fame by writing biographical accounts of his own military campaigns and victories. He also became the lover of the most powerful woman in Egypt, the pharaoh Cleopatra VII.

Although Caesar was popular among his soldiers, members of the Roman Senate feared his growing popularity and power, believing that it would cause problems in Rome if a single individual was too powerful. This led to a civil war between Caesar and the Senate, which Caesar won.

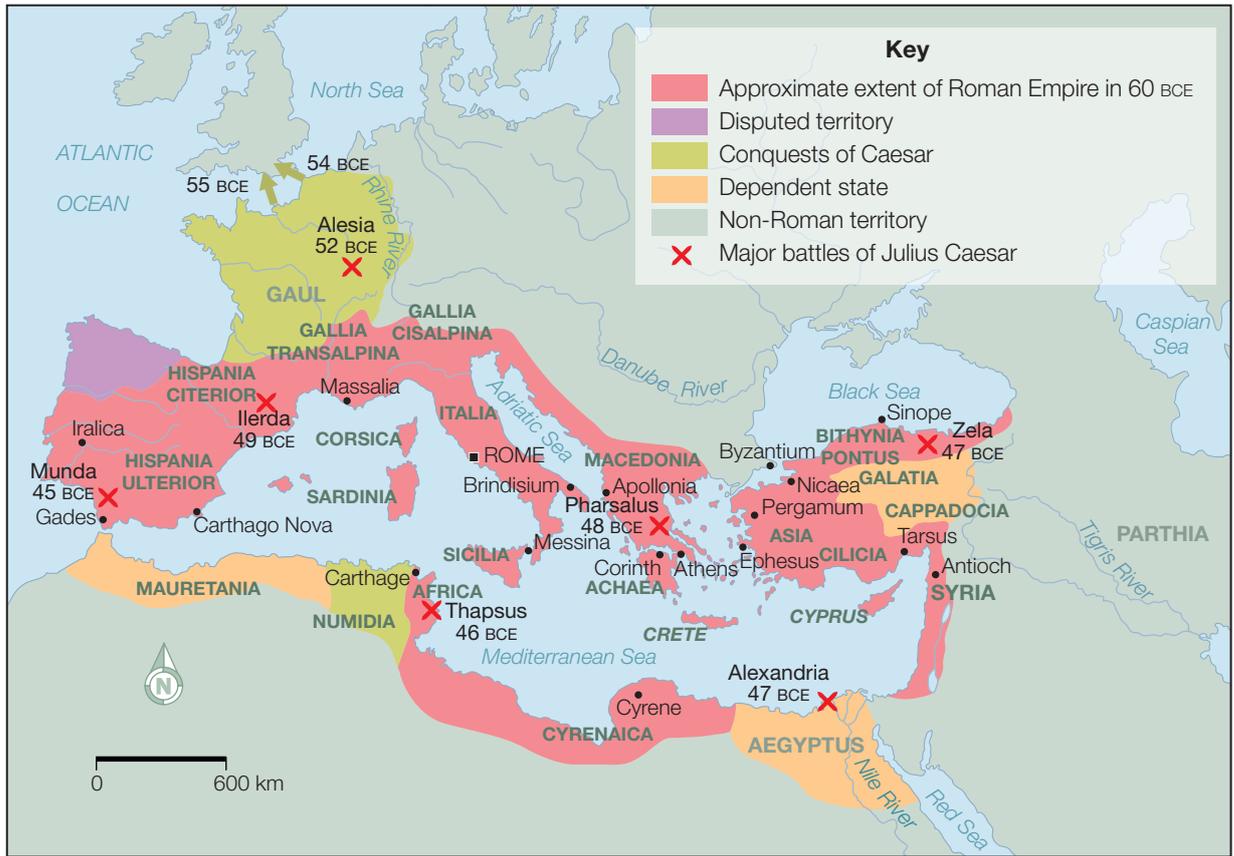
In power with no real opposition, Caesar was eventually declared to be the dictator of Rome for life. However, in 44 BCE, a group of high-ranking Roman nobles killed Caesar by stabbing him to death, declaring to the people of Rome that they had done so for the good of the republic.



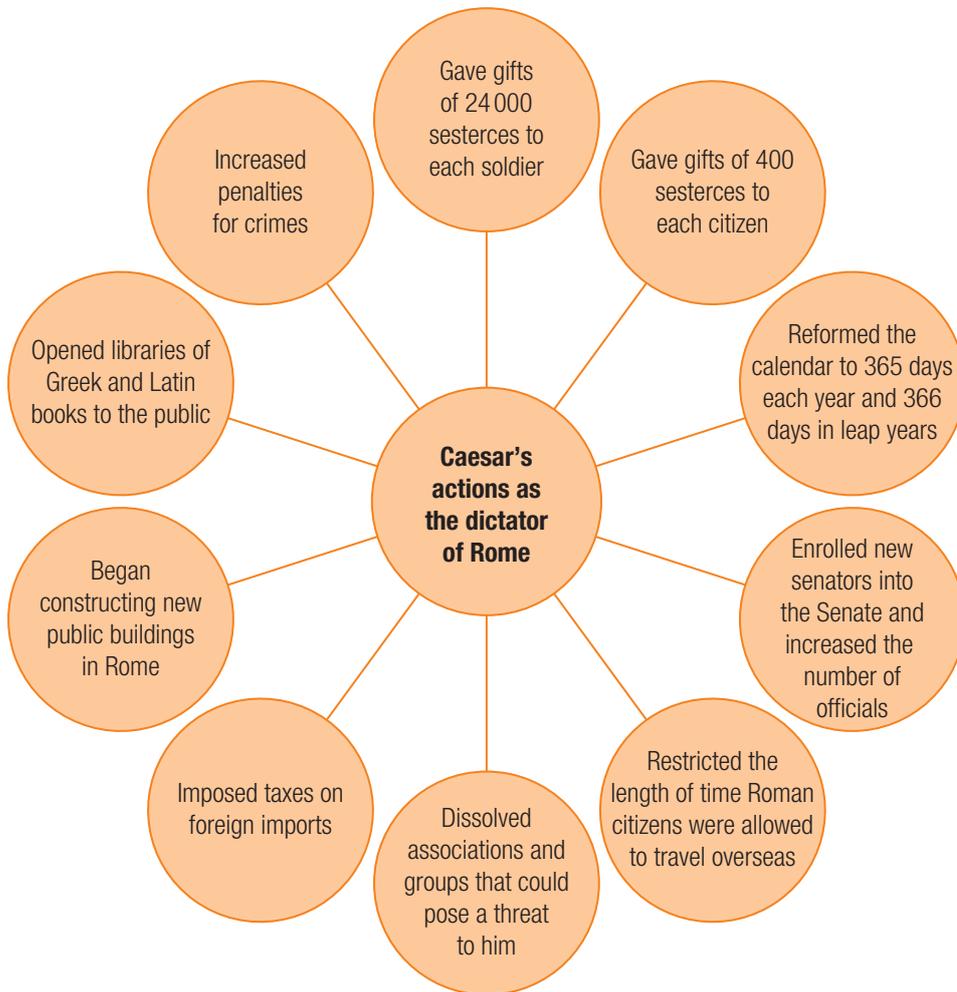
THINKING DEEPER

Would you describe the portrait of Julius Caesar in Source 3.60 as glamorised or realistic? Why might leaders like Julius Caesar have had sculptures of themselves made?

What were Julius Caesar's main achievements?



▲ **Source 3.61** This map of the Roman Empire shows the territories that Julius Caesar conquered before his death in 44 BCE.



▲ **Source 3.62** Julius Caesar's actions as the dictator of Rome



ACTIVITY 3.28 RESPONDING TO THE SOURCES

- 1 Using Source 3.61, **explain** how Julius Caesar contributed to the success of the Roman Empire.
- 2 **Consider** Caesar's actions shown in Source 3.62. With a partner, **discuss** what Caesar's motives might have been for each action – in other words, was this action made to benefit Rome, or to benefit himself?
- 3 Out of Caesar's actions in Sources 3.61 and 3.62, which one do you think had the most significant impact on the world? **Explain** your reasoning to a partner.



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Significance.

Your response should contain:

- Identification of which elements are significant in relation to the content of the question
- A clear statement about the degree of significance (i.e. very significant, somewhat significant)
- Evidence from the sources to support this judgement of significance.

Hero or villain: how was Julius Caesar perceived by his contemporaries?

Does Julius Caesar deserve to be seen as a great Roman hero, or as a villain who sought only to benefit himself? Read the following sources relating to Julius Caesar to help you develop your own opinion of this famous Roman.

Caesar was a most skilful swordsman and horseman and showed surprising powers of endurance. He always led his army, more often on foot than in the saddle, went bareheaded in sun and rain alike, and could travel for long distances at incredible speed ... if Caesar's troops gave ground, he would often rally them in person, catching individual fugitives by the throat and forcing them round to face the enemy again ... He always addressed his soldiers not with 'My men', but with 'Comrades' ... which put them into a better humour. He fixed the daily pay of the regular soldiers at double what it had been and occasionally gave each man a slave.

▲ **Source 3.63** Roman historian Suetonius, writing around 110 CE, describes Julius Caesar's relationship with his soldiers.

There was also a great crowd of women and children in the German camp ... They began to flee in all directions, and were hunted down by the cavalry which I sent out for the purpose ... A large number (of the Germans) were killed, and the rest plunged into the water and perished, overcome by the force of the current in their terror-stricken and exhausted state ...

▲ **Source 3.64** Julius Caesar, writing around 52 BCE, describes a massacre of German tribespeople given under his orders. The tribe was looking for land in Gaul to settle on but was forced by Caesar to move elsewhere. Caesar imprisoned the leaders of the tribe when they came to him to seek peace and used the opportunity to launch a surprise attack on the now leaderless tribe. The result was a massacre of perhaps tens of thousands of people.

(Caesar) decided to deter all others by making an example of the defenders of Uxellodunum (a settlement in Gaul Caesar was trying to conquer). All who had used weapons [against him] had their hands cut off and were then let go, so that everyone might see what punishment was given to evildoers.

▲ **Source 3.65** Hirtius, one of Caesar's friends and a general who participated in the Gallic War, wrote this account of one of the final battles of the war (c. 42 BCE).

Caesar, victorious over all his enemies, returned to Rome, and pardoned all who had fought against him, an act of generosity almost beyond belief. He entertained the city with the magnificent spectacle of a gladiatorial show, a pretend battle of cavalry, infantry, and even mounted elephants ... [His friend Mark Antony] had brought great **odium** upon Caesar by placing a royal crown on his head ... [Caesar removed the crown] but in such a way that he did not seem to be displeased.

odium intense hatred or dislike

▲ **Source 3.66** Velleius Paterculus, a historian writing c. 20–30 CE, described Caesar's actions after winning the civil war in Rome.

Our tyrant deserved his death ... here you have a man who was ambitious to be king of the Roman people and master of the whole world; and he achieved it! The man who maintains that such an ambition is morally right is a madman, for he justifies the destruction of law and liberty ...

▲ **Source 3.67** After the assassination of Caesar, the Roman politician and author Cicero wrote these words about Julius Caesar's death (c. 44 BCE).



ACTIVITY 3.29 RESPONDING TO THE SOURCES

- 1 Copy the table below into your notes. **Analyse** and **evaluate** Sources 3.63–3.67, then complete the table.

Source	Describe the source – what is it? Who is it by?	Analyse the source – what does it say or show? What impression might it give of Julius Caesar?	Evaluate the source – does this support the view of Julius Caesar as a hero or as a villain?
3.63			
3.64			
3.65			
3.66			
3.67			

- 2 Develop a paragraph in response to the question: 'Should Julius Caesar be considered a hero or a villain?'



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Contestability.

Your response should contain:

- A clear identification of the interpretations of the past
- An assessment of the degree of corroboration or contestability between interpretations
- Evidence from the sources that illustrates the historical interpretations
- A judgement about which of the differing interpretations is best supported by evidence.



ACTIVITY 3.30

Role play: the courtroom of history!

Conduct a role play of a mock trial of the conspirators who killed Julius Caesar.

- 1 Divide the class into two groups: the prosecution (who will argue that Julius Caesar was unfairly killed) and the defence (who will argue that the conspirators were right to fear Caesar).
- 2 Using the sources provided in this section, as well as additional research, each group will prepare arguments for their side of the trial. It may not be practical for all students to speak, so you may wish to select some representatives from each group to present their side's case.
- 3 Perform the trial as a class. You may wish to nominate someone to act as the judge/jury to decide which side has the stronger argument.



ACTIVITY 3.31 MAKING THINKING VISIBLE

Attitude scale

- 1 **Conduct** a class discussion: 'Should Julius Caesar be seen as a hero or villain of ancient Rome?'
- 2 In your class, **create** an 'attitude scale' from one end of the classroom to the other. At each end, place the absolute opposing viewpoints:
 - Hero
 - Villain.
- 3 Each student is to stand along the scale in the place that represents their attitude to whether Julius Caesar was a hero or a villain. Students are to **justify** why they are standing where they are.
- 4 After hearing the viewpoint of others in the class, students can move to a different position on the attitude scale. Again, students are to **justify** why they are standing where they are.



REFLECTING ON YOUR LEARNING 3.8



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'What role did individuals, such as Julius Caesar, play in making ancient Rome successful?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient Rome a successful civilisation?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.



Conclusion: end-of-chapter reflection

STEP ONE: REFLECT ON YOUR SUB-QUESTIONS

At the end of each section of this chapter, you were asked to **reflect on** how the information in the section related to the overall inquiry question:

‘What made ancient Rome a successful civilisation?’

- 1 For each of the sub-questions below, write a brief response (approximately 2–3 sentences) to **reflect on** the sub-inquiry question. Do you feel that you have a good understanding of each section of this chapter?
 - What are the different methods and sources of evidence used by historians and archaeologists to investigate ancient Rome?
 - How did ancient Rome’s location and physical features influence its success?
 - What was life like for different social classes in ancient Rome and how did they contribute to its success?
 - What was life like for women in ancient Rome and how did they contribute to its success?
 - What was life like for slaves in ancient Rome and how did they contribute to its success?
 - What role did religious beliefs, values and practices play in ancient Rome’s success?
 - How did ancient Rome benefit from contact and conflict with other societies?
 - What role did individuals, such as Julius Caesar, play in making ancient Rome successful?

(If you prefer a visual approach, you could do this as a mind map instead.)

STEP TWO: REFLECT ON THE KEY INQUIRY QUESTION

- 2 Now, based on what you have learned in this chapter, write a short paragraph in response to the question: ‘What made ancient Rome a successful civilisation?’

STEP THREE: FUTURE QUESTIONS

- 3 Based on your learning in this chapter, what questions do you have about ancient Rome?
- 4 **Reflect on** the questions you or your classmates raised at the beginning of the chapter, at the end of the ‘Setting the scene’ activities. Have you answered most of these questions? Which questions have not been answered?



End-of-chapter assessment

1 Project

Roman artefact assignment

A project assesses students' responses to a single task, stimulus, question, situation or scenario. A project gives students authentic opportunities to demonstrate their historical knowledge, understanding and skills.

Scenario

The use of replica artefacts is becoming more common in museums, particularly in Australia, as it saves the time and cost of transporting the originals and reduces the risk of damaging priceless items by shipping them overseas.

Your task is to **create** a display for a new ancient Roman exhibition at the Queensland Museum. Your display will consist of a replica of an ancient Roman artefact, as well as a two-paragraph object label to **describe** the artefact to museum visitors.

Step 1: Select *one* of the following areas to focus your research on:

- Warriors and warfare (armour, weapons, fighting techniques, historical battles and wars)
- Daily life (health, government, laws, housing, women's lives, children's lives, slavery)
- Religion (beliefs, rituals, death and burial, gods)
- Architecture (aqueducts, forum buildings, the Colosseum, the Pantheon, temples, tombs, theatres, monuments)
- Another topic with your teacher's approval.

Step 2: Conduct some background research on your topic and **identify** an artefact that is relevant and useful for gaining a better understanding of the topic.

Step 3: Copy the analysis table below into your notes. Then use it to **analyse** your artefact.

Analysis questions	Your response
What are the features of the artefact? <ul style="list-style-type: none">• What is the artefact? (text type)• When was it created (and by who, if known)? (origin)• What was happening at the time the artefact was made that is relevant to the inquiry? (context)• Why might this artefact have been created? (motive)• Who might the artefact have been created for? (audience)	
How is this artefact useful for learning about ancient Rome? <ul style="list-style-type: none">• What evidence does the artefact provide about your chosen topic? (explicit and implicit information)• Overall, how is this artefact useful for learning about the ancient Roman civilisation and/or reasons for its success? (usefulness)	

Step 4: Create a replica of your artefact. If you are unable to complete this step, just use a photo of the original artefact.

Step 5: Use your analysis table to help you write the **two-paragraph object label** that will accompany the artefact. It must include paragraphs on the following topics: What are the features of the artefact? How is this artefact useful for learning about ancient Rome? A quick online image search for 'museum object label' will provide you with plenty of examples and ideas for how to format and present your own object label.

Step 6: Include a reference list that shows at least *four* sources of information for your object label. **Length:** 400–600 words

2 Practice examination question

Based on the available evidence, does Julius Caesar deserve to be considered a great Roman leader?

Using Sources 3.61–3.67 in Section 3.8, write a paragraph to present an argument in response to this question. Make sure you include in-text references (i.e. Source X) where you refer to evidence.

Digital resources

Visit the Interactive Textbook or Online Teaching Suite to access:

- General Capability Project
- Interactive chapter quiz
- Interactive Scorcher quiz
- Videos, image galleries and other extra materials.





CHAPTER 4: Ancient China: what made ancient China a successful civilisation?

Setting the scene: the legacies of ancient China



ACTIVITY 4.1 MAKING THINKING VISIBLE

See, think, wonder

Complete this activity on three sticky notes. Refer to Source 4.1.

- 1 What do you **see** in this image?
- 2 What does this image make you **think** about China at the time this section of the wall was built?
- 3 What does this image make you **wonder**? What questions do you have?
- 4 Divide the class into three groups. Each group is to collate the class's answers to one of the cognitions.

Report back: what did the class see, think and wonder? What patterns emerged? Were there any ideas that stood out?

Extension: follow up on one or more of the wonders and report back with an answer to the class.

▲ **Source 4.1** This photograph shows the sun setting over the Great Wall of China as it looks today.

The legacies of ancient China

During the Han dynasty (202 BCE – 220 CE), it was discovered that bamboo tossed into a fire caused an explosion. This was due to overheated air rapidly expanding in hollow pockets in the stems. Burning and exploding bamboo soon became part of Chinese New Year activities, along with displays of red lanterns and scrolls.

Around 800 CE, a Chinese alchemist mixed potassium nitrate, sulphur and charcoal. Attempting to create a life-giving potion, instead he created the first gunpowder. It was poured into hollow bamboo or paper tubes to create the first fireworks.

Today the People's Republic of China is the world's most populous country with a population of over 1.4 billion people. It also has the largest economy and is the world's biggest manufacturer.

British sinologist (scholar of Chinese culture and history) Sir Joseph Needham has proposed that China's most significant global impact has stemmed from four ancient inventions. They are printing (block-printing emerged in China c. 200 CE), paper-making (c. 105 CE), gunpowder (c. 800 CE) and the compass (c. 200 BCE).



▲ Source 4.2 Chinese New Year celebrations



THINKING DEEPER

A legacy is something of value that has been left to future generations. A legacy is not always an object, wealth or invention. It can also be artistic, an idea ... What are some legacies of Australia's ancient First Nations peoples? What would you like your legacy to be?



ACTIVITY 4.2

Class activity

- 1 As a class (allocate to individuals or groups), **investigate** each invention (printing, paper-making, gunpowder and the compass) and the ways each has led to further developments and inventions.
- 2 In groups, **create** a timeline that shows a sequence in chronological order of the first invention from ancient China, and then examples of innovations and developments of that invention over time. Ensure that you **use** correct timeline conventions, including a title and scale.



ACTIVITY 4.3 MAKING THINKING VISIBLE

Brainstorm, diagram, describe, display, reflect

- 1 Brainstorm: Make a list of the ways in which each invention (printing, paper-making, gunpowder and the compass) is connected to who you are and the life you are living today.
- 2 Diagram: Use this list to draw a diagram or a picture explaining how ancient China is connected to who you are and the life you are living today.
- 3 Describe: Write a title and a short description to accompany your diagram (similar to a short caption that explains a museum exhibit – for example, ‘This diagram shows ...’).
- 4 Display: Display the diagrams and take a gallery walk as a class.
- 5 Reflect: What new ideas do you have about your classmates and your connection to ancient China?

Chinese pronunciation

Chinese words can be tricky for English speakers to pronounce, as the Chinese language uses unfamiliar sounds and tones. Also, Chinese is written in characters rather than with letters, so a system called ‘pinyin’ was designed to translate characters into the Roman alphabet. English speakers can often sound out words written in pinyin as most of the vowels represent similar sounds to those in English. However, some of the consonants are very different. Here is a quick guide to help you with some of the differences.

c ‘ts’ as in lots

x ‘sh’ as in leisure

j ‘j’ as in jet

zh ‘j’ as in job

q ‘ch’ as in chop

z ‘ds’ as in woods

r ‘z’ as in haze

So, in pinyin, Zhou dynasty is pronounced ‘joe’ dynasty, while Xia is ‘Shaa’ and Qin is ‘Chin’.

Chapter overview

Introduction

Powerful ancient societies did not just exist in Europe and the Mediterranean; the Asia–Pacific world was home to the ancient civilisation of China during the same period. The cultural beliefs and practices of this unique civilisation have helped shape a region of the world that is close to and important for Australia today. The ancient past of our neighbours has impacted us in ways we often do not realise.

Key inquiry question

'What made ancient China a successful civilisation?'

Every key inquiry question should have:

- An open interrogative
- A historical concept
- Specific content
- Scope and scale.

So, let's dissect this key inquiry question: 'What made ancient China a successful civilisation?'

To answer a key inquiry question in a historical investigation, it is helpful to break the question into sub-inquiry questions.

Sub-inquiry questions

After completing this chapter, you should be able to answer these sub-inquiry questions:

- What are the different methods and sources of evidence used by historians and archaeologists to investigate ancient China?
- How did ancient China's physical environment and physical features influence its success?
- How was ancient China organised and how did this contribute to its success?
- What key beliefs, values and practices emerged in ancient China and how did they influence its success?
- How did ancient China benefit from contact and conflict with other societies in this period?
- What role did individuals, such as Qin Shi Huangdi and Fu Hao, play in making ancient China successful?

Historical skills

After completing this chapter, you should be able to:

- Develop historical questions about the past to inform historical inquiry
- Locate and identify primary and secondary sources to use in historical inquiry
- Identify the origin, content, context and purpose of primary and secondary sources
- Identify and describe the accuracy and usefulness of primary and secondary sources as evidence
- Describe causes and effects and explain continuities and changes
- Identify perspectives, attitudes and values of the past in sources
- Explain historical interpretations about significant events, individuals and groups
- Create descriptions, explanations and historical arguments, using historical knowledge, concepts and terms that reference evidence from sources.

Timeline of key events

What came before this topic?

In around 8000 BCE, China's hunter-gatherer societies began to plant and grow grain. Before agriculture developed fully, the Neolithic societies used stone, horn and bone tools. They wore fabric, clothing and animal skins, and developed increasingly complex pottery designs.



▲ Jade axe, c. 4500–2300 BCE

dynasty a succession of rulers from the same family; in ancient Egypt and China, some dynasties included rulers that were not related to the ruling family.

smelting a process of heating rocks and sediment to extract metals

2070–1600 BCE

The Xia **dynasty** rules part of north-eastern China. Societies during the Bronze Age produced harder and more durable metals like bronze by **smelting** copper and tin alloys. These new metals enabled the development of new technologies and improved weaponry.

c. 1200 BCE

Death of Lady Fu Hao, an important **consort** and Shang general

771–475 BCE

Spring and Autumn period after the Zhou lose control over the western regions

475–221 BCE

The *Warring States period* where Zhou rule begins to crumble and many states break away to govern themselves; the first parts of the Great Wall are built

2123–2025 BCE

Lifespan of Yu the Great



▲ Bronze *zun* (wine container used in religious rituals) shaped like an elephant, from the Shang dynasty, c. 1600–1046 BCE

1600–1046 BCE

The Shang dynasty rules north-central China after the Xia tyrant, Jie, is overthrown in a rebellion by the Shang leader Tang. The stability of the Shang led to numerous advances in science and culture, including the development of writing. Sophisticated bronze casting techniques were developed, and people moved away from using stone tools. Improvements in agriculture meant that less labour was required to produce food. Workers were freed up to build cities, tombs and canals.

1046–256 BCE

The Zhou dynasty defeats the Shang and rules north-central China. During this time, culture in ancient China continued to develop. The **well-field system** was used to farm land.

551–479 BCE

Lifespan of Confucius, an important Chinese philosopher



▲ Bronze ring-handle with mask, c. 1046–771 BCE

consort a wife or companion of a ruler

well-field system a system under which areas of land were divided into nine sections. Eight of these sections were farmed individually by different peasant families, while one was farmed collectively for the lord who owned the land

Responding to the timeline

- 1 **Identify** what the information in the timeline indicates about the way that China was ruled.
- 2 **Discuss** whether there is evidence from the timeline that women could hold important roles in ancient China.
- 3 Refer to the timeline and Source 4.3. How did the territory controlled by China change with each new dynasty? **Determine** how this change was brought about.

What came after this topic?

Imperial China continued through several more dynasties, including the Mongolian Yuan dynasty, the powerful Ming dynasty and the Manchu Qing dynasty. The dynasties lasted until the removal of the child emperor Pu Yi in 1912 CE.



▲ Detail of a decorated vase from the Ming dynasty, circa 1640 CE

► Terracotta warrior from Emperor Qin Shi Huangdi's tomb



221 BCE

Qin Shi Huangdi, who was King of the Qin, conquers the last of the warring states and becomes the first emperor of a unified China

202 BCE – 220 CE

The Han dynasty rules China

c. 145 CE

Sima Qian, author of *Shiji* (*Historical Records*) is born

581–618 CE

The Sui dynasty rules China for a short but significant period; the north and south of China are reunified

627 CE

Wu Zeitan, China's only female emperor, is born

221–206 BCE

The Qin dynasty rules China

50–121 CE

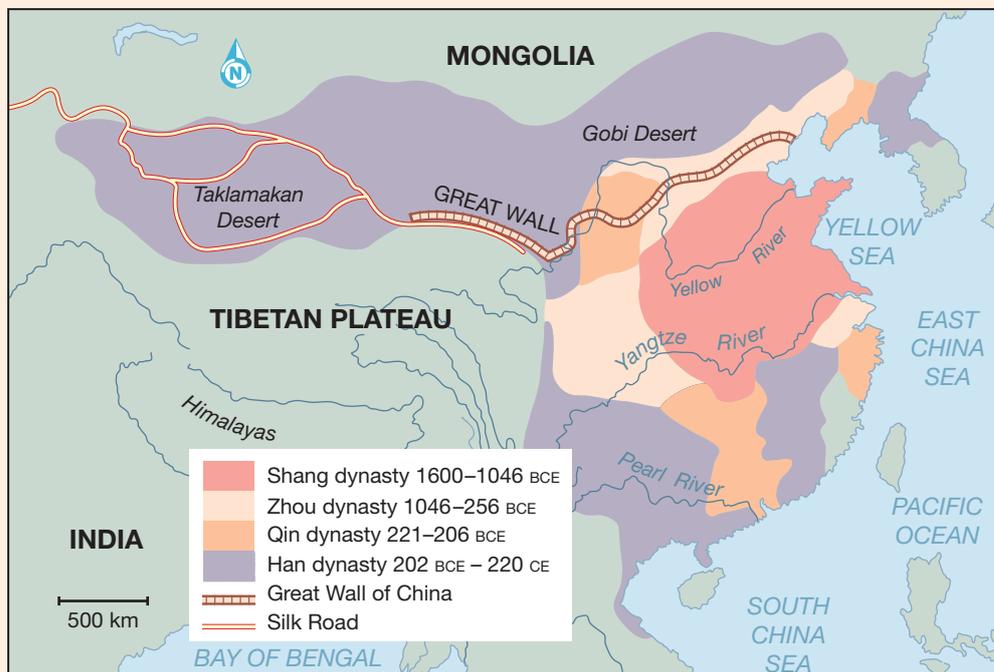
Lifespan of Cai Lun, reputed inventor of paper

220–589 CE

The *six-dynasties period* where there was some breakup of the Chinese state and six short-lived dynasties ruled from the capital of Jiankang

618–907 CE

The Tang dynasty rules China; many historians regard this period as a golden age of civilisation in China



◀ **Source 4.3** The territory controlled by the ancient Chinese dynasties (each new dynasty incorporates the earlier one)



ACTIVITY 4.4 MAKING THINKING VISIBLE

Know, new, explore

- 1 **Identify** some ideas from the timeline that you already knew about ancient China.
- 2 **Identify** some ideas from the timeline that have given you new ideas about ancient China.
- 3 Which idea from the timeline would be interesting to explore and learn more about? **Justify** your choice.



▲ **Source 4.4** A jade axe. Jade is a mineral (c. 4500–2300 BCE).

▼ **Source 4.5** A bronze *zun*. A *zun* is a wine container that was used in religious rituals (c. 1600–1046 BCE).



▼ **Source 4.6** A bronze ring-handle (c. 1046–771 BCE)



▲ **Source 4.7** A decorated pot (c. 4700–3600 BCE)



◀ **Source 4.8** A food vessel. This artefact was made from black pottery (c. 4700–3600 BCE).

▶ **Source 4.9** A double cup. This object includes a hollow tube between the two cups that allows liquid to flow from one cup to another. What may this cup have been used for? (c. 2500 BCE)





▲ **Source 4.10** A three-legged bronze vessel called a *ding*. A *ding* was used to cook food or to burn incense (c. 1780–1480 BCE).



▲ **Source 4.11** A bronze *jue*. A *jue* is a type of ancient Chinese vessel used to serve warm wine (c. 2000–1600 BCE).



▲ **Source 4.12** An owl-shaped *zun* (c. 1600–1050 BCE)



ACTIVITY 4.5 RESPONDING TO THE SOURCES

Copy the following table into your notes. Using information from the timeline and Sources 4.4–4.12, complete the table.

	Neolithic period	Xia dynasty	Shang dynasty	Zhou dynasty
Time period				
Agriculture				
Materials used				
Technological developments				
Other developments				
One artefact from the dynasty. Justify how you know the artefact is from the dynasty (e.g. the date it was made and one other reason).				



ACTIVITY 4.6

Question for consideration

Describe one way in which artefacts from ancient China have demonstrated change and continuity over time. (Your description must give an account of the artefacts' characteristics and features.)



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Change and continuity.

Your response should contain:

- A clear statement about what stayed the same and/or what changed
- Corroborating evidence or examples that show how things stayed the same (i.e. continuity)
- Differing evidence or examples that demonstrate how things changed
- A reason that accounts for this continuity and/or change.



4.1 What are the different methods and sources of evidence used by historians and archaeologists to investigate ancient China?

FOCUS QUESTIONS

- How do we know about ancient China?
- Why is conserving the remains, material culture and heritage of ancient China important?

Early Chinese history: fact or fiction?

Around 4000 years ago, during the Neolithic period, the people living in China decided they no longer wanted to roam the land. The idea of having a stable place to call home was appealing and the banks of the mighty Yellow River seemed like an ideal location to start a civilisation. However, there was a significant problem for communities living along the river. Frequent flooding damaged crops and property, and sometimes the water swept away people. But living near the river was vital to the future of the **fledgling** civilisation. The Yellow River was necessary for trade and agriculture, so a solution needed to be found to manage the river's unpredictability and its destructive power.

A man named Gun was chosen to fix the problem. Gun's solution was to use soil to build **embankments** and **levees** that would protect the farms from rising water. However, the Yellow River's floodwaters proved to be too strong. After nine years of attempting to hold back the water, a devastating flood broke through the embankments and

wiped out crops, destroyed buildings and killed many people. Gun was dismissed from his post (possibly executed) and his son Yu was appointed to find a permanent solution.

Yu worked tirelessly for 13 years to protect the people and their farms from the devastation of another flood. He redirected the waters out towards the sea by using a combination of levees and **canals**.

fledgling something that is new or young and without much experience

embankments ridges of earth or stone walls used to hold back water

levees earth embankments built along riverbanks to prevent flooding

canal human-made waterway



▲ **Source 4.13** These twenty-first-century Chinese drummers are celebrating the birth of King Yu.

The ultimate success of his plans was so appreciated by the people that the then ruler, King Shun, passed the throne on to Yu, rather than to his own son. This is how Yu became the first ruler of the Xia dynasty.

Yu the Great, as he became known after his death, has been revered throughout Chinese history as an ideal ruler. There has long been doubt, however, about whether Yu was a historical figure or a mythological king designed to promote the values of a good ruler. There is no written record that exists from the time of Yu or any artefacts that can be directly linked to him.



ACTIVITY 4.7

Reflection

Compare the ways Gun and Yu tried to prevent the Yellow River from flooding surrounding areas.

Why can we not always get a definitive answer about historical events or individuals?



THINKING DEEPER

Sometimes myths are created to teach important lessons. If King Yu is a myth, what important lessons could people learn from his story?



ACTIVITY 4.8 RESPONDING TO THE SOURCES

Explain how Sources 4.13 and 4.14 show that King Yu has been well regarded throughout Chinese history.



▲ **Source 4.14** King Yu. This painting on silk is from the Song dynasty (960–1279 CE).

DID THE FLOOD OF GUN AND YU REALLY OCCUR?

Like endless boiling water, the flood is pouring forth destruction. Boundless and overwhelming it overtops hills and mountains. Rising and ever rising, it threatens the very heavens. How the people must be groaning and suffering!

▲ **Source 4.15** Emperor Yao describing the flood – quoted in the *Book of History (Shujing)*. Emperor Yao was the father of King Shun. He abdicated (gave up) his throne so that Shun could rule but he was still alive when Shun was king. Shun ruled China at the time of the flood. The *Book of History (Shujing)* was, according to tradition, compiled by Confucius (551–479 BCE). Many copies were destroyed during the rule of Emperor Shi Huangdi (Qin dynasty). The text was reconstructed by Fu Sheng, a Chinese writer and scholar, who hid a copy of the original text in the walls of his house during the book burnings conducted by Shi Huangdi. After the Qin dynasty ended (206 BCE), Fu Sheng retrieved some of the scrolls to assist him to reconstruct the work.

Legend has it that a great flood engulfed China 4000 years ago. Lasting for more than 20 years, it was finally tamed by the heroic efforts of [King] Yu, whose Xia dynasty marked the birth of Chinese civilisation ...

But now we have the first compelling evidence that the flood did actually happen at the time and place chronicled in the legend.

In the Jishi Gorge, along the Yellow River [an archaeological team has] discovered rocks and sedimentary formations that could only have existed as a result of a cataclysmic flood ...

‘The flood they documented is in the right place and time to explain the origin of Yu’s flood,’ says David Montgomery of the University of Washington in Seattle.

▲ **Source 4.16** An interview with Professor David Montgomery in *New Scientist* magazine, 4 August 2016. David Montgomery is a professor of Earth and space science at the University of Washington. He holds a PhD in Geomorphology (a study of the features of Earth’s surface).



ACTIVITY 4.9 RESPONDING TO THE SOURCES

- Identify** the different sources of evidence that historians can use to investigate this period in ancient Chinese history.
- Copy the table into your notes. **Analyse** Sources 4.15 and 4.16. Using the questions in the table, **decide** if the flood of Gun and Yu really occurred.

Questions	Source 4.15	Source 4.16
Who published or compiled the source? (origin)		
When was the source written? (origin)		
How long after the period of King Yu and the flood was the source written? (context)		
Is the source a primary or secondary source?		
What evidence does the source provide about the existence of the flood? (content)		

- Did the flood of Gun and Yu really occur? **Synthesise** evidence from Sources 4.15 and 4.16 to answer this question.
 - First develop a thesis – a thesis is the answer to your question in a statement with a reason why. For example: ‘The flood of Gun and Yu really occurred because ...’
 - Combine information from each source to support your thesis.



ACTIVITY 4.10 MAKING THINKING VISIBLE

What makes you say that?

Ask students if they believe that there was a real historical figure, King Yu.

Label four areas of the classroom:

- Yes – definitely
 - Yes – probably
 - No – definitely
 - No – probably.
- 1 Stand in the area of the classroom that matches your opinion on whether King Yu was a real historical figure.
 - 2 A representative from each area is to **justify** why they have taken this stance based on the evidence.
 - 3 After hearing the viewpoints of the different areas, move to a different area if you have been convinced otherwise.

The terracotta army

In 1974, three farmers in Shaanxi province were digging a well when they came across some pieces of a clay figure. Excavations revealed thousands of life-size clay statues of warriors and horses, which had been buried in the vast tomb of the first emperor of China, Qin Shi Huangdi. After Shi Huangdi unified China in the third century BCE, his reign was short. But in that time, he oversaw the building of sections of the Great Wall, created a standard for coins, weights and measures, and organised a royal palace and a royal mausoleum for himself. Since the discovery of Qin Shi Huangdi's tomb, four pits have been partially excavated. The single warrior uncovered by the farmers turned out to be one of at least 8000 individual soldiers. Every terracotta warrior is unique with different facial features, hairstyles and positions. There are officers, archers, foot soldiers, charioteers and the horses to go with them. These warriors, which would have taken decades to make, were created to be included in Qin Shi Huangdi's mausoleum to accompany and protect him in the afterlife. The warriors all face outward from his tomb.

A dilemma has arisen for archaeologists and conservators attempting to excavate the tomb. While everybody is keen to uncover as much as possible, there have been serious difficulties in looking after the items that have already been found. Almost all the terracotta warriors were broken when they were discovered. Most of the warriors that you can now see on display are the smooth sandy colour of terracotta, but when they were first entombed, each one was brilliantly painted. Exposure to the air causes much of the paint to immediately shrink and flake from the terracotta. Scientists have worked to develop methods of uncovering new warriors and preserving the paint before it can disintegrate, but so far this has only been partially successful.



ACTIVITY 4.11 MAKING THINKING VISIBLE

Compass points

The terracotta army is a valuable source of information about ancient China, but unearthing it is harming the artefacts. In groups, **decide** what should happen next: continue to excavate the tomb or leave the remaining artefacts in the ground?

Use the 'compass points' below to help you make a decision:

1 E = excited

What excites you about further excavations? What are the positives?

2 W = worrisome

What do you find worrisome about this proposition? What are the negatives?

3 N = need to know

What else do you need to know to decide?

4 S = stance or suggestion for moving forward

What is your current opinion on the idea? Give reasons for your decision.

Because of their exceptional technical and artistic qualities, the terracotta warriors and horses, and the funerary carts in bronze are major works in the history of Chinese sculpture ... the information to be gleaned [gained] from the statues concerning the craft and techniques of potters and bronze workers is immeasurable.

▲ **Source 4.17** UNESCO World Heritage List. UNESCO is an agency of the United Nations that was established to share and protect information, ideas and culture. The World Heritage List is a list of places that are of outstanding universal value to humanity. They are placed on the World Heritage List to be protected for future generations to appreciate and enjoy.

Recent digs have revealed that in addition to the clay soldiers, Qin Shi Huangdi's underground realm, presumably a facsimile [copy] of the court that surrounded him during his lifetime, is also populated by delightfully realistic waterfowl, crafted from bronze and serenaded by terra cotta musicians. The emperor's clay retinue includes terra cotta officials and even troupes of acrobats, slightly smaller than the soldiers but created with the same methods. 'We find the underground pits are an imitation of the real organization in the Qin dynasty,' says Duan Qingbo, head of the excavation team at the Shaanxi Provincial Research Institute for Archaeology. 'People thought when the emperor died, he took just a lot of pottery army soldiers with him. Now they realize he took a whole political system with him.'

▲ **Source 4.18** 'Terra Cotta Soldiers on the March', *The Smithsonian Magazine*, July 2009



▲ **Source 4.19** The terracotta army. This photo shows some of the 8000 terracotta warriors buried in Qin Shi Huangdi's tomb.



▲ **Source 4.20** One of the terracotta warriors buried in Qin Shi Huangdi's tomb – traces of paint are still visible.



▲ **Source 4.21** Every terracotta warrior was different. Traces of paint are still visible on this warrior's face.



▲ **Source 4.22** These terracotta warriors were found in pit 1.



◀ **Source 4.23** Exploring the terracotta warriors.



ACTIVITY 4.12 RESPONDING TO THE SOURCES

- 1 Source 4.17 gives reasons why the discovery of the artefacts in Qin Shi Huangdi's tomb is so important. **Identify** two of these reasons.
- 2 Using Source 4.18, **identify** the roles that the following groups and individuals were to play in the emperor's afterlife:
 - a The army
 - b Acrobats and musicians.
- 3 Using Sources 4.19–4.23, list the information a historian could gain about ancient China from studying these artefacts.
- 4 Draw or make your own terracotta warrior using play-dough or clay. **Investigate** the armour, weaponry and appearance of the artefacts that have been uncovered. Remember, every warrior is different. What is unique about your warrior? What is similar?



REFLECTING ON YOUR LEARNING 4.1



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'What are the different methods and sources of evidence used by historians and archaeologists to investigate ancient China?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient China a successful civilisation?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.



4.2 How did ancient China's physical environment and physical features influence its success?

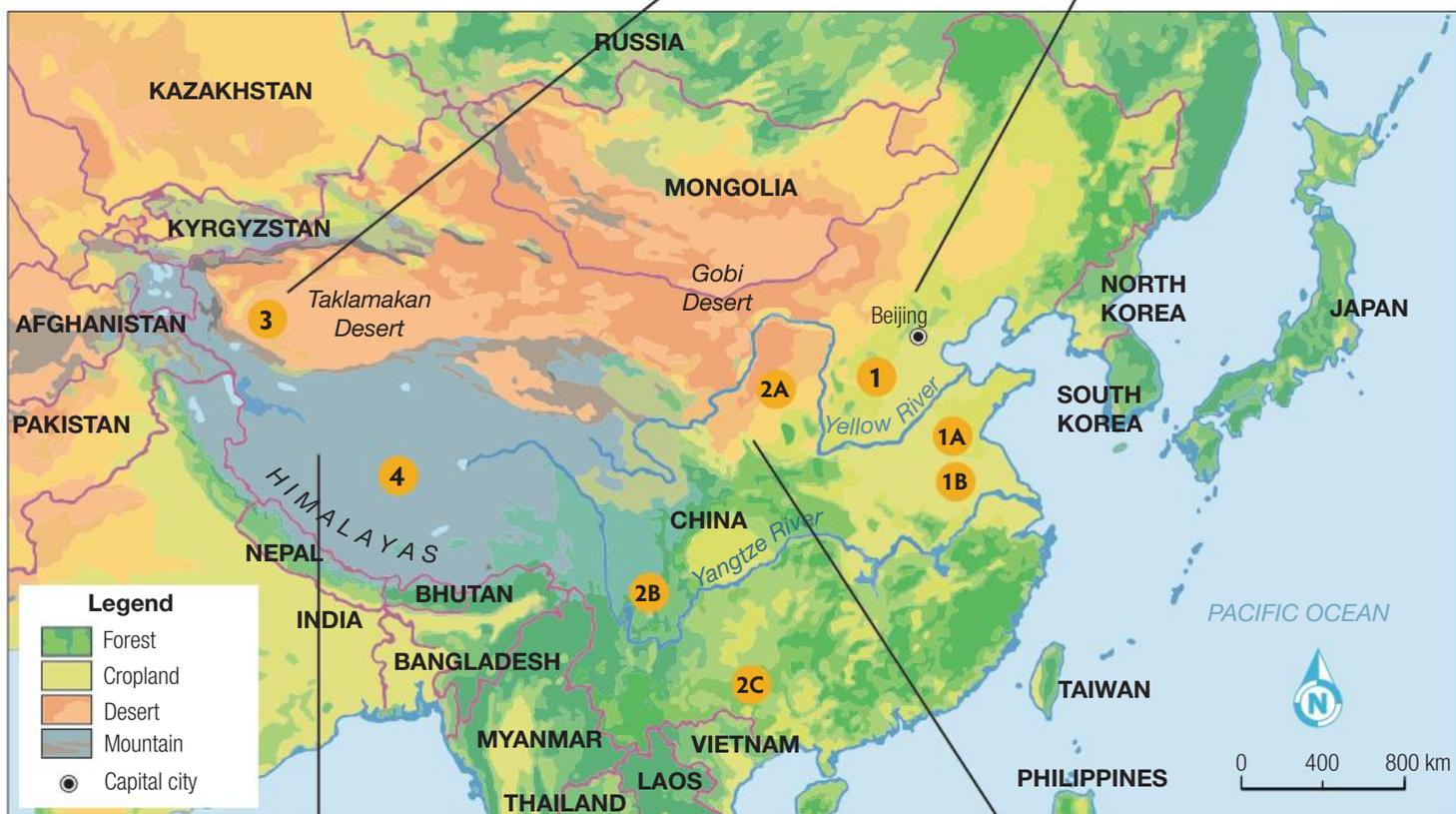
FOCUS QUESTIONS

- Where did the earliest societies develop in ancient China?
- How did the climate and geographic features influence the development of ancient China?

Yangtze River Western misnaming of the whole river, which is Chang Jiang (long river), while the eastern section (from Nanjing onwards) is locally known as the 'Yangtze' or 'Yangzi' River

To the north and north-east of the Tibetan Plateau lies the Tarim Basin, which contains the Taklamakan Desert (3). The Tang dynasty of the seventh century was the first to establish control of this region. It was through this region that the main paths of the important trade route, the Silk Road, were travelled.

The core of ancient Chinese culture and civilisation grew in the flat, fertile plains of the country's north-east. The earliest civilisations in China developed along the banks of two key rivers: the Yellow River (1A) and the **Yangtze River** (1B). Both these rivers emerge from the heights of the Tibetan Plateau.



The Tibetan Plateau (4) covers a wide area in west China. It consists primarily of a vast plateau that rises around 4.8 kilometres above sea level and is bound by the Himalayan Mountains to the south-west. China first claimed ownership of this land during the Yuan dynasty in the thirteenth century CE.

The central and eastern regions of China include the Loess Plateau (2A) and the Chinese Plain (1) to the north, and the Sichuan Basin (2B) and southern hills to the south (2C).

▲ **Source 4.24** This map shows the geographical features and borders of China.

There are different climates experienced in China.

▼ **Table 4.1** Climates in China

Location	Summer	Winter
South-east	Hot and humid	Mild and wet
North-east	Hot and dry	Very cold
South-west		
North-west		
Central	Long, hot and humid	Short and cold

► **Source 4.25** The Yangtze River in modern-day Yunnan Province



ACTIVITY 4.13 RESPONDING TO THE SOURCES

Use Sources 4.3 and 4.24 to answer the question: 'Where did the earliest societies develop in ancient China and what geographic features influenced this development?'

To answer an inquiry question in a historical investigation, it is helpful to break the question into sub-questions:

- 1 Where did the earliest civilisations of ancient China develop? What were the geographic features of these first locations that caused settlement to develop here?
- 2 How did these geographic features benefit the ancient Chinese civilisations that settled there (what were the effects of these locations)?
- 3 What geographic features may have limited or stopped the expansion of ancient Chinese civilisations? **Identify** the challenges ancient Chinese civilisations faced because of these geographic features.



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Cause and effect.

Your response should contain:

- A clear identification of the causes and/or effects relating to the question
- A clear explanation of how the causes are connected to the effects (i.e. how one event or action led to an outcome or consequence)
- Evidence or examples to support this explanation of the relationship between cause and effect.



REFLECTING ON YOUR LEARNING 4.2



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'How did ancient China's physical environment and physical features influence its success?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient China a successful civilisation?'

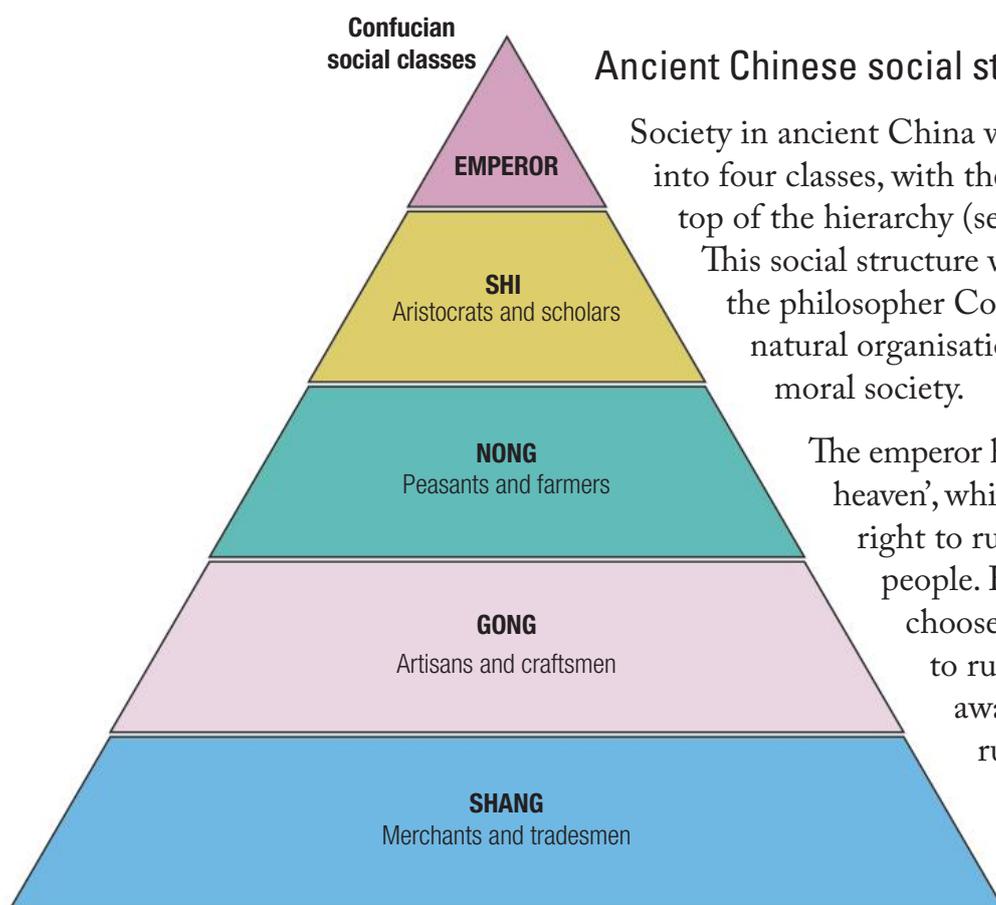
Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.



4.3 How was ancient China organised and how did this contribute to its success?

FOCUS QUESTIONS

- What was the social structure of ancient Chinese society?
- What was the role of women in ancient China?



Ancient Chinese social structure

Society in ancient China was separated into four classes, with the emperor at the top of the hierarchy (see Source 4.26). This social structure was described by the philosopher Confucius as the natural organisation of a just and moral society.

The emperor held the ‘mandate of heaven’, which was the divine right to rule the Chinese people. Heaven (Tiān) chooses who has a right to rule and can take away this right if a ruler behaves in an unacceptable way. The mandate means that if any dynasty or ruler is

▲ **Source 4.26** The social structure of ancient China



THINKING DEEPER

Does anything surprise you about the order of the social classes in ancient China? Why or why not?

overthrown by another, the very fact of it being overthrown is proof that the previous ruler had lost the mandate.

Just below the emperor were the Shi. The Shi were the aristocrats and members of the imperial court; the Shi included scholars (who were called ‘the literati’) and bureaucrats.

Next in order of status were the Nong, who were peasants and farmers. They were the largest group in society. Although they were not wealthy, the Nong were well respected in ancient Chinese society as the producers of food. Under the Nong came the Gong, who were artisans and craftsmen. Beneath them were the Shang, who were merchants and tradesmen. The merchants were lowest in ancient Chinese social ranks because they produced nothing but acted as go-between, so their contribution to society was considered to be less significant than either the Nong or the Gong. In practice, many Shang people became much wealthier than their higher-class counterparts.



ACTIVITY 4.14 RESPONDING TO THE SOURCE

Examine Source 4.26.

- 1 What implicit information does Source 4.26 provide about what was valued in ancient China? (Explicit information is what a source directly shows or states; implicit information is what can be reasonably known based on the explicit information.) To answer a question like this, start with the explicit information and then show what can be inferred from this information:
 - a At the highest level in Chinese society was the emperor. This implies that the ancient Chinese highly valued ...
 - b The second-highest group in Chinese society was ... This implies that ...
 - c The third most-important group in Chinese society was ... This implies that ...
 - d The second least-important group in Chinese society was ... This implies that ...
 - e The least important group in Chinese society was ... This implies that the Chinese did not value ...
- 2 How do these values and beliefs differ from or align with Australian society today?



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Empathy.

Your response should contain:

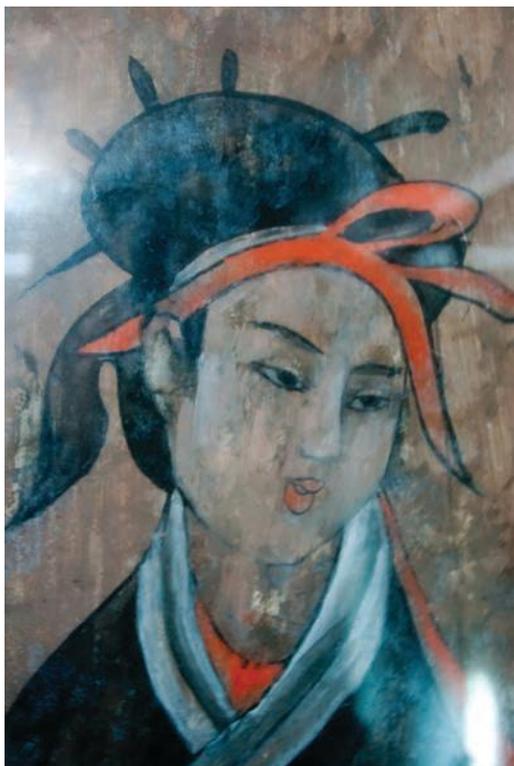
- Language that shows that you understand the values, beliefs, experiences and emotions of people from the past
- Consideration of how these values, beliefs, experiences and emotions align with or differ from your own
- Explanation of how the origin and context of the source may account for similarities or differences with your own experience.

Women in ancient China

Ancient China was a society that valued males over females. The role of women was to have children, in particular sons, and to look after the family. Occasionally, women could hold positions of power and influence. Fu Hao (Section 4.6) is one such exception. Older Chinese women were also respected. Some women also had access to education, as seen in the following sources.



▲ **Source 4.27** A mural depicting women in scenes of daily life from the Dahuting Tomb of the late Eastern Han dynasty (25–220 CE)



▲ **Source 4.28** An unknown woman from the Dahuting Tomb of the late Eastern Han dynasty (25–220 CE)

On the third day after the birth of a girl the ancients observed three customs: first to place the baby below the bed ... Now to lay the baby below the bed plainly indicated that she is lowly and weak, and should regard it as her primary duty to humble herself before others.

Let a woman retire late to bed, but rise early to duties; let her not dread tasks by day or by night. Let her not refuse to perform domestic duties whether easy or difficult.

A woman ought to have four qualifications: (1) womanly virtue; (2) womanly words; (3) womanly bearing; and (4) womanly work ...

... to exhibit modesty ... this is womanly virtue.

... to speak at appropriate times; and not to weary others with much conversation, may be called the characteristics of womanly words.

... To wash and scrub filth away; to keep clothes and ornaments fresh and clean; to wash the head and bathe the body regularly ... may be called the characteristics of womanly bearing.

... to sew and to weave; to love not gossip and silly laughter; in cleanliness and order to prepare the wine and food for serving guests, may be called the characteristics of womanly work.

Whenever the mother-in-law says, 'Do not do that,' ... unquestionably the daughter-in-law obeys. Whenever the mother-in-law says, 'Do that,' even if what she says is wrong, still the daughter-in-law submits unflinchingly to the command. Let a woman not act contrary to the wishes and the opinions of parents-in-law about right and wrong; let her not dispute with them what is straight and what is crooked.

▲ **Source 4.29** Ban Zhao was the younger sister of Han court historian Ban Gu. When he died in 92 CE, she completed his work on a history of the Western Han dynasty (206 BCE – 8 CE). She composed *Nu Jie* (*Lessons for Women*), in about 80 CE. Extracts from Nancy Lee Swann, trans., *Pan Chao: Foremost Woman Scholar of China*, 1932, pp. 82–90.

When walking, don't turn your head; when talking, don't open your mouth wide; when sitting, don't move your knees; when standing, don't rustle your skirts; when happy, don't exult with loud laughter; when angry, don't raise your voice ...

The sexes should be segregated. Don't peer over the outer wall or go beyond the outer courtyard. If you have to go outside, cover your face; if you peep outside, conceal yourself as much as possible. Do not be on familiar terms with men outside the family; have nothing to do with women of bad character ...





Your father-in-law and mother-in-law are the heads of your husband's family ... Respectfully serve your father-in-law. Do not look at him directly [when he speaks to you], do not follow him around, and do not engage him in conversation. If he has an order for you, listen and obey.

Listen carefully to and obey whatever your husband tells you.

A woman who manages the household should be thrifty and diligent. If she is diligent, the household thrives; if lazy, it declines. If she is thrifty, the household becomes enriched; if extravagant, it becomes impoverished ... If your husband has money and rice, store and conserve them. If he has wine or foodstuffs, save and keep them for use of guests when they come; do not take any to indulge your own desires.

After cleaning your face and teeth, fix your hair and makeup simply. Then go to the kitchen, light the fire, and start the morning meal. Scrub the pots and wash the pans; boil the tea water and cook the gruel. Plan your meals according to the resources of the family and the seasons of the year, making sure that they are fragrant and tasty, served in the appropriate dishes and in the proper manner at the table.

▲ **Source 4.30** In *The Analects for Women*, the expectations for women are outlined in detail. This text was written by Song Ruohua but we know about it through the notes that were written by her sister, Song Ruozhao. Song Ruozhao was a Chinese Confucian scholar, poet and official of the Tang dynasty (618–906 CE). Extracts from T. de Bary and I. Bloom, *Sources of Chinese Tradition*, 1999, pp. 827–83.



ACTIVITY 4.15 RESPONDING TO THE SOURCES

Refer to Sources 4.29 and 4.30.

- 1 To what extent do the sources corroborate each other in describing expectations for women in ancient China? Copy the table into your notes. Complete the table by locating appropriate evidence from each source.

	Source 4.29 Ban Zhao	Source 4.30 Song Ruozhao
Women were expected to be quiet and not draw attention to themselves		
Women were expected to obey their husband's parents		
Women were expected to keep themselves and their home clean		
Women should be hard-working		
Women served food and drink		
Women were viewed as inferior to men		

- 2 What evidence is there in Source 4.30 that women held an important role in managing the success of the household?



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Contestability.

Your response should contain:

- A clear identification of the interpretations of the past
- An assessment of the degree of corroboration or contestability between interpretations
- Evidence from the sources that illustrates the historical interpretations
- A judgement about which of the differing interpretations is better supported by evidence.



ACTIVITY 4.16 MAKING THINKING VISIBLE

Projecting across distance

In small groups, divide an A3 sheet of paper into three sections. In each section, brainstorm ideas on one of the three questions.

Display the results, take a class gallery walk and **discuss** the ideas that were presented.

OR

Work through each question as a class discussion, with each group building on the ideas of the last.

- 1 How are women viewed and what are the expectations for women in modern Australian society?
- 2 How were women viewed and what were the expectations for women in ancient China?
- 3 What might account for the similarities and differences between and within both societies?



REFLECTING ON YOUR LEARNING 4.3



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'How was ancient China organised and how did this contribute to its success?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient China a successful civilisation?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.

4.4 What key beliefs, values and practices emerged in ancient China and how did they influence its success?



FOCUS QUESTIONS

- What did the ancient Chinese believe about the afterlife?
- What were the religious practices and beliefs of the ancient Chinese?

Early Chinese religious practices

Religious practices and spiritual beliefs existed in China long before the teachings of Confucius or the arrival of Buddhism from India. Early Chinese societies believed in a **pantheon** of gods with a supreme deity (Shàng Dì) or heaven (Tiān). They believed in the existence of an afterlife, and the tombs they created for their dead reflected the need to honour and provide for their ancestors. Ancestor worship was an important aspect of ancient Chinese religious belief because they thought they could connect with the gods through their deceased ancestors.

pantheon a group of gods

divination the practice of foretelling the future through supernatural means

ORACLE BONES

One method of contacting the gods through the ancestors – which was particularly significant during the Shang dynasty – was by using oracle bones. These bones, usually the shoulder blades of oxen or the flat underside of turtle shells, were used in **divination**. Shang diviners (fortune tellers) would ask the spirits of the ancestors to predict future events by inscribing questions on the bones and then using a hot poker to crack them. The cracks would then be interpreted as positive or negative answers to the questions.

The diviners were very good record keepers and inscribed the questions, answers and the outcomes of the predictions on the bones.



▲ **Source 4.31** This oracle bone was created during the Shang dynasty (c. 1600–1046 BCE). It was made from the flat underside of a turtle's shell, which was a very valuable material in ancient China.



THINKING DEEPER

What other ancient societies believed in a pantheon of gods and/or buried people in a manner that prepared them for an afterlife?

Through these records, modern archaeologists and historians have learned a great deal about what the Shang were interested in and the issues they considered to be important. Most oracle bones were used by wealthy people and rulers, as only they were able to afford the bones and the services of fortune tellers. The wealthy and rulers asked many types of questions, such as whether family members would recover from illnesses, the likelihood of good crops, and the outcome of wars. Sometimes, the same question was asked many times and the prediction was based on the answer that came up most often.

Crack-marking on *jiashen* [day 21]

Que divined: 'Lady Ho [a consort of Wu Ding] will give birth and it will be good.'

The king read the cracks and said: 'if it be on a *ding* day that she give birth, it will be good. If it be on a *gang* day that she give birth, it will be prolonged auspiciousness [good luck for a long time].'

[Verification]: After thirty-one days, on *jiayin* [day 51], she gave birth. It was not good. It was a girl.

▲ **Source 4.32** An inscription on an oracle bone. Cited in Patricia Buckley Ebrey, *Chinese Civilization: A Sourcebook*, 1993, p. 4.



ACTIVITY 4.17 RESPONDING TO THE SOURCES

- 1 In small groups, **create** a dramatic re-enactment of the events in Source 4.32. Or **create** a dramatic re-enactment using another oracle bone question-and-answer scenario.
- 2 **Explain** how Sources 4.31 and 4.32 corroborate the statement 'oracle bones were used by wealthy people and rulers'.
- 3 **Identify** and **explain** one piece of information Source 4.32 provides about life in ancient China. In your response, make a statement, provide a quote from the source that is correctly referenced, and **explain** how the quote answers the question.



ACTIVITY 4.18 MAKING THINKING VISIBLE

Generate, connect, label

- 1 **Generate** a list of ideas and thoughts about early ancient Chinese religious practices.
- 2 Connect your ideas by drawing connecting lines between the ideas that have something in common.
- 3 Label each group of ideas with a heading.

Ancient Chinese religion in the Warring States period

The period after the Zhou moved the capital to the east is known as the Spring and Autumn period. It was a time of almost constant conflict, but also a time when philosophy and culture flourished. Two of the key ancient Chinese belief systems, Confucianism and Daoism, emerged at this time. As the conflict between peoples grew more intense, the period became known as the Warring States period (475–221 BCE).

The various Chinese states fought among themselves in a bitter struggle for control that lasted over 200 years.

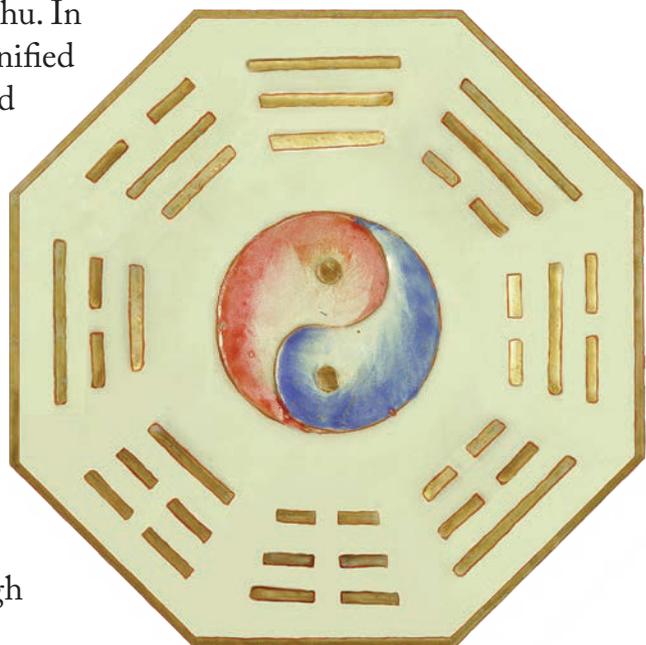
The Qin were the ultimate victors after they defeated the last two states of Qi and Chu. In 221 BCE, the Qin king (Shi Huangdi) unified China under a new dynasty and declared himself to be the first emperor.

Daoism

Daoism (also spelled ‘Taoism’) emerged sometime in or before the sixth century BCE in the province we today call Henan. Daoism developed a significant presence in China during the Warring States period. The exact circumstances surrounding the start of Daoism are unclear, although Laozi is usually identified as the first Daoist philosopher.

‘Dao’ literally means ‘the way’ but can be interpreted as ‘path or road’ or ‘doctrine’. It refers to the force that shapes all things in heaven and nature. There are still 12 million Daoists today.

Following Daoism is an attempt to be one with the way by avoiding conflict and finding peace. It requires constant adjustment to find balance between the two halves of life: the Yin and the Yang. Daoist religious practices are concerned with honouring ancestors, purifying spaces, and having a reverence or admiration for nature.



▲ **Source 4.33** This plate with the Yin and Yang and trigram symbols is from a Daoist temple in nineteenth-century China.

Once Zhuang Zhou dreamed he was a butterfly, a fluttering butterfly. What fun he had, doing as he pleased! He did not know he was Zhou. Suddenly he woke up and found himself to be Zhou. He did not know whether Zhou had dreamed he was a butterfly, or a butterfly had dreamed he was Zhou. Between Zhou and the butterfly there must be some distinction. This is what is meant by the transformation of things.

▲ **Source 4.34** A written work from Zhuang Zhou. Zhuang Zhou was a Daoist philosopher who became known as Zhuangzi. He lived during the Warring States period. His written work, *Zhuangzi*, is one of the main texts of Daoism and has inspired many beautiful poems and paintings. The ‘transformation of things’ refers to a state of mind or way of being where people become open to new ideas, possibilities and ways of seeing things.



▲ **Source 4.35** Zhuang Zhou dreaming of being a butterfly. Titled *The butterfly dream*, this mid-sixteenth-century Ming-dynasty silk painting is by a Chinese painter, Lu Zhi.



ACTIVITY 4.19 RESPONDING TO THE SOURCES

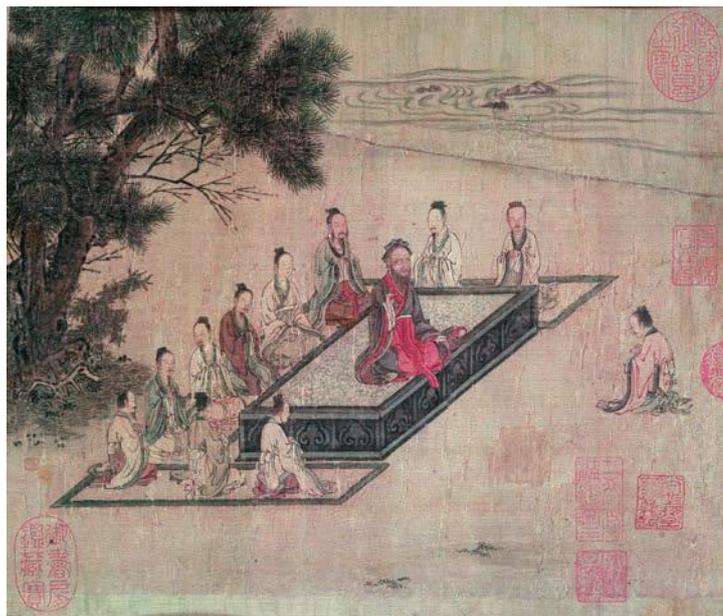
- 1 **Identify** the main values or beliefs of Daoism.
- 2 **Explain** how Sources 4.33–4.35 represent a value or belief of Daoism.

Confucianism

Confucianism was an ancient Chinese belief system that emerged during the Zhou era. It is still important in China today. Confucianism is more a philosophy or way of life than a religion. It was based on the teachings of Confucius during the Spring and Autumn period, when Zhou rule was beginning to weaken.

Confucius is believed to have been born around 551 BCE in the city of Qufu. He worked as a government official for the prince of Lu

but was not particularly successful in his political career. Confucius travelled widely throughout China explaining his political philosophy to various courts, but eventually returned to Qufu to establish a school. He is credited with having written or compiled several classic Chinese texts, and many of his teachings were recorded in books such as *The Analects* and *The Doctrine of the Mean*. Confucius claimed that his principles were not ones that he had invented, but rather they had been distilled from the wisdom of the ancients.



▲ **Source 4.36** A painting of Confucius on silk. This Song-era (960–1279 CE) silk painting shows Confucius teaching students about the importance of being respectful and loyal to their parents. This virtue was known as 'filial piety'.

Many of Confucius's teachings were focused on the creation of a just and moral society.

He believed that in order to create this, all relationships must be well regulated. Family loyalty was of utmost importance; in particular, it was vital that children respect and obey their parents. Ancestor worship was an essential part of regulating relationships. Only if family relationships were solid could the state work effectively.

The duties of universal obligation are five and the **virtues** by what means they are practised are three. The duties are those between **sovereign** and minister, between father and son, between husband and wife, between elder brother and younger, and those belonging to the association of friends. Those five are the duties of universal obligation. Knowledge, **magnanimity** [generosity], and energy, these three, are the virtues universally binding.

▲ **Source 4.37** An extract from the Confucian text *The Doctrine of the Mean* (c. 500 BCE). *The Doctrine of the Mean* (*Zhongyong*) is one of the four books of Confucian philosophy. The text was written down by Confucian students and scholars after Confucius's death. It provides advice on how to live a just and moral life.

virtues qualities of goodness or moral excellence

sovereign a king or ruler who has total and permanent authority

magnanimity the quality of being highly moral in forgiveness and overlooking insults from others



ACTIVITY 4.20 RESPONDING TO THE SOURCES

- 1 **Identify** the main values or beliefs of Confucianism.
- 2 **Explain** how Sources 4.36 and 4.37 represent a value or belief of Confucianism.



ACTIVITY 4.21

Questions for consideration

Daoism and Confucianism developed in China during a time of constant conflict.

Explain why these belief systems may have been appealing to the Chinese people at this time.

Buddhism

Buddhism originated in India about 500 years before it arrived in China during the Han dynasty (202–220 CE). A combination of Buddhism and Daoism was adopted by many people in ancient Chinese society, whereby the practitioners continued to pay respect to their ancestors. Buddhism became an official religion during the Sui era and was an important feature of the Tang dynasty. **Mahayana Buddhists** believe in spirits, ghosts and gods, and worship the qualities of Buddha and **bodhisattvas**. A Buddha in Mahayana Buddhism is any person who has attained enlightenment by perfecting every virtue and removing all negativities. Ultimately, Mahayana Buddhists believe that they themselves can become a Buddha through developing qualities to replace harmful ways of thinking and acting. Buddhists believe that everybody is reborn after they die – sometimes as humans

Mahayana Buddhism the form of Buddhism that became popular in China

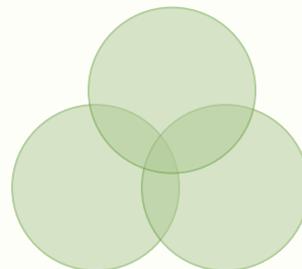
bodhisattva a follower of Mahayana Buddhism who is able to reach nirvana (a state without suffering) but delays doing so out of compassion for the suffering of others

but also as animals or insects, or even ghosts or gods. Unfortunately, these rebirths are without end and only result in suffering. The only way to escape continuous rebirth is to attain enlightenment.



ACTIVITY 4.22

Organise information about Daoism, Confucianism and Buddhism using a Venn diagram to highlight the similarities and unique features of each belief system.



▲ **Source 4.38** The tomb of Fu Hao, showing burial goods



▲ **Source 4.39** A statue of Fu Hao near her tomb

Death and funerary customs in ancient China

The ancient Chinese believed that life would continue for those who died in an afterlife. Objects were buried with the dead. Some of these were of great value; others were to assist with daily life. While the afterlife was believed to be in a world that was separate from the world of the living, there were links between the living and the dead. People still living could make offerings to their ancestors to ensure that they would bring them good fortune.

Burial sites as early as the Yangshao culture (5000–3000 BCE) show that the dead were buried with pottery vessels. They were buried beyond the ditch that surrounded the village.



▲ Source 4.40 Terracotta warriors in the tomb of Qin Shi Huangdi



▲ Source 4.41 Tourists visiting the tomb of Qin Shi Huangdi

By the time of the Shang period (1600–1046 BCE), the structure of some tombs was very elaborate. Fu Hao’s tomb (Section 4.6) contained bronze weapons, mirrors and vessels. Other items were made from jade, bone, ivory, stone and pottery. Human sacrifices were also made to ensure that Fu Hao would have servants to serve her in the afterlife. The remains of 16 people were found around the edges of her tomb.

The tomb of the First Emperor, Qin Shi Huangdi of the Qin dynasty (221–206 BCE), unlike earlier tombs, was built above ground. The Emperor was buried with a terracotta army (Sections 4.1 and 4.6) to protect him in the afterlife.



ACTIVITY 4.23

Exit tickets

After reading through the information on death and burial in ancient China, obtain a square card from your teacher. Use *one* of the following as a prompt to write a response in 3–5 minutes:

- What is the most *important* point about death and burial in ancient China?
- What are you finding difficult or *challenging* to understand?
- What is a *question* that you would like to discuss?
- What is something you found *interesting*?

Now, share your ideas using one of the following strategies:

- In small groups, share and **discuss** what you have written.
- As a class, collect the cards and pass them back randomly. Read and respond to the card you receive, writing your response on the back of the card. You may be called upon to share the original comment and your response. Cards are then collected again and passed back to the original student.
- Use your card as an exit ticket. Your teacher collects and reads the cards as a form of formative assessment and begins the next class by making use of what was shared.



ACTIVITY 4.24 RESPONDING TO THE SOURCES

- 1 **Explain** what the ancient Chinese believed about death and burial with reference to the burials of Qin Shi Huangdi and Fu Hao. **Consider** evidence from Sources 4.38–4.41 and 4.59–4.62 (later in the chapter).
- 2 Using information on burial and oracle bones (Sources 4.31 and 4.32), how do we know that ancestors were valued by the ancient Chinese? What important roles did they perform?



THINKING DEEPER

What groups in ancient Chinese society are we more likely to know about based on burial practices? Are there any groups we may have less or no evidence for?



▲ **Source 4.42** A painting of Emperor Qin Shi Huangdi, the first emperor of the Qin dynasty



REFLECTING ON YOUR LEARNING 4.4



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'What key beliefs, values and practices emerged in ancient China and how did they influence its success?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient China a successful civilisation?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.

4.5 How did ancient China benefit from contact and conflict with other societies in this period?

FOCUS QUESTION

What were the causes and effects of contacts and conflicts between China and other ancient societies?



4

Early contact and conflict

People in ancient China had contact with foreigners and outside powers from the time of the Qin dynasty, and possibly earlier. From the second century BCE, Chinese diplomats were sent into parts of central Asia, looking for allies against the nomadic tribes who threatened their northern borders. Later, diplomatic relations were established with other nearby societies, including the Korean, Japanese and Vietnamese peoples. Religious ideas, such as Buddhism from India, arrived in China during the Han dynasty, while the philosophies of Confucius were passed on to other Asian societies.

When contact with other societies became dangerous or unprofitable – most notably with the nomadic tribes of the northern regions – the ancient Chinese built fortifications to protect their society. The Great Wall of China is not one wall but many sections, which are not all connected.

The first sections of the wall were built as early as the seventh century BCE. However, Qin Shi Huangdi was responsible for greatly enlarging and connecting those parts. Many of the dynasties that followed maintained and repaired the wall, and also built new sections. Not only did the Great Wall protect China from intruders and invaders but it also enabled the ancient Chinese to control trade and to impose duties or taxes on goods brought into China from outside.



▲ **Source 4.43** A mural from the tomb of Li Xian. From the Tang era (618–907 CE), this mural shows ambassadors from Korea and the west being received at court in China.

The emperor decided that this would be the limit for further expansion and ordered the construction of a lengthy wall to protect his new lands. This wall joined earlier walls built by the Warring States on their northern frontier ... [In doing this] the first emperor distinguished in the most visible way China proper ... from the outside world, which was to remain beyond Chinese control.

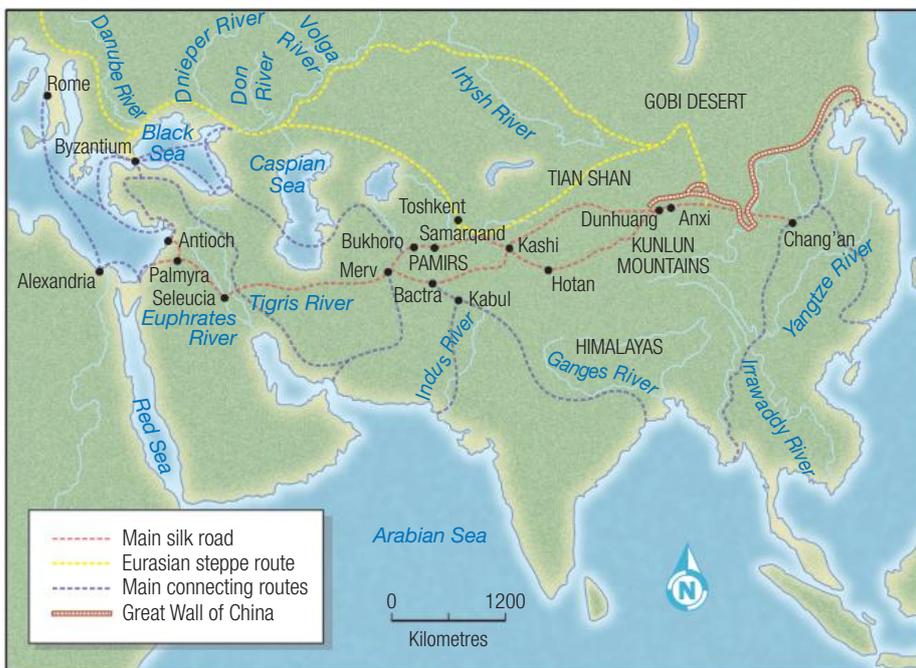
▲ **Source 4.44** An extract from Y. Pines, *The Everlasting Empire: The Political Culture of Ancient China and its Imperial Legacy*, 2012



▲ **Source 4.45** The Jinshanling section of the Great Wall. This section of the wall was built between 1368 and 1389 CE during the Ming dynasty and rebuilt again in the sixteenth century. (Use the QR code to watch a video.)

The Silk Road

People in ancient China first made contact with more distant civilisations, like those in Europe, through trade. The Silk Road was established during the Han dynasty. It was not a single road but a series of overland tracks that wound from the heart of China through the Middle East and into Europe. Many goods were bought and sold along these trade routes, including olive oil and wine from Italy, cotton and peppercorns from India, ivory from east Africa, and spices from Arabia. Ancient China exported jade and iron, but its most significant product to trade was silk.



◀ **Source 4.46** This map shows the routes that made up the Silk Road in ancient China.



◀ **Source 4.47** The French title of this artwork translates to, 'Marco Polo's caravan' (1375). This is a detail from an illustrated map that shows European merchants travelling along the Silk Road. Marco Polo (1254–1324) was a Venetian explorer known for the book *The Travels of Marco Polo*, which describes his voyage from Europe and experiences in Asia. Whether he actually reached China is contested by historians. Marco Polo's own account claims he ventured into Mongolia and China. Frances Wood, a historian, argued in her book *Did Marco Polo Go to China?* (1995) that Marco Polo's account fails to mention the Great Wall of China, the practice of binding women's feet, chopsticks and tea drinking. She believes that if he had really visited China, he would have included this information in his writings. Wood also notes that Chinese documents from this period do not mention Marco Polo and his entourage.

Although neighboring states look
across at each other,
And the sounds of roosters and
dogs be mutually heard,
Unto old age and death, the people
do not travel back and forth.

▲ **Source 4.48** A description of scattered Chinese settlements (600–400 BCE) in the *Tao Te Ching*, believed to be written by Laozi

Within the six directions
This is the land of the Emperor
To the west it ranges to the flowing sands
To the south it completely takes in where the doors flow north
To the east it enfolds the eastern sea
To the north, it goes beyond Da Xia.
Wherever human traces reach
There is none who did not declare himself [the Emperor's subject].

▲ **Source 4.49** An inscription from the first emperor, Shi Huangdi (c. 220 BCE)



ACTIVITY 4.25 RESPONDING TO THE SOURCES

- 1 **Explain** how Sources 4.48 and 4.49 show a change in the contact ancient China had with other societies. Can you think of why this change may have happened?
- 2 **Identify** reasons why historians have questioned if Marco Polo (Source 4.47) visited China.
- 3 What concerns does this raise about using primary sources as evidence?



ACTIVITY 4.26 RESPONDING TO THE SOURCES

Identify three examples of contact that ancient China had with other societies. For each example, provide evidence from a source in this chapter. **Explain** what it says about this example of contact.



THINKING DEEPER

There is a saying that 'good fences make good neighbours'. What are the benefits and problems caused by walls and fences? Why have walls been built in more recent times (e.g. the Berlin Wall or the Mexico–United States barrier)? You may wish to conduct additional research to help inform your response.



REFLECTING ON YOUR LEARNING 4.5



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'How did ancient China benefit from contact and conflict with other societies in this period?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient China a successful civilisation?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.



4.6 What role did individuals, such as Qin Shi Huangdi and Fu Hao, play in making ancient China successful?

FOCUS QUESTIONS

- Who was Qin Shi Huangdi and when did he live?
- What evidence can historians use to investigate the life of Qin Shi Huangdi?
- To what extent was Qin Shi Huangdi a good ruler?
- Who was Fu Hao and when did she live?
- What evidence can historians use to investigate the life of Fu Hao?
- What makes Fu Hao a significant individual?

Qin Shi Huangdi

Qin Shi Huangdi (259–210 BCE) became King Zheng of Qin in 238 BCE at the age of 21. A previous ruler, Shang Yang, had started conquering other Chinese states. Qin Shi Huangdi completed this task in 221 BCE and gave himself the title of Shi Huangdi, which means ‘first emperor’. This was because he believed that uniting all the Chinese lands made him greater than a mere king.

The Qin dynasty was very short compared to the Zhou dynasty it replaced. While the dynasty lasted only 15 years, it was a time of great change. For 11 of those 15 years, Qin Shi Huangdi ruled with an iron fist and began an ambitious plan to reshape the country. He divided the land into 40 different states and appointed governors who were loyal to him to run them. In order to control the leaders of the conquered states, they were all required to live in the Qin capital. This limited their ability to oppose his authority. Not everyone was happy about Qin Shi Huangdi’s way of ruling, so in 213 BCE a group of scholars tried to convince Qin Shi Huangdi to give the states more autonomy. Rather than give in to this request, Qin Shi Huangdi ordered that all books be burned that were not about practical topics like medicine or agriculture. He also ordered that any scholars who disobeyed him be executed. He believed that the scholars were using history to criticise him, so it was necessary to eliminate any history that did not support his ideas. It was said that 460 scholars were buried alive. Citizens were encouraged to inform on one another and people who were convicted of crimes were executed, mutilated or put to hard labour.

Not all of Qin Shi Huangdi’s changes were brutal. Some of his reforms had long-lasting benefits for Chinese society. Qin Shi Huangdi created



THINKING DEEPER

Another group in history who burnt books was the Nazi Party. What kind of books did this group burn? Is it ever acceptable to burn books?

a set of standards for weights to ensure that all merchants and craftsmen were using the same measurements. He rewrote the laws to make them consistent throughout the country, and he made taxes uniform. To replace the many different kinds of money being used, he adopted a single type of coin: round with a square hole in the centre. These coins could be threaded on to rope or a ribbon to be kept safe. They continued to be used until the modern era. The writing system was also standardised during Qin Shi Huangdi's rule, so that all states used the same characters. These kinds of changes created consistencies between the various states that unified China as an empire. After the death of Qin Shi Huangdi, the empire rapidly fell to pieces as none of his successors had the power to hold it together. In 202 BCE, Liu Bang, the leader of the Han, declared himself to be emperor and the Han dynasty began.



ACTIVITY 4.27 MAKING THINKING VISIBLE

Circle of viewpoints

- 1 As a class, brainstorm different people's viewpoints or perspectives of Shi Huangdi – for example, Shi Huangdi's perception of himself, and the perspectives of loyal governors, scholars, merchants and craftsmen.
- 2 **Select** one viewpoint to explore, using these sentence starters:
 - I am thinking of Shi Huangdi from the viewpoint of ... (the viewpoint you have chosen)
 - I think ... (**describe** the topic from your viewpoint; be an actor – take on the character)
 - A question I have from this viewpoint is ... (ask a question from this viewpoint).

The First Emperor is the sort of person whose heavenly nature is stubborn and self-satisfied ... the Supreme One enjoys using punishments and executions as a sign of his authority, and since all under Heaven hang on to their salary in fear of punishment, nobody dares to fulfil his loyal duties. Since the Supreme One does not hear about his faults, he grows more arrogant every day, and his subordinates, cringing in terror, practice duplicity [being two-faced or deceitful] in order to win his forbearance [patience and acceptance].

▲ **Source 4.50** Sima Qian's description of Qin Shi Huangdi. Sima Qian was a historian who is considered to be the father of Chinese history. It is believed Qian was born in about 145 BCE. Qian wrote the *Shiji (Historical Records)* – a general history of China – in approximately 94 BCE. Qian was greatly influenced by the work of Confucius. Shi Huangdi tried to have all of the works of Confucius destroyed.



THINKING DEEPER

Why might the followers of Confucius be critical of Shi Huangdi? Why is it important that historians find out as much as they can about the authors of the sources they use to research the past?

The Chinese historical tradition, in which Records of the Grand Historian (Sima Qian) is the closest Source to Shi Huangdi's era, casts a real *damnatio memoriae* [negative portrayal] on the king, a condemnation [criticism] that practically remains unchallenged in a milieu [time period] dominated by Confucian followers ... Shi Huangdi was a strategic thinker, because he accomplished great things, the most important being the unity between [the] Qin state and other rival states. Taking into consideration his decisions and actions, we can underline that he had an authoritarian [controlling] personality, acting as The Supreme One. He was vengeful, unforgiving – being adept of [skilled at] punishments and executions.

▲ **Source 4.51** A psychological analysis of Shi Huangdi, which was published by a group of psychologists in a behavioural sciences journal in 2014. A psychologist is a professional trained in the science of how people think, feel, behave and learn. The journal that this article was published in was peer-reviewed. This means that other experts in the field checked the research for validity and accuracy.

The great sage [wise person] created his order,
Established and fixed the rules and measures ...
He instructed the feudal lords;
Brilliantly He spread culture and grace,
Enlightening them through rightness and principle ...
Just was He in punishment, trustworthy was He in acting,
His awesome influence radiated to all directions,
And there was none who was not respectful and submissive [obedient].
He boiled alive and exterminated the violent and cruel ...

▲ **Source 4.52** An inscription ordered by Shi Huangdi. Shortly after completing his final conquest and uniting the empire of China in 221 BCE, Shi Huangdi, accompanied by members of his court, began to tour the newly conquered regions. On the tops of mountains, Shi Huangdi erected a series of stones that had inscriptions etched into them. These inscriptions were recorded in Sima Qian's *Historical Records*. The inscriptions were designed to express the greatness of the Qin dynasty and the first emperor to these newly conquered lands.



▲ **Source 4.53** 'Killing the scholars and burning the books'. This eighteenth-century painting is by an anonymous Chinese artist.

[Qin Shi Huangdi was] one of the great heroes of Chinese history.

▲ **Source 4.54** A Chinese historian praises Shi Huangdi in 1941 (Feibai, *Qin Shi Huangdi Zhuan*, 1941). In 1941, when this text was written, China was being attacked by foreign countries and was weak. At this time, historians began to see a strong leader like Shi Huangdi in a positive light. The first emperor had united and strengthened China.

Later when the First Emperor ascended [the throne] he flourished and furthered the accomplishments of the six generations before him. Brandishing his long whip, he drove the world before him; destroying the feudal lords, he swallowed up the domains of the two Zhou dynasties ... He then abolished the ways of ancient sage kings [wise kings from the past] and put to the torch the writings of the Hundred Schools in an attempt to keep the people ignorant. He ... put to death men of fame and talent ... all with the aim of weakening his people.

▲ **Source 4.55** A description of Shi Huangdi by Jia Yi. Jia Yi (200–168 BCE) was a Confucian poet who lived during the Han dynasty. The Han dynasty was founded by a rebel leader who overthrew the Qin. The Han portrayed the previous Qin dynasty in a negative light to justify their right to rule. Confucian scholars were also very negative about Shi Huangdi as he had burned the writings of Confucius and buried Confucian scholars alive.



THINKING DEEPER

How do politicians and leaders share messages about themselves and their achievements today? Why might they do this? Why do historians have to make sure they find a range of sources when they are researching a person from the past?

Why was Shi Huangdi seen in a more positive light in China in 1941? Why might opinions about people and events change over time? Can you think of any examples?



▲ **Source 4.56** *Burning of the Chinese books, by order of the emperor*. This painting, by the Western artist J.W. Giles, was painted in 1847.



ACTIVITY 4.28 RESPONDING TO THE SOURCES

- 1 Sequence** the sources about Shi Huangdi (Sources 4.50–4.56) chronologically by making a timeline to scale and plotting the sources and their authors on the timeline. Give your timeline a title, provide the scale and use correct dating conventions.
- 2 Analyse** the features of the sources about Shi Huangdi (Sources 4.50–4.56). Use the questions in the table on the next page to guide your analysis. Complete *one* source as a class and the rest in pairs. Groups could be allocated *one* source each, and then answers shared with the class.



THINKING DEEPER HISTORICAL CONCEPTS

Did you know you are engaging in conceptual thinking? The historical concept in this question is Perspectives.

Your response should contain:

- A clear identification of the source's perspective
- Evidence from the source to demonstrate this perspective (note, this may include implied meaning)
- Discussion of how the source's origin or context may account for this perspective
- Discussion of how this perspective compares to other perspectives (in questions that use more than one source)
- Consideration of how this source's perspective is useful in responding to the question.





Analysis questions	Response for the source
What is the source? (text type)	
Who published or compiled the source? (origin)	
When was the source written or created? (origin)	
What was happening at the time the source was written or created that is relevant to the inquiry question? (context)	
How long after the rule of Shi Huangdi was the source written or created? (context)	
Is the source a primary or secondary source?	
Why might this source have been written or created? (purpose and motive)	
Who might the source have been written or created for? (audience)	
Who is speaking in the source? Provide some information about this person and how they might have felt about Shi Huangdi. (perspective)	
What evidence does the source provide about the actions of Shi Huangdi? (content – explicit information)	
From this evidence, what can you say the author's opinion is regarding whether Shi Huangdi was a good ruler? (content – implicit information)	

3 Evaluate the sources about Shi Huangdi (Sources 4.50–4.56). Using the questions in the table below, **decide** how useful and reliable these sources are to a historian trying to discover whether Shi Huangdi was a good ruler. Complete one source as a class and the rest of the sources in pairs or groups. Or, groups could be allocated one source each, and then the answers are shared with the class.

Questions	Response for the source
How useful is this source for deciding if Shi Huangdi was a good ruler? What relevant information does it provide?	
Is the information in the source fact or opinion?	
What are some features of the source that make it trustworthy?	
What are some features of the source that make you doubt its accuracy?	

4 Was Shi Huangdi a good ruler? **Synthesise** evidence from Sources 4.50–4.56 to answer this question.

Fu Hao

Lady Fu Hao was a consort of Wu Ding, the twenty-second king of the Shang dynasty. She is one of the most famous women in ancient Chinese history. Her tomb (Section 4.4) was discovered by archaeologists in 1976; it is the only Shang tomb found that had not been looted by grave robbers. Historians estimate that she died in around 1200 BCE.

Fu Hao's tomb contained a huge number of grave goods, including 468 bronze objects, 755 jade items, 61 ceramic or pottery objects, over 6000 seashells, and a variety of other items made out of gems, bone and ivory. At least 109 items from the tomb have Fu Hao's name engraved on them, clearly marking this as her final resting place. Less happily, 16 humans and six dogs were also entombed with Fu Hao to join her on her journey into the afterlife. There is evidence that a **shrine** was built on top of the tomb where her relatives could pay respect to her spirit.

shrine a place used for religious rituals

However, Fu Hao is not just famous for her tomb; she was also a clan leader and landowner whose property lay beyond the area directly controlled by the king. This land gave her wealth and power, but also the duty to pay tribute. Fu Hao spent much of her time at court performing religious rituals, including sacrifices for ancestors and gods. She had several pregnancies, although it is not clear how many surviving children she had with the king.

Probably the most notable aspect of Fu Hao's life was that she led soldiers into battle on more than one occasion. Women did not commonly go to war, but as the head of a clan, she was responsible for her army.

During her lifetime, she participated in every significant **military campaign** and at one stage led a force of 13 000 soldiers into battle, which is the largest army recorded at any time during the Shang era.

Fu Hao was a successful general with many significant victories to her name, including the defeat of the Tu Fang. It was after a long-drawn-out campaign against the Ba, however, that Fu Hao became ill and died. Her military service is acknowledged in her grave goods, as many of the bronze items are weapons like axes, knives and arrowheads.

Significance of Fu Hao

To determine if a historical person or event is significant, use the following assessment criteria:

- Remarkable – was the person or event remarkable or extraordinary in some way for their time or for later?
- Remembered – was the person or event important at some stage within the collective memory of a group or groups? Was something done to remember this person or event?
- Resounding – do, or did, people make connections to this person or event well beyond the time of origin?
- Results – did the person or event lead to change or consequences in their time or in the future?
- Revealing – does the person or event reveal something important about the time period of origin?

military campaign
a series of conflicts or battles that are aimed at reaching the same goal

yue a ceremonial axe



▲ **Source 4.57** A modern artist's impression of Fu Hao, holding her ceremonial **yue**

**ACTIVITY 4.29****Class activity**

As a class, **discuss** this question: 'Who is a significant Australian or modern-day individual who could be deemed to be significant according to the criteria listed on the previous page?'

**THINKING DEEPER
HISTORICAL CONCEPTS**

Did you know you are engaging in conceptual thinking? The historical concept in this question is Significance.

Your response should contain:

- Identification of what elements are significant in relation to the content of the question
- A clear statement about the degree of significance (i.e. very significant, somewhat significant)
- Evidence from the sources to support this judgement of significance.

**ACTIVITY 4.30****Building a response**

- 1 Set up: Write the question: 'Was Fu Hao a significant individual?' on five large pieces of paper. On each piece, add one of the five criteria of significance listed on the previous page. Place the sheets of paper on tables around the room.
- 2 Present: **Explain** the question and the criteria to the class.
- 3 Process: **Consider** your reaction to the question and record your ideas and questions. Add to each other's responses with comments and questions. Circulate around the room, reading and adding to the questions and responses.
- 4 If you are arranged in groups, each group should stay with one piece of paper for five minutes. Groups can then rotate to another group's paper, silently read what is written there, and then add their reactions and questions to the paper.
- 5 Facilitate: **Consider** the types of responses you can add to the sheets: connecting ideas, building on ideas, commenting on what others have written, asking others to respond with more detail, etc.
- 6 Share the thinking: If you have rotated as a group, return to your original starting place to read what others have written on your paper. What are the common issues and reactions? Are there any surprises? How has your thinking developed during the process?

Wu Ding knew of his wife's capabilities and was persuaded, after consulting with Fu Yue, to grant Fu Hao a bronze *yue*, a symbol of empowerment for a military campaign. A diviner, brought in to see whether the omens were favourable, wrote questions on tortoise shells and they were answered in the affirmative. Fu Hao was commissioned to fight. Marching with her troops northward to battle the Tu Fang, she fought at the head of her troops. Off the battlefield, she nursed the wounded and raised morale. The Tu Fang were badly beaten and would never again challenge the Shang's military power.

▲ **Source 4.58** An extract from Barbara Bennett Peterson, *Notable Women of China: Shang Dynasty to the Early Twentieth Century*, 2015



▲ **Source 4.59** A bronze *yue* from the tomb of Fu Hao. In ancient China, a bronze *yue* was a symbol of empowerment.



► **Source 4.60** A jade monkey from the tomb of Fu Hao. This object was probably several hundreds of years old when Fu Hao acquired it. Jade was a symbol of luxury and wealth in ancient China.



▲ **Source 4.61** A dagger axe from the tomb of Fu Hao. A dagger axe was a blade attached to a pole that was used in ancient Chinese warfare.



► **Source 4.62** A bronze owl-shaped *zun* from the tomb of Fu Hao



ACTIVITY 4.31 RESPONDING TO THE SOURCES

- 1 **Examine** Source 4.57. **Identify** one reason why Fu Hao was given a bronze *yue*, according to the text in Source 4.58.
- 2 **Describe** three qualities of Fu Hao that can be inferred from Source 4.58.
- 3 What aspects of life in ancient China does Source 4.58 provide information about?
- 4 'Fu Hao was wealthy, a warrior and participated in religious rituals.' **Explain** how the contents of Fu Hao's tomb support this statement (see Sources 4.59–4.62).
- 5 Imagine you are promoting a movie about the life of Fu Hao. Design a poster or movie trailer to promote your movie. Include a clever title for your movie, images and a blurb that summarises the interesting aspects of her life that will be featured in the movie.



REFLECTING ON YOUR LEARNING 4.6



Reflect on what you have learned in this section:

- 1 Based on the information and sources in this section, either **create** a mind map or write a short response of 5–10 sentences to summarise what you have learned and to answer the question: 'What role did individuals, such as Qin Shi Huangdi and Fu Hao, play in making ancient China successful?'
- 2 How could the information and sources in this section contribute to answering your overall inquiry question: 'What made ancient China a successful civilisation?'

Complete the Quiz and the 'Developing your understanding' questions in the Interactive Textbook.



▲ **Source 4.63** A statue of Fu Hao outside of her tomb in Henan, China.



Conclusion: end-of-chapter reflection

STEP ONE: REFLECT ON YOUR SUB-QUESTIONS

At the end of each section of this chapter, you were asked to **reflect on** how the information in the section related to the overall inquiry question:

‘What made ancient China a successful civilisation?’

- 1 For each of the sub-questions below, write a brief response (approximately 2–3 sentences) to **reflect on** the sub-question. Do you feel that you have a good understanding of each section of this chapter?
 - What are the different methods and sources of evidence used by historians and archaeologists to investigate ancient China?
 - How did ancient China’s physical environment and physical features influence its success?
 - How was ancient China organised and how did this contribute to its success?
 - What key beliefs, values and practices emerged in ancient China and how did they influence its success?
 - How did ancient China benefit from contact and conflict with other societies in this period?
 - What role did individuals, such as Qin Shi Huangdi and Fu Hao, play in making ancient China successful?

(If you prefer a visual approach, you could do this as a mind map instead.)

STEP TWO: REFLECT ON THE KEY INQUIRY QUESTION

- 2 Now, based on what you have learned in this chapter, write a short paragraph in response to the question: ‘What made ancient China a successful civilisation?’

STEP THREE: FUTURE QUESTIONS

- 3 Based on your learning in this chapter, what questions do you have about ancient China?



End-of-chapter assessment

1 Investigation

An investigation assesses students' abilities to identify, select, analyse, organise and draw conclusions about evidence from primary and secondary sources.

Step 1: Select *one* of the following areas to focus your research on:

- Warriors and warfare (training, armour, weapons, fighting techniques, historical battles and wars)
- Daily life (health, government, laws, housing, women's lives)
- Religion (beliefs, rituals, death and burial, gods)
- Another topic with your teacher's approval.

Step 2: Conduct some background research on your topic and devise a key inquiry question (see the example in the Chapter Overview on page 187).

Step 3: Devise *three* sub-inquiry questions that will help to answer your key inquiry question.

Step 4: Select *one* primary and *one* secondary source that answer the sub-inquiry questions.

Step 5: Copy the analysis table below into your workbook. Then use it to **analyse** each source.

Analysis questions	Your response
What is the source? (text type)	
Who published or compiled the source? (origin)	
When was the source written or created? (origin)	
What was happening at the time the source was written or created that is relevant to the inquiry? (context)	
Is the source a primary or secondary source?	
Why might this source have been written or created? (purpose)	
Who might the source have been written or created for? (audience)	
Who is speaking in the source? Provide some information about this person and how they might feel about the focus area of your question. (perspective)	
What evidence does the source provide about the inquiry question? (content – explicit information)	
From this evidence, what can you say the author's opinion is regarding the inquiry question? (content – implicit information)	

Step 6: Answer the *three* sub-inquiry questions. Make sure you refer to and acknowledge your sources as evidence in your writing.

Step 7: Include a reference list for your two sources.

Length: 400–600 words

2 Project

A project assesses students' responses to a single task, stimulus, question, situation or scenario. A project gives students authentic opportunities to demonstrate their historical knowledge, understanding and skills.

Scenario

The editor of an ancient history magazine has asked you to write a special feature article about a significant individual from ancient China.

Step 1: Select *one* of the following individuals (or get confirmation from your teacher if you would like to **research** another individual):

- Confucius
- Yu the Great
- Wu Zeitan
- Sima Qian
- Cai Lun
- Lady Fu Hao
- Shi Huangdi.

Step 2: Design the front cover of the magazine. Include an image, a headline that highlights why the individual was significant, and *three* interesting dot points or facts about their life.

Step 3: Create a timeline that accurately displays *five* key events from the life of your individual. Ensure that you follow the conventions of a timeline.

Step 4: Write the article. It must include paragraphs on the following topics: Who was the individual? When and where did they live? What did they achieve? Why were they significant?

Step 5: Include a reference list that shows at least *four* sources of information for your article.

Length: 400–600 words

Digital resources

Visit the Interactive Textbook or Online Teaching Suite to access:

- General Capability Project
- Interactive chapter quiz
- Interactive Scorcher quiz
- Videos, image galleries and other extra materials.







PART

2



Geography

What is Geography?

What do you think are the most important challenges facing our world today? Geography is a fascinating subject for anyone who is curious about how the world works. It can improve the lives of people and their environments. Geography involves the study of Earth's physical environment and human activities, and how these two areas affect each other.

Figure A shows the devastation caused by a tsunami that hit Indonesia in 2018. Geographers studied the area's physical environment and discovered that an unusual natural process had occurred to cause the tsunami. They found that the eruption of the Anak Krakatau volcano triggered an underwater landslide that then created the tsunami. Also, by studying the human activities in the area, geographers discovered why so many people were affected. The tsunami in Indonesia struck popular tourist beaches during peak season when hundreds of tourists were there for the Christmas and New Year holiday. Tsunami warning systems had not worked for six years because they had been damaged and vandalised.



▲ **Figure A** This photograph shows the resulting damage of the tsunami that hit coastal regions in Java and Sumatra, Indonesia, in 2018.

Furthermore, the warning systems that were in place only activated when an earthquake was detected, not when there was an underwater landslide. Many locals considered an earthquake to be a sign for people to move to higher ground, but they did not have a strong education on how volcanic activity causes tsunamis and the risks involved. By studying the relationship between humans and the environment, geographers are able to understand why people would risk living in dangerous areas. In the case of Java and Sumatra, where the tsunami hit in Indonesia, the natural environment provides locals with healthy soil to grow crops and the ocean to provide them with seafood. The tropical **climate** and beaches also supply those who live there with a source of income from the tourist industry. The land near volcanoes is often cheaper and many cannot afford to move further away. Often, the locals would not want to move because the area is their home. The study of geography finds solutions to important challenges. For example, geographers used sonar surveys to map the sea floor beneath the Anak Krakatau volcano in order to understand how the landslide caused the tsunami. They also educated people about the warning signs of a tsunami when it is triggered by a volcano. There is no doubt that geographers can be game-changers and life savers, but to perform their important role, geographers need to rely on geographical concepts and skills.

climate the long-term trends in the weather conditions of a place, such as its average rainfall and temperature

Introducing geographical concepts and skills

Geographical concepts and skills help to guide the way you question and think about an issue. The seven concepts that are used in the following chapters on geography are: place, space, environment, interconnection, sustainability, scale and change.

Geography is a process of questioning, discovering and communicating what you have learned. This process of inquiry involves the following geographical skills:

- Asking questions that relate to geographical concepts
- Researching a topic by collecting primary and secondary data (see Table A)
- Analysing information to come up with conclusions and to gain an understanding of a topic
- Evaluating what is being done in response to an issue or **phenomenon** by seeing if a response is successful
- Presenting information in ways that help people, governments and the media understand an issue
- Suggesting or creating solutions based on the research and evidence.

phenomenon an occurrence or observable fact

▼ **Table A** Primary and secondary data in geography

Primary data	Secondary data
Primary data is data that you collect specifically to help you answer an inquiry question. This data is collected during fieldwork .	Secondary data is data that was created by someone else for a different reason. However, the information can still help you answer your own question.
Examples: <ul style="list-style-type: none"> • Photographs • Collecting samples • Observations of geographic processes • Interviewing people 	Examples: <ul style="list-style-type: none"> • Published statistics • Satellite imagery • Online interactive maps

fieldwork gathering information and data about a natural or human environment outside the classroom



▲ **Video A**
Types of maps

Maps are an important type of secondary data for geographers. Video A gives an overview of different map types.

To give you an example of geographical concepts and the skills in action, a geographer looking at Figure B might ask the following questions:

- How has this volcano changed?
- What is the scale and distribution of this change?
- What interconnections between factors caused the change?
- What impacts have these changes had on the environmental, social and economic sustainability of the region?



▲ **Figure B** These satellite images of the volcano on Anak Krakatau were taken before erupting (left) and after erupting (right). The most obvious change that the eruption had to the region is that a large part of the southern flank of the volcano slid into the ocean, which has changed Anak Krakatau's shape and size.



▲ **Figure C** Anak Krakatau erupting in 2018. The unusual interconnection between this eruption and the following tsunami launched geographers into a new area of research, in the hope that we can stop such tragedies from happening again.

You will learn more about geographical concepts and skills in the following chapters. In Chapter 5, you will study the topic of water. This includes how water connects people and places, how water is used and managed, how hydrological hazards occur and what their impact is on people. Chapter 6 looks at place and liveability. You will learn what makes a place a good area to live, how a person's town can impact their life, and how geographers can make places safe, healthy and inspiring environments for people to thrive in.

The work of geographers has been, and will always be, important. In the past, geographers have helped to determine the circumference of Earth, how and where to grow food, and how to reduce the damage caused by natural disasters. Today, and into the future, the discoveries geographers make will help us overcome modern challenges, such as climate change, the extinction of species and the sustainable use of resources such as water.

Geography is an empowering and forward-thinking subject. It requires an open mind to consider many questions and perspectives. A geographer also has to be sharp enough to understand the information that is collected and to create a future that is better than the present. Who knows where your study of geography will take you? The possibilities are endless!

An aerial photograph of a river system. The river channel is a vibrant turquoise color, winding through a landscape of reddish-brown earth and sparse green vegetation. The banks are eroded, showing intricate patterns of soil and rock. The overall scene is a mix of natural beauty and rugged terrain.

UNIT

1

**Water in
the world**

Overview

Water is the most precious resource we have. We use it every day in our homes, as well as to grow food, make energy and products, and move people and goods all over the world. Water is a finite, renewable resource. This means that there is the same amount of water on Earth today as there was when Earth was formed and, if managed well, it can be reused forever. In fact, the water you drink today could contain molecules that dinosaurs and cave-dwellers drank well before your time!

Every day there are more and more people using the water on Earth, but only 2.5 per cent is drinkable. So, how we treat this precious resource has never been so important. As our use of water increases, we have come up with clever ways to access fresh water. In Perth, 10 per cent of the water flushed down the toilet and sink is recycled into drinking supplies. In Kuwait, almost 100 per cent of drinking water comes from desalination plants that turn saltwater into fresh water. However, there are also ways that we mistreat or waste water. Water is part of an interconnected system called 'the water cycle'. This means that the pollutants we put into the soil and sky can contaminate or pollute our water, and reduce the amount of clean water that we can use.



▲ **Figure D** Some of the most spectacular places on Earth were formed by water, including the Marble Caves in Patagonia, Chile.



▲ **Figure E** This photograph shows some of the filtration processes used to treat wastewater at the Bundamba purified recycled water plant near Brisbane. It is one of three purified recycled water plants connected to the South East Queensland Water Grid. This plant has the capacity to treat wastewater to meet drinking water standards. This water could then be added to Lake Wivenhoe, where it would eventually be treated again through conventional treatment processes before reaching people's taps.



▲ **Figure F** The Gordon Dam in Tasmania

Introducing geographical concepts

In this unit, you will have many opportunities to explore geographical concepts.

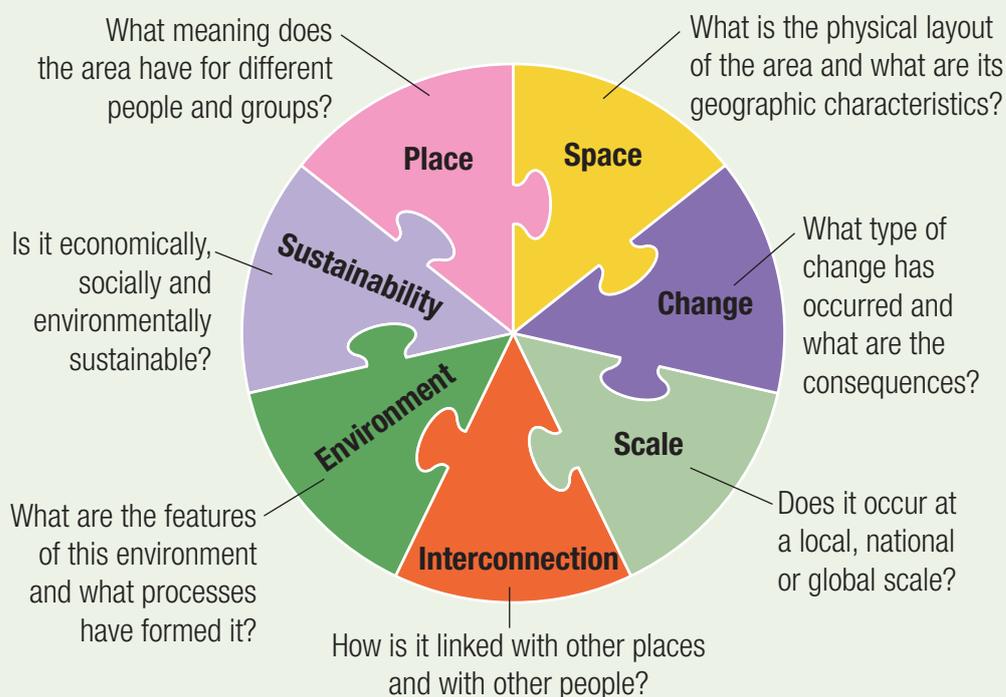
Space is a physical area. When we discuss space, we often refer to the layout of that area (or the spatial distribution), the physical characteristics and its location.

The concept of **place** refers to the meaning that the location or space has for individuals, communities and cultures.

When geographers look at **change**, they investigate the type of changes that have occurred. They also look at when, where and why change has happened.

The **environment** in geography refers to the characteristics of an environment, how an environment supports life, and the connections between an environment and people.

Interconnection involves the links between places and the ways that people influence or are influenced by the characteristics of places and spaces.



▲ **Figure G** Adapted from ACARA, 'Understand this learning area: Geography 7–10', Australian Curriculum: Geography V9.0



CHAPTER 5: Water in the world

Setting the scene: water – an essential part of human existence

Water is essential to all life on Earth. A person can only survive without it for about three days. Throughout history, people have used water not only to survive but also to thrive. It is needed for

drinking, to grow food, as habitat for plants and animals, and is used for transport and to create electricity. Water is also a significant part of First Nations cultures in Australia. First Nations people developed expertise in managing water sources, and passing on knowledge with Dreaming stories such as the rainbow serpent.

Figure 5.1 shows a rainbow serpent that the Amurdak people believed had a snake's body, and was decorated



▲ **Figure 5.1** A cave painting of the rainbow serpent in Mount Borradaile, Awunbarna, which is in Arnhem Land in the Northern Territory. The traditional owners are the Amurdak people.

with rainbow shapes and designs. The rainbow on the serpent's body meant that it was travelling, and keeping the waterholes full and flowing. The rainbow serpent could also be destructive, and cause storms and floods when it was angry.

sediment a soft substance that is like a wet powder and consists of very small pieces of a solid material that have fallen to the bottom of a liquid

Water was also central to civilisation in ancient Egypt. The Nile River flows 6650 kilometres in length from Uganda to the Mediterranean Sea in northern Egypt. The river was the religious, cultural and economic centre of ancient Egyptian life. It would flood annually, leaving fertile **sediment** along its banks. This sediment allowed people to grow enough crops to support themselves. Figures 5.2 and 5.3 show the lush vegetation still growing along the Nile River's banks, and



▲ **Figure 5.2** Cultivated fields by the Nile, Minya, Egypt

the surrounding **floodplain**. Without the floodplain of fertile land, this area would be part of the desert.

As described in Chapter 2, the people of ancient Egypt expressed how much they relied on the Nile River through religious rituals and hymns (songs of praise). They and their priests sang verses like that shown in Figure 5.4.

The river was so vital to the ancient Egyptians' survival that they invented ways to move water from the river to their crops. Although the shaduf shown in Figure 5.5 might be considered primitive by modern standards, the concept of using river water for watering crops within naturally dry regions is a fundamental part of agriculture in many regions of Australia.



▲ **Figure 5.3** This satellite image shows the lush vegetation of the Nile River surrounded by desert.

Hail to thee, O Nile! Who manifests thyself over this land, and comes to give life to Egypt!

Mysterious is thy issuing forth from the darkness, on this day whereon it is celebrated! Watering the orchards created by Re, to cause all the cattle to live, you give the earth to drink, inexhaustible one!

▲ **Figure 5.4** *Hymn to the Nile*, c. 2100 BCE, Ancient History Sourcebook, Fordham University website

floodplain an area of flat land near a river that is often flooded when the river becomes too full

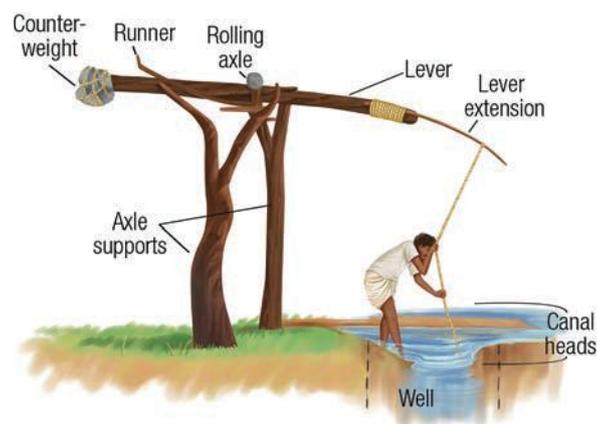


ACTIVITY 5.1 MAKING THINKING VISIBLE

Think, pair, share

Many cultures from the ancient past as well as today have a deep connection with water. Answer the following questions, before sharing your responses with a partner. Then **discuss** your answers with the rest of the class.

- 1 **Identify** all the ways you use water in your life.
Consider how water is used at home and at school. Also think about the water that might be needed to produce items that you purchase or consume.
- 2 **Describe** your experiences with water in the landscape.
Consider water that is near your home, a place you visit regularly or somewhere you have been to on a holiday.
- 3 **Explain** how you think water supplies and water in the landscape might change or be impacted on in the future.
Consider environmental damage, population growth and changes to the climate.



▲ **Figure 5.5** The shaduf is a hand-operated device for lifting water. It is still used in some countries to water crops. It moves water from the river, over the bank and into drains that are dug along and through the fields.

Chapter overview

Introduction

In this unit, you will investigate what water means to Australians and peoples around the world. Understanding the connections between water, people and places is an essential part of your study. This unit will help you to interpret your natural environment and the natural processes that shape it. By looking at the way water is used, you will learn how this resource is treated with respect and ways that it is not. You will also look at water in its wildest forms, such as in storms and floods, and learn how people can be prepared to handle hazards of this kind. In this unit, you will consider the value of water, and the way it connects people, places and environments in the landscape.

Learning goals

After completing this unit, you should be able to answer these questions:

- How is water essential to life?
- What is an environmental resource?
- How can water be classified as an environmental resource?
- What role does water play in connecting environments and places?
- How do people manage water resources?
- How is water managed in Australia?
- What role does water play in the spiritual, economic and cultural life of people in Australia and around the world?
- Why do floods occur?
- What are the social, economic and environmental impacts of floods?

Geographical skills

After completing this unit, you should be able to:

- Explain processes that influence the characteristics of places
- Identify, analyse and explain spatial distributions and patterns, as well as identify and explain their implications
- Identify, analyse and explain interconnections within places and between places, and identify and explain changes resulting from these interconnections
- Analyse maps and other geographical data and information, using digital and spatial technologies as appropriate, to develop identifications, descriptions, explanations and conclusions that use geographical terminology.

5.1 How is water used as an environmental resource and how does it connect and change places?

FOCUS QUESTIONS

- What is an environmental resource?
- How can water be classified as an environmental resource?
- What role does water play in connecting environments and places?

Environmental resources

Resources are used by people to satisfy a need. A need could be something like constructing a building, generating electricity or earning money. **Environmental resources** are those that are found naturally in Earth's **environment**. They include things like light, wind, heat, water, plants, trees, animals, soil, rocks and minerals. When we speak about the environment, we are referring to all the features that make up our surroundings and make it possible to live on Earth. The features of the environment can be divided into four spheres:

- The atmosphere, which includes the air we breathe and the sunlight we feel
- The hydrosphere, which is all of the water found on Earth, including the oceans, rivers and lakes
- The lithosphere, which includes all of the rocks and soil
- The biosphere, which is all of the living things on Earth, including plants, animals and people.

Different parts of these four spheres interact with each other. For example, rain that falls from the atmosphere might flow into a river, the hydrosphere. This river might cut through soft soil on a river bank, the lithosphere, and provide a water supply for local animals, the biosphere. The interactions between different parts of the environment are known as **geographical processes**.



ACTIVITY 5.2

Features of the environment

Using the information above about features of the environment, complete the following:

- 1 **Create** a diagram showing how the four spheres of the environment interact with each other.
- 2 **Identify** an example of an environmental resource for each of the four spheres that make up the environment.



5

environmental resources resources that are from the natural environment, such as water and wood

environment the air, water and land of a particular area, which contains people, animals and plants

geographical processes a series of events or actions that change environments, spaces and places

renewable

resources resources that can be produced as quickly as they are used

harvest to pick and collect crops, or to collect plants, animals or fish to eat

species a group of plants or animals that are classified as having the same characteristics

sustainability the wise use of resources so that they are available into the future

non-renewable

resources resources existing in limited quantities that cannot be replaced after they have all been used

fossil fuels fuels that were formed underground from plant and animal remains millions of years ago; examples include gas, coal and oil

infinite resources

resources that are without limits

Renewable and non-renewable resources

A common way to classify environmental resources is based on whether they are renewable. **Renewable resources** are those that can naturally replenish themselves – for example, solar energy, wind energy and trees. Some resources are renewable, but if they are used at a rate that is quicker than the rate they renew themselves, then they can eventually run out. For example, if people choose to **harvest** trees from a forest, the trees might grow back naturally or they could be replanted by people. However, depending on the **species** of the tree and the climate, it might take each tree 30 years to grow back to a mature height. This means that if trees are harvested too quickly, the supply can run out faster than it grows back, even though they are a renewable resource.

In geography, we use the concept of **sustainability** to describe whether the use or changes of an environment can continue at the same rate into the future, without leading to negative impacts. **Non-renewable resources** are those that cannot be replaced once they are used. **Fossil fuels** are a common example. Fossil fuels are produced from buried deposits, which are formed from layers of decayed plants and animals (fossils). Over millions of years, the layers of organic remains have been exposed to intense heat and high pressures. These geographical processes have changed the organic remains into fossil fuels. Fossil fuels include:

- Crude oil
- Coal
- Natural gas.

Technically, new fossil fuels are being created following the same processes that formed them in the first place. However, this does not occur at a time-scale that makes them renewable for use. For example, it will take 300 million years for new coal to form from the current dead plant material!

Finite and infinite resources

Some renewable resources will never run out. These are known as **infinite resources**. Scientists predict that the sun will last for another 6.5 billion years.



▲ **Figure 5.6** Ranger Uranium Mine, Northern Territory, Australia. Australia is the third largest producer of uranium (behind Kazakhstan and Canada).



▲ **Figure 5.7** Coal is a non-renewable fossil fuel that is mined in Australia and exported around the world for the production of electricity.

Although this technically is not infinite, this time span is much longer than the amount of time that Earth has existed, and is therefore considered to be renewable. Resources that have a limited supply, such as non-renewable resources, will eventually run out. Every time they are used, there is less of the resource remaining. These types of resources are known as **finite resources**.

finite resources
resources that have a limit or end



ACTIVITY 5.3 DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Classification

An important role of a geographer is to classify the world around them. This helps them to understand features of Earth and how the features interact with each other. Geographers classify species of plants and animals, as well as different types of rocks, rivers and mountains.

Based on the information here about environmental resources, classify the following resources as either renewable or non-renewable. Also classify each resource as either finite or infinite. Write a sentence justifying why you have classified each resource the way that you have.

- Native animals hunted as a food source
- Saltwater from the ocean that is converted into fresh water
- A forest that is used to harvest individual trees and then left to grow back
- A forest where all the trees are harvested so that the land can be turned into a farm.

You may wish to use the table template shown here to help set out your classifications.

Resource	Renewable or non-renewable	Finite or infinite	Justification



▲ **Figure 5.8** Although wood is a renewable resource, supplies can run out if it is not managed sustainably. Here is an aerial view of deforestation in Borneo.

5

fresh water water with less than 0.5 per cent of dissolved salts

glaciers large masses of ice that move slowly; they are frozen rivers of ice that form when snow accumulates and is compacted

ice cap a thick layer of ice that permanently covers an area of land

How much water is there on Earth?

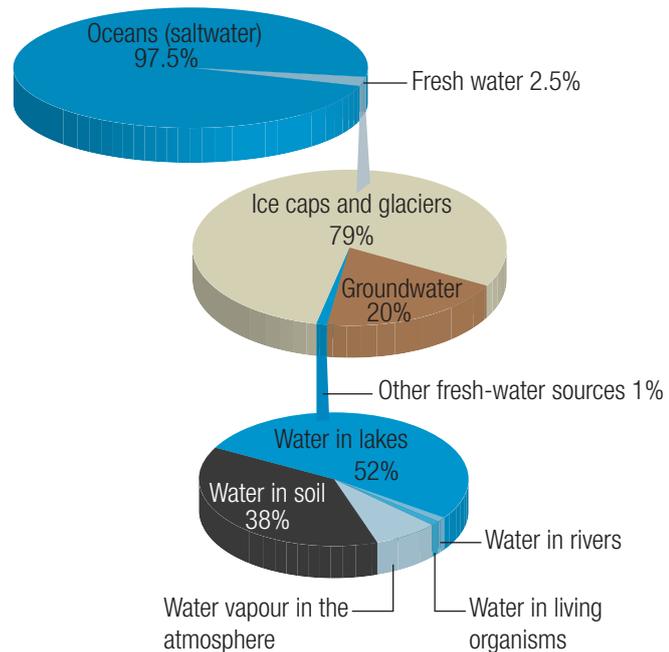
Water is one of the most abundant resources on Earth. In fact, it is estimated that Earth contains 1260 quintillion litres. That’s 1 260 000 000 000 000 000 000 litres!

Approximately 97.5 per cent of this water is saltwater. It is found in oceans, which cover 71 per cent of Earth’s surface. This leaves 2.5 per cent as **fresh water**. Fresh water supports all life on land, including people. Though the usage varies depending on location, the average individual in Australia uses 340 litres of water per day. This does not include all the water used to grow crops.

Although fresh water is a small percentage of the total water on Earth, if this 2.5 per cent was readily available, then it would be a plentiful supply. However, 79 per cent of all fresh water is frozen in **glaciers** and **ice caps**, such as those covering Greenland and Antarctica (see Figure 5.10). A further 20 per cent is located underground in the groundwater supply. In fact, just over 0.5 per cent of all the fresh water on Earth is available in lakes and rivers.



▲ **Figure 5.9** Oceans cover 71 per cent of Earth’s surface.



▲ **Figure 5.10** Although Earth contains a very large amount of water, only a very small percentage is available as fresh water.

The natural water cycle

All of the water on Earth is constantly changing form through the processes involved in the natural water cycle (see Figure 5.11 and Video 5.1). Due to the warmth of the sun, the surface water in rivers and lakes turns water into water vapour. This process is known as **evaporation**. Similarly, water in plants and trees undergoes **transpiration**. As water cools in the atmosphere, clouds form and the water condenses. From this **condensation**, water droplets and ice crystals form. When clouds grow large enough, the water falls as **precipitation**, such as rain and snowfall. When this falls on the land, some of the water is absorbed into the soil and is added to the groundwater supply. This **infiltration** eventually flows underground into rivers, lakes or to the coast. Water that does not infiltrate into the soil flows over the land and into rivers. This is known as **run-off**. This water eventually makes its way into river systems and flows back out into the ocean where the cycle repeats itself.

evaporation the process of a liquid changing to a gas, especially by heating

transpiration the process of losing water through the surface or skin of a body or a plant

condensation the process by which water vapour in the atmosphere cools and changes into liquid water

precipitation water that falls from the clouds towards the ground, especially as rain or snow

infiltration the process by which water is absorbed into the ground

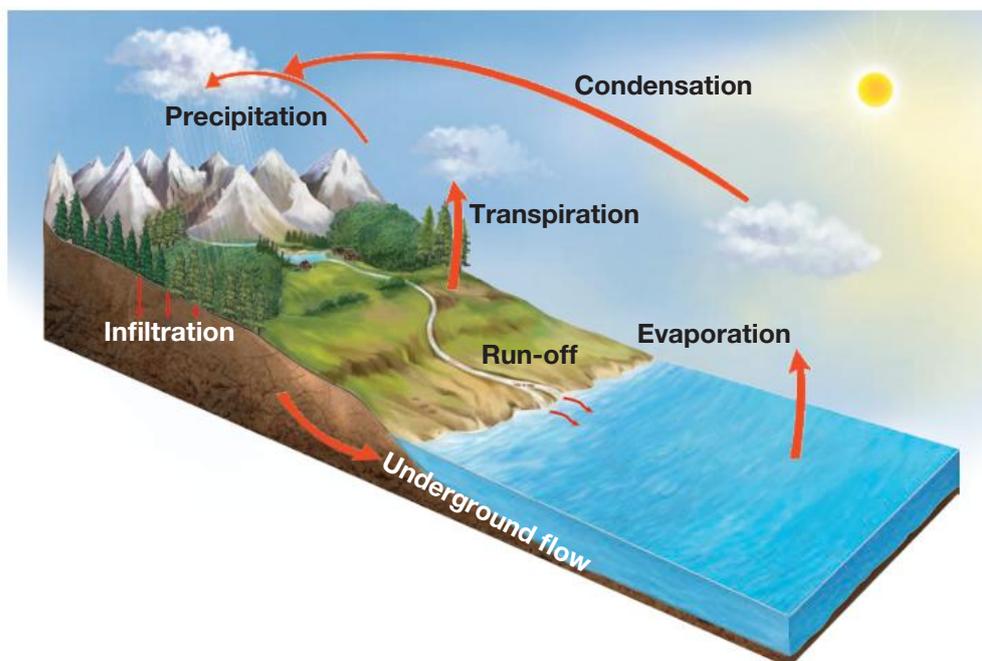
run-off water that is not absorbed by the land and flows from high areas to low areas

catchment an area acting like a giant bucket, catching all of the water from rainfall, run-off and infiltration

meander to follow a winding course, like the bends and curves of a river or stream

Interesting fact

The Brisbane River **catchment** starts in the Great Dividing Range at the Cooyar and Brisbane ranges. It then winds through the Brisbane valley connecting with its six sub-catchments to **meander** through the city and end at Moreton Bay.



▲ **Video 5.1**
The water cycle

▲ **Figure 5.11** The different processes involved in the natural water cycle. These are explained in more detail in Video 5.1.

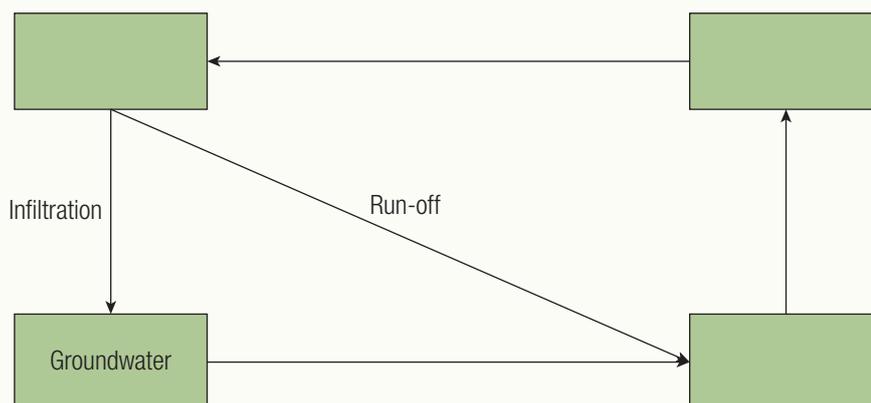


ACTIVITY 5.4 DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Drawing a concept map

Concept maps are a type of diagram that are used to show processes. They include terms inside boxes, with arrows linking the boxes to demonstrate the steps of a process.

A concept map can be used to summarise the processes within the water cycle and the different forms of water found in the cycle. Copy and complete the concept map here to summarise the water cycle.



How is water used?

Water is considered an environmental resource because it has a wide variety of uses. Water is used in the following ways:

- Domestic – used in the home for drinking water, flushing toilets, showers, cooking and cleaning
- Agriculture – used to grow crops and raise animals
- Industry – used to manufacture and transport products
- Environment – used to maintain the health of natural and human environments
- Recreation – used in community swimming pools, and to maintain parks, ovals and golf courses.

What kind of resource is water?

Since water is constantly undergoing different processes in the water cycle, it can be described as a renewable resource. Many communities around the world rely upon regular rainfall to renew their water supply. Although rainfall and river flows are usually regular and therefore renewable, these processes can reduce or stop completely during **drought**. In these cases, water is temporarily non-renewable. Despite constantly changing between a solid, liquid and gas, the total amount of water on Earth never changes. This means that the overall supply of water is finite. However, in areas such as Cairns, that receive high and regular amounts of rainfall, the resource can certainly seem infinite. In other places, supplies are constantly monitored and the use might need to be restricted if the finite supplies run low.

drought an extended period of time without rain that causes water shortages and crop damage

Available water resources

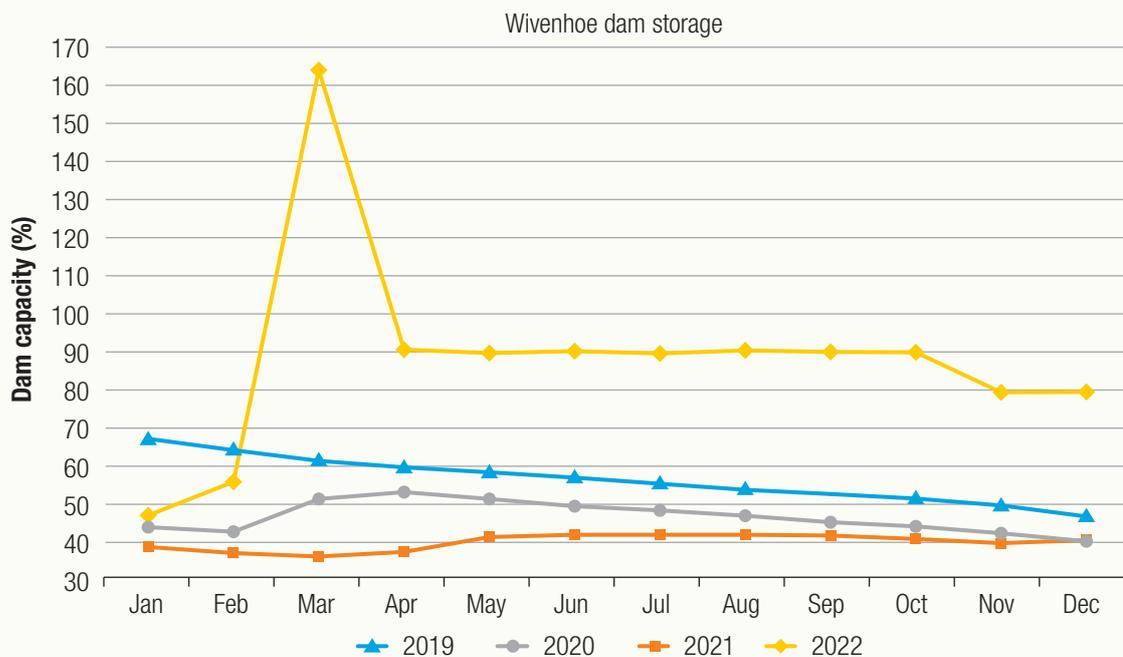
Available water resources are those that can be accessed relatively easily and cheaply. This includes the water found in rivers, lakes and groundwater.



ACTIVITY 5.5 DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Describing changes using a line graph

Line graphs are used to show changes over time. The bottom of the graph shows the movement of time and is often divided into years or months. The quantity that is changing is measured along the side of the graph. Figure 5.12 shows how the level of water stored in the Wivenhoe Dam (which has a total storage capacity of 3.132 million megalitres) has changed each month over four different years. The values shown on the left of the graph are how full the Wivenhoe Dam was during different years, by indicating the percentage of the dam filled with water. **Examine** the graph and answer the questions that follow.



▲ **Figure 5.12** Percentage of the Wivenhoe Dam capacity filled with water as measured on the first day of the month from 2019 to 2022 (Source: Seqwater)

- Identify** the year and month that recorded the most water in the Wivenhoe Dam. What was the percentage capacity then?
- Identify** the year and month that recorded the least water in the Wivenhoe Dam. What was the percentage capacity then?
- Identify** the year that had the biggest change in the level of water stored in the Wivenhoe Dam. What was the lowest and highest level during that year?
- Describe** what you think might have been the cause for the low storage levels in 2020 and what the consequences might be for local residents.
- Research** the millennium drought, and write a short summary that includes timelines, weather conditions and impacts.

perennial something that happens repeatedly or all the time

ephemeral something that happens only for a short time

arid very dry, often without rainfall to support plants

SURFACE WATER

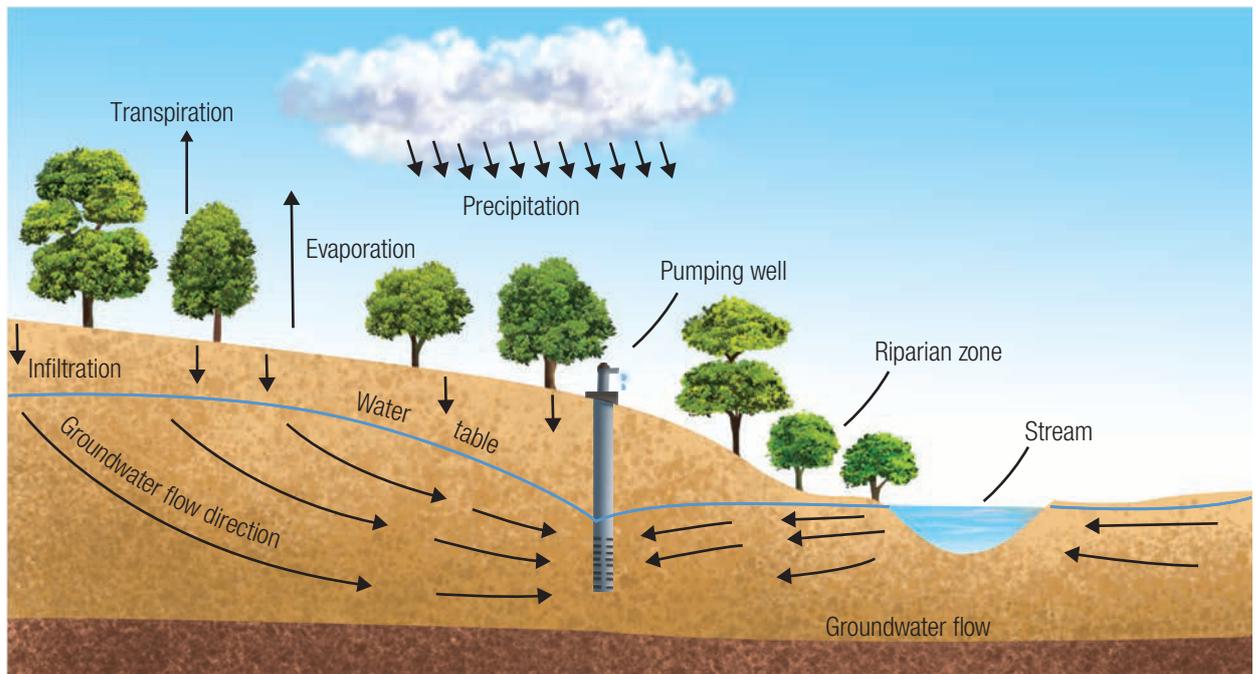
As the name suggests, surface water is water located on the surface of Earth. This includes rivers, lakes and wetlands, such as swamps. Most major cities are built near a reliable supply of surface water because it is easy and cheap to access and use. In some cases, surface-water resources are **perennial**, which means that they are permanent. Perennial resources are lakes that always contain water and rivers that flow all year round, such as the Burdekin River in north-central Queensland. In drier areas, surface-water resources are often **ephemeral**, which means they are semi-permanent. Ephemeral resources dry up during seasons with low rainfall. This is a common occurrence in many **arid** places in Australia, such as the Diamantina River in western Queensland.



▲ **Figure 5.13** The Burdekin River in north-central Queensland is a perennial river, which means it flows all year.



▲ **Figure 5.14** The Diamantina River in central-west Queensland is an ephemeral river, which means it flows occasionally after flooding rains.



▲ **Figure 5.15** Groundwater comes from rainfall that infiltrates into the soil layer.

GROUNDWATER

Groundwater is water that is located below Earth's surface. It comes from rainfall that has infiltrated into the ground, and has been absorbed by soil and **porous** rocks. The boundary between groundwater supplies and the drier soil above it is called the water table. Australia has a large system of groundwater basins, which stretch under about 60 per cent of the continent. The Great Artesian Basin is the largest of these; it is estimated to hold around 8700 **megalitres** of water. Many people living in dry areas are reliant on groundwater supplies, especially when rainfall is erratic or during extended periods of drought. During these periods, water is pumped to the surface using **bores**. Although groundwater supplies are finite, they are replenished during periods of high rainfall.

porous something that has many small holes so liquid or air can pass through, especially slowly

megalitre a metric unit of capacity equal to a million litres

bores holes drilled into the ground to access underground water resources; also called a well for larger holes

Potential water resources

Potential water resources are those that are not as easy to obtain. They include saltwater, ice, water vapour and wastewater. Accessing these resources requires complex and expensive extracting and filtering technologies. As populations grow, many places are forced to use these types of resources to ensure their water supply is renewable.

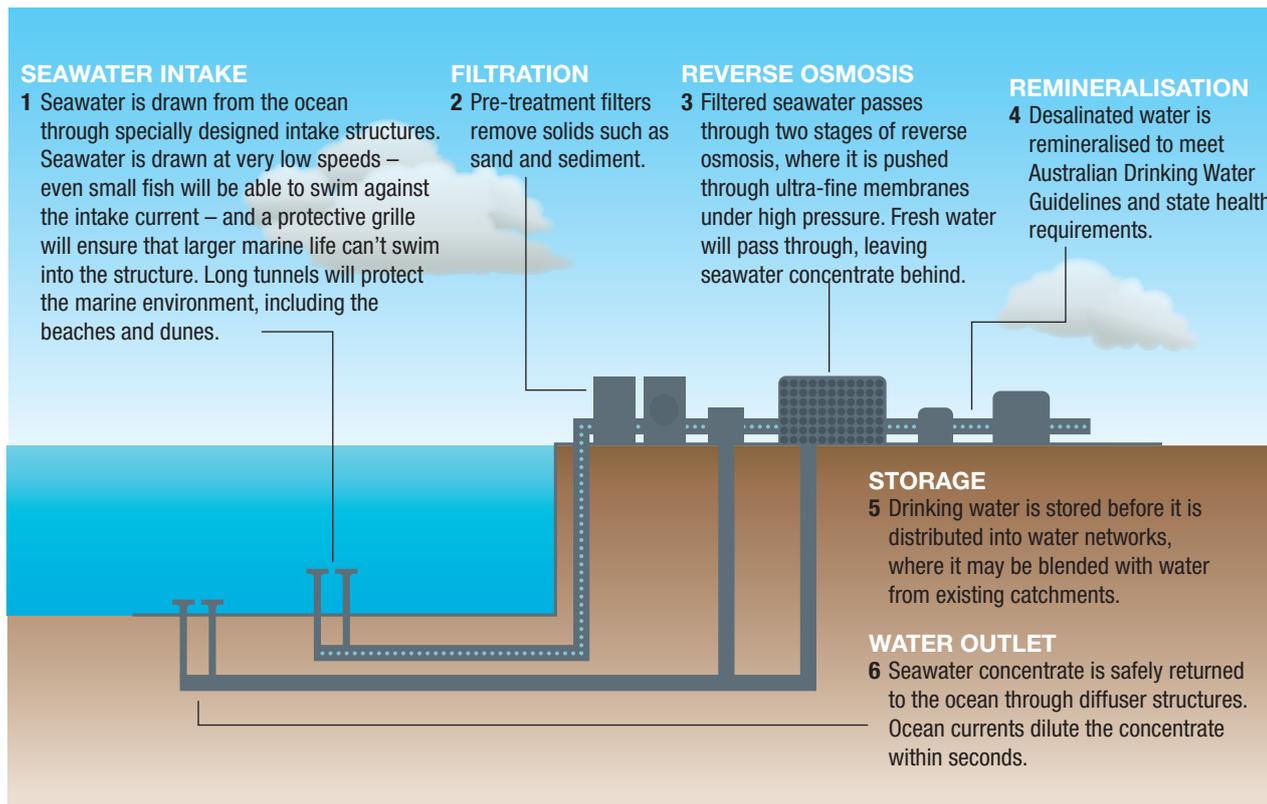
SALTWATER: DESALINATION

Desalination is the process of removing salt and other minerals from water. This can turn water from the ocean or underground sources into water that is safe for human consumption.



▲ Video 5.2 Desalination

Given the size of the ocean, water from desalination is a very reliable resource, and is particularly useful in coastal areas that have low or inconsistent rainfall. However, desalination plants are expensive to build and maintain. The cost to build a single plant in Australia is more than \$1 billion, and this does not include the ongoing maintenance costs on the equipment. Desalination plants also require a very large amount of energy to run. Despite the costs, desalination plants have been built in Melbourne, Sydney, Adelaide, Perth and the Gold Coast.



▲ Video 5.2 The process involved in desalination to create drinkable water. (Use the QR code to watch the video.)

Interesting fact

Desalination is an ancient technology! The ancient Romans used early forms of desalination to ensure that their soldiers did not get dehydrated when they were in areas without a consistent supply of fresh water. The ancient Romans used clay filters to trap salt, which allowed their soldiers to keep on the move when they were away from freshwater sources.

sewage waste matter such as human urine or solid waste

potable water that is clean and safe to drink

filtration the process of removing solids and impurities from water

purification the process of removing dirty or harmful substances from water

WASTEWATER: WATER RECYCLING

Water recycling involves reusing treated wastewater, such as **sewage**. Recycled water can be used to water crops on farms, flush toilets and replenish groundwater supplies. If wastewater is treated thoroughly, it can even be used for drinking. Water that is suitable for drinking is called **potable** water. The process of water recycling involves transporting water to a wastewater treatment plant, where it is **filtered** and **purified**.

In California's Orange County, there is a plant that recycles sewage to make it potable and then returns it to the groundwater supply. It recycles enough water to supply the needs of 850 000 people. While the use of recycled water is not yet widespread in Australia, wastewater in Brisbane, Queensland, is recycled and returned to the Wivenhoe Dam. It is then processed to be safe for drinking. There are three wastewater recycling plants in Brisbane and Ipswich that contribute to the city's water storages. Although many people may find the idea of drinking recycled sewage difficult to swallow, there have not yet been any cases of human health problems associated with the consumption of recycled water.

Interesting fact

Colour terms are often used to help define different types of water resources. *Blue* water is water found in rivers, lakes and dams. *Green* water is water that is stored in the soil and used by plants during their growth. *Grey* water is wastewater that comes from household uses, such as baths, sinks, washing machines and dishwashers. It is not safe to drink but can be reused to water the garden. *Black* water is sewage and wastewater that contains everything that we flush down the toilet.



ACTIVITY 5.6

Positives and negatives

Create a table that summarises the positives and negatives of surface water, groundwater, saltwater and recycled water as water resources. **Consider** the environmental and economic impacts of using these resources. Use your table of positives and negatives to **justify** your response to the following question: 'How would a wastewater recycling plant be helpful in the large and growing regional city of Toowoomba?'

▼ **Figure 5.16** Wivenhoe Dam outside of Brisbane



interconnection the relationship between places and people, and the ways in which they influence each other

Water as an interconnection

In geography, **interconnection** refers to the links and relationships between objects and places. People often play an important role in these links as human activities often impact and change natural processes. As water transforms through the water cycle, it plays a significant role in connecting places and changing an area's characteristics. The flow of rivers downstream provides important links between places. These connections vary in scale from small urban creeks to rivers that flow across several countries. For example, the Condamine River begins at Mt Superbus in the Great Dividing Range, flowing west through south-east Queensland and the Darling Downs, and connects to the Darling River. It then becomes part of Australia's longest river system (total length of 3672 kilometres), flowing through the three states of Queensland, New South Wales and Victoria, where it eventually connects with the Murray to become the Murray–Darling Basin. In contrast, the Mekong River is one of the largest rivers in the world and flows 4350 kilometres through China, Myanmar, Thailand, Laos, Cambodia and Vietnam.

TRADE AND TRANSPORT

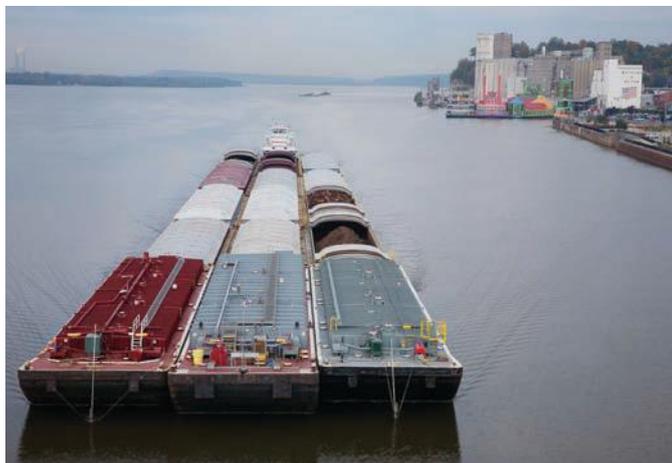
In larger river systems, rivers have been, and still are, a major source of transport and vehicle for trade. In 1853, paddle steamers became a form of inland transport and trade along the Murray River. While the common cargo was once bales of wool, today these paddle steamers carry tourists up and down the river in places like Mildura and Echuca. The Mississippi River is the second longest river in North America and is a significant part of trade in the United States. The barges there transport items like petroleum, iron, steel, grain, paper and wood to various ports.

Interesting fact

The Port of South Louisiana ships 500 million tonnes of goods each year!



▲ **Figure 5.17** Famous Murray River paddle steamers, such as the PS *Emmylou*, operate as a tourist attraction in Echuca, which is on the border between Victoria and New South Wales.



▲ **Figure 5.18** Oil tankers and barges are essential to the local economy in the Mississippi basin.

WATER MOVING THROUGH ENVIRONMENTS

Water can take many forms as it flows through different environments. In Bhutan, the water source for many villages comes from glaciers located tens or even hundreds of kilometres away. Glaciers are frozen rivers of ice that form when snow accumulates and is compacted. This usually occurs in mountainous regions. When ice from Bhutan's glaciers melts, water flows into rivers and downstream to villages. People then use this water for agriculture, which is the main industry in Bhutan.

The amount of water available for people living in downstream regions of a river system depends on the amount extracted by the upstream users. If users upstream withdraw too much water, the quantity of downstream supplies is reduced. Furthermore, if pollution is added to a river upstream, it can damage the quality of downstream supplies. Pollution in this context includes industrial waste from factories or mining operations, and fertilisers and pesticides from farm use, which get washed into waterways when it rains.

In the case of the Mekong River, the **exploitation** of water resources in upstream countries, such as China and Laos, is causing havoc for Cambodia. Cambodia is heavily reliant on the Mekong River for agriculture, as it provides 85 per cent of the agricultural water supply. The fishing industry, which makes up 12 per cent of Cambodia's economy, also relies on a healthy river flow to support 500 local species of fish. However, since the 1990s, the river and its **tributaries** have been dammed throughout South-East Asia, largely for the generation of hydropower. These dams have blocked the movement of fish, reduced the amount of **nutrients** in the water, and have made water levels downstream

exploitation the use of something in order to get an advantage from it

tributaries rivers or streams that flow into a larger river or a lake

nutrient any substance that plants or animals need in order to live and grow



▲ **Figure 5.19** Northern Bhutan is dominated by tall mountains and glaciers that make up part of the Himalayas.



▲ **Figure 5.20** Ice from Bhutan's melting glaciers flows into rivers.



▲ **Figure 5.21** Water from Bhutan's rivers supplies the villages with water to use for agriculture.



▲ **Figure 5.22** Cambodia's fishing industry is in crisis as water levels in the Mekong River have hit record lows.

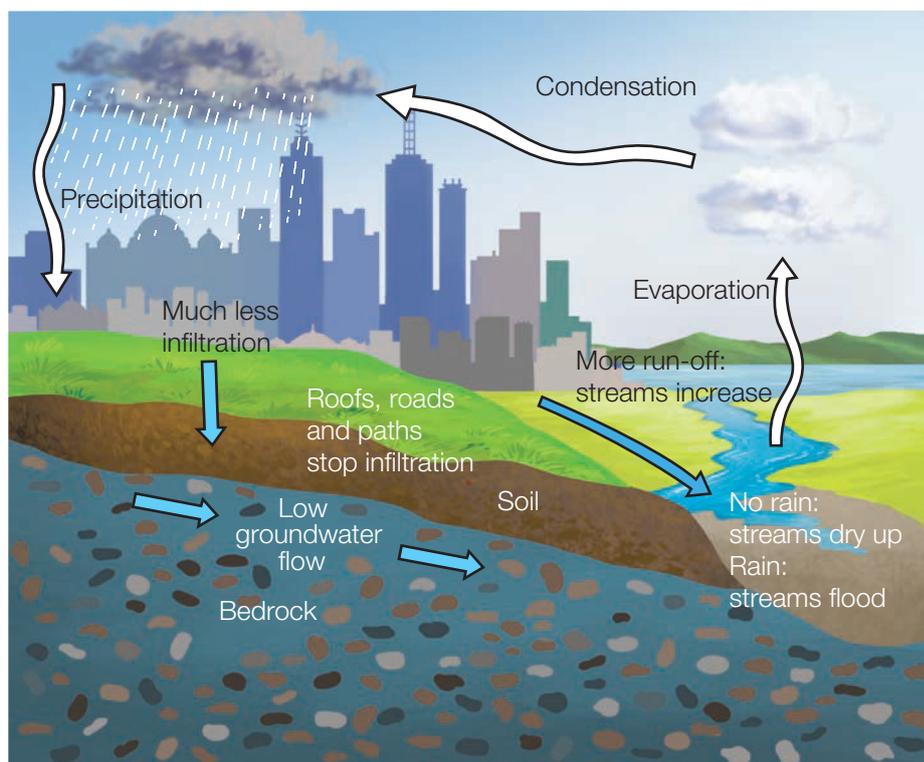


▲ **Figure 5.23** In 2018, thousands of villagers in Cambodia were left stranded when a collapsed dam in Laos sent floodwaters hundreds of kilometres downstream.

irregular and unnatural. Furthermore, in cases where these dams have collapsed, downstream communities have been flooded. Villagers in Cambodia who rely on the Mekong River are losing their livelihoods and are being forced to change their lifestyles due to the actions of people hundreds of kilometres away.

THE URBAN WATER CYCLE

The development of urban environments involves the change of a natural environment to one that is artificial. This typically involves the removal of trees and other vegetation, as well as the construction of houses, buildings, roads and footpaths. Although this development is necessary to house a growing population, it can completely transform the way water moves through an environment. In these human environments, rather than following the natural water cycle (see Figure 5.11 and Video 5.1), water follows the urban water cycle (see Figure 5.24).



▲ **Figure 5.24** The urban water cycle has the same processes as the natural water cycle. However, there is much less infiltration to groundwater due to the non-porous coverings of roads and paths, which create more run-off.

In the natural water cycle, water infiltrates into the soil and maintains groundwater supplies. In urban areas, there is far less exposed soil. The landscape in an urban environment is dominated by hard surfaces. These are surfaces like concrete where no water can penetrate. Therefore, much less water infiltrates into the soil and groundwater in an urban environment, and far more flows as run-off. The run-off can lead to increases in flooding and in the amount of pollutants entering local rivers.



ACTIVITY 5.7

The natural water cycle versus the urban water cycle

Compare Figures 5.11 and 5.24, then answer the following questions:

- 1 Identify** and **explain** the major differences between the movement of water in the natural and urban water cycles.
- 2 Describe** the impacts that these differences will have on the local environment in an urban area.
- 3** One way to reduce the impact of urban development on local waterways is to construct raingardens. Visit the Brisbane City Council website and search for 'raingarden' to learn about the benefits of using raingardens to treat stormwater.



▲ **Figure 5.25** Stormwater run-off is directed into raingardens like this one so that water can infiltrate into the ground rather than flooding local creeks.

Investigate whether or not a raingarden would be suitable to construct outside your home or school.



DEVELOPING YOUR UNDERSTANDING 5.1



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

- 1 Identify** the four spheres that make up an environment and **describe** in one sentence what is found in each one.
- 2 Identify** the six processes that water undergoes within the water cycle.
- 3 Explain** some ways in which water use in the upstream countries of the Mekong River has impacted villagers in Cambodia.

Interpret

- 4 Explain** why water can be described as both a renewable and a finite resource.
- 5 Describe** how urban development changes the water cycle and how this can impact on water resources.

Argue

- 6** 'To ensure future water supplies for a growing population, South East Queensland should build more water recycling plants.' **Explain** whether you agree or disagree with this statement. In your response, you should **discuss**:

- The process of water recycling
- The sustainability of water supplies in South East Queensland
- The positive and negative effects of recycling more water
- Viable alternatives to recycling water.



5.2 The location and distribution of water resources in Australia

FOCUS QUESTIONS

- How do people manage water resources?
- How is water managed in Australia?

*I love a sunburnt country,
A land of sweeping plains,
Of ragged mountain ranges,
Of droughts and flooding rains.*

'My Country' – Dorothea Mackellar

The excerpt from Dorothea Mackellar's poem 'My Country' sums up Australia's water resources perfectly. It is a land of contrast; Australia's climate is prone to extended periods of low rainfall and to floods. While some areas have a very high average rainfall, others are classified as deserts. As such, the availability of surface water varies considerably. Australia is the second-driest continent on Earth after Antarctica. Although the average annual rainfall in Australia is 417 millimetres, Figure 5.26 shows that this number varies significantly across Australia. Coastal areas generally receive the most rainfall, whereas rainfall decreases towards the centre.

Australia has a large system of groundwater basins stretching under about 60 per cent of the continent (see Figure 5.27). Australia's Great Artesian Basin is the largest and deepest groundwater basin in the world. It covers 1.7 million square kilometres across Queensland and into the surrounding states and territories. The Great Artesian Basin is estimated to hold around 8700 million megalitres of water. Australians are reliant on groundwater extracted from basins in arid areas where rainfall is erratic and drought conditions are more common. Hundreds of **water bores** are used to pump water out of the ground for use in agriculture and industry, as well as for domestic purposes.

water bore a hole drilled through levels of the ground for the purpose of accessing the groundwater below for use on the surface



ACTIVITY 5.8 DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Describing the spatial association between different features

Describing the spatial association between features on different maps is an important part of understanding the relationship between them. It involves looking at different maps of the same scale and analysing how similar or different their spatial distributions are. In other words, are the features arranged in the same way? A spatial association can be described as strong if the two maps have a very similar distribution or arrangement. A spatial association is moderate if the distribution matches in some regions but not others. And a spatial association is weak if the two maps do not appear to have much of a relationship.

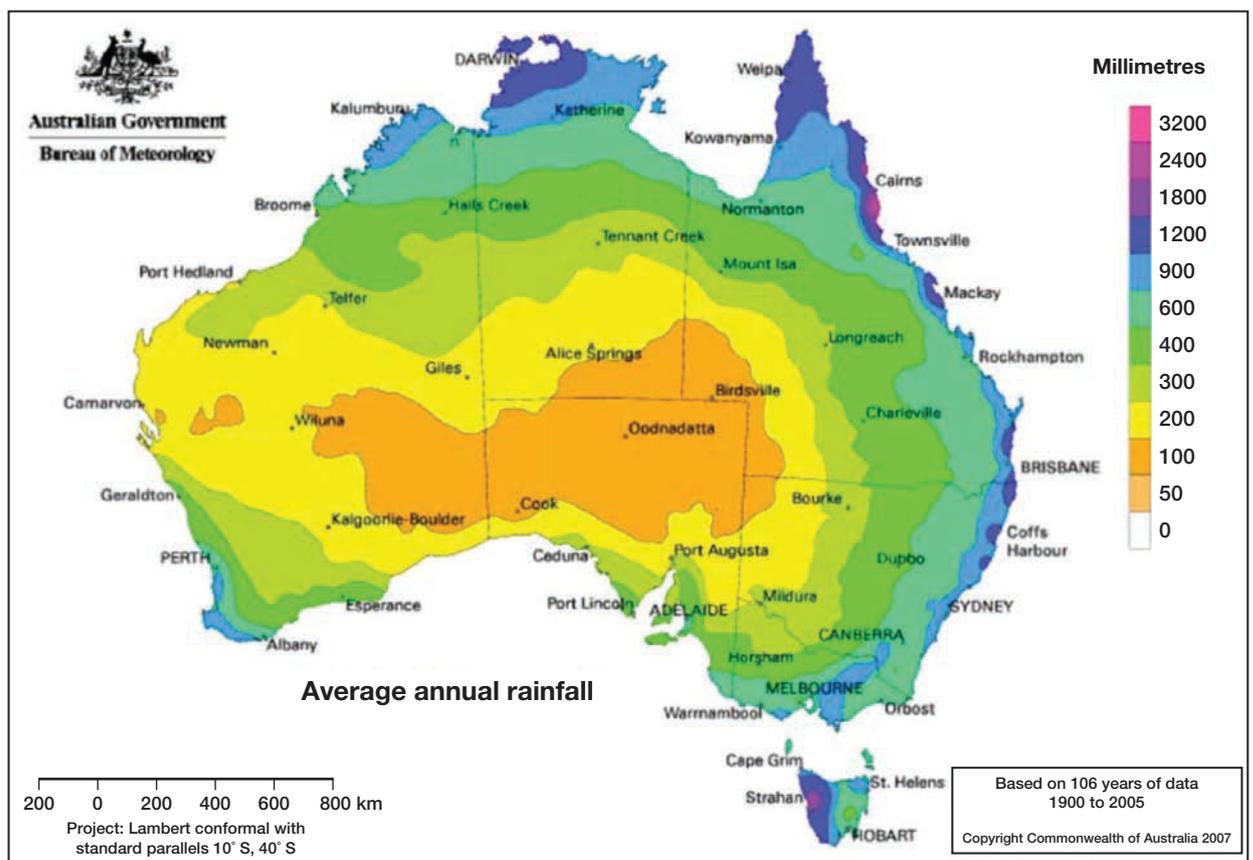
1 Refer to Figures 5.26 and 5.28, and answer the following questions:

- Identify** if the relationship is a strong, moderate or weak association between average rainfall and **population density**.
- Identify** examples of places from the maps to support your answer.
- Identify** and **describe** any exceptions to this relationship.
- Explain** the relationship you see between rainfall and population.

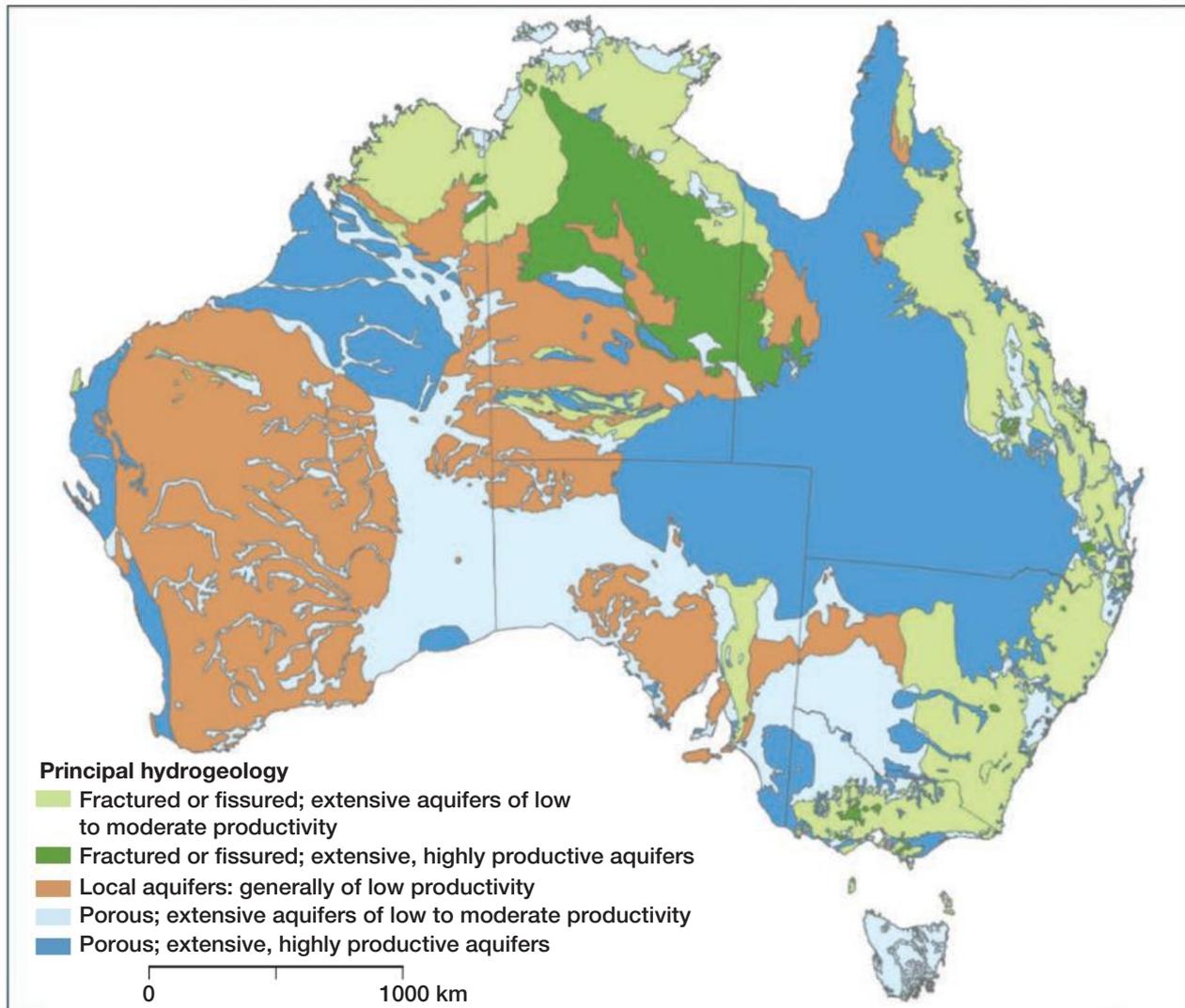
2 Refer to Figures 5.27 and 5.28, and answer the following questions:

- Identify** if there is a clear relationship between groundwater supplies and population density.
- Explain** your answer.

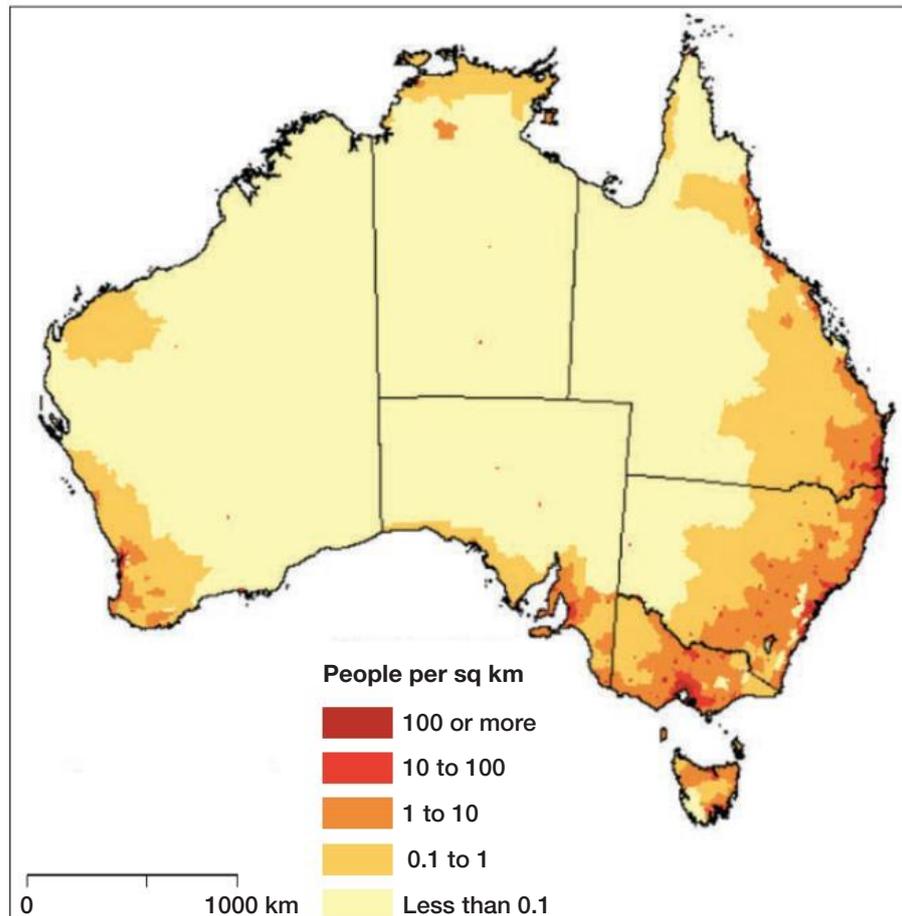
population density refers to the number of people who live in a geographic area; in Australia, this is often expressed as the number of people per square kilometre



▲ **Figure 5.26** The spatial distribution of average annual rainfall over 106 years in Australia. Source: Australian Government, the Bureau of Meteorology.



▲ **Figure 5.27** The spatial distribution of Australia's groundwater supplies. The aquifers in dark blue and dark green are the largest and highest quality supplies, 2021. Source: Bureau of Meteorology Groundwater Insight.



► **Figure 5.28** The spatial distribution of Australia's population, projection for 2021

Strategies to manage the sustainability of water

WATER USE AROUND THE WORLD

Approximately 110 000 **cubic kilometres** (km³) of rain falls on land each year and a further 398 000 cubic kilometres falls over the ocean. To get a sense of scale, this amount of water is the equivalent of 44 billion Olympic-sized swimming pools! This is an enormous amount of water, which is why it is measured in cubic kilometres rather than litres. Around 61 per cent of rainfall on land evaporates or transpires. This leaves 39 per cent, or 43 000 cubic kilometres, to fill rivers, lakes and groundwater. Some of this water is left in the environment to support local **flora** and **fauna**, and some is taken out by people to use as resources. This is known as **water withdrawals**. Figure 5.29 shows the proportion of the water withdrawals that is used for agricultural, domestic and industrial uses when averaged across the entire world. While agriculture dominates the global use of water resources, Figure 5.30 shows that these proportions vary significantly in different continents.

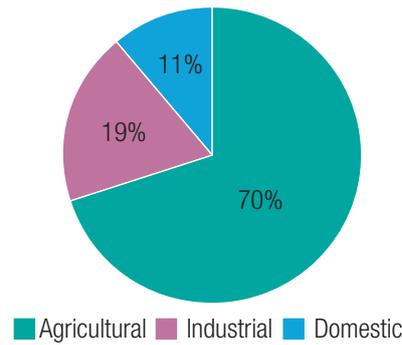
cubic kilometre

a cubic kilometre is equal to a volume of 1000 × 1000 × 1000 metres; a cubic kilometre is also equal to a teralitre, which is exactly one trillion litres

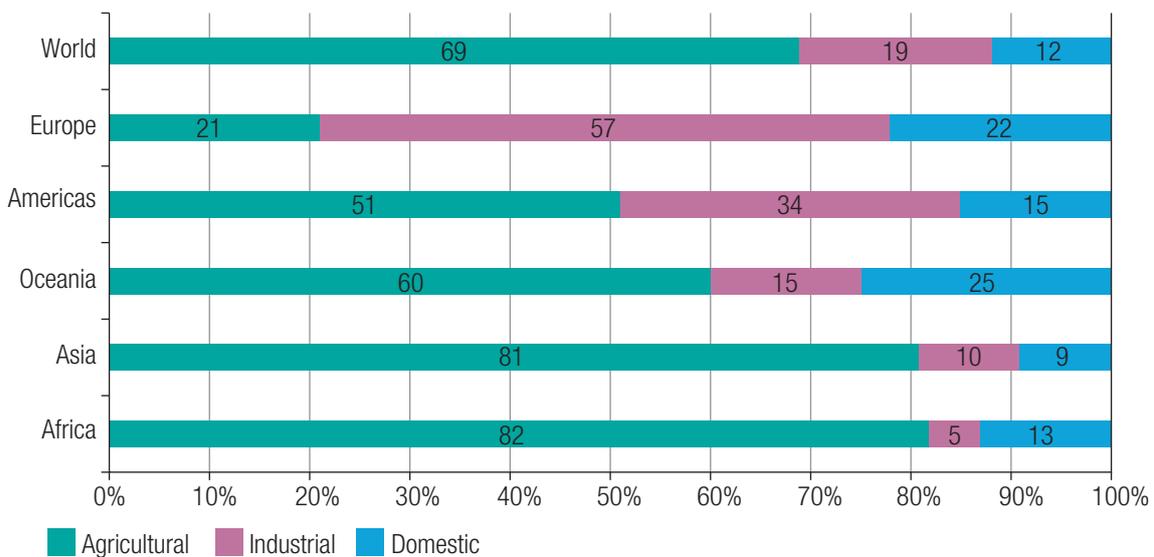
flora the plants of a particular region

fauna the animals of a particular region

water withdrawals the total amount of water withdrawn from a surface-water or groundwater source



▲ **Figure 5.29** The proportion of the world's water withdrawals that are used in the agricultural, industrial and domestic sectors. Source: Our World in Data.



▲ **Figure 5.30** The proportion of different water uses by continent compared to world usage, 2019

The amount of water used within a country varies considerably. Table 5.1 shows the 10 countries that use the most amount of water each year.

populous a place that has a lot of people living in it

5

According to this data, India and China use far more water than any other country. This is not surprising since these are the two most **populous** countries in the world. Table 5.2 shows the 10 countries that use the most amount of water each day per capita. Per capita means per person. In this case, it refers to the average amount of water that each person uses in these countries every year. It is important to note that this is not only the amount that each person uses in their homes. The figure also takes into account all of the water used for agriculture (to supply the food we eat) and other industries (to supply products that we use).

▼ **Table 5.1** The 10 countries that use the most water every year. Countries with more people use more water.

Country	Total yearly water used (km ³)
India	761
China	598
United States	444
Indonesia	223
Pakistan	184
Iran	93
Mexico	87
Philippines	85
Vietnam	82
Japan	81

Source: Worldometer website, 2022

▼ **Table 5.2** The 10 countries that use the most water per capita (this means per person) each year

Country	Yearly water used per capita (m ³)
United States	1206.80
Canada	883.50
Belgium	883.49
Türkiye	746.80
Mexico	704.00
Australia	703.12
Spain	670.30
Japan	623.90
Korea	517.40
China	439.70

Source: Statista website, 2019



ACTIVITY 5.9

Using information from figures and tables

Read the information about water use around the world and answer the following questions:

- Using Figure 5.30, **identify** which continent uses the highest proportion of water for agriculture. **Identify** which continent uses the lowest proportion for agriculture.
- Explain** the reason for the differences between continents in the use of water for agriculture. **Consider** the climate, level of wealth, and history of the places involved.
- Refer to Table 5.1. **Suggest** why you think India, China and the United States use so much water each year compared to other countries.
- Refer to Table 5.2. **Identify** the regions or continents where many of the countries that use high amounts of water per capita are located.
- Explain** why you think the people in the regions identified in Question 4 use so much water.
- Based on the differences you see in the lists in Tables 5.1 and 5.2, **explain** why it is important to always compare places based on per capita use, rather than just the total amounts that are used.



ACTIVITY 5.10 DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Factors causing a phenomenon

In geography, factors are the causes or reasons why something occurs. Geographers are interested in factors because they can help us to understand why something occurs and to try to predict what might happen in the future.

Factors are often ranked in order of their importance. This helps to determine the primary cause of a change and enables managers to allocate funds or develop strategies to tackle a change that causes a problem.

An example of this approach is bushfire management in Australia. Experts determine the factors that lead to bushfires, the spread of fire and the level of vulnerability for different communities. Governments use this information to determine the best course of action in reducing uncontrolled bushfires.

Figure 5.30 and Tables 5.1 and 5.2 present a variety of information about the use of water resources around the world. Look at this information and then complete the following tasks:

- 1 **Select** either Figure 5.30, Table 5.1 or Table 5.2 to use as the focus of this activity.
- 2 **Identify** at least three reasons why you think there might be variation between the places listed.
- 3 **Sequence** these factors in order of importance.
- 4 In a short paragraph, **justify** the reasons for your ranking.
- 5 **Compare** your answer with a classmate.



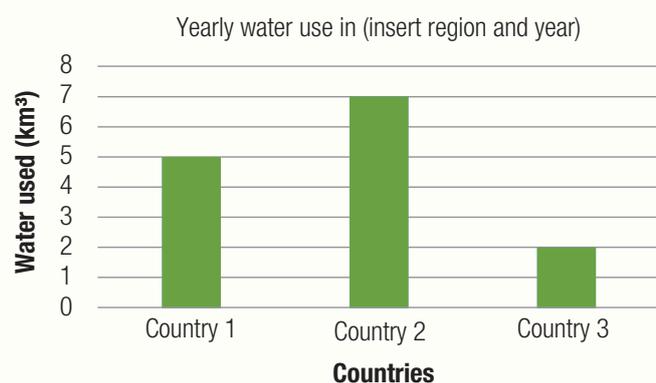
ACTIVITY 5.11 DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Drawing a bar graph

Bar graphs are a simple way to display and compare quantities. They allow us to see which values are greatest and how much variation there is between quantities. All graphs must show the date of the data, and a key/legend.

The information in Tables 5.1 and 5.2 came from Worldometer and Statista. Look online for these websites (you can search for 'water and Worldometer' or 'water and Statista') and gather the data for all the countries in a region of your choice – for example, all of the countries in South America or Europe.

- 1 Have a look at the range of values. What are the largest and smallest values? This will help you to determine how high your graph axes have to go.
- 2 **Create** horizontal and vertical axes and label them. Your countries will go on the horizontal axis and the amount of water they use will go on the vertical axis.
- 3 Divide your vertical axis into even amounts. These should start from below your lowest value and go to above your highest value.
- 4 Add the names of your countries to the horizontal axis.
- 5 Draw your bars ensuring they are an even width and have a gap between them.
- 6 Add a title and legend to your graph.



▼ **Table 5.3** The amount of water needed to grow 1 kilogram of different types of food

Food (1 kilogram)	Water use (litres)
Potatoes	287
Apples	822
Bread	1608
Rice	2497
Cheese	3178
Chicken	4325
Beef	15415
Chocolate	17196

Agricultural water use

In most parts of the world, agriculture uses the most water resources. This is because water is used to grow all of the fruits, vegetables and grains that we eat. Water is also used to grow the food that is fed to animals, such as cows and sheep, and to domestic pets. Table 5.3 shows the amount of water in litres needed to grow 1 kilogram of a variety of different foods. Based on this information, it is clear that the food we choose to consume has a very large impact on the amount of water resources that are needed.

IRRIGATION

irrigation the practice of supplying land with water so that crops and plants will grow

pasture grass or similar plants suitable for animals, such as cows and sheep, to eat

infertile land or soil that is not good enough for plants or crops to grow well there

Irrigation is defined as the artificial application of water to land for the purpose of agricultural production. In other words, irrigation refers to the watering of crops on a farm. The water used for irrigation is taken from surface water resources, such as rivers, lakes and reservoirs, and groundwater supplies. The benefits of irrigation include the ability to:

- Grow a higher quality and greater quantity of crops and **pasture**
- Choose when and how much water crops are given to maximise growth
- Grow crops even during periods with low or no rainfall
- Use land for agriculture that would have otherwise been too dry or **infertile**
- Stimulate local economies by providing jobs in labour, agricultural science, and the processing, packaging and transporting of products.

There are several different types of irrigation. Some of these are presented in Table 5.4.



▲ **Figure 5.31** This photograph shows a very labour-intensive form of irrigation in Vietnam.

▼ **Table 5.4** Three of the main types of irrigation

Irrigation type	Description
Furrow	A series of small, shallow channels to guide water down a slope across a paddock
Sprinklers	Sprinkler systems that spray water over the land; some are fixed in position while others are mounted on wheels or a trailer to move across the landscape
Drip	Tubes placed above or below the soil's surface, which have holes that frequently drip small amounts of water onto the soil

The choice of irrigation types for farmers will depend on the amount of water available, the amount of water needed, the soil type, the types of crops grown, the shape of the landscape and the local climate. The choice of which irrigation type to use also varies considerably across the world because of the **availability** of technology and money to purchase equipment.

availability how easily people can access a service or facility

Although irrigated farmland covers less than 1 per cent of Australia, it produces 30 per cent of all of our agricultural products. Irrigated farmland also uses 90 per cent of the total amount of water resources used by agriculture. There are 40 000 farmers who use irrigation and many more employed in related industries. Altogether this contributes to around \$10 billion of the Australian economy each year.

Australia's irrigation industry is highly regulated. Farmers are issued with irrigation licences and are allocated an amount of water that they are able to extract from surface and groundwater supplies. This regulation aims to ensure that irrigation is sustainable.

IMPACTS OF IRRIGATION

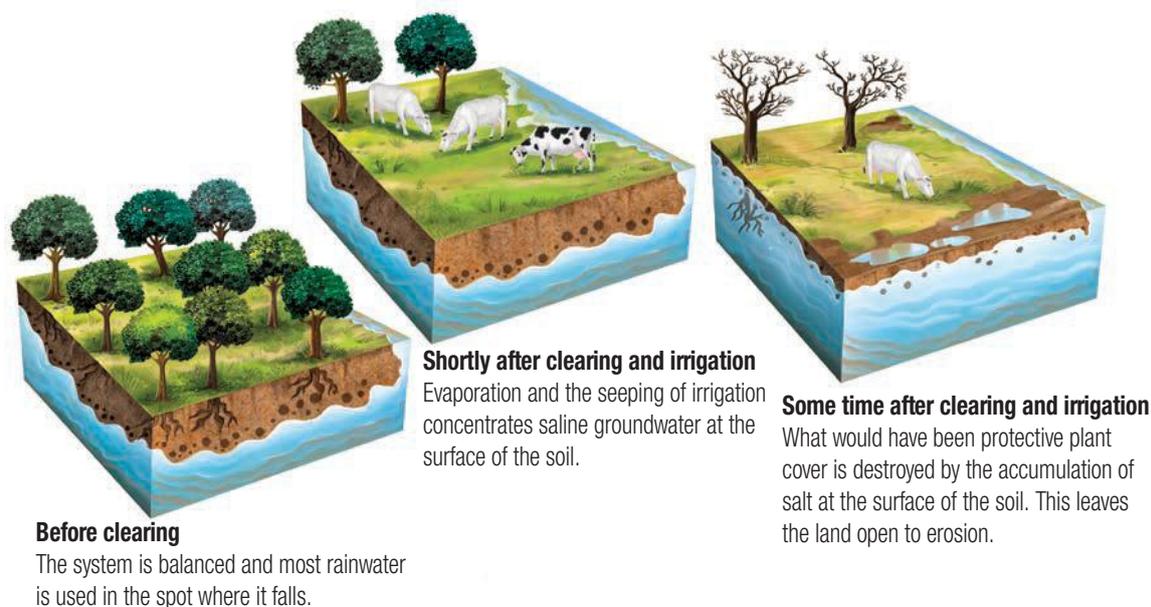
Despite the numerous benefits of irrigation and its regulation, there are several negative impacts associated with it. Allocating water resources is a balance between agricultural, domestic and environmental needs. If too much water is extracted for irrigation, less is available for **rural** towns and their domestic needs. Extracting water from river systems can also prevent rivers from supplying water to wetlands, which can lead to the loss of vegetation and damage vital **habitats**.

rural an area in the countryside that is not part of a large town or city

habitat the natural environment where an animal or plant usually lives

▼ **Figure 5.32** Irrigation can allow crops to be grown in places that would otherwise be barren, such as this area in Sudan.





▲ **Figure 5.33** Excessive irrigation, together with land clearing, can contribute to salinity in the soil.

salinity the amount of salt contained in something

percolation the process of a liquid moving slowly through a substance that has very small holes in it

topsoil the soil that forms the top layer of ground where plants grow

erosion a process that gradually wears away and removes rock, soil and sediment by wind or water

efficiency the use of resources in the best way to avoid waste

stormwater excessive water run-off from rain and snow after a storm

Another common impact of irrigation is **salinity**. Salinity refers to an increase in the amount of salt that is in soil. Since salt is toxic to most plants, this can kill local vegetation. As shown in Figure 5.33, in a forested area, tree roots soak up groundwater supplies, keeping them at a low level. Removing trees and irrigating the land causes the groundwater level to rise. As water rises, it passes through soil and rock, which is a process known as **percolation**. As it does this, salt that is present in lower levels is dissolved in the water and transported to the surface. This increases the amount of salt in the layer of **topsoil** where crops are grown. As the vegetation dies, the topsoil becomes exposed to **erosion** from wind and rainfall, leading to a loss of topsoil. This process in irrigation can turn a thriving farm or forest into a barren wasteland.

Domestic water use

Domestic water use refers to the ways in which we use water in and around our homes. This includes drinking, cooking, flushing toilets, showering and watering the garden. Table 5.5 lists some of the common domestic uses of water and the amount of water each activity consumes.

The amount of water used for domestic purposes per person varies significantly across the world. As shown in Figure 5.34, Australia uses more domestic water per person than anywhere else in the world. Some factors that determine the amount of domestic water use include the **efficiency** of appliances, such as washing machines and shower heads. Also, whether alternative supplies of water, such as rainwater, **stormwater** and wastewater, are recycled affects the amount of domestic water that is used.

▼ **Table 5.5** A list of common domestic water uses and the amount of water they consume

Domestic water use	Water consumed (litres)
Brushing teeth with tap running	5
Hand basin per use	5
Drinking, cooking and cleaning per day	10
Toilet flush	12
Dishwasher load	50
Bath	100
Hosing driveway	100
Washing machine load	150
Shower (10 minutes)	200
Car washing with hose	200
Garden sprinkler per hour	1000

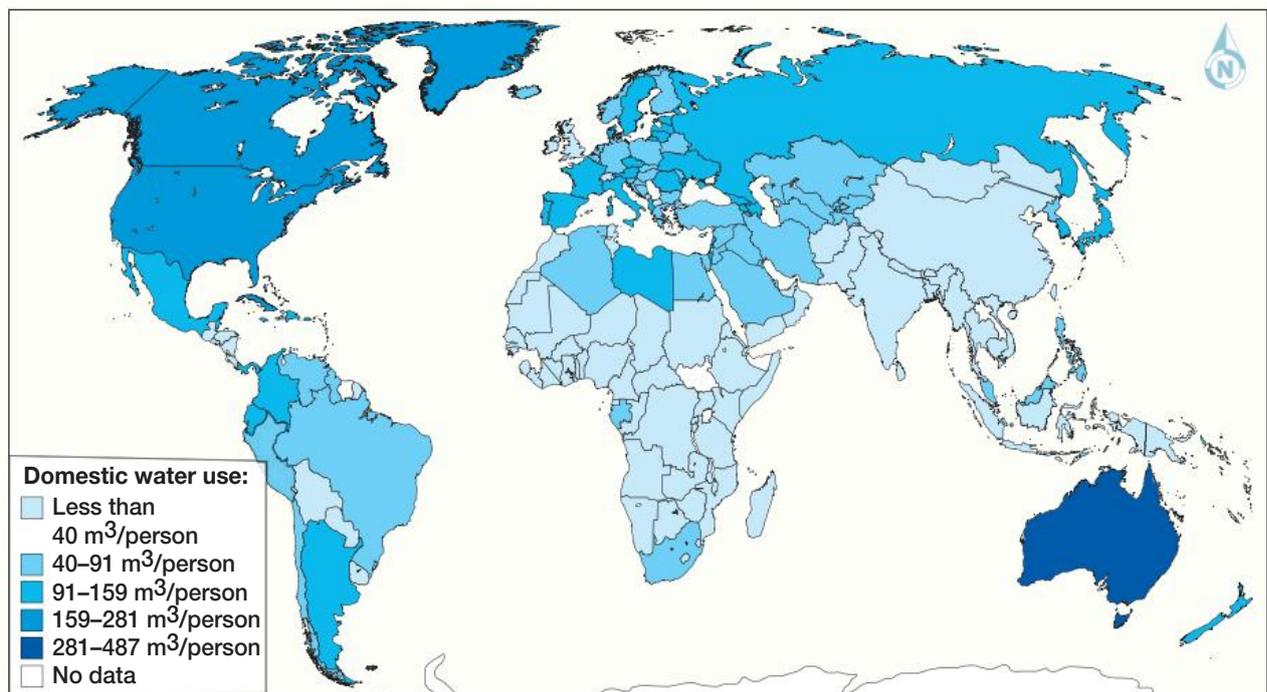
Source: Riverina Water County Council website, 2019



ACTIVITY 5.12

Reading information from maps

Refer to Figure 5.34 and answer the questions that follow.



▲ **Figure 5.34** The amount of domestic water use per person across the world by year (this is shown in cubic metres per person), 2019

- 1 Besides Australia, **identify** which region of the world uses the most amount of water for domestic purposes each year.
- 2 **Identify** which region uses the least amount of water.
- 3 **Suggest** a reason for your answers to Questions 1 and 2. **Consider** the region's access to technology, wealth and lifestyles.



ACTIVITY 5.13
MAKING THINKING VISIBLE

Think, pair, share

How much water do you use?

Read through Table 5.6 and then use the 'Home Water Efficiency Audit' on the Seqwater website to find out how much water your household uses. Think about your family water use and estimate how much water your family uses per person in a week.

Share your estimation with a partner, and then **discuss** it with the rest of the class.

▼ **Table 5.6** What does 150 litres of water use look like?

<p>88 litres One load of washing with a 3-star WELS rating</p> 	<p>36 litres One four-minute shower</p> 
<p>9 litres Three half-flushes</p> 	<p>7 litres One load of dishes with a 3-star WELS rating</p> 
<p>4 litres Approximately half a bucket to water house plants, clean pets, etc.</p> 	<p>3 litres One litre per hand wash</p> 
<p>2 litres Drinking water</p> 	<p>1 litre Two brushes/shaves</p> 

Managing water supplies

To ensure there is enough water to meet agricultural, domestic and industrial needs, water resources require management. This involves the use of technology to access available and potential sources, as well

as the construction of reservoirs and dams to store large quantities of water. Bulk water in Queensland is planned and managed by the Department of Regional Development, Manufacturing and Water. Water infrastructure and delivery is provided by Seqwater, Sunwater, the Gladstone Area Water Board and the Mt Isa Water Board.

RESERVOIRS AND DAMS

Reservoirs are large natural or **artificial** lakes that are used to store a large quantity of water. In order to store water, the flow of rivers is stopped using a dam. Dams are barriers that prevent the flow of water downstream through the use of a wall. Dams have gates that can be opened to allow excess water to be released. By controlling the flow of rivers, dams can also be used to stop floods and to generate **hydroelectricity**. The largest dam in Queensland is the Burdekin Dam, which has a total storage capacity of 1860 **gigalitres** (1.86 cubic kilometres). This is tiny compared to the Kariba Dam between Zambia and Zimbabwe, which can store 185 cubic kilometres! Despite their usefulness, dams lead to a number of environmental consequences. They alter the natural flow of rivers and streams, and that impacts on river ecosystems. Fish that need to migrate up and downstream to feed and breed are unable to cross barriers. This has led to the extinction of many species. Altering a river's natural flow can also affect water temperature and water quality. This impacts on food networks, and the growth and reproduction of a variety of plants and animals.

artificial made by people, often as a copy of something natural

hydroelectricity electricity produced by the force of fast-moving water such as rivers or waterfalls

gigalitre a gigalitre is exactly one billion litres

▼ **Figure 5.35** The wall of the Kariba Dam in Zambia is 128 metres tall and 579 metres long.



While dams can prevent downstream cities and towns from flooding, they also stop natural flood events – an essential process that helps to maintain the health of floodplains, forests and wetlands. Dams also stop small particles known as sediment from flowing downstream, which is needed to maintain downstream habitats.

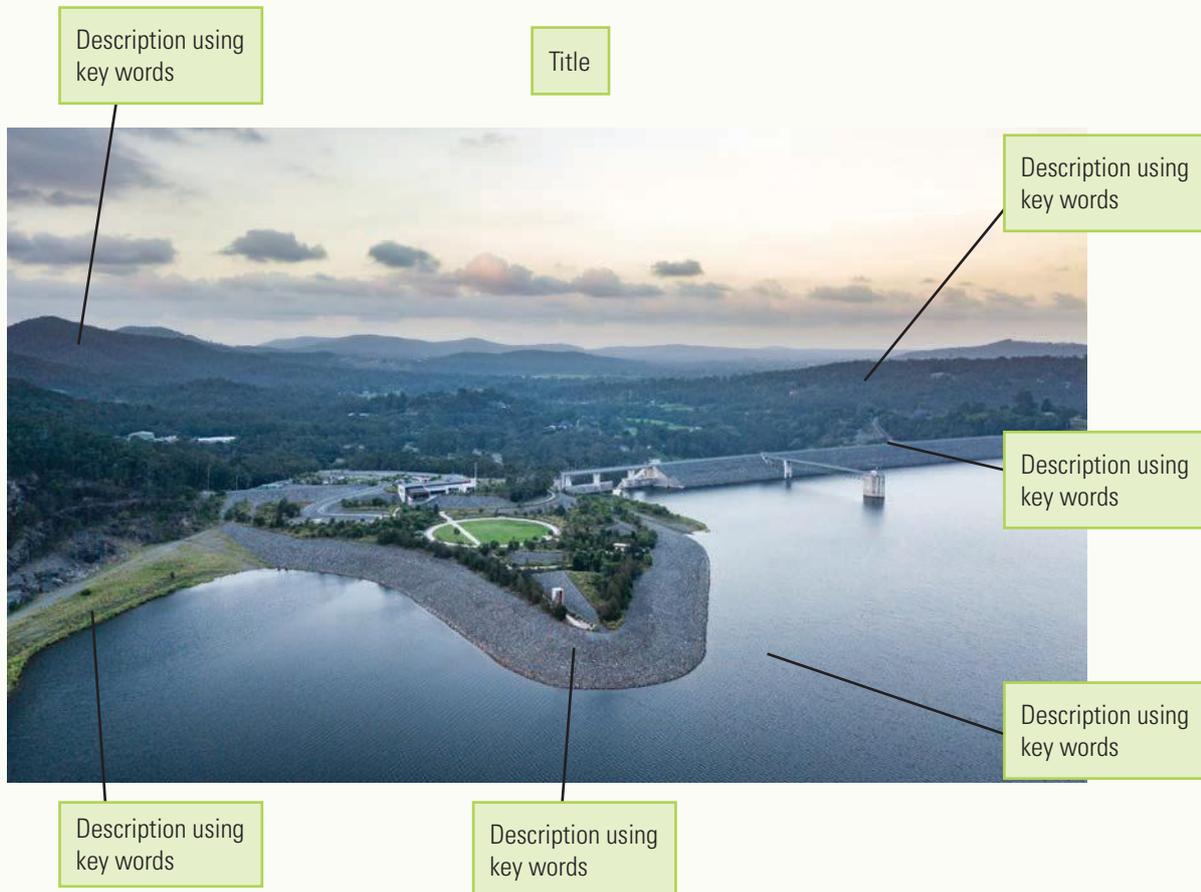


ACTIVITY 5.14 DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Annotating a photo

An annotated photograph is a photograph that has been labelled with names and descriptions. This can be done by hand or digitally. Geographers use annotated photos to demonstrate their observations from photos taken out in the field. They use annotated photographs to demonstrate specific features, processes or impacts. **Create** your own annotated photograph by following these steps:

- 1 Find a photograph of a dam using Google Images or Bing Images or use the photograph provided of the Hinze Dam, Gold Coast.
- 2 Print your photograph or copy it into a graphics editing program.
- 3 Add lines leading to specific features of the photograph that you wish to describe. Do not use arrows to label features, because arrows indicate movement.
- 4 Add key words and short descriptions to **demonstrate** the features and purposes of a dam, as well as some of their environmental consequences.
- 5 Add a title and source to your annotated photograph.





DEVELOPING YOUR UNDERSTANDING 5.2



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

1 Define the following terms:

- Agriculture
- Irrigation
- Salinity
- Reservoir
- Dam.

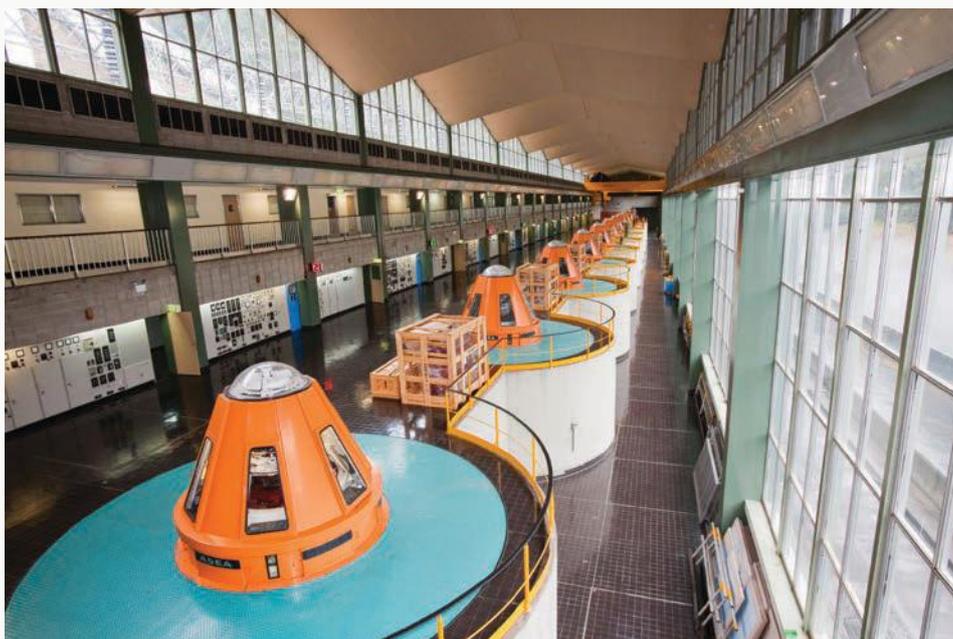
- 2 **Identify** how much of the rainfall that reaches Earth flows into rivers and groundwater each year.
 3 **Identify** the proportion of the water in rivers and groundwater that is used for agriculture.
 4 **Explain** the difference between agricultural and domestic water use. Provide examples in your explanation.

Interpret

- 5 **Explain** why countries where people use the most amount of water per capita are not necessarily the same countries that use the largest amount of water in total.
 6 **Describe** how using too much water for irrigation can lead to salinity.
 7 **Identify** and **describe** the way water is used in your school and **suggest** three ways that water could be used more sustainably.

Argue

- 8 Due to their environmental impacts, the construction of dams is often controversial. In a paragraph, **identify** and **explain** the reasons why dams are constructed and their negative impacts. Based on this information, **justify**, using researched evidence, whether you think Australia should construct more dams rather than using alternative water resources. You can refer to Figures 5.35 and 5.36, your research and also the positives and negatives table you created in Activity 5.6 in your answer.



▲ **Figure 5.36** Regulating the flow of rivers can be used to generate electricity. The Snowy Mountains Hydro Scheme has 10 turbine generators and each one can generate enough electricity to power 95 000 homes.



5

5.3 The economic, cultural, spiritual and aesthetic value of water for people

FOCUS QUESTION

What role does water play in the spiritual, economic and cultural life of people in Australia and around the world?

Water is the life for us all ... If that water go away, everything will die.

That's the power of water. He connect with the land.

*John 'Dudu'
Nangkiriyin,
Bidyadanga,
Western
Australia*

Water is and always has been essential to all aspects of life. In fact, recent evidence from NASA suggests that liquid is likely to exist on Mars, which could be a hint of current or previous signs of life! Not only does water sustain life, but it is also a significant part of diverse ancient and modern-day cultures around the world. Water is culturally and spiritually important to many societies, including ancient civilisations.

The significance of water for Australia's First Peoples

Water and water sources have a central place in First Nations peoples' ways of life, being ancestral sites and providing resources for people and Country. Managing water is an important responsibility for First Nations people.

Archaeological evidence shows that First Nations peoples lived along the river banks in places throughout Australia. They managed these waterways to ensure the sustainability of the water source as well as the plants and animals that depended on it, including themselves. The Gunditjmara people developed an extensive aquaculture system for farming eels at Budj Bim that was added to the UNESCO World Heritage List in 2019.



▲ **Figure 5.37** The Budj Bim Cultural Landscape

This site in western Victoria is a **fish management** system containing weirs, channels and holding ponds to trap eels. The system supplied the ancient Gunditjmara people with a reliable food source to consume and trade.

Today, water management is a high priority for many First Nations people. This includes ensuring access to household water as well as the responsibility of managing waterways as part of Country. First Nations rangers are applying their knowledge and cultural practices to rehabilitate and manage waterways.

fish management a system for sustainably controlling the harvesting of larger fish and other aquatic organisms, with minimum disruption to natural breeding, and allowing smaller individuals to escape and grow



▲ **Figure 5.38** Young First Nations boy Quentin is jubilant after catching a crab, speared with the traditional two-pronged fish spear, at Dhipirri beach, Arnhem Land, Northern Territory.



ACTIVITY 5.15

First Nations peoples' history

Research the history of a large river or coastal region in your local area. Write a paragraph to summarise:

- Who the traditional custodians of the land are
- the relationship First Nations peoples have with the area, from deep time through to the present
- the ways First Nations peoples have managed this Country.



▲ **Figure 5.39** The ruins of the Temple of Poseidon, believed to date back to the fifth century BCE, at Cape Sounion in Greece. This is one of many temples dedicated to the ancient Greek god Poseidon, god of water and the sea.

The significance of water to other ancient cultures around the world

Since ancient times, water has been a significant part of cultures around the world. Many cultures made water an important part of their religious rituals and beliefs. The ancient Egyptians called the Nile River the ‘father of life’. They believed that the god Khnum controlled the flow of the Nile and sent the floods each year. To keep this god happy and ensure the Nile River continued to flow, the ancient Egyptians built shrines

and temples honouring Khnum. They also threw food and statues into the Nile River as offerings to the god.

Ancient Greeks had a similar connection with water through their god, Poseidon, who was the god of the sea and water, as well as earthquakes, storms and horses. The ancient Greeks relied heavily on the sea for trading and transport between the mainland and the Greek islands. There are ancient temples dedicated to the worship of Poseidon in Greece.

Beliefs and cultures today

Hindus believe that large rivers are sacred and provide a connection with the gods. The Ganges River is one of the most significant rivers in Asia. It is over 2500 kilometres long and flows through some of the most populated places in India and Bangladesh. Four hundred million people rely on it for drinking, bathing and irrigation. The Ganges River is sacred for Hindus as it is considered to be a form of the goddess Ganga. Many Hindus believe that if you bathe in the Ganges River you will be cleansed of your impurities and negative actions. For this reason, millions of people make pilgrimages to the Ganges River to bathe in its waters. Many people also scatter the ashes of their deceased loved ones on holy rivers like the Ganges River. Hundreds of Hindu festivals and celebrations are held on the banks of the river each year.

Interesting fact

Although the Ganges River is believed to be sacred and spiritually pure, the very high population along its course threatens its water quality.

Aesthetic and recreational value

Many people might not have a deep spiritual connection to water, but it is still a significant part of their culture. For example, water activities are enormously popular in Australia and around the world. These activities include water-based sports such as swimming and waterskiing, and hobbies such as fishing. The beauty of coastal and river environments, alongside the recreational opportunities that water provides, means that places near water are popular choices for holidays. Water also plays a big part in increasing the prices in real estate. Waterfront properties in capital cities or in places that have easy access to the beach, such as the Gold Coast, usually have higher prices than properties that are inland.



▲ **Figure 5.40** Surfers Paradise is a popular holiday location on the Gold Coast.



ACTIVITY 5.16 FIELDWORK

Exploring the significance of a local water resource

Fieldwork is an essential part of studying geography. It enables you to investigate many of the concepts studied in the classroom by collecting data out in the real world. In this investigation, your aim is to explore a water resource close to your school or home, and determine the ways it is used and its significance for the surrounding region.

First, **select** a local water resource and develop a plan for a fieldwork investigation. Ideas include:

- Any river or creek near your home or school – for example, the Brisbane River, Nerang River, Burdekin River, Condamine River or any other creek or river in Queensland that you choose
- A smaller urban or rural river or creek that is in your area or one that you might visit
- A lake that might be near you or that you may have had a holiday near
- A water reservoir or dam near you.

Use the following structure to plan your investigation and present your results.

Title and introduction

Introduce your study by providing some context. This should include the location of your chosen water resource and what aspects you will be investigating.

Aim

Write an aim for your fieldwork that is achievable based on the data that you intend to collect.



▲ **Video 5.3**
Fieldwork





Research question

Write a research question that you intend to answer using the data that you collect. Examples include:

- What are the different ways this resource is used by people?
- What role does this resource play in the local water supply and the surrounding environment?
- How is this resource managed?

Primary data collection

Consider the types of primary data that you will need to answer your research question. Examples include:

- Observations, annotated photos and field sketches showing the interconnection with the surrounding landscape
- Water-quality sampling and testing
- Analysis of the quality and species of vegetation surrounding water bodies
- Interviews and surveys of local residents about how they use the resource
- An interview with a group that manages the water supply, such as Seqwater, a catchment management authority or a local community group.

Secondary data collection

Use a range of secondary sources to supplement your primary data.

Examples include:

- Satellite images and elevation data gathered using Google Earth
- Previous studies and management information from the websites of management groups and government authorities
- Tabled data relating to rainfall, water flows, water use and storage capacity
- Data that can be turned into graphs
- Data on any additional water production or collection that is part of your chosen body of water.

Presenting and analysing your data

Your investigation must be presented as a report. You should include a title page and contents page and **organise** your information using page numbers, headings and sub-headings. Your report should use in-text referencing throughout the body of the report to acknowledge where you got your information from as you use it. This then becomes a bibliography at the very end of the report, to show the details of your information collection. Your report should also be illustrated throughout using pictures, maps, tables and graphs, each one with a caption to briefly explain what is being shown. You should have a conclusion and evaluation followed by your bibliography.

Conclusion and evaluation

Summarise your findings and **evaluate** the success of the field trip. What were the positives and negatives of your data collection? What could be done differently next time? What additional data could be collected to extend this investigation?

References

Always ensure you keep a record of any sources used and present these in a bibliography.



DEVELOPING YOUR UNDERSTANDING 5.3



5

Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

- 1 **Describe** an example of an ancient civilisation having a spiritual or cultural link with water.
- 2 **Explain** what Hindus believe will happen to people who bathe in the Ganges River.



▲ **Figure 5.41** Devotees immerse themselves in the Ganges River at Varanasi as part of a religious festival. Each year, cities like Varanasi are inundated by pilgrims who want access to the Ganges River.

Interpret

- 3 **Identify, describe** and **explain** how First Nations peoples managed water resources to suit their needs. You may need to **conduct** further research to find more information.

Argue

- 4 'The history of water management by First Nations peoples is valuable and should be a primary concern when managing water resources.' **Discuss** whether you agree with this statement. Refer to specific examples to **justify** your opinion.



5.4 Hydrological hazards: floods

FOCUS QUESTIONS

- Why do floods occur?
- What are the social, economic and environmental impacts of floods?



ACTIVITY 5.17 DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Analysing satellite imagery

Satellite images, such as the ones shown in Figure 5.42, are photographs taken from space using satellites. If you have ever looked at your house or school on Google Earth, then you have used satellite imagery. Satellite images are very useful to geographers because they show large-scale changes to the landscape. This means that these images can be used to analyse events such as floods. Satellite images often show a north arrow so that we know which way they are oriented. They also include a linear scale. A linear scale enables us to compare distances on the image with distances in the real world. In Figure 5.42, the length of the line at the bottom of the first image represents a distance of 900 metres and the length of the line at the bottom of the second image represents a distance of 1 kilometre.

Refer to the satellite images in Figure 5.42 and answer the following questions:

- 1 **Describe** what you think the colours in the images represent. (You may wish to **create** a legend to support your answer.)
- 2 Use the scale in the second image to **determine** how wide the floodwaters spread.
- 3 **Explain** the impact that the floodwater may have had on the surrounding **vegetation**.
- 4 **Explain** why some people choose to live near rivers despite the risk of flooding.

vegetation the plants found in an area, such as trees, shrubs and grasses



▲ **Figure 5.42** The first satellite image shows the normal footprint of the Ross River as it flows through Townsville. The second image shows the extent of the flooding that occurred in 2019 at its peak.



ACTIVITY 5.18

Examine the two satellite images in Figure 5.42 and **describe** what you can see in the images.

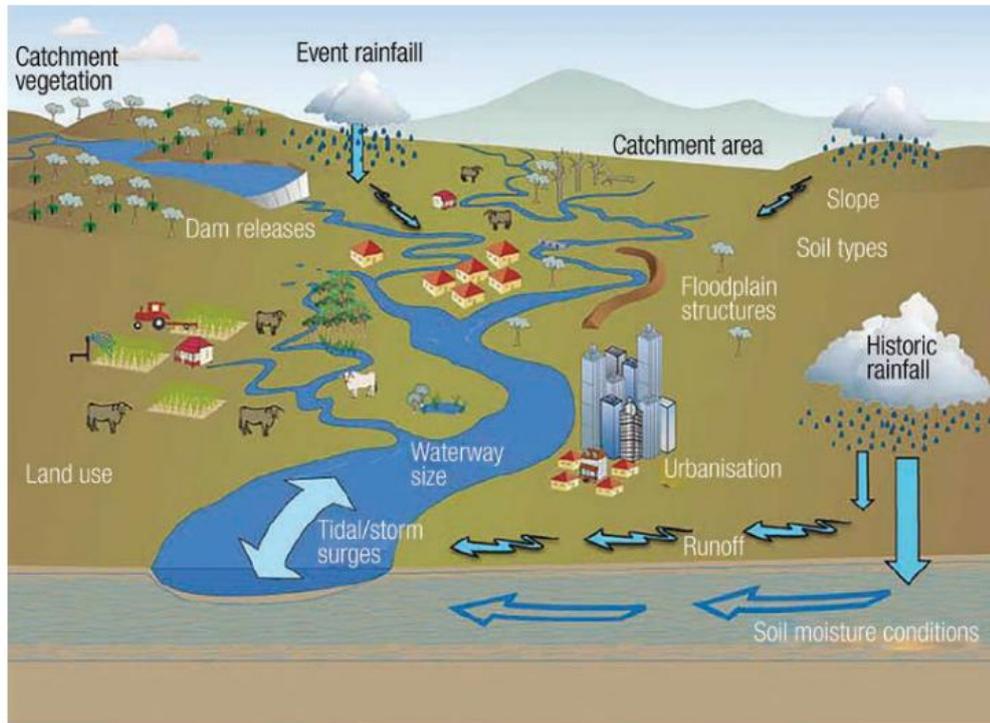
- 1 Identify** something interesting about these images and write a sentence using the sentence starter: 'I notice that ...'.
- Once you have written your sentence, ask yourself 'Why is it that way?' or 'Why did it happen that way?' Then write a paragraph to **explain** what has happened and why.

What are hydrological hazards?

Hydrological hazards are dangerous weather events involving water. They include having too much water, such as in the case of heavy storms leading to floods and landslides, or not having enough water, such as a lack of rain leading to a drought. Hydrological hazards are driven by atmospheric conditions such as wind, humidity, temperature and rainfall. They have an enormous impact on people, places and the environment. Some places are extremely vulnerable because of their climate and location. In many parts of Australia, people regularly deal with the danger and consequences of this type of hazard.



▲ **Figure 5.43** November 2019, Italy declared a state of emergency for flood-hit Venice, as the UNESCO World Heritage site suffered millions of euros worth of damage.

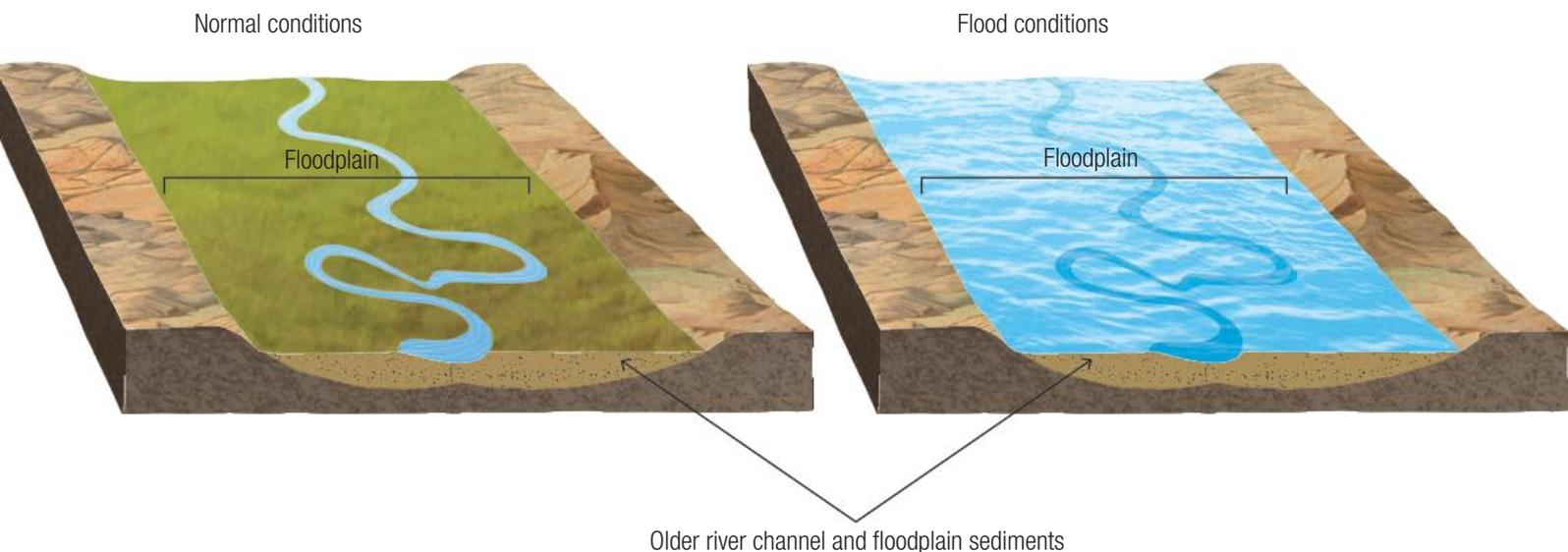


▲ **Figure 5.44** The factors that can contribute to flooding

What are floods?

submerge to cause something to be under water

A flood is when water **submerges** land that is normally dry. Floods can last anywhere from a few hours to several months and can affect small individual places, entire towns or many kilometres of land. They occur in a variety of places, such as near rivers and dams, in the valleys between mountains and in coastal regions. Floods are a naturally occurring part of the water cycle (see Figure 5.11 and Video 5.1 illustrating the water cycle) and are essential in maintaining the health of many environments. However, when floods meet civilisation, they can wreak havoc and be very costly.



▲ **Figure 5.45** A natural part of any river is the floodplain. It is always quite flat and will naturally flood when the river is too full. This creates very fertile soils, which are exceptional for growing crops. Many cities have grown up around rivers; Brisbane and Townsville are two of Queensland's most well-known.

Why do floods occur?

When rain falls, some of the water infiltrates or seeps into the soil, some of it evaporates, and some of it flows into rivers and creeks (referred to as run-off). During large rainfall events, such as large storms, soil can become **saturated**, meaning that it can no longer absorb any more water. This causes more water to run into river systems. Eventually, the rivers become so full that the water flows out over the floodplain. The Balonne River is a continuation of the Condamine River in south-west Queensland, and therefore part of the Murray–Darling Basin. It passes through the towns of St George and Dirranbandi and then into New South Wales. Figure 5.47 on the following page shows the Balonne River in flood and the positive impact it has on groundwater both locally and for the wider area.

Coastal flooding

Coastal areas are particularly vulnerable to flooding. Floods occur when large amounts of sea water are pushed ashore, sometimes several kilometres inland from the coast. Flooding in coastal areas happens because of a **storm surge**, **high tide** or **tsunami**. Storm surges occur as a result of large storms – for example, those caused by a **tropical cyclone**. High winds push water up against the coast as a cyclone approaches, causing a temporary rise in the sea level. This can be particularly disastrous if it occurs during a high tide. (See Figure 5.46 illustrating storm surge flooding.)

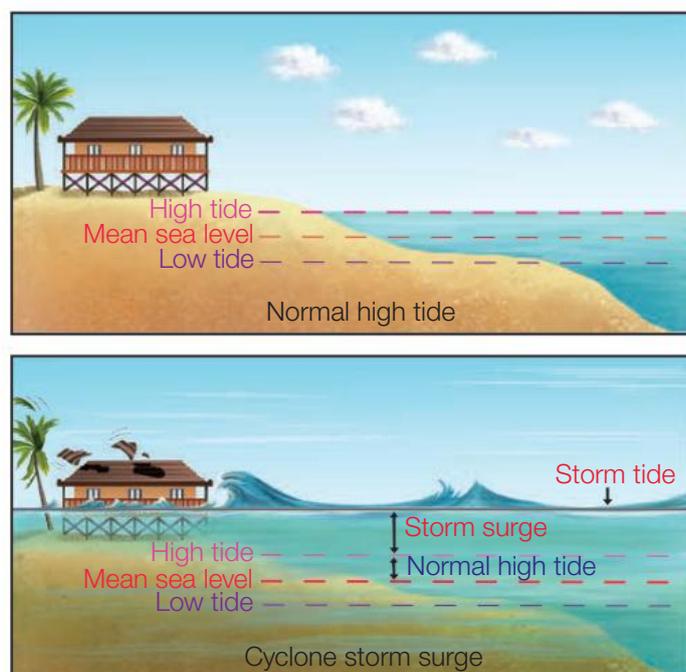
saturate to reach a point where soil cannot absorb any more water

storm surge a rise in sea levels due to the wind and other atmospheric elements of a storm

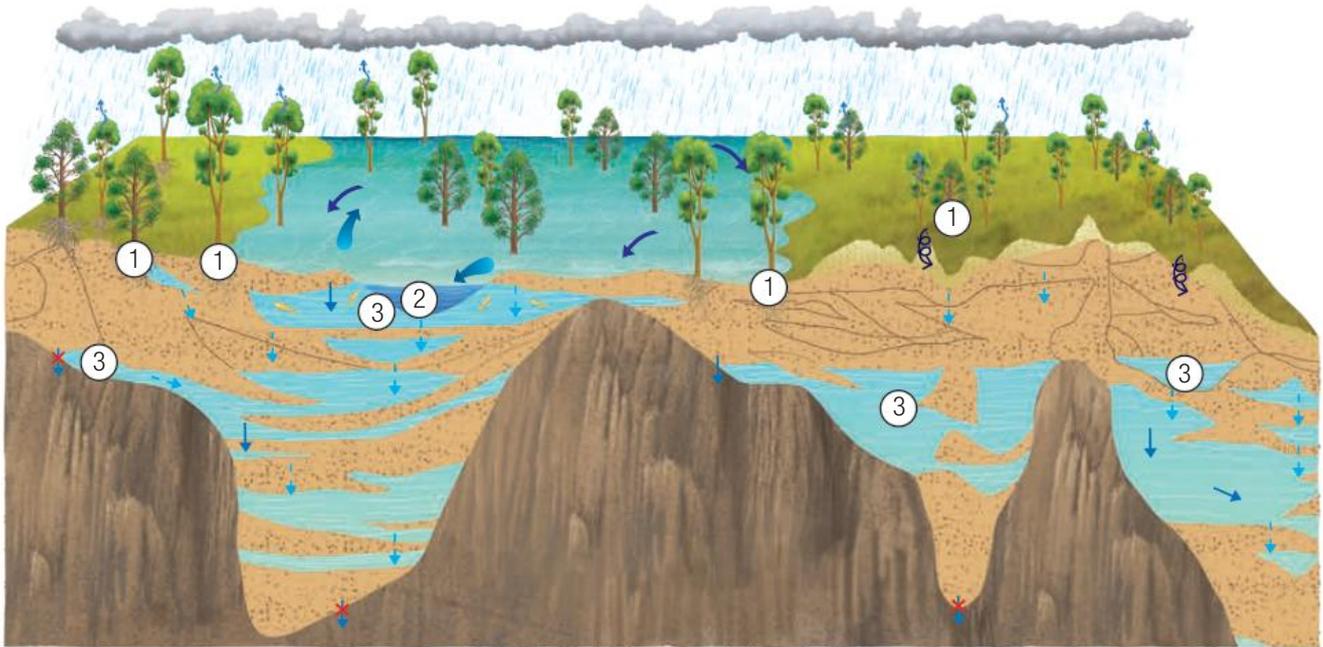
high tide the time when the sea or a river reaches its highest level and comes furthest up the beach or the bank

tsunami a high wave that forms out at sea due to a disturbance underground, such as an earthquake

tropical cyclone a rapidly rotating storm system with strong winds and thunderstorms



▲ **Figure 5.46** A storm surge leads to a temporary increase in the height of the sea level. This illustration shows the sea level in a coastal area before a storm surge (top) and during the surge (bottom).



Geology legend

- Alluvia
Unconsolidated sand and clay
- Low-permeability rock
- Soil

Groundwater hydrology legend

- Alluvia (saturated)
- Alluvia (unsaturated)
- Low-permeability rock (unsaturated)
- Infiltration and percolation
Rain infiltrates through the soil to recharge the aquifer below
- Direction of groundwater movement
- Groundwater leakage
- Negligible groundwater movement
- Direction of surface water movement in the channel
- Direction of surface water movement outside of a channel

Flora legend

- Casuarina* spp.
- Eucalyptus* spp.
- Evapotranspiration
Process whereby plants draw water up through their roots and move it out through their leaf pores

Fauna legend

- Stygofauna
Aquatic fauna that live in groundwater

Groundwater-dependent ecosystem (GDE) legend

- 1** Terrestrial GDEs
Regional ecosystems and riverine wetlands may depend on the subsurface presence of groundwater within the capillary zone for some or all of their water requirements.
- 2** Surface-expression GDEs
Lacustrine wetlands, palustrine wetlands and riverine water bodies may depend on the surface expression of groundwater for some or all of their water requirements.
- 3** Subterranean GDEs
Aquifer and cave subterranean wetlands may depend on the subterranean presence or expression of groundwater for some or all of their water requirements.

▲ **Figure 5.47** The Balonne River alluvial floodplain



ACTIVITY 5.19 DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Explaining concepts

It is important to understand the difference between the following three definitions as it will have an impact on what we do individually and as a community to prepare.

Natural event – any natural phenomenon that can occur to impact the land, air, water or biosphere environments (e.g. earthquake, cyclone, flooding, drought or bushfire).

Natural hazard – any natural event that has the *potential* to cause damage to people and property. Human-made hazards, or technological hazards, such as oil and chemical spills into the environment, are not considered natural hazards.

Natural disaster – any natural hazard that directly impacts/destroys people and property.

Activity

Identify the correct definition for each of these scenarios:

- 1 In 2010, the capital city of Haiti, Port-au-Prince, was almost destroyed by an earthquake. Hundreds of thousands of people were killed and most major buildings collapsed.
- 2 In 1992–93, Cyclone Nina crossed the Queensland coast on the Cape York Peninsula. In Australia, Cyclone Nina caused very little damage to property, and no one was injured. This was due to the cyclone passing over a vegetated area that was sparsely populated. It did, however, cause extensive damage to the Solomon Islands.
- 3 The K'gari-Fraser Island bushfires of 2020 had the potential to destroy both the resident and tourist infrastructure on the sand island, which is on the World Heritage List. The fires burned for months. When they were finally extinguished, almost half the island's vegetation had been destroyed but there was no loss of life or property. With the knowledge that it will regenerate in time, tourists are returning to enjoy the island.
- 4 In 2006, a dust storm in the Simpson Desert, which is one of the driest deserts in Australia, situated around the borders of Queensland, the Northern Territory and New South Wales, had no impact on people or property.

Hazard management and mitigation

There are a couple of reasons we need to know and understand these terms. First, we as individuals need to learn about how hazards may impact us in the areas we live, so we can prepare our houses and properties. The second reason is so that all levels of government can manage and prepare the potential hazard areas and be ready to respond to local people's needs if the hazard becomes a disaster.



ACTIVITY 5.20

Creating a flow chart

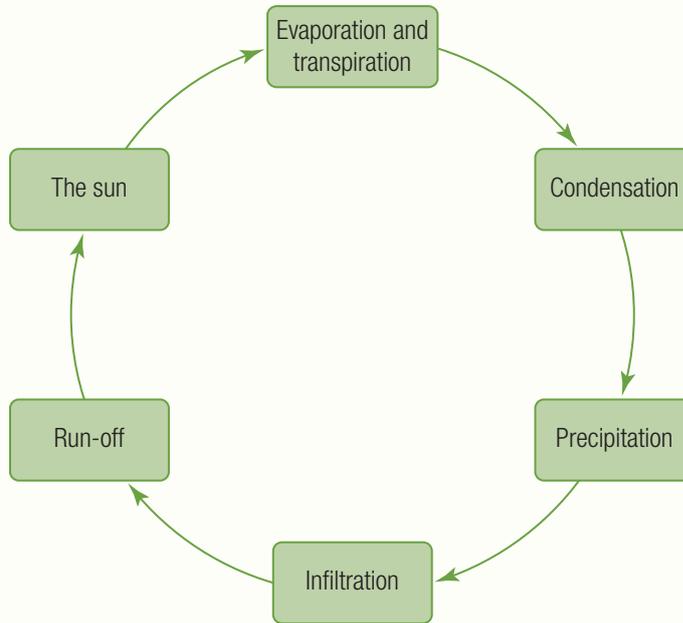
A flow chart is used to show the sequential order of steps in a process. This is done by using boxes and arrows to show the next following step. Flow charts can be created by hand or by using a computer program. On the next page is an example of a flow chart showing the water cycle. This chart uses arrows and words to show the process of how water moves and changes in our world.





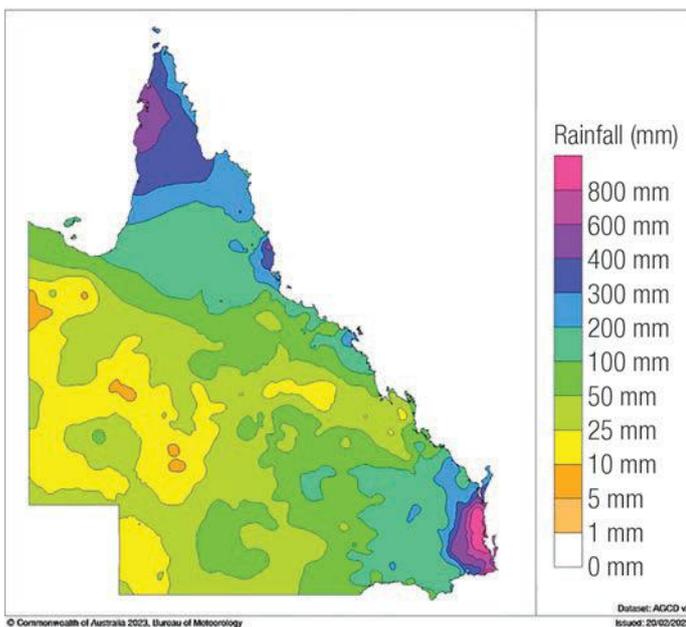
Create a flow chart that explains the processes that form a flood. Use some of the key words and diagrams from the text and include linking words to show the connection between these process ideas.

5

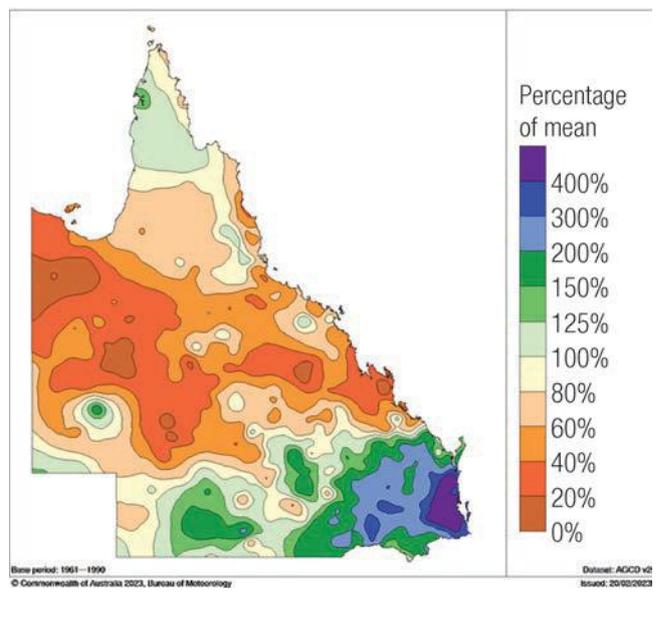


High rainfall leading to flooding

In 2022, Queensland experienced a major flooding event. Figure 5.48 shows the amount of rainfall that fell in Queensland in February 2022. Figure 5.49 shows the amount of rainfall that fell during this period compared to the normal February average. In some places, the rainfall was 400 per cent more than the average.



▲ **Figure 5.48** The total rainfall that fell in Queensland in February 2022 (see the digital versions to zoom in on this figure)



▲ **Figure 5.49** The amount of rainfall in February 2022, compared to Queensland's February average (see the digital versions to zoom in on this figure)



ACTIVITY 5.21 DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Describing space

Geographers use maps to analyse the distribution of phenomena in space. This is not referring to outer space, but 'spatial distribution', which is how things are arranged. Geographers analyse spatial distributions and look for patterns so that they can understand how or why things occur.

Refer to Figure 5.48 and answer the following questions:

- 1 **Identify** which part of Queensland received the most amount of rainfall in February 2022. How much rain fell during this period?
- 2 **Identify** three places that received more than 300 millimetres of rainfall.
- 3 **Identify** which parts of Queensland received the least amount of rainfall.
- 4 Write a structured paragraph that explains the pattern of rainfall shown. Include a description of the regions that received the most and least amount of rain, as well as the location of these regions. You should use compass directions (north, south, east and west), and words such as 'coastal' and 'inland' to help you with this.

Interesting fact

Tropical cyclones are known as 'hurricanes' in the United States and 'typhoons' in Asia.



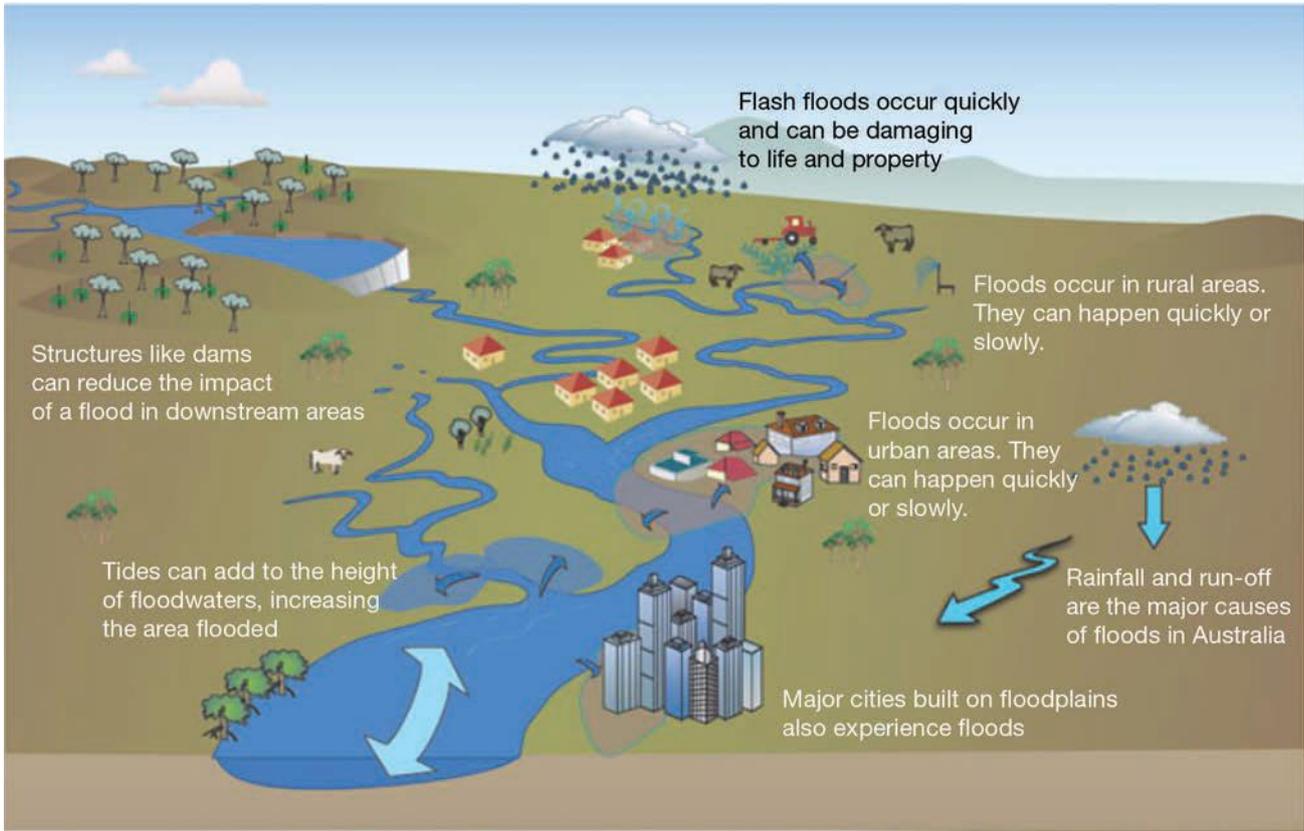
► **Figure 5.50** This satellite image shows Severe Tropical Cyclone Debbie over Queensland in 2017. This caused extensive flooding throughout the state.

Different types of floods

There are three main types of floods: flash floods, slow-onset floods and quick-onset floods. Floods vary because of the **meteorological event** that caused them and where the flood is located, such as near the coast, inland or close to mountain ranges.

meteorological event an event relating to changes in the weather, such as fog, rain, storms and cyclones

As Figure 5.51 shows, floods can occur because of modifications to the land, such as building cities on floodplains. While building dams can slow the flow of rivers and reduce the risk of flooding, if a dam fails it can be a major cause of downstream flooding.



▲ Figure 5.51 The characteristics of floods



▲ Figure 5.52 Flash flooding in Toowoomba Central Business District (CBD) in January 2011. Called an ‘inland tsunami’, flash flooding at the top of the Toowoomba Range took 33 lives as it flooded the Lockyer Valley below.

FLASH FLOODS

Flash flooding is caused by a large amount of rain falling over a short period of time. This is usually due to large **thunderstorms** that lead to heavy rainfall. Flash floods are the most rapid type of flood, typically occurring within six hours of an intense rainfall event. This means that flash floods pose the greatest threat to life as there is little time to warn people or for them to evacuate. Many places are vulnerable to flash flooding because they are built on floodplains. This includes a large number of Australian cities and towns, such as Brisbane.

thunderstorm a

storm that produces thunder and lightning and usually heavy rainfall or hail

urban areas built-up environments, such as cities or large towns

Urban areas are vulnerable because they are covered with hard surfaces such as roads, footpaths and roofs. This means that during high rainfall events, water cannot infiltrate or seep into the soil and the water is instead washed into drains. When these drainage systems fill, flash flooding occurs.



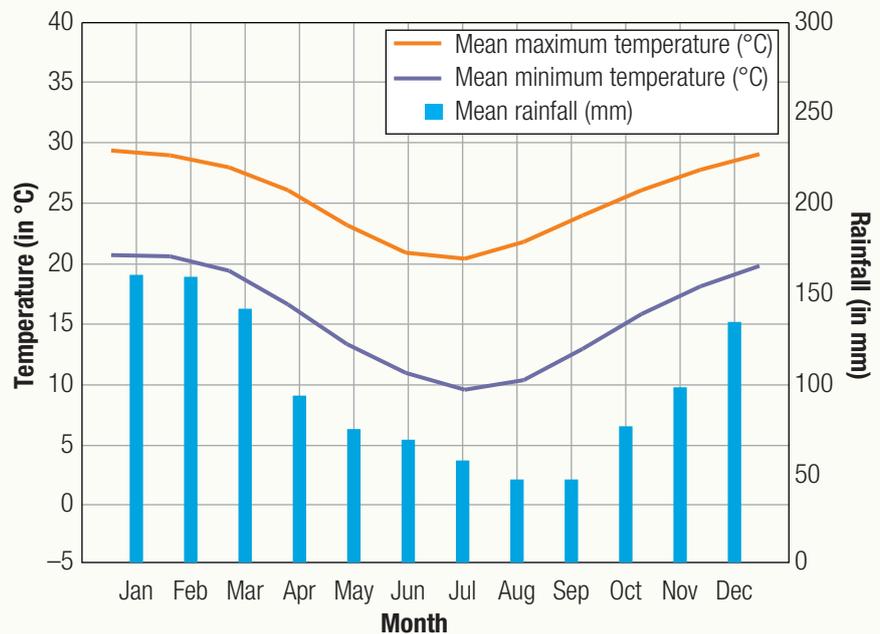
ACTIVITY 5.22 DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Reading a climate graph

Climate graphs are used to represent the mean (average) temperature and rainfall of a location throughout the year. The graphs can be used to compare the climates of different places, and extreme weather events to long-term averages. The information on the climate graph in Figure 5.53 is organised monthly.

The orange and purple lines

represent the average maximum and minimum temperatures ($^{\circ}\text{C}$) each month. These values can be read from the vertical axis on the left. Rainfall is shown in millimetres (mm), which is represented as blue bars. These values can be read using the vertical axis on the right.



▲ Figure 5.53 Climate graph of Brisbane

- Use the graph in Figure 5.53 to answer the following questions about Brisbane:
 - Identify which are the hottest months and what are the highest mean temperatures.
 - Identify which is the coldest month and what is the lowest mean temperature.
 - Identify which month has the highest average rainfall and how many millimetres it receives.
- The following table outlines the amount of rainfall that fell during the last eight days of February 2022. Use this table to answer the questions below.

Date	Rainfall (mm)
February 21	0.2
February 22	2.2
February 23	38.6
February 24	13.4
February 25	64.0
February 26	225.6
February 27	228.4
February 28	222.8

- Calculate the total amount of rainfall for the final eight days of February 2022.
 - How much greater was this compared to the February average?
- Search online to find a climate graph for another place in Australia. **Compare** the climate in Brisbane with the climate in this place. In your discussion, refer to specific climate data, such as monthly rainfall, total rainfall and average temperatures throughout the year.



▲ **Figure 5.54** Slow-onset flooding in St George, Queensland outback

SLOW-ONSET FLOODS

Slow-onset floods occur when water slowly builds up over several days or weeks. When there is a large amount of rainfall spreading slowly across the flat land, the ground becomes saturated. This means that infiltration can no longer occur. Therefore, a large amount of run-off flows into rivers and creeks. When river channels can no longer contain this extra water, the water overflows the banks and floodwaters spread across the floodplain, inundating the land.

Slow-onset floods typically occur in rural areas and can last weeks or months. There may not have been any rain in those flooded areas. With clear blue skies and floodwaters all around, many people become isolated for weeks and months on their properties.

Residents are given plenty of warning, allowing them to prepare and evacuate. This means slow-onset floods are less dangerous to human lives than other types of floods.

However, they have a huge economic cost because of the destruction to infrastructure. Slow-onset floods can cause damage to towns, roads, railway lines, bridges and agricultural land, and livestock can die.

QUICK-ONSET FLOODS

Quick-onset floods tend to occur more frequently in steep mountainous areas of high rainfall, where rivers flow quickly. They can be caused by high rainfall events or snowmelt.



▲ **Figure 5.55** Quick-onset flooding in the Brisbane CBD during the February 2022 floods

Quick-onset floods also occur in coastal areas where rivers have the largest volume of water flowing in them, or where there is the risk of tropical cyclones. These types of floods only last for a short period of time and the land is typically submerged for a few days. However, quick-onset floods are very dangerous as they occur with little warning and the floodwaters often move rapidly. People can be caught unprepared.



ACTIVITY 5.23

Summarising the main features of floods

Describe and **explain** the features of the three main types of floods in a table. You may wish to use the following template as a guide.

	Flash flood	Quick-onset flood	Slow-onset flood
Description			
Cause			
Impacts			
Example			

Where do floods occur?

The locations where floods occur can be explained by the causes of a flood. High rainfall is the most common cause of flooding, so areas that experience high rainfall or events such as tropical cyclones are likely to experience flooding. The shape of the landscape can also determine flooding, as the physical features of the land control where water flows. **Low-lying areas** are particularly vulnerable because water flows downhill to reach these places. A less obvious reason why some areas are vulnerable to floods is poverty. While many wealthy areas can build structures and infrastructure to prevent flooding, many poorer regions, particularly those with a high population density, do not have this luxury.

FLOODING IN BANGLADESH

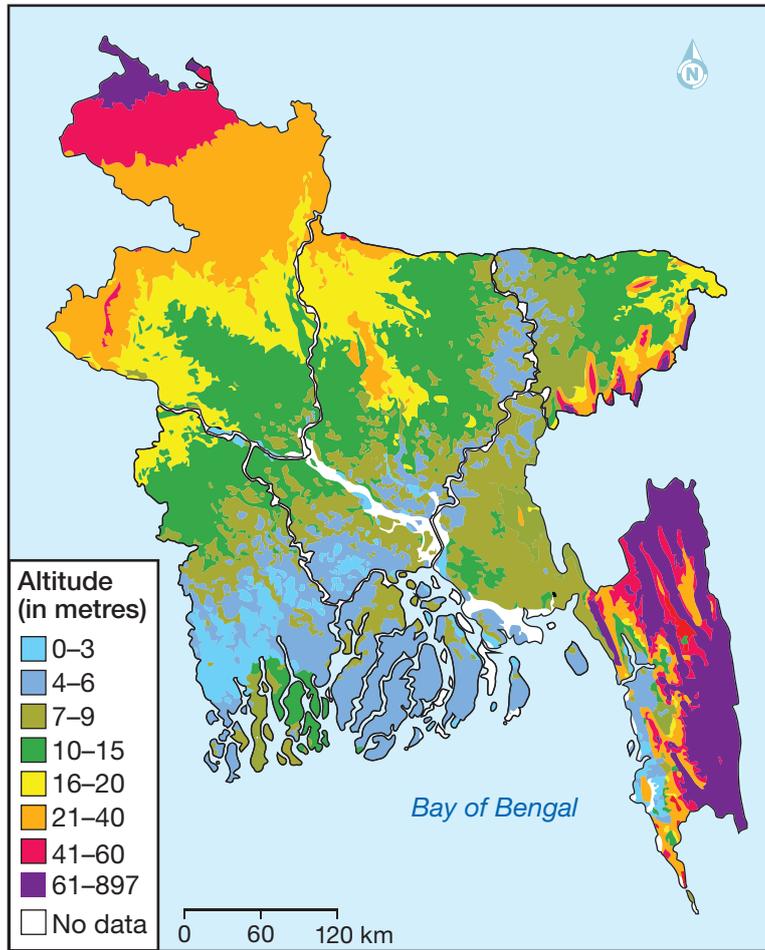
Bangladesh is an example of a country that is very vulnerable to flooding. It experiences major floods most years because Bangladesh:

- Is located where the three largest rivers in Asia – the Ganges River, Brahmaputra River and Meghna River – meet in the Ganges Delta
- Has a very low **elevation**, with most of its land mass located less than 10 metres above sea level (see Figure 5.56)
- Has a subtropical climate, which means it experiences a **monsoon** season with very high rainfall from June to October each year
- Has a very high population density and is a relatively poor country, which means that floods have a major impact.

low-lying area an area that has a very low elevation and is close to sea level, usually located near the coast

elevation height above sea level – altitude

monsoon the seasonal changes in atmospheric wind circulation and precipitation



▲ **Figure 5.56** An elevation map of Bangladesh



ACTIVITY 5.24

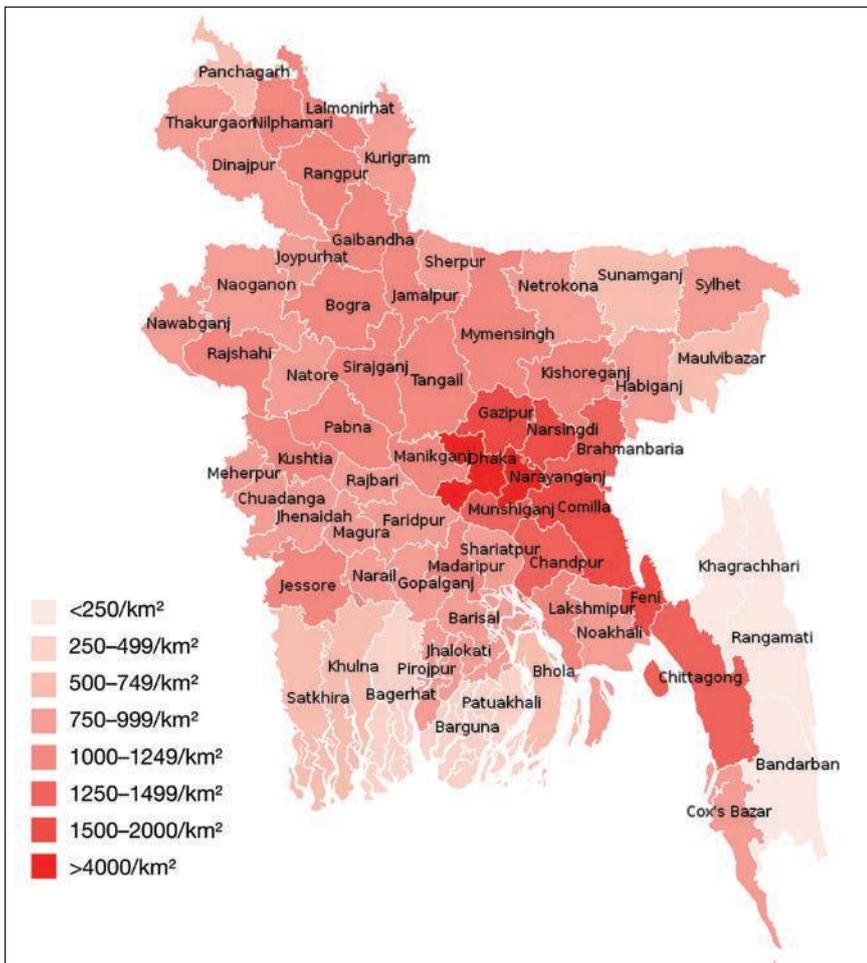
Interpreting data

Look at the elevation map in Figure 5.56 and answer the following questions:

- 1 Assess how much of Bangladesh is located at an altitude of less than 10 metres.
- 2 **Describe** where the lowest and highest parts of Bangladesh are located.
- 3 Use an atlas or an online map such as Google Maps or Bing Maps to explore the region north of Bangladesh. What major landform is located here?

Looking at Figure 5.57 of the population distribution of Bangladesh, answer the following questions:

- 4 **Identify** the two provinces with the highest population density.
- 5 **Identify** the provinces with the next highest density.
- 6 In a structured paragraph, **analyse** the two maps to **describe** and **explain** the relationship between the data in the two maps. You will need to use province names and densities as well as altitude to help you **explain**. Use the information in this section and do some online research to find out why people live in these flood-prone areas of Bangladesh.



◀ **Figure 5.57** Population density by province in Bangladesh, 2011



ACTIVITY 5.25 DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Describing the characteristics of a place

When geographers refer to a place, they are referring to:

- Location
- Geographic characteristics
- The sense of place and the connections that people have with it.

Location can be described in two ways. *Absolute* location refers to a place's exact location. This might be its latitude and longitude or a street address. *Relative* location is the distance and direction that a place is from somewhere else. For example, Rockhampton is approximately 617 kilometres north of Brisbane.

Geographic characteristics are the features of a place. These can be divided into *natural* and *human* characteristics. The geographic characteristics of Bangladesh listed earlier are its major landforms, elevation, climate (natural characteristics) and population density (human characteristics).

The sense of place is harder to define. It refers to what the place is like, why it is significant and the connections that people have with it. Different people have different connections to a place based on a variety of factors, including age, gender, cultural background, interests and experiences.

Now that you know these characteristics of a place, complete the following research task:

- 1 Use an atlas or an online map such as Google Maps or Bing Maps to **identify** a major city in Bangladesh.
- 2 **Describe** the absolute location of your chosen city by stating where it is located within Bangladesh or its latitude and longitude.
- 3 **Describe** the relative location of your chosen city by describing how far and in what direction it is from Dhaka, Bangladesh's capital.
- 4 **Research** your chosen city online and list some of its geographic characteristics. This might include population, elevation and any major rivers or other landforms located in or around the city.
- 5 Repeat this activity using a location that is significant to you. For example, you might choose a place where you ride your bike or somewhere you have been on a holiday. Use the three characteristics of place to **describe** this area. Share your work with a classmate.



▲ **Video 5.4**
Absolute and relative location

What are the impacts of floods?

In geography, an impact refers to a change or an effect of an event. This includes the consequences of the change or effect. Geographers often classify impacts into three categories:

- *Environmental impacts*, which are to do with both the natural and human environments
- *Social impacts*, which are to do with people, including their wellbeing or safety
- *Economic impacts*, which are to do with money, including income or costs.

When we think of the impacts of an event, most people tend to consider negative effects. However, it is important to remember that impacts within these categories can also be positive.

ENVIRONMENTAL IMPACTS OF FLOODS

Floods are a natural and essential process in maintaining the health of many environments. They have a very important role as an interconnection or link between river channels and floodplains. By flowing over land, floodwaters recharge groundwater systems.

They also replenish wetlands and forests with water, sediment and nutrients. Floods lead some species of fish to breed or migrate. Many of these benefits to the environment also benefit farmers, as floods can make land more fertile for growing crops or pasture.

The Barmah–Millewa Forest, located in Victoria and New South Wales (shown in Figure 5.58) is the largest river red gum forest in Australia. It is a vital habitat for thousands of waterbirds. Flooding in this area helped replenish the forest.

Flooding in 2010–11 ended a drought in the area that lasted almost a decade. The floods revitalised the wetland and forest areas, and ensured the survival of local species.

While floods play an important part in maintaining the environment, they can also damage an area, particularly environments that have been modified by people. During a flood, sediment from floodplains is collected by floodwater. This can contain pollutants, such as harmful chemicals from houses, farms and factories, and **heavy metals**. The pollutants are washed into rivers and become part of the water system. This can contaminate food supplies, especially fish.

heavy metals dense metals such as iron and lead



▲ **Figure 5.58** Floods are essential in maintaining the health of wetlands such as the Barmah–Millewa Forest, Victoria and New South Wales. In September 2010, thousands of river red gums finally received the long-awaited floodwater.

▲ **Figure 5.59** Flooding in Kreuzberg, Germany, 2021. Debris left behind after flooding can clog waterways and provide a place for bacteria to breed.

Debris can be washed downstream and cause blockages or wash away important plant life in and around the river or stream. Rotting carcasses of livestock killed in the floods can degrade the water's quality.

SOCIAL IMPACTS OF FLOODS

The destruction that often comes with floods can have a large impact on people. This impact increases significantly if floods occur in areas that are highly populated. Floodwaters can threaten the physical safety of people, especially during flash or quick-onset floods. There is also an increased risk of people contracting waterborne diseases and other infections during a flood, as well as immediately afterwards. More than 1850 people have died since 1900 as a result of floods in Australia. During floods, people may be forced to evacuate their homes, farms and businesses, and schools can be closed for long periods of time. Building structures are often damaged or destroyed, which leads to the **displacement** of people for extended periods. Floods also damage the physical infrastructure that people rely on for utilities, such as sewerage, electricity and water. As a result, there can be disruptions to power and clean water supplies. An impact of any natural disaster, which is sometimes forgotten, is the psychological effect the event has on local people. Figure 5.60 presents some first-hand accounts from those affected by the February 2022 floods that impacted Queensland and New South Wales.

displacement
the movement of something or someone from its original place to somewhere else

Within ten minutes, the water – almost covered the whole road out the front of my house. That's how fast it was coming up ... I only just got my car and the kids out. We had to walk through probably shin deep water to get to my car ... we've lost all our bedding, most of our clothes. I had a four-bedroom house and a massive yard, so everything's gone. The whole kitchen has to be redone; walls knocked down. We can't live there for quite some time. – *Sharna, from West Ballina*

The water was horrific ... it was so cold, and it kept coming. It didn't stop ... it's so hard to describe the feeling of standing in your own kitchen, in this freezing cold water and there's nothing you can do about it. – *Vickie, from Lismore*

Some people were very hard to calm because it had just been too overwhelming. And some of those people had nothing ... or very little to start with and had lost the little that they had. It'd be like us, like me losing the whole house, just losing it. I can imagine how that would feel. – *Bill, Red Cross Emergency Services volunteer*

▲ **Figure 5.60** These first-hand accounts describe some of the impact of the Queensland and northern New South Wales floods in 2022.

Interesting fact

The impacts of floods in Queensland are often felt around Australia. Extensive damage to crops often causes prices to soar. In extreme cases, supermarkets can run out of supplies.



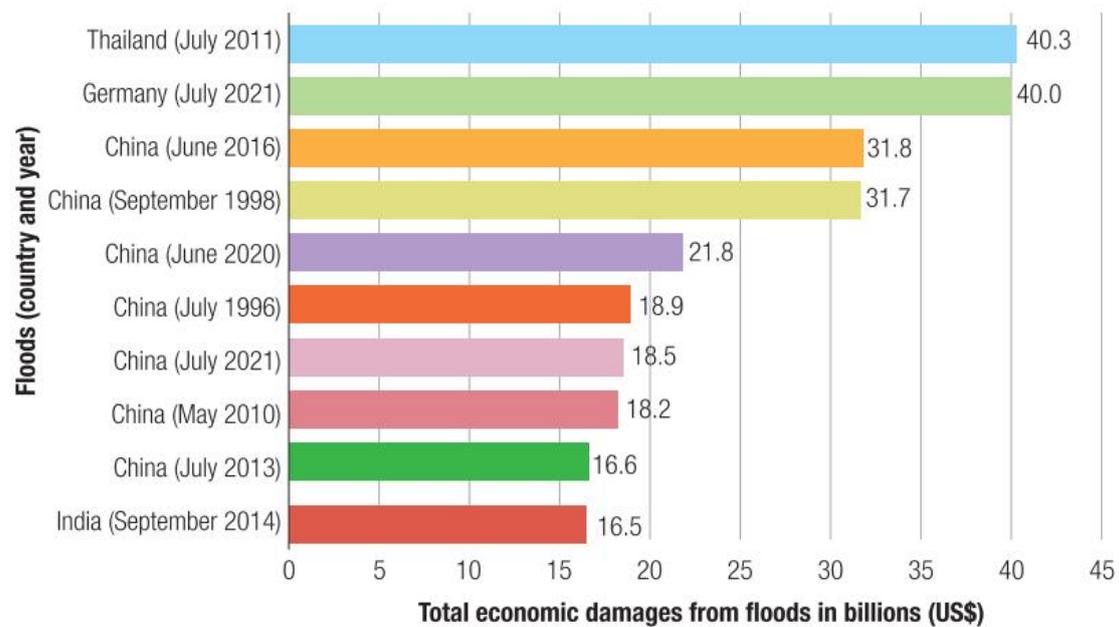
▲ **Figure 5.61** In early 2011, banana prices soared to \$12 per kilogram after Cyclone Yasi destroyed banana plantations such as this one in Tully, Queensland.

ECONOMIC IMPACTS OF FLOODS

Floods are the most expensive disasters we experience in Australia. On average, they cost Australia \$377 million each year. Between 1967 and 2017, experts estimated that flooding in Australia cost around \$42.6 billion; the disastrous floods that occurred in 2010–11 in Queensland are estimated to have cost \$14.1 billion. Figure 5.63 shows that, although this cost is significant, even more costly floods than this occur around the world. Most of the economic impact of floods happens in the aftermath when local and state governments clean up the destruction and repair or rebuild infrastructure. Flooding can damage or wash away roads, bridges, buildings and railway lines. Floods also have a huge impact on agricultural output, as they wash away crops and kill large numbers of livestock.



▲ **Figure 5.62** A Townsville resident cleaning up their home in February 2019



▲ **Figure 5.63** This graph shows the economic cost of 10 of the most significant floods from 1900 to 2022. The costs are shown by the billion in US dollars.



ACTIVITY 5.26 DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Observational scale

As well as being categorised as environmental, social or economic, impacts can be categorised based on scale.

Scale refers to the level at which something is examined. In geography, observational scale refers to the relative size of an area being investigated.

Common scales that are used are:

- *Local scale* – affecting a single place
- *Regional scale* – affecting an entire area, such as a suburb, town or state
- *National scale* – affecting an entire country
- *International scale* – affecting multiple countries
- *Global scale* – affecting a significant proportion of the world.

For example, a severe flood might occur in a region (regional scale) that affects an entire country (national scale) or might even require financial assistance from other countries (international scale).

Another common way of categorising impacts is by considering the temporal scale or time-scale. This refers to impacts that are short-term or long-term. For example, floods might cause a short-term impact on the safety of people, but a long-term impact on a local economy.





Now that you know more about scale, complete the following questions that explore the impacts that floods have socially and economically, as well as on the environment.

- 1 **Compare** the economic and social impacts of floods.
 - a **Research** online to make a list of the deadliest floods in human history.
 - b Use the list you have made to **create** a new list of floods that have occurred since 1900.
 - c Using a blank map of the world, pinpoint the location of these floods. Use different-sized symbols or colours to **represent** the amount of deaths from each flood.
 - d **Compare** the location of these floods with the information in Figure 5.63.
 - e **Discuss** whether the locations of the deadliest floods match those that had the largest economic cost.
 - f **Suggest** a reason for your answer to part e.
- 2 Using the information provided and researching online if necessary, summarise the different impacts of floods in a table. **Identify** the observational scale and the temporal scale (temporal = time) of the impact. Also, provide an example where possible. You may wish to use the template here as a guide for your work.

Category	Description	Observational scale	Temporal scale	Example
Environmental impact				
Social impact				
Economic impact				

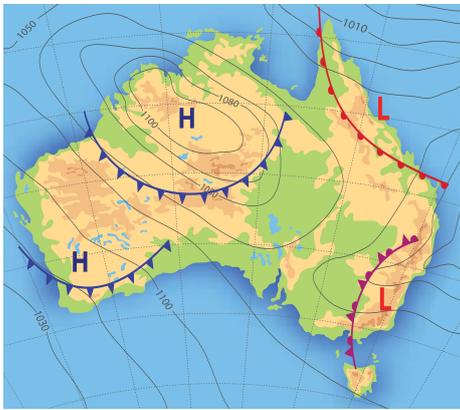
How do people minimise the impact of floods?

People who live in flood-prone areas use several responses to reduce the impacts of floods. Some of these strategies are preventative, which means that they aim to reduce the likelihood of a flood. Others are adaptive, which means that they try to reduce the impact of floods when they occur. Four common types of responses are presented in Table 5.7.

Many of the responses outlined in Table 5.7 are linked. For example, places that build houses on stilts might also construct dykes and levees for added protection. **Meteorologists** use modelling and forecasting data to determine whether a dam or levee will be able to contain floodwaters. Meteorologists also inform emergency services of the need to evacuate. Unfortunately, despite these responses, extreme and unexpected events such as flash floods are still largely unpredictable. Also, while evacuation can keep people safe, it does not protect valuable infrastructure from being destroyed.

meteorologist a person who studies the atmosphere, especially the weather, and makes predictions for weather forecasts

▼ **Table 5.7** The different ways that people can respond to the risk of flood and to flood events

Management response	Description	Example
Alterations to building designs	In areas that flood regularly, houses are often built on stilts so that they are not damaged by floodwaters. Another construction method used to prevent flood damage involves making buildings watertight by sealing any gaps so that floodwaters cannot get inside them. In some places, governments have made laws that no houses or building can be built in flood-prone areas.	 <p>▲ Stilt houses in Belém, along the Amazon River, Brazil</p>
Dams, dykes and levees	Dams are built in the upper sections of rivers to contain water and control the amount of liquid flowing downstream. Dykes and levees are long structures built alongside rivers to help contain floodwaters and prevent water from flowing behind them. Spillways control the release of water from dams and levees. The Bonnet Carré Spillway in Louisiana, United States, diverts floodwater from the Mississippi River so that it flows out to the Gulf of Mexico rather than towards New Orleans.	 <p>▲ Floodwater from the Mississippi River at Bonnet Carré Spillway</p>
Computer modelling and forecasting	Meteorologists can track the possible development of rain cells and storms to predict how much rain will fall over an area several days in advance. They also use satellite images and radar to track storms to help predict the likelihood of a flood. Data for these services is managed in geographic information systems. FloodCheck Queensland is an example that provides information about flood heights and risk assessments.	 <p>▲ Computer modelling and forecasting helps people to better manage the impacts of floods.</p>
Evacuation	As with most hazards, the safest way to avoid danger is to evacuate. This is often done with the help of emergency services. Unfortunately, if the scale of the flood is too large or the flood rises too rapidly, this might not always be possible. In July 2020, 1.3 million people were ordered to evacuate their homes when a series of floods, followed by landslides, hit the southern Japanese island of Kyushu.	 <p>▲ Evacuation coordinated by fire brigades and the Japan Self-Defense Forces during the July 2020 Kyushu floods</p>



ACTIVITY 5.27 DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Using a geographic information system

A geographic information system (GIS) is a form of spatial technology used to gather, manage and analyse spatial information such as hydrology data. This can include river and floodwater heights, elevation data and the location of previous flood events. Geographers use this data to better understand how floods work, to model future flood events and to analyse which areas are most vulnerable.

Brisbane City Council's flood-awareness map is a GIS that can be used to explore the likelihood of a flood occurring in the suburbs of Brisbane. Search for the flood awareness map on the Brisbane City Council website and launch the Interactive Flood Awareness Maps. You can zoom into the CBD of Brisbane.

- 1 **Identify** the name of the river running through Brisbane.
- 2 Click on the 'high likelihood' button.
 - a **Determine** the chance of a highly likely flood occurring in any year.
 - b **Describe** where floodwater is likely to travel in a flood. Will it affect houses?
- 3 **Select** one of the historic floods. **Identify** when and why this flood happened, and **describe** how and where the floodwaters spread.
- 4 On the flood awareness map page on the Brisbane City Council website, click on the link to access the guide for residents to help prepare for flooding in Brisbane. List the three preparations that you think are the most important. **Justify** why you think these preparations are more important than others.



CASE STUDY 5.1

The 2021 floods in Europe

In July 2021, parts of Europe experienced severe flooding. Heavy rain fell across Europe, causing 10 billion euros (A\$15.6 billion) worth of damage and taking 243 lives. The flooding



started in the United Kingdom and spread throughout Western Europe. Some places recorded over 150 millimetres of rain in a 24-hour period. This led to significant flash flooding with some rivers reaching their highest level ever recorded. Floodwaters caused landslides, inundated homes and other buildings, and destroyed or damaged key infrastructure, such as railway lines, roads and power lines.

▲ **Figure 5.64** Floodwaters in Tilff, Belgium



▲ **Video 5.5**
News report





Analysis questions

- 1 **Conduct** some initial research on the 2021 floods in Europe and **select** one country that was impacted by the floods.
- 2 **Research** the floods in that country and **identify** the social, economic and environmental impacts of the floods on your selected country.
- 3 **Describe** the response to the floods in that country.



▲ **Figure 5.65** Flooding in Germany



DEVELOPING YOUR UNDERSTANDING 5.4



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

- 1 Provide an example of a flood's impact on an area, either local, regional, national or international.
- 2 **Describe** the difference between a flash flood, a slow-onset flood and a quick-onset flood.
- 3 **Explain** what a storm surge is and why it can cause flooding.
- 4 **Explain** the difference between a natural event and a natural hazard, and give an example.

Interpret

- 5 State whether each of the following is an example of a flash flood, a slow-onset flood or a quick-onset flood.
 - a A tropical cyclone brings very heavy rainfall to a coastal town over a 24-hour period. Local rivers immediately begin to overflow onto the floodplain.
 - b A thunderstorm causes heavy rainfall from 4 p.m. until 7 p.m., which leads to rapid flooding of a suburb of the Gold Coast.
 - c Consistent rainfall over a three-day period in one of Queensland's inland rural areas causes rivers to slowly rise and flood over several kilometres.
- 6 **Describe** the characteristics of a place that might make it vulnerable to flooding.

Argue

- 7 **Discuss** whether you think people should be allowed to live in places that are vulnerable to flooding. **Consider** the attractions of living in those areas and the drawbacks.



End-of-chapter assessment

1 Making thinking visible

Turning wastewater into potable water is seen by some as a necessity and by others as an absolute last resort. **Consider** a situation where the Queensland Government decided to start recycling Brisbane's wastewater into the city drinking water supply.

Select a perspective from the following list:

- The premier of Queensland
- A government authority, such as Seqwater
- The owner of a Brisbane business that needs a large water supply
- A local resident.

Use the following sentence starters to explore this topic:

- I am thinking of turning wastewater into potable water from the point of view of ...
- I think turning wastewater into potable water is ...
- A question I have from this viewpoint is ...

2 Research task

Select one of the examples provided in this chapter to study water as an environmental resource more thoroughly. Develop a research question, and **research** additional detail and statistics to answer the question. Then, present your findings in a report.

Some ideas are given here:

- What are the impacts of salinity in Australia? Find out how much of Australia is affected, the main causes of the problem and the ways that Australians are trying to reduce the impacts.
- To what extent are dams in Australia or elsewhere in the world impacting the environment, people and local economies?
- What are some of the specific impacts of the management of the Mekong River in downstream communities? Is this likely to change in the future? How could the river system be managed more sustainably?

3 Extended-response question

Claim 1: *Preventative responses are far more effective than adaptive responses in reducing the impacts of flooding.*

Discuss whether you agree or disagree with this statement using information presented in this chapter.

Claim 2: *People in more economically developed countries, such as Japan or Australia, and in less economically developed countries, such as Bangladesh or Cambodia, are affected differently by flooding.*

Discuss whether you agree or disagree with this statement using information presented in this chapter.

4 Problem-solving task

As the global population continues to grow, domestic water use places an increased pressure on water supplies. Either **research** a modern technology that reduces domestic water use or design your own. **Discuss** how this technology works and how it could be incorporated into existing houses in Australia.

5 Visible-thinking routine

You will be creating a concept map to track your understanding of floods. First, write the topic 'Floods' in the centre of your page. Then follow the steps: generate, sort, connect and elaborate.

- **Generate** a list of key ideas based on what has been covered in this unit.
- Sort your ideas according to how central they are to the topic of flooding. Place central ideas near the middle where your title 'Floods' is and write less important ideas towards the outside of the page.
- Connect your ideas by drawing lines between ideas that have something in common. Write a short sentence under each line explaining how the ideas are connected.
- Elaborate on each idea by adding a few dot points to **describe** the concept or give more information about it.



▲ **Figure 5.66** Distribution of relief supplies in a flood-hit area of Sudan, 2020

Digital resources

Visit the Interactive Textbook or Online Teaching Suite to access:

- General Capability Project
- Interactive chapter quiz
- Interactive Scorcher quiz
- Videos, image galleries and other extra materials.



UNIT

2

**Place and
liveability**

Overview

The places we call home look and feel different to each of us. Factors such as our location, income, age, cultural background and connections to the community and the natural environment all play a role in how we experience our neighbourhoods, towns, cities and suburbs. To live well in a place, we need access to basic necessities. We also need to be able to enjoy the culture, entertainment and recreational activities that make a place feel safe and fun. So, liveability not only means surviving in a place but thriving there, too. Places are always changing. Figures A, B and C show the changes that have occurred on the Gold Coast from the 1950s to nowadays, while Figure D illustrates one of the changes brought about by the COVID-19 crisis.

Technology is evolving quickly, and technological advancements have an impact on places and liveability. How you feel about a place can also change as your needs alter over time. For instance, growing up in a rural region might be great when you are young, as you can enjoy the open space and freedom. However, later you may decide to move to a city to go to university.

In this geography unit, you will investigate what places mean to Australians and people around the world, as well as what services and facilities make a place liveable. This will help you to recognise key characteristics of our built environments, and understand the human activities and beliefs that have helped to shape them. You will also learn to see places from the perspectives of different groups of people. Understanding the characteristics of built environments and others' perspectives can help you be more connected to your own environment and community.



▲ **Figure A** Surfers Paradise Hotel, Cavill Avenue and Pacific Highway, 1952



▲ **Figure B** Grundy's waterslide next to Surfers Paradise beach, 1980s. What changes can you detect between these first two images?



▲ **Figure C** The skyline of Surfers Paradise, 2019



▲ **Figure D** Cavill Avenue at Surfers Paradise during the April 2020 COVID-19 lockdown



▲ **Figure E** Melbourne, Sydney and Adelaide have been, in recent years, in the top 10 of the most liveable cities in the world according to the Global Liveability Index.

Introducing geographical concepts

In this unit, you will have many opportunities to explore geographical concepts.

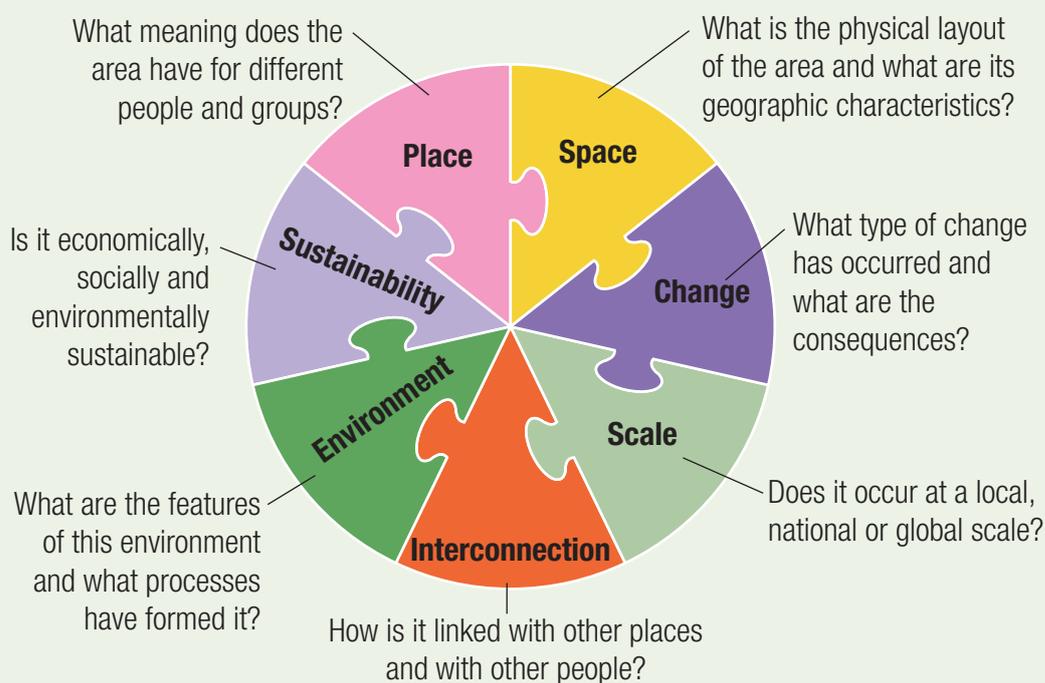
Space is a physical area. When we discuss space, we often refer to the layout of that area (or the spatial distribution), the physical characteristics and its location.

The concept of **place** refers to the meaning that the location or space has for individuals, communities and cultures.

When geographers look at **change**, they investigate the type of changes that have occurred. They also look at when, where and why change has happened.

The **environment** in geography refers to the characteristics of an environment, how an environment supports life, and the connections between an environment and people.

Interconnection involves the links between places and the ways that people influence or are influenced by the characteristics of places and spaces.



▲ **Figure F** Adapted from ACARA, 'Understand this learning area: Geography 7–10', Australian Curriculum: Geography V9.0



CHAPTER 6: Place and liveability

Setting the scene: Canberra – a planned city

infrastructure the physical structures and facilities needed within a community, such as roads, buildings and pipelines

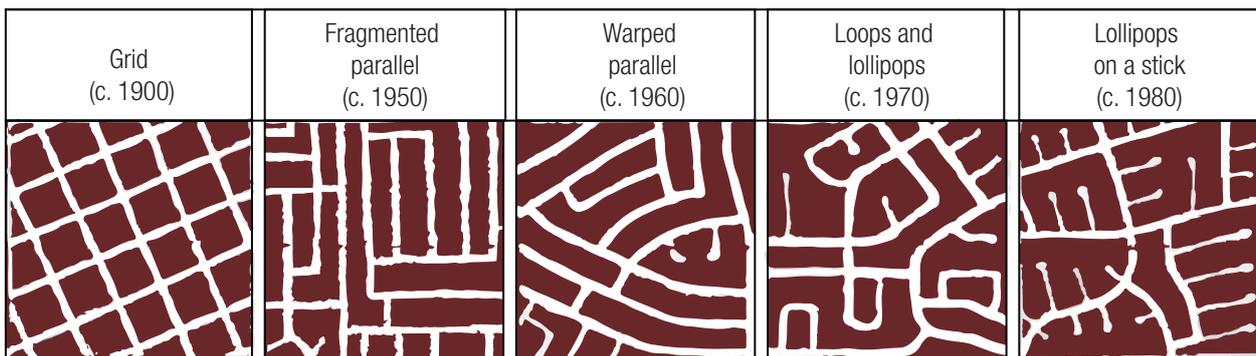
urban planning the process of planning the layout and infrastructure of a place

sustainability the wise use of resources so that they are available into the future

accessibility where resources or services are available and affordable for all people to use

Canberra – Australia’s capital city – is unlike any other city in the country. But what is it about Australia’s capital that makes it so liveable and unique? Have you ever wondered how the city was first designed and how it continues to rank highly as one of the world’s most liveable cities? Canberra’s rating as a highly liveable city is due to its stability, education, health care, **infrastructure** and employment opportunities. The city’s design uses the topography of the land to emphasise its natural features and make sure the beauty of the Australian landscape is not lost. All these features are not accidental; they exist because of **urban planning**.

Urban planners shape the world we live in because they design our cities and plan our infrastructure. Over time, urban planning designs have changed. For example, the use of a grid for urban design was popular from the seventeenth to nineteenth centuries when new cities were forming. Since the 1900s, urban planners have created designs for cities to accommodate cars. Now, modern designs focus on **sustainability** and **accessibility**. Figure 6.1 shows the evolution of street design in the twentieth century.



▲ **Figure 6.1** Types of street patterns in urban planning during the twentieth century

Canberra is located between Sydney and Melbourne and was chosen as a compromise between the two cities, which could not agree on where the capital city of Australia should be. The site that is now Canberra was selected for its picturesque natural features. It is believed that the name Canberra comes from a local Aboriginal word meaning meeting place.

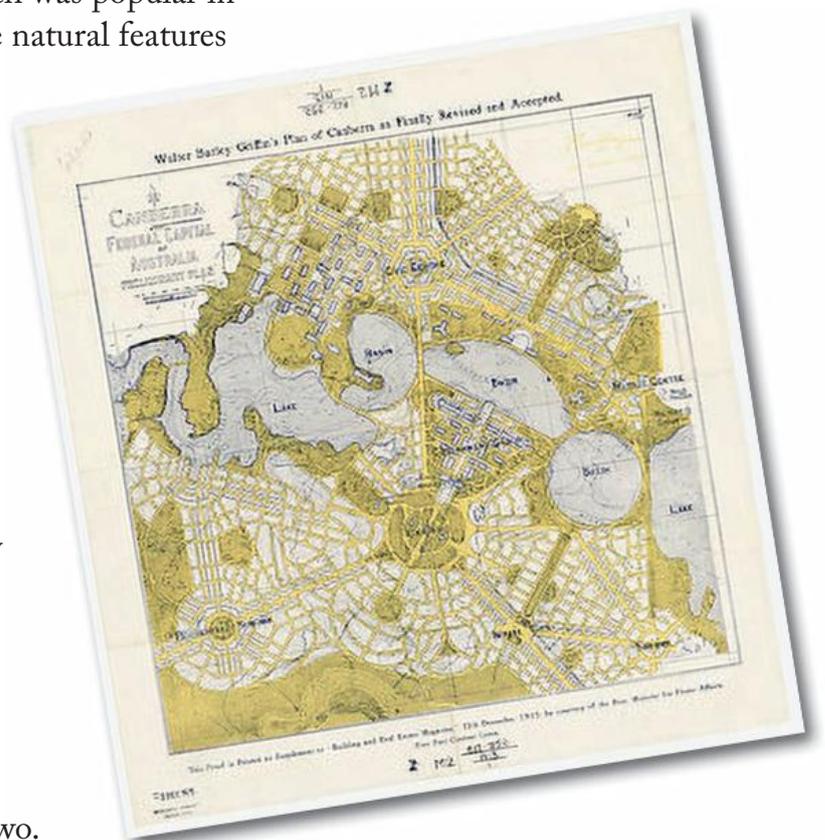
In an innovative move, an international competition was held to choose a design for the fledgling city. In 1912, American designer Walter Burley Griffin won this competition. While the competition was won in his name, it is important to note that he collaborated on this design with his architect wife, Marion Mahony Griffin.

Canberra was to be an entirely planned city and its design was strongly influenced by the garden city movement, which was popular in the early 1900s and uses the natural features and topography to create the layout of the city. This movement aimed to bring together the best features of city and country living by creating satellite communities that linked to a central city or central business district. Growing from a small rural settlement, the city is now home to approximately 400 000 people.

Canberra's design used an artificial lake – now called Lake Burley Griffin – as the centrepiece for the city, essentially dividing it into two. The civic centre of Canberra is to the north of the lake, while



▲ Figure 6.2 Walter Burley Griffin and Marion Mahony Griffin



▲ Figure 6.3 The preliminary plan for Canberra

the government centre and residential areas are located to the south. It is important that the government precinct is close to residential areas because it was meant to be seen as the ‘people’s seat’. Canberra is home to many major Australian institutions, including federal parliament, the High Court of Australia, the Australian Mint (where money is produced), the Australian War Memorial and the National Museum. An important element of the design of Canberra is shared with Washington DC. The links between sections of the city create large avenues and ensure some major features such as Parliament House are visible from other landmarks in the city. This adds to the city’s **sense of place**. The major functions of government are also close together.



▲ **Figure 6.4** An aerial view of Canberra showing the Australian War Memorial and Parliament House

sense of place

the meaning that a person or group attaches to a specific area or space



**ACTIVITY 6.1
MAKING THINKING VISIBLE**

Identify, describe, consider

Copy the following table.

	Identify the things you see, observe or notice in this image	Describe the sense of place in this image	Consider whether you connect with the space – why or why not; provide a reason or two
Figure 6.5			
Figure 6.6			
Figure 6.7			

With a partner, use Figures 6.5–6.7, which show different places in Canberra, to complete the table.



▲ **Figure 6.5** The Australian War Memorial



▲ **Figure 6.6** Floriade, the annual Canberra spring festival



▲ **Figure 6.7** Scenic view of the landscape of Canberra

Chapter overview

Introduction

In this unit, you will explore the concepts of liveability and sustainability in different parts of the world. You will complete various fieldwork activities and conduct research to find out about a range of developments throughout the world, including places such as Brisbane. You will work through a range of activities and case studies to build your skills and to encourage you to think like a geographer.

Learning goals

After completing this unit, you should be able to do the following:

- Explain the concepts of place and liveability
- Describe factors that influence where people live and what they think of their place
- Identify how we measure the liveability of a place
- Describe what makes one place more liveable than another
- Interpret how access to services and facilities affects the liveability of a place
- Propose how environmental quality affects the liveability of a place
- Describe how the feeling of social connectedness and identity affects the liveability of a place
- Identify how liveability can be improved.

Geographical skills

After completing this chapter, you should be able to:

- Explain processes that influence the characteristics of places
- Identify, analyse and explain spatial distributions and patterns, as well as identify and explain their implications
- Identify, analyse and explain interconnections within places and between places, and identify and explain changes resulting from these interconnections
- Analyse maps and other geographical data and information, using digital and spatial technologies as appropriate, to develop identifications, descriptions, explanations and conclusions that use geographical terminology.



6.1 Why do people choose to live where they do?

FOCUS QUESTIONS

- What is liveability?
- How is liveability measured?

The concept of liveability focuses on why people live where they do. The reasons a person lives in an area or moves to a different area are often based on their perceptions about the liveability of a place.

Where would you rather live?

People live in different areas for a variety of reasons. Some people move for employment and education opportunities, some people move seeking safety and security, and some people stay in an area because of their connection to it.



ACTIVITY 6.2

Features of liveability

Examine the places shown in Figures 6.8–6.17 and use Google Street View and your own research to explore the areas further. Then, answer the questions that follow.



▲ **Figure 6.8** Bibury, England



▲ **Figure 6.9** Kinshasa, Democratic Republic of the Congo



▲ **Figure 6.10** Buenos Aires, Argentina



▲ **Figure 6.11** Zagreb, Croatia





▲ **Figure 6.12** Québec, Canada



▲ **Figure 6.13** Tel Aviv, Israel



▲ **Figure 6.14** Abu Dhabi, United Arab Emirates



▲ **Figure 6.15** Hoi An, Vietnam



▲ **Figure 6.16** Whitsunday Islands, Australia



▲ **Figure 6.17** Guangzhou, China

- 1 **Identify** the features that affect the liveability of each area shown. **Describe** both the positive and negative features of living in each place.
- 2 **Identify** which place/s you could imagine yourself living in.

What is liveability?

Liveability is a measure of the living conditions of a certain place. To measure whether a place has a high or low level of liveability, we look at the quality of economic, environmental and social living conditions in that place. The features of a place are often perceived differently because they depend on a person's

liveability the qualities of a place that enable a person to live there with a good standard of living. To work out whether a place has a high or low level of liveability, we consider the quality of economic, environmental and social living conditions in that place.

perception the way something is viewed or understood

space a physical area and its physical features

scale the size of an area and how it is viewed in relation to another area

background, age and culture. This **perception** of a **space** means that different people value a range of different features and experience those features in unique ways. Their perception of these features is what creates a sense of place. In other words, your experiences in a space and the meaning you attach to it make up your 'sense of place'.

The concept of space

In geography, the term 'space' refers to a physical area. This includes all the area's objects or physical features. Spaces often relate to a point of latitude and longitude, and vary in their **scale**. They can be small, like a room, or large like a city, country or region. How each physical feature is distributed in a space is an important consideration because it contributes to how that space is used. For example, a city or town that is spread out with limited public transport will usually have high use of private vehicles.

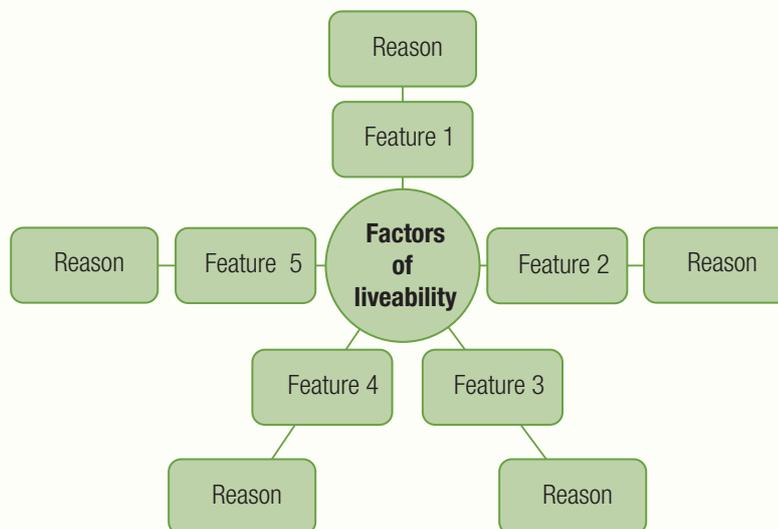


ACTIVITY 6.3

Ranking task

Use the content you have read so far to answer the following questions:

- 1 With a partner, brainstorm features that make a place liveable.
- 2 **Select** five factors that you consider to be the most important and **create** a mind map like the one shown here. For each factor, you should also provide a reason why you think it is significant.
- 3 Share your mind-map work with the class and **explain** why you think each factor you chose is important.



What factors affect liveability?

The choices people make about where they live are often based on **push factors** and **pull factors**. A push factor is a reason that causes a person to leave an area, such as unemployment, poverty, lack of access to services or limited opportunities for education. A pull factor is a reason a person moves to or is drawn to an area. These are positive motivations that will benefit the person who is moving to a place, such as better job opportunities, accessible services, education and living conditions.

push factor a reason people move away from an area

pull factor a reason people move into an area



ACTIVITY 6.4

Class discussion

As a class, **reflect on** the possible push and pull factors for an 18-year-old finishing school in Dalby, who is thinking about moving to a major centre like Toowoomba or Brisbane. **Create** a two-column table with push and pull factors.

Forced migration is a push factor. In times of conflict, many people are forced to leave their homes because they fear for their safety and security. These people do not have a choice about where they live and they simply have to go somewhere so they can be safe. According to the United Nations High Commissioner for Refugees, approximately 89.3 million people around the world were forced to leave their homes due to persecution, human rights violations, conflict or violence in 2021.



CASE STUDY 6.1

Understanding different perceptions of place

Yasmin is a refugee who came to Australia from Syria to escape the war. Read what Yasmin says about her experience, then answer the questions that follow.

Every summer holiday, we would leave Damascus to go to visit my grandparents in Aleppo. When we went to visit them in 2012, the war had started but it was still far away from us, so we didn't worry about it. But after two weeks, just as we were about to book the ticket for the bus to take us home, our neighbour called us and said, 'Don't come back here – everybody is leaving!' We thought it would just be a month but it turned out to be permanent, and we lost everything. The worst thing was losing the photos, as my dad had taken our picture every day of our childhood, since we were born.

A year later, the war started in Aleppo too, so we moved to Kobani, a Kurdish suburb in North Syria, as we have a Kurdish background. I hadn't seen Kobani in my entire life, but when the war started I had to go back to my 'place'. It was safe there, but it was very simple – no electricity, no running water. My family all lived in one room, but it was ok. It was actually lovely – we were all close to each other, and because my aunty was there, we didn't feel much sadness. She looked after us.

After a year and a half, the United Nations interviewed us and a few months later, we heard that Australia had accepted us as refugees. At first, my mum said, 'But we don't have any idea about Australia!' The only thing we knew was it was really far away, and I thought that if I went, I'd never be able to go back to Syria. Later, my mum said, 'This is the best way for the children to continue their education and have better futures'.





I was 16 when we arrived. On the way to Wollongong, we saw so many trees, and the next day, my mum was like, 'I want to go back – book a flight for me, I can't stay here anymore, everything is too green!' However, after a while, we started to get used to everything. We first went to the Intensive English Centre, and then to high school to do our year 11 and year 12. It was a little bit challenging at the beginning because we had missed year 10, and because the system of education was very different to Syria's.

My little brother has no idea of what Syria was like, because he was so little when we left. I think those pictures we lost would have really helped him to have a picture in his mind about how we used to live and how happy we were. But we are happy in Wollongong too. We used to love the noise in Syria but now we love the quiet environment, the beautiful beaches, and all the trees!

Source: Yasmin, 'Every summer holiday, we would leave Damascus to go to visit my grandparents',
New Humans of Australia website, 20 June 2018

Analysis questions

- 1 Create** a list of the push factors that forced Yasmin to leave her home.
- 2 Create** a list of the pull factors that brought Yasmin to Australia.
- 3 Compare** the liveability of Yasmin's homeland Syria with her new home of Australia. What are the benefits of this new home for Yasmin and her family? (It might help to think about the access to services and new opportunities.) For more information and detail about her story, go to the New Humans of Australia website and search for 'Yasmin'.



ACTIVITY 6.5

Analysing spatial patterns

In this activity, you will explore the concepts of space and **change**.

Go to the BBC website and search for 'Syria from space: Three cities in darkness and light'. You will see three sets of satellite images that show the impact of the Syrian war over time in the country's major cities. Spend some time looking at these images and then answer the following questions:

- 1 Describe** the changes you see for Damascus over time.
- 2 Infer** reasons why you think different regions lost their lights. When do you think this happened?
- 3 Identify** the impacts of what you see for the people who live in these cities in terms of their safety, health, connectedness and access to services.
- 4 Compare** the two daytime, aerial images of Raqqa in 2012 and 2017. What do you notice?

change the ways in which something is different from the past



CASE STUDY 6.2

A comparison between Brisbane and Zurich

Read the information provided to you about Brisbane and Zurich, and then answer the questions that follow.

Brisbane

Brisbane is the capital city of Queensland. It is located on Australia's east coast and is in the traditional lands of the Turrbal and Jagera people, who call it Meanjin. The metropolitan area of Brisbane has 2.5 million residents.

The city is built on the floodplains of the Brisbane River, 14 kilometres from Moreton Bay. This has meant that Brisbane has experienced many flooding events, including major weather events in 1974, 2011 and 2022. The city has a humid, subtropical climate and has regular storms over the summer months. It is a hub for business and education in Queensland. Brisbane is set to host the Olympic Games in 2032, an event that will bring more changes to the city.

Transport

Public transport in Brisbane consists of trains, buses and ferries. As the city is expected to grow, the public transport system is planned to grow with it. This growth will include a new rail network that crosses the Brisbane River and a high-frequency bus-transit system. These rail and bus networks will link together to provide the city with stronger options for public transport.



▲ **Figure 6.18** Brisbane is located on Australia's east coast.



▲ **Video 6.1** Aerial footage of Brisbane

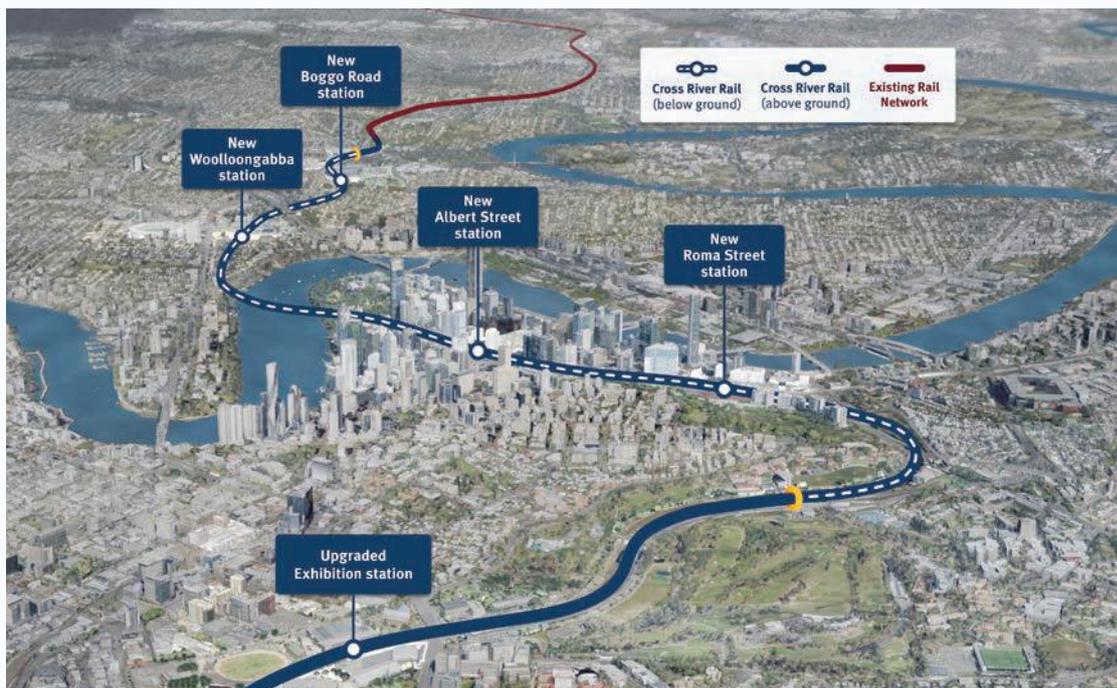


▲ **Figure 6.19** A typical Brisbane bus



▲ **Figure 6.20** Ferries are part of Brisbane's network of public transport.





▲ **Figure 6.21** Brisbane's new cross-river rail network is due for completion in 2024.

Housing

Homes in Brisbane are more affordable than those in Sydney and Melbourne. This is an economic factor that helps to make Brisbane liveable. Many people have moved from Sydney and Melbourne to Brisbane because of this economic pull factor. High-rise apartment buildings are increasingly common in the suburbs close to the CBD. Suburbs further away from the CBD tend to have low-density houses and townhouses. Queenslander-style homes in Brisbane are common. These homes are timber with a corrugated iron roof. They are high set, meaning they have elevated foundations, to allow for ventilation, and typically have a surrounding veranda. The Queenslanders were designed and built specifically for Brisbane's subtropical climate.

Lifestyle

The people of Brisbane embrace an outdoor and active lifestyle. The city is located within an hour's drive of both the Gold Coast and the Sunshine Coast. These are frequent weekend destinations for people who live in Brisbane. Brisbane's suburbs have high levels of access to services such as schools and health care. Crime rates are relatively low and the city is generally considered to be safe.



▲ **Figure 6.22** Traditional Queensland houses are built raised from the ground to counteract flooding and encourage a cooling airflow.



▲ **Figure 6.23** Surfers Paradise beach, on Queensland's Gold Coast, is a frequent weekend destination.





Zurich

Zurich is often listed as one of the world's most liveable cities. It is the capital of Switzerland and has a population of approximately 1.4 million people within the metropolitan area. The city is located in the northern end of Lake Zurich. It is 408 metres above sea-level and close to the Alps. Zurich is known for its oceanic climate with four distinct seasons, including warm summers. The city has a long history, with settlements found around Lake Zurich dating back to the Bronze Age.

Design

There are 12 sites in Zurich's city centre that are World Heritage listed. The Old Town in Zurich is medieval. For this reason, there are no high-rise buildings within the area. The buildings in the historic city centre have a wide variety of historic design features.

Economy and education

Zurich is one of the wealthiest and most financially important cities in Europe. The city is Switzerland's economic heart. The most important sector in Zurich's economy is the service industry, which employs four-fifths of Zurich's workers. The city's high quality of life contributes strongly to its economic growth. A strong emphasis on, and investment in education produces a skilled and multilingual workforce for the country.



▲ **Figure 6.24** Zurich is the capital of Switzerland.



▲ **Figure 6.25** Aerial view of Zurich



▲ **Figure 6.26** The University of Zurich was founded in 1833.



◀ **Video 6.2** Aerial footage of Zurich





Transport

Zurich has a variety of public transport that is widely used, including local trains (the S-Bahn), a tram system, a bus system, a funicular railway and a cable car. Tickets are valid on all forms of public transport. The public transport system in Zurich is efficient and reliable. The high levels of service and usage of Zurich's public transport enhance the city's liveability and accessibility.

Lifestyle and culture

Zurich has a long history of art and culture. The city is home to many museums, as well as theatres, an opera house and a ballet theatre. Zurich was also home to the Dada art movement, an artistic style that rejected logic and reason, instead embracing chaos and nonsense.



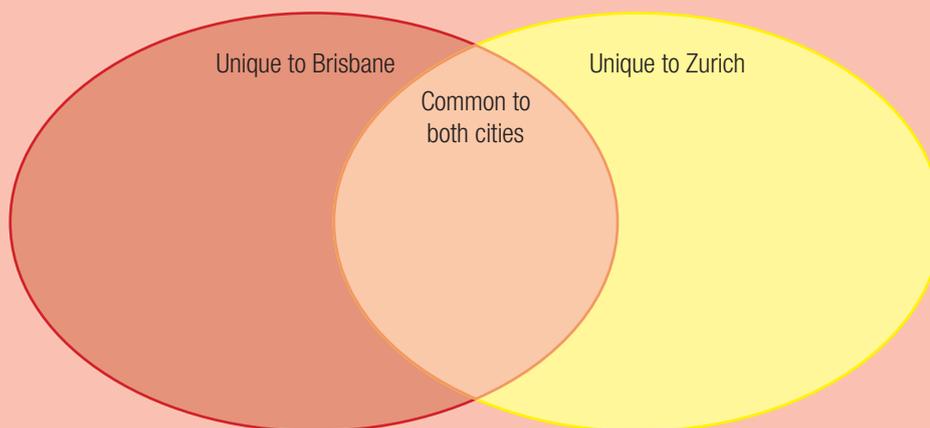
▲ **Figure 6.27** A tram in Zurich

Analysis questions

- 1 Create** a Venn diagram so that you can see the similarities and differences between Brisbane and Zurich. You can use the information in this case study and your own online research.
- 2 Describe** which features of liveability from Zurich could be used to improve liveability in Brisbane.

What is a Venn diagram?

A Venn diagram is a great way to show similarities and differences between concepts. It usually has two or three circles that overlap each other. In the overlapping area, the similarities appear. In the separate areas, the differences are shown.



ACTIVITY 6.6

Mapping my local area

- 1** Using Google Earth, Bing Maps or Scribble Maps **create** an annotated map of your local area. Mark points of interest and features of liveability in the area.
- 2 Describe** the distribution of your area's features. (Where are these features located? What does the space look like?)



ACTIVITY 6.7 FIELDWORK

Conducting a survey of the local neighbourhood

Fieldwork in geography consists of practical activities that are done away from your classroom at school. It can involve a range of activities, including observing, questioning, planning, collecting, recording, evaluating, representing, analysing, concluding, communicating, reflecting and responding.

In this fieldwork task, you will visit your neighbourhood and answer some questions. These questions will form a class survey about the liveability of your local neighbourhood. The learning experience here is to construct a five-question survey. The following will assist you in understanding the different methods of data gathering in fieldwork.

Survey applications like Microsoft Forms, SurveyMonkey and Survey123 have made it possible to collect large data sets easily and accurately. These applications also help us to make the data into helpful graphs, rankings or word clouds. Surveys are often emailed out to participants or completed face to face using devices. These types of surveys provide extensive **qualitative data** for fieldwork projects. Here are the steps to take:

- 1 As a class, **discuss** and **describe** the type of data (**quantitative** and/or qualitative) you wish to gather to learn more about your local area.
- 2 **Create** different types of questions. Designing short informative questions is important. Try not to ask questions that will result in a yes or no answer. You could, for instance, **create** a simple multiple-choice question, use a Likert scale question by making a statement and asking participants to rank their opinion, or you could ask participants to rate a place and the app will average out responses, providing an overall score.

qualitative data

non-numerical, observed or collected through interviews, surveys, etc.

quantitative data numbers or counts

Which project would improve Moorooka's liveability for you?

Constructing a skate bowl

Improved public transport

Accessible aged care facilities

Other

▲ **Figure 6.28** An example of a multiple-choice question

Moorooka is a great suburb to live in.

Strongly disagree Disagree Neutral Agree Strongly agree

▲ **Figure 6.29** An example of a Likert scale question





How would you rate the liveability of Moorooka.

1 = Poor
5 = Excellent



▲ **Figure 6.30** An example of a 'rank your opinion' question

- 3 Complete the survey form, based on the suburb you live in.
- 4 **Compare** your completed survey with people in your class who live in the same area as you.
- 5 **Organise** your survey results for your suburb and **identify** the top five features of liveability in your area.
- 6 In a small group, **create** a poster or social media style campaign that advertises these features of liveability for your local area.

Quality of the environment

Water and air quality are essential factors in determining the liveability of a place. Access to clean water and air improves the health of a population as well as the natural environment. Water and air pollution can severely impact the health of residents.

Many cities are built close to river systems to take advantage of the resources of the natural environment. This proximity to a river system means that there is consistent access to fresh flowing water for the population. The river is also useful for transportation to move people and goods.

Sustainable environments

Designing a place to maximise the use of renewable resources is important. If this is done, the sustainability and liveability of a place increase.

The energy and structures used in cities tend to attract and produce heat. This generation in heat is known as a heat island. To reduce the effects of heat islands, major cities in Germany have introduced green roofs. A green roof involves partially or completely covering a roof with vegetation. A green roof creates insulation, provides habitats for local species, absorbs carbon dioxide and helps to cool air temperatures. In 2014, Germany had 86 million square metres of rooftop vegetation. The use of green roofs in Germany has been so successful that they are now being used in designs in other parts of the world.

In Santander, Spain, smart technology is already making the city more efficient: rubbish bins send alerts when they are ready to be emptied and streetlights automatically dim when no one is on the street.

Air pollution has become a larger problem as cities become more busy. This has severe impacts on people's health, causing more premature deaths than cigarette smoking. In Oslo, the capital of Norway, there

are many initiatives to reduce air pollution. ‘CityTrees’, which are park benches covered in a living wall of moss, absorb pollution. One CityTree cleans the air more effectively than 275 real trees. Oslo has also added 1000 charging stations to encourage electric vehicle use, and its buses are powered by biogas, which is produced from city sewage.



▲ **Figure 6.31** An example of a CityTree in Oslo



▲ **Figure 6.32** An example of urban agriculture in Montreal, Canada, where the rooftop is being used to grow vegetables



ACTIVITY 6.8

Research and mapping task

Identify a place anywhere in the world you could picture yourself living. **Investigate** this location, and **identify** some social, environmental and economic features of the area’s liveability.

- 1 Using Google Earth or a similar online mapping tool, **create** a tour of this place. You should include at least eight stops. For each stop, ensure that you have an image and include a 50-word description to show its liveability.
- 2 Share your tour with a small group.



DEVELOPING YOUR UNDERSTANDING 6.1



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

- 1 **Define** push and pull factors. Provide three examples of each.
- 2 **Describe** the concepts of space and place.
- 3 **Explain** how our ideas of liveability can depend on our age, culture and needs.
- 4 **Identify** key changes that have been planned to enhance liveability in Brisbane.

Interpret

- 5 **Reflect on** how someone’s perception or experience influences their sense of place.
- 6 Referring to Yasmin’s experience of moving to Australia from Syria (Case study 6.1), **explain** how safety and security are important features of liveability.

Argue

- 7 **Identify** the factors that affect the liveability of your local area. **Explain** why these factors make or do not make your local area liveable.



6.2 How does the location and distribution of services and facilities affect liveability?

FOCUS QUESTION

What are some of the reasons people choose to live where they do?

Access to services and facilities affects the liveability of a place. Adequate access needs to be available and affordable, and facilities and services need to be environmentally, socially and economically sustainable. This is so future generations can continue to live in the area.

Accessible facilities and services

Sustainable access to facilities and services enhances the liveability of an area for its residents. The availability and **affordability** of services and facilities acts as a pull factor by attracting more people to a place. This attraction leads to population growth. Over time, Queensland’s population has grown, partially due to its pull factors. A lack of accessibility to services in rural and remote areas has often led to **rural–urban migration**. This means that people move from rural areas to live in cities. Since the start of the COVID-19 pandemic, some people have chosen to move from urban areas to rural areas for a lifestyle change. This is called **urban–rural migration**. To sustain regional centres, state governments are giving more power to local governments to run local services. This makes it easier for people in rural areas to access the services that they need, so that they don’t feel the need to move to cities.

affordability the ability to afford a service or attendance of a facility – for example, going to the doctor

rural–urban migration when people move from rural areas to urban areas, usually for better opportunities such as employment and education

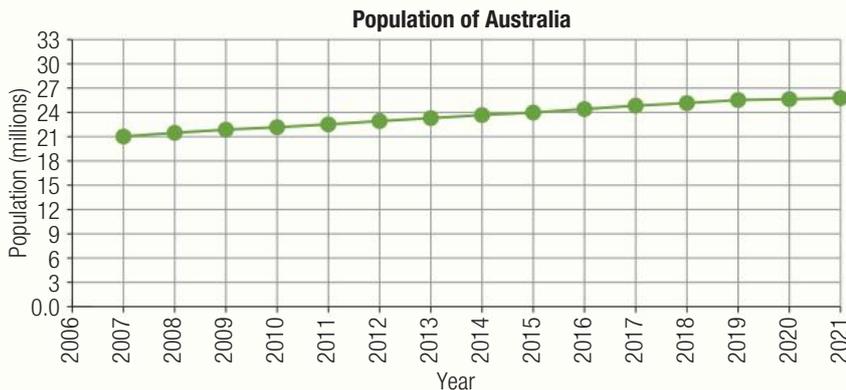
urban–rural migration when people move from urban areas to rural areas, usually for lifestyle changes



ACTIVITY 6.9

Representing data in a line graph

Simple line graphs provide an effective way to show change over time. The graph here is an example of a line graph showing the population change over time for Australia.





Create a line graph that shows Queensland's population growth from 2006 to 2022, using the data in Table 6.1.

▼ **Table 6.1** Estimated resident population in Queensland from 2006 to 2022

Year (ending 30 June)	Estimated resident population (millions)
2006	4.0
2007	4.1
2008	4.2
2009	4.3
2010	4.4
2011	4.5
2012	4.6
2013	4.7
2014	4.7
2015	4.8
2016	4.8
2017	4.9
2018	5.0
2019	5.1
2020	5.2
2021	5.2
2022	5.3

Instructions

To construct a line graph, follow these steps:

- 1 Draw a horizontal line. On the far left of the line, draw a vertical line upwards. The horizontal axis is called the 'x-axis'. The vertical axis is called the 'y-axis'. The point where the x-axis and y-axis intersect is called 'the origin'.
- 2 For this data set, you will mark in 17 points along the horizontal axis at an equal distance apart and 11 points along the vertical axis. These points should be equal in scale. Leave the first point (the origin) blank.
- 3 Below the horizontal x-axis, write in the progression of years from the beginning of your data set to the finish. Refer to Table 6.1 for the information you need.
- 4 To the left of the vertical y-axis, write zero at the origin and then work your way up each of the 11 points by 0.5 until you reach 5.5. This is enough to cover your smallest and largest values.
- 5 Neatly label each axis to show your audience what information appears on each of them and give the graph a title. The title should give detail about the type of information that is represented, the location and the time period.
- 6 Plot each value on the graph by creating a dot where the population data meets the year. For example, where the data on the left meets 4.0, measure across to where this lines up with 2006 and mark the spot with a small dot.
- 7 When all the data has been marked on the graph, join the points with a continuous line, preferably drawn with a ruler to make sure it is neat.
- 8 Now **examine** your line graph. What does it tell you about population growth in Queensland? Write a paragraph describing the change that you see in the data.

Classifying settlements

Settlements are usually classified as either *rural* or *urban*. Rural settlements are found in the countryside and have fewer than 10 000 residents. They are often spread out. This geographic distance and low population often makes it difficult for governments and businesses to provide services and facilities. Urban settlements have more than 10 000 residents and are often more compact. There is usually better access to services and infrastructure in urban areas.

What settlements need

For a settlement to function effectively, residents need access to services like clean, fresh water. Water is vital to a settlement, which is why so many cities are located close to major rivers. As modern cities grow, the people that live in them need access to a variety of services and infrastructure. This includes **sanitation**, housing, adequate and affordable food, employment, and health care. Residents also need to feel connected. Transport plays a vital role in connecting people and places. Public transport gives people the ability to go to different places and access services, which is especially important for those who do not have access to private vehicles.

sanitation the system for taking dirty water and other waste products away from buildings to keep places clean and protect people's health

urban sprawl the gradual spread of cities into previously rural areas due to population growth

Urban sprawl

As more and more people move to cities, **urban sprawl** often occurs. This is where a city starts to spread outwards. The outskirts of cities usually have low-density housing. These areas of lower density buildings often have design features that encourage car dependency and limit access for those without vehicles.



ACTIVITY 6.10

Spatial data interpretation

This activity explores the concept of urban sprawl and the growth of cities, as well as urbanisation, by reviewing maps of some of the world's megacities.

- 1 Search for 'The age of megacities ArcGIS' and click on the link.
- 2 **Select** one location and **explain** how the distribution of the city has changed over time.
- 3 **Examine** the growing urbanisation in Africa by searching for 'Urban Africa ArcGIS' and clicking on the link.
- 4 **Select** one location and **explain** how the urbanisation of that location has changed over time.

Population density

Population density refers to the number of people per square kilometre. This can be calculated for a small space, a city, a country or a region. Population density is one of the most important aspects of urban planning. Urban planners use information about a population to make decisions on future services and infrastructure. Population density determines the types of dwellings that can be constructed in an area and the services

that are provided. If density is low, then services are sparse and less efficient. If density is too high, an area can become overcrowded and uncomfortable. A well-planned urban area usually has a mixture of housing, commercial and industrial uses.

High population densities are a major feature of a **megacity**. A megacity is a city with a population of 10 million people or more. Megacities often have major social and economic pull factors, such as housing, education and employment. These factors have led to rural–urban migration, which is also a phenomenon known as urbanisation. Currently, more than half of the world’s population lives in an urban area. This urbanisation can sometimes lead to improvised settlements, known as slums. Services can become difficult to deliver in these areas, so living standards are often poor.

megacity a city with 10 million or more residents

6



ACTIVITY 6.11

Comparing images

Compare Figures 6.33–6.36 and choose which images are good examples of:

- a High-density living
- b Low-density living
- c A slum
- d A megacity.

Some pictures may fit into more than one category.



▲ **Figure 6.33** Shanghai, China



▲ **Figure 6.34** New York City, United States



▲ **Figure 6.35** Rio de Janeiro's Rocinha is the largest shanty town in South America.



▲ **Figure 6.36** Estaing, France



ACTIVITY 6.12

Calculating population density and interpreting data

The population density of an area is calculated by dividing the total population by the total land area. Use the equation here to calculate the population densities for the countries provided in Table 6.2. Copy and complete the table with your calculations to two decimal places, then answer the questions that follow.

$$\text{Population density} = \frac{\text{Total population}}{\text{Area in square kilometres}}$$

▼ **Table 6.2** Population and land area of selected countries

Country	Population (2022)	Land area (km ²)	Population density
United Arab Emirates	9 441 129	71 020	
Australia	26 177 414	7 692 020	
Spain	47 558 630	499 564	
United Kingdom	67 508 936	241 930	
Iran (Islamic Republic of)	88 550 570	1 628 760	
Mexico	127 504 126	1 943 950	
Bangladesh	171 186 373	130 170	
Brazil	215 313 498	8 358 140	
India	1 417 173 173	2 973 190	

- Identify** the country with the highest population density.
- Compare** Australia's population density to other countries listed here. **Explain** why Australia's population density is so low.
- Calculate the population density of your classroom by using the following steps:
 - Measure the dimensions of your classroom using a tape measure and **determine** the size of the room in square metres. (e.g. if a room is 6 metres wide and 6 metres long, it is 36 square metres).
 - Count the number of people in the class.
 - Divide the number of people by the size of the classroom to get the classroom population density.



CASE STUDY 6.3

Mumbai's diverse communities

Read the information about Mumbai, then answer the questions that follow.

Mumbai is a city of extremes. It is ranked as the twelfth richest city in the world and has a large population of billionaires. At the other extreme, however, more than half of the city's population lives in improvised settlements (slums) that lack clean air and water, basic electricity and transport.

Mumbai has the largest slum population in the world. This has created a unique economy. Many wealthy people own prosperous businesses and live in high-rise apartments, whereas poorer people are often craftspeople and artisans, who live in one-storey buildings that are poorly maintained and built closely together. This means that adequate services are difficult to provide to those living in these slum areas and they have a lower standard of living.





Analysis questions

- 1 Using Video 6.3, Figure 6.37 and Google Earth or Google Maps, **explore** Mumbai.

Describe what you notice about the population density.
- 2 **Conduct** further research on the slums in Mumbai.
 - a **Identify** features of sustainability in Dharavi, Mumbai.
 - b **Describe** the features of liveability in Dharavi, Mumbai.
 - c **Explain** how **interconnections** through community can enhance the liveability of Dharavi, Mumbai.

interconnection the relationship between places and people, and the ways in which they influence each other



◀ **Video 6.3** Aerial footage of Mumbai



▲ **Video 6.3** An aerial view of Mumbai and the Dharavi slums. (Use the QR code to watch the video.)



▲ **Figure 6.37** A street view of the Dharavi slums

Urban modes of transport

To enhance the liveability of an area, accessibility to other locations, services and facilities is vital. Accessibility is often best provided through roads and public transport. Sometimes the cost of a car can be unaffordable and, at other times, people make the choice not to have a car. Some social groups, such as migrants, international students, the elderly and younger people, rely heavily on public transport to feel connected and to move around. To ensure sustainability and **equity**, large settlements need to provide public transport options, such as buses, trains, ferries and trams.

equity where all people have equal access to resources that meet their basic needs

Trams are an iconic feature of Victoria’s capital, Melbourne. Some cities in Australia have recently begun introducing or reintroducing the use of trams or similar transportation. For example, Brisbane stopped its tram service in 1969 to much public outcry, but a new rapid transit system is planned to open in late 2024. The Gold Coast introduced a light-rail system to service the city in 2014. Sydney halted its use of trams in 1961, but between 1997 and 2020, the city reintroduced them by re-using old rail lines and installing new city lines along the routes of the old tram network. These enhancements of the public transport infrastructure demonstrate change over time.

▼ **Figure 6.38** The TransLink network in Brisbane has more than 400 bus routes.



▼ **Figure 6.39** A tram moves along George Street towards Randwick in Sydney on 14 December 2019. Restoring trams to Sydney has been a controversial project, with the projected costs in late 2019 estimated to be A\$2.9 billion.

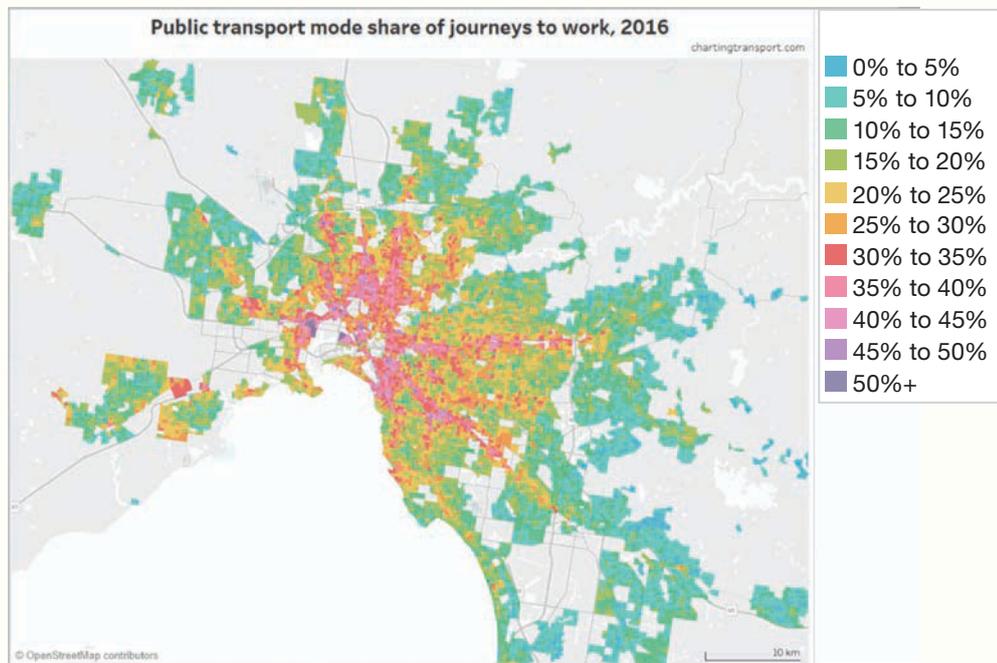




ACTIVITY 6.13

Recognising spatial patterns

The following two images show us what percentage of workers use public transport to get to work in Melbourne's CBD, as well as where they travel from. The first image is from 2006 and the second is from 2016. Study the images and answer the questions that follow.



- 1 **Identify** two changes that you can see in the pattern of public transport use.
- 2 **Describe** what these changes show us about public transport use over time.

Rural health care and education

Large-scale services are sometimes difficult to provide to rural communities because these areas are often geographically spread out and the populations are small. However, advancements in technology have improved the effectiveness of providing services to rural areas. For example, health-care providers are improving health care in these locations through technology. Increasingly, doctors are consulting with patients in rural and regional areas through electronic communications. Some rural and regional hospitals are also using nurses and other health-care professionals to consult with patients rather than doctors. For more critical cases, transport and accommodation are provided at a very low cost to rural and regional residents so that they can access the treatment services in larger urban areas.

Rural areas have also seen improvements in accessing educational services. Through use of digital technology, students who live in rural and regional areas can now access distance education. Previously, students accessed lessons via radio communication. Now due to improvements in technology, students are increasingly able to access their lessons online and interact with their teachers using live streaming. Students are also better able to share their work with their teacher and collaborate online with other students.



CASE STUDY 6.4

Vanuatu

Sometimes, international groups help developing countries increase their liveability. For example, the United Nations, World Health Organization and international aid agencies are working to improve the sanitation in rural and regional areas in less economically developed countries. In the Ambae Island communities of Vanuatu, a project has been set up to help community-based businesses produce and sell sanitation products. The businesses create products such as toilets and hand basins to sell to people in the community. Not only is this improving the sanitation and health of local communities on Ambae Island, but it is also creating jobs and increasing economic growth. In turn, this is leading to the improved liveability of Ambae Island because the people who live there have increased access to sanitation.

Analysis questions

- 1 Identify** some of the organisations that are helping people on Ambae Island increase their standard of living.
- 2 Describe** how these organisations are assisting Vanuatu.
- 3 Explain** the effects of their work by using information from the case study and further research.



▲ **Figure 6.40** Port Olry on the island of Espiritu Santo in Vanuatu



ACTIVITY 6.14 DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Reading and interpreting topographic maps

In this activity, you will practise the geographic skill of reading a topographic map, and look closely at the interconnection of human-made and natural environments.

Reading contours

Topographic maps use contour lines to show the shape of Earth's surface. Contour lines allow us to know the heights of mountains, the ocean's depths and how steep an area is, just by reading a map. Contour lines are often represented on a map by thin brown lines that join points of equal elevation. Some of the lines have a number written on them. These numbers represent the metres (or feet) above or below a certain point (usually sea level). The closer the contour lines on a map, the steeper the terrain. This is because the elevation is changing a lot in a short distance. The contour interval is the difference in elevation from one contour line to the next. Because not all contour lines have the elevation written on them, we can use the contour interval to work out the elevation of the unnumbered lines. Topographic maps also have grid lines. These grid lines can help us locate and explain where different features of the map are found.

Area referencing

We can find larger features, such as the township of Landsborough, by finding its area reference (AR). An AR is made up of four numbers. The first two numbers are called eastings. These numbers run along the top and bottom of the map. The numbers increase in an easterly direction along the map. The following two numbers are called northings. We find these numbers along the side of the map. These numbers increase in a northerly direction along the map. To find the AR of Landsborough, we first look to the easting number to the left of the township. In this case, the number is 96. We then find the northing number directly below the township. This makes up our second two-digit number, 34. The AR for Landsborough is therefore 9634.

Grid referencing

To find smaller features, we need to be more specific and use grid references (GR). A GR has six numbers. The first three numbers of a GR identify the easting, and the following three identify the northing. The first two numbers of the easting and northing are easy to determine as they are the same as the AR. For instance, the AR of Landsborough's police station is 9634. To determine the numbers of a GR, imagine that each AR square has 10 equally spaced horizontal lines and 10 vertical lines running through it. Each imaginary line is numbered 1 to 10. If you want to pinpoint something in an AR, you use the imaginary numbers of the horizontal and vertical lines to indicate where the feature is. For example, the police station at AR 9634 is about nine imaginary lines across and five upwards, which means its GR is 969345. Notice that the GR is the third and last number.

Symbols are often used on maps to represent the features of a map. These symbols are found in the *legend*. They look similar to the feature that they are trying to represent. For example, can you find the symbol for a lake in the legend? Can you find a lake on the topographic map? What is the AR or GR of this lake?



Guide to using
topographic
maps



▲ **Video 6.4**
Topographic maps



▲ **Video 6.5** Area and
grid references





Using the map in Figure 6.41 and the instructions on the previous page, attempt to answer the following questions. You can also go to the digital versions of the book to zoom in on the image.

- 1 **Identify** one natural characteristic located at AR 0037.
- 2 **Identify** the type of community facility located at AR 9539.
- 3 **Identify** the natural characteristics located at:
 - a GR 947216
 - b GR 925332.

4 **Identify** the human characteristics located at:

- a GR 978331
- b GR 966349.

5 **Select** one of the natural and one of the human characteristics that you identified above and **explain** how each of these might improve or reduce the liveability of the area.

- 6 a Using the scale on the map, **determine** roughly how large the town of Beerwah is.
- b The population of Beerwah is approximately 3900 people. **Predict** if Beerwah is likely to be a high-density or low-density place.

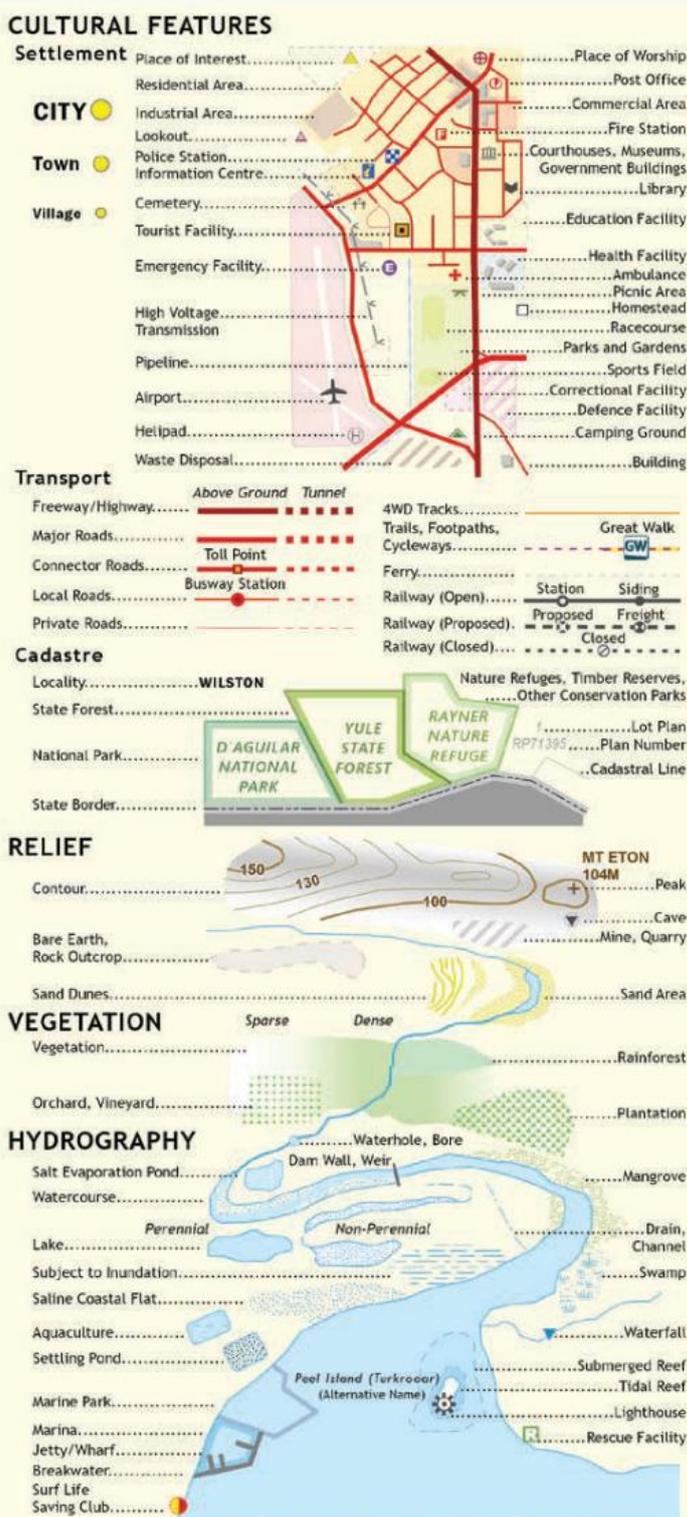
7 **Describe** the assumptions you could make about the liveability of this town, based on the services and infrastructure this region has to offer. **Identify** some of the benefits and drawbacks of living here.

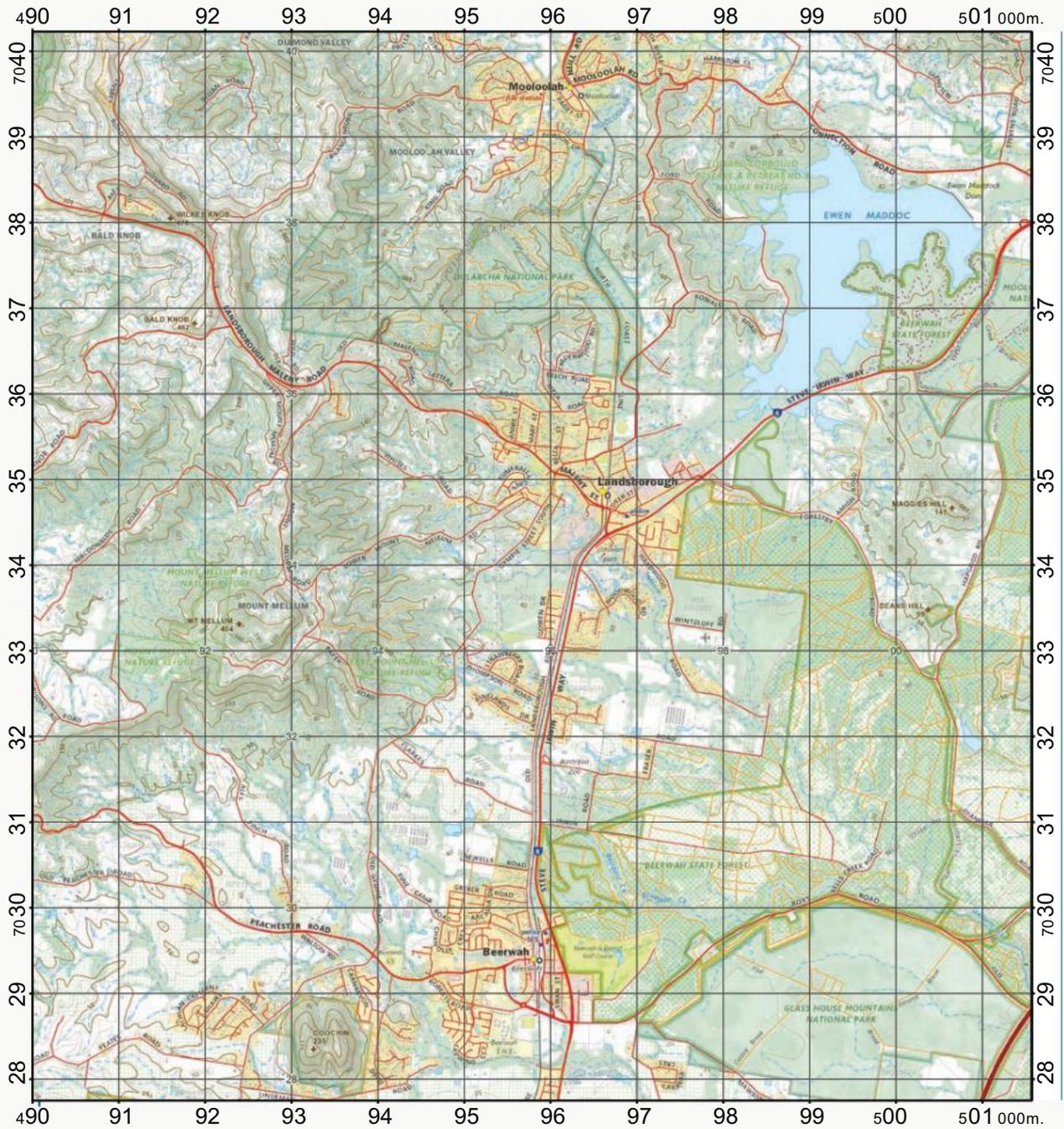
8 Use the contour lines in and surrounding Beerwah to read the topography. **Describe** the topography of the region.

9 **Identify** the elevation of the highest point that you can find in this region.

10 **Identify** one benefit and one drawback of living in a place with this type of topography.

11 The closer the contour lines on a map, the steeper the terrain. **Explain** why this is the case.





Scale 1:50,000



Kilometres

▲ **Figure 6.41** A topographic map of Landsborough and Beerwah (legend on previous page)



DEVELOPING YOUR UNDERSTANDING 6.2



Review questions

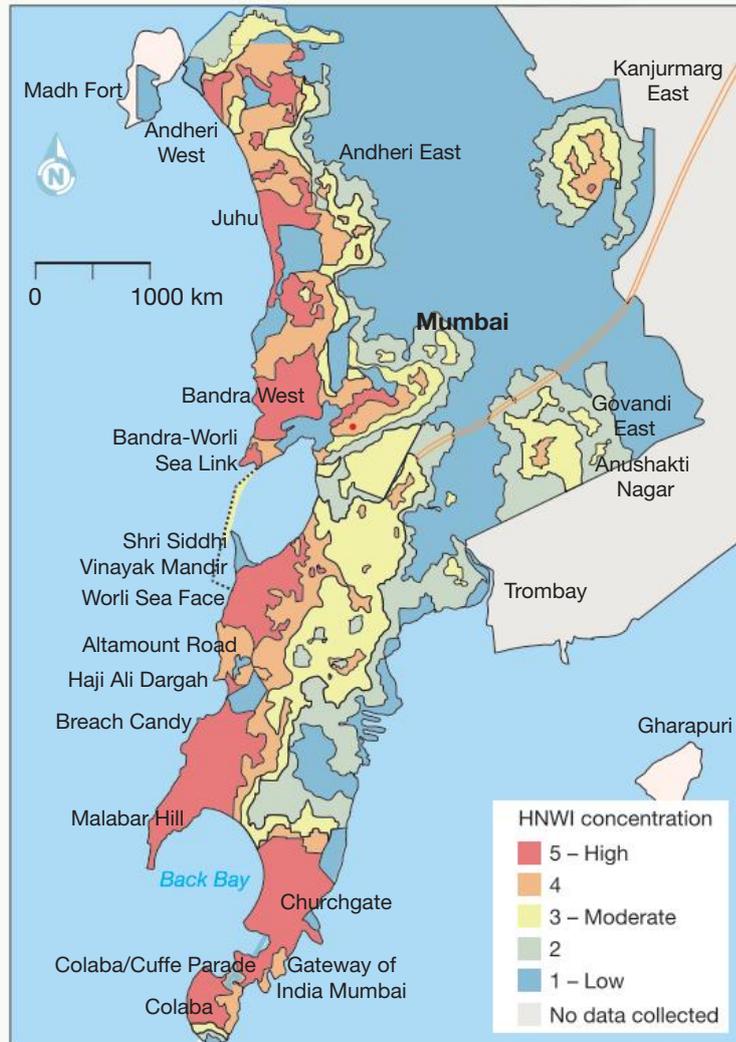
Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

- 1 **Explain** urban sprawl. How have urban planners tried to reduce this?
- 2 **Explain** how population density can impact liveability.
- 3 **Describe** how health care and education are becoming more accessible to people living in rural areas.

Interpret

- 4 **Describe** how green roofs reduce the effect of heat islands.
- 5 Mumbai is the Indian city with the most 'high net worth individuals' (HNWIs). An HNWI is a person who has assets over US\$1 million. Refer to Figure 6.42, which shows the neighbourhoods in Mumbai with a high concentration of HNWIs, then answer the following questions:



▲ **Figure 6.42** Concentration of HNWIs in Mumbai

- a **Describe** the distribution of HNWI concentration in Mumbai. To answer this, make sure that you **identify** which neighbourhoods have high and low concentrations of HNWIs and **describe** where these are located.
- b Based on the map, **propose** why many millionaires choose to live where they do in Mumbai.
- c **Select** one of the wealthy neighbourhoods and **investigate** what makes this neighbourhood appealing to millionaires.

Argue

- 6 'Environmental sustainability needs to be considered by urban planners.' **Explain** this statement and **identify** reasons for this point of view.

6.3 How does culture and connection impact perceptions of place and a sense of belonging?

FOCUS QUESTION

How does our connection to place enhance liveability?

Connection enhances our sense of belonging to a community and can influence our sense of place. Social connection and community identity are important concepts because they contribute to the liveability of a place.

Cultural connectedness of First Nations Australians to Country and place

Australia is home to the oldest continuing culture in the world. This is a fact that all Australians should be not only aware of, but also proud of. First Nations Australians have always had a deep spiritual connection to their **Country** or place. It is how they identify themselves and their family, their laws and their responsibilities. Country is a place of belonging and home. Country is the place of their ancestors and culture. Their special relationship with the health of the land and waterways shows a profound spiritual connection.

Country ancestral lands and waters that people are custodians of



▲ **Figure 6.43** An Aboriginal cultural ceremony involving hand painting

For First Nations peoples, to not know one's Country means a profound disconnection. The following sentiment about connection to the land comes from Bill Neidjie of the Bunitj clan, Gagudju language group. He was a traditional owner of the World Heritage listed Kakadu National Park in the Northern Territory:

Our story is in the land ... it is written in those sacred places. My children will look after those places, that's the law. Dreaming place ... you can't change it no matter who you are. No matter you rich man, no matter you King. You can't change it ... Rock stays, earth stays. I die and put my bones in cave or earth. Soon my bones become earth ... all the same. My spirit has gone back to my country ... my mother.



▲ **Figure 6.44** A man of the First Peoples of Australia performing a ritual medicine dance



ACTIVITY 6.15

Exploring place

In order to understand the Country you are on, you can do the following:

- 1 Learn whose Country you are on by using the AIATSIS map of Indigenous Australia. You can use the following link to help you: <https://cambridge.edu.au/redirect/10083>.
- 2 **Investigate** if there are First Nations names for the area you are in, for example the local name for what is now the centre of Brisbane is Meanjin in the Turrbal language.
- 3 Follow appropriate protocols to learn some local First Languages words.
- 4 If possible, find out the significance of the local area to local First Nations people.
- 5 Get out in Country and explore it. What sense of place do you get?

Social connection and community identity

Social connection is the experience or feeling of closeness to others. People feel connected when they are loved, valued and cared for within their community. Connected people have interpersonal relationships and work to maintain them.

Social connection is extremely important to our health and wellbeing. For this reason, it is vital for communities to have opportunities to connect with each other. Social connections then form a community identity. A person's community identity is based on their experiences of their local community and their sense of belonging. Community identity is often created because of a physical location, but communities are increasingly formed online through social media.



ACTIVITY 6.16

Research task

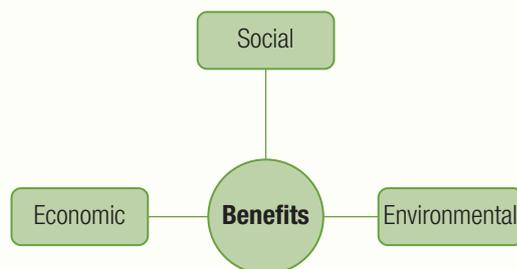
This activity explores the benefits of social connection and having a community identity.

1 Here is a list of benefits that result from social connection and having a community identity.

Categorise each benefit as either economic, social or environmental.

- Businesses give back to the community – for example, a business gives free coffees to homeless people or a business supports the local football team
- Loneliness is combated
- Community gardens are created
- Mental health is improved
- Safety in the community is increased because people keep an eye out for each other
- An economy is shared through online marketplaces and physical markets
- Resources, such as a local toy library, are shared
- People work together to improve the local environment
- Businesses are supported by the people in the community.

2 **Create** a mind map and brainstorm some other benefits that result from social connection and community identity. Use the template shown to help you with your ideas.



Safety and security

displace force someone to move from their home, usually because of war, natural disaster or persecution

Safety affects our sense of place and our connection to the local community. Some places lack safety, which forces people to leave the area. For example, Syria has this push factor because the country has experienced significant conflict since 2011. The conflict has led to the loss of lives, homes, infrastructure, services and facilities. Half the population in Syria has been **displaced** since the conflict began and significant cultural places have been destroyed. These losses and lack of safety have shattered the community spirit.

In other areas, violence against women makes it difficult for women to fully participate in their communities. The violence has forced them to take additional precautions for their safety.

Racial and cultural intolerance also affects the sense of safety and community. To improve the feeling of connection and safety it is important to promote cultural understanding. In Australia, there are many people from diverse backgrounds. Celebrating the cultural richness of Australia increases our sense of social connection, community and safety. Safety is vital for the development of a community's liveability. Urban planners can improve the safety and security of public spaces through their designs. The measures used by urban planners are known as passive measures. Passive measures deter and disrupt threats to security and make it easier to monitor the safety of a public space.



▲ **Figure 6.45** Rue Montorgueil pedestrian street with multiple restaurants and intense nightlife, Paris, France

They include monitoring locations through CCTV, using street lighting and safety mirrors, and ensuring the presence of others (such as using outdoor seating at restaurants). Having people fill the streets at night in a safe way allows people to keep an eye on activity (this is called passive surveillance) and discourages others from engaging in illegal behaviour.

More direct or active security measures prevent antisocial behaviour and physical threats. Safety bollards are an example of this.

Disconnection from communities

Some members of our communities feel disconnected if they cannot physically access their local area. This leads to social isolation. Areas that have good physical connections promote the social connections of members of the community. Physical access can be improved through public transport for those without access to cars, and ramps enable physical access for those with a disability in the community. Social connections can also be created by organisations that work with marginalised people. Connections enhance the liveability of places and the wellbeing of all.



▲ **Figure 6.46** CCTV monitoring is widely used to ensure public safety.



▲ **Figure 6.47** Accessible and inclusive public transport improves the mobility of all inhabitants.



▲ **Figure 6.48** An accessible footpath edge with bumps ('truncated domes') which tell an approaching vision impaired person with a cane that they are about to step out into the street.

Improving connections

Community groups and activities give people opportunities to find like-minded people and improve their connections to others. There are groups and activities available for people from all walks of life. Traditionally, these types of connections have occurred through organised clubs, such as sporting teams. However, today there is a wider variety of ways available for people to create connections in their communities and find people who have similar interests to them.

Events like pub choirs enable adults to socialise and enjoy singing in a large choir. 'No lights, no lycra' are dance classes that allow people to dance in a darkened room like no one is watching. 'Men's sheds' enable men to bond with other men over a shared interest in physical work and crafts. Groups like these help people to increase their confidence, as well as to create, connect and share with others in their local communities.



ACTIVITY 6.17

Research and creative tasks

This activity invites you to think about ways to create connections to others in your community. Think about what you have read about community identity and social connection, then follow these steps:

- 1 Go online to **research** community events and groups that exist in your local area. **Identify** activities that build community identity. Examples of these include SPARK Ipswich and the Redcliffe KiteFest.
- 2 **Consider** the information you find from your research and then **create** an event for young people that aims to expand on their social connections.
- 3 **Create** a poster or social-media campaign to advertise your event.



DEVELOPING YOUR UNDERSTANDING 6.3



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

- 1 **Describe** the concept of social connection.
- 2 **Explain** how community is formed. Provide an example of what this might look like.
- 3 **Identify** and **explain** an example of a passive measure for increasing public security.
- 4 **Identify** and **explain** an example of an active security measure for safety in a public place.

Interpret

- 5 **Evaluate** why it is important for people to feel a social connection to their community.
- 6 **Determine** how people connect with their community.

Argue

- 7 **Explain** how important you think online communities are in providing a social connection and identity. **Justify** your answer.

6.4 How do design strategies enhance the liveability of a place?

FOCUS QUESTION

How do we enhance the liveability of places?



6

Sustainability and interconnections are increasingly important features of liveability. Urban planners are developing innovative ways to improve the liveability of local areas. This section contains case studies of innovations showing the types of factors that enhance the liveability of a place.



CASE STUDY 6.5

Enhancing liveability for young people in rural areas

According to the Queensland Youth Strategy, young people living in rural and remote areas experience consistent barriers to accessing employment, education and specialist support services. Access to services can be limited for youths in rural locations. There can be privacy issues because the young people may know their doctor or nurse personally. They also do not have access to the same variety of education options and career opportunities that young people in urban areas have. This can mean that young people from rural locations feel forced to leave their town to pursue the careers and opportunities they want.

Analysis questions

Go online to research issues related to liveability for young people in rural and regional areas – for example, education, mental health or political participation – then answer the following questions:

- 1 Identify** one issue related to liveability for young people in rural and regional areas and find further information from other sources about the issue.
- 2** Design an advertising or awareness-raising campaign for young people in rural and regional areas about the issue you have identified. Make sure you answer the following questions:
 - a** What is the issue?
 - b** Why is it an issue?
 - c** What can be done about it?
 - d** What message would you like to send in your campaign?
 - e** How would you communicate your message (print advertising, radio, social media)?
- 3 Create** a presentation that explains your campaign.



ACTIVITY 6.18

Class discussion

Around 35 per cent of Queensland youth live in rural and regional areas. Visit the Youth Affairs Network Queensland (YANQ) website and other support networks for Queensland youth. As a class, **discuss** whether the issues you have identified in Case study 6.5 are likely to be issues for young people living in rural Queensland. How might they be different in different states around Australia?



CASE STUDY 6.6

Pontevedra

Read the information about Pontevedra, then complete the questions that follow.



▲ **Figure 6.49** The city of Pontevedra

Pontevedra is a city in the north-west of Spain in a province known as Galicia. The city has a long history, stretching back to the Roman Empire. During the medieval period, Pontevedra became an important trading hub in the region. The city boasted a large and secure seaport. During the sixteenth century, sediment from the river began to build up along the harbour, making it unusable for large ships. When this industry declined, so did the population.

In 1833, Pontevedra became the capital of its province. This revived the city, which currently has a population of approximately 83 000 people. The city banned all non-essential motor vehicles in its medieval centre in 1999. Pontevedra is known as one of the most pedestrianised cities in Spain and has won international awards. The city has a plan called the Metrominuto. The Metrominuto is a map that marks the distances between key locations in the city and the pedestrian travel-time between them. This pedestrian-friendly environment follows the examples of Bruges, Copenhagen and Amsterdam.

The Metrominuto, combined with the vehicle ban in the centre of the city, has drastically improved

walkability

a measure of how easy it is for a pedestrian to walk around

the **walkability** of the city. Before the ban in 1999, the city centre was in decline because there was crime and antisocial behaviour, pollution and traffic. However, since the vehicle ban, the city centre has been revived. Crime has declined, and air and noise pollution are no longer a problem. Businesses within the area have benefited from more pedestrians and it is a more friendly environment. This demonstrates that the vehicle ban has improved liveability in the city.



▲ **Figure 6.50** Pontevedra is on the west coast of Spain.



▲ **Figure 6.51** The old town of Pontevedra has many narrow streets.





Analysis questions

Use Google Earth or Google Maps to **conduct** a virtual field trip around Pontevedra, then answer the following questions:

- 1 Search for the following location: Ponte do Burgo. Use Street View to explore the area around this intersection and **create** a field sketch of the bridge from Avenue de Bos Aires.
- 2 Search for Praza Ourense, Pontevedra, and use Street View to explore the area. **Describe** the types of built features that are in the location. Are there mostly **commercial buildings** or **residential buildings**, or a mix of the two? Are the buildings high, medium or low density? What social, economic and environmental features are there?

commercial building

a building that is used for business activities

residential building

a building that is used for private activities



ACTIVITY 6.19

DEVELOPING GEOGRAPHICAL CONCEPTS AND SKILLS

Creating a field sketch

To construct a field sketch, follow these steps:

- 1 Study the scene or photograph you want to draw and **select** the features to be sketched. It may be helpful to use a viewing frame.
- 2 Using a soft pencil (it makes it easier to erase mistakes), draw a frame the same shape as the scene you wish to sketch on a blank piece of paper.
- 3 Divide the scene you wish to sketch into three parts: the foreground, middle distance and background, as shown.
- 4 Sketch in the main features or lines of the scene. This may include the horizon and other prominent landform features.
- 5 Mark in other prominent features or lines, such as roads, railway lines, rivers or powerlines. These will provide reference points for the addition of detailed features.
- 6 Add detail if appropriate. Details may include buildings, trees and fences.
- 7 Use shading and colour to highlight the key features of your field sketch. Avoid making your sketch too cluttered.
- 8 Label the main features shown in your sketch.
- 9 Give your field sketch a heading and note the date of the observation.
- 10 Highlight your frame with a black felt-tipped pen.

Background

Middle distance

Foreground

Urban consolidation and renewal

To improve sustainability and reduce urban sprawl, many cities are turning to **urban consolidation**. Urban consolidation is the idea that residential development and population growth is restricted to the urban areas that already exist. This means that urban areas are not expanded into rural locations and other areas. The currently existing urban areas are often known as brownfield sites. They are located within existing urban areas and have usually had another land use. Urban consolidation involves a process of redeveloping this land and improving its liveability through connectedness and better services.

urban consolidation

keeping residential development and population growth restricted to the urban areas that already exist



ACTIVITY 6.20

Research tasks

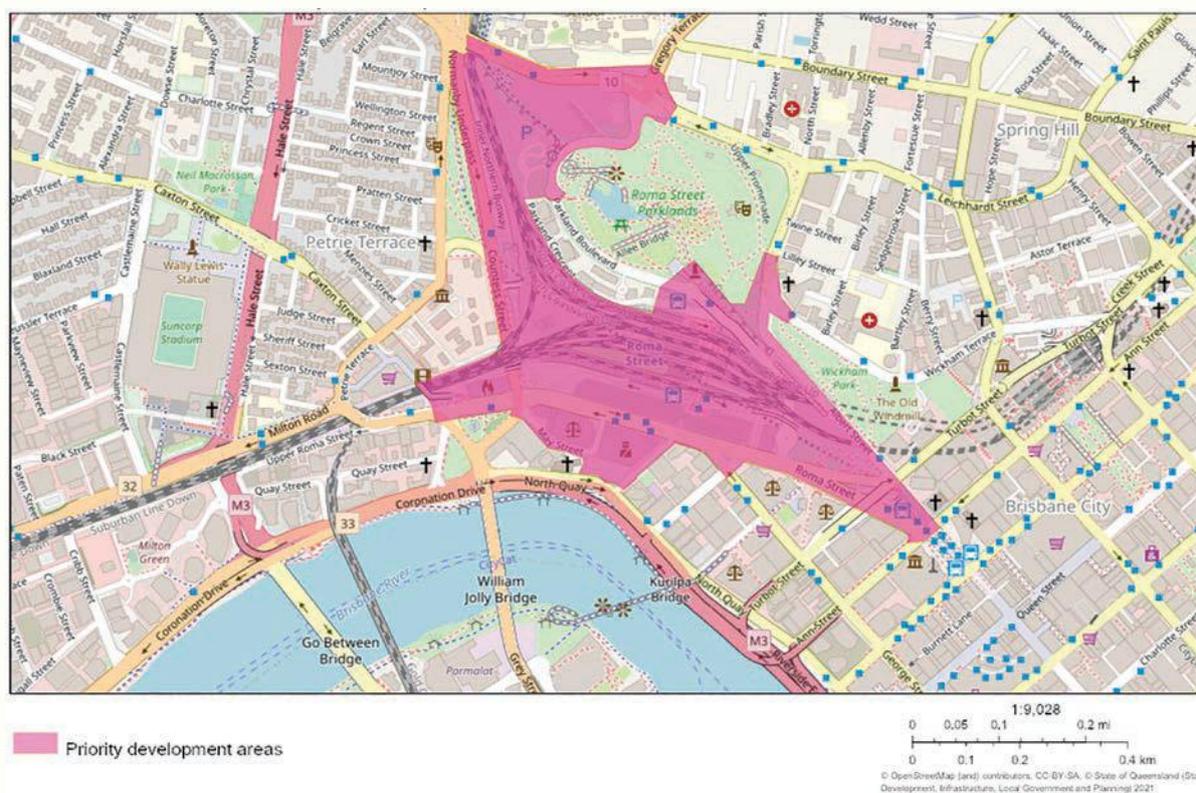
Griffith University, a public research university in South East Queensland with five physical campuses (Gold Coast, Logan, Mount Gravatt, Nathan and South Bank), revealed in its 2020–2025 strategic plan that it will close its Mount Gravatt campus, reinvigorate its Nathan campus and will ‘position itself more strongly in the Brisbane CBD with an ambitious building project’.

Since September 2020, Griffith University has been in negotiations with the Queensland Government over its plans for a new inner-city high-rise campus.

Conduct some online research to answer the following questions:

- 1 **Identify** the exact proposed location of the new campus in Brisbane’s CBD and the estimated cost of this new high-rise campus project.
- 2 **Identify** the timeline for Griffith University to move out of its Mount Gravatt campus and how many students are currently hosted in that campus.
- 3 **Explain** why new facilities will be constructed at the Nathan campus in the coming years.
- 4 Griffith University also has plans for a new building in the Gold Coast Health and Knowledge Precinct. **Identify** the name and purpose of that building.

In 2019, 32 hectares surrounding Roma Street, in Brisbane’s CBD, were declared a Priority Development Area by the state government. **Conduct** some further online research to answer the questions on the following page.



▲ **Figure 6.52** Priority Development Areas around Roma Street Parklands. Source: The National Map, © State of Queensland (Department of Infrastructure, Local Government and Planning).





- 5 **Explain** what a Priority Development Area is.
- 6 **Identify** who requested the Roma Street precinct to be declared a Priority Development Area and why.
- 7 **Research** the Roma Street precinct renewal strategy developed by the Brisbane City Council and **identify** the five strategies to facilitate growth, revitalisation and investment.
- 8 **Select** one of the five strategies from the previous question, and **identify** one sub-strategy that will be a part of the precinct renewal.
- 9 The Roma Street precinct is part of Brisbane's knowledge corridor. **Explain** what Brisbane's knowledge corridor is.
- 10 **Identify** three major development projects currently under construction in Brisbane.



DEVELOPING YOUR UNDERSTANDING 6.4



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

- 1 **Describe** what it means to be pedestrian-friendly.
- 2 **Identify** the percentage of young Queenslanders who live in rural and regional areas.
- 3 **Describe** urban consolidation.
- 4 **Identify** some innovative ideas in which urban planners have improved the liveability of local areas. Use the information in this section and additional research.

Interpret

- 5 **Determine** the reasons you think crime decreased when vehicles were banned in Pontevedra.
- 6 Use the internet to **explain** what a brownfield site is. **Identify** if there are any located near where you live or elsewhere in Queensland.

Argue

- 7 Pontevedra banned all non-essential motor vehicles in 1999. **Identify** three reasons as to whether or not you think this would work in a location near where you live. **Justify** your argument.



End-of-chapter assessment

1 Making thinking visible

I used to think that place and liveability meant ...

Now I think that place and liveability means ...

This exercise in visible thinking asks you to connect, extend and challenge the knowledge you had prior to reading this chapter with what you have learned.

How does what you know about place and liveability *connect* to what you have learned in this chapter?

Which new ideas in the chapter *extend* or push your thinking in new directions?

What concepts in the chapter *challenge* or confuse what you used to think about place and liveability? Do you have any questions about what you have learned?



▲ **Figure 6.53** Extreme poverty and extreme wealth live side by side in Mumbai.

2 Problem-solving task

Create a liveable community

A new community is being developed. It is your task to plan this new community using the knowledge you have gained from this chapter.

On YouTube search for 'If the World were a village of 100 people (2022 Edition)' and think about the characteristics of the community you are creating.

With a partner or a group, design a community that will accommodate these people. What you create should consider the following key concepts:

- Liveability
- Accessibility
- Walkability
- Sustainability
- Community
- Place
- Social connection
- Safety.

You should ensure that you include infrastructure that supports health care, schools, roads, recreation, open spaces and anything else you think is essential for liveability.

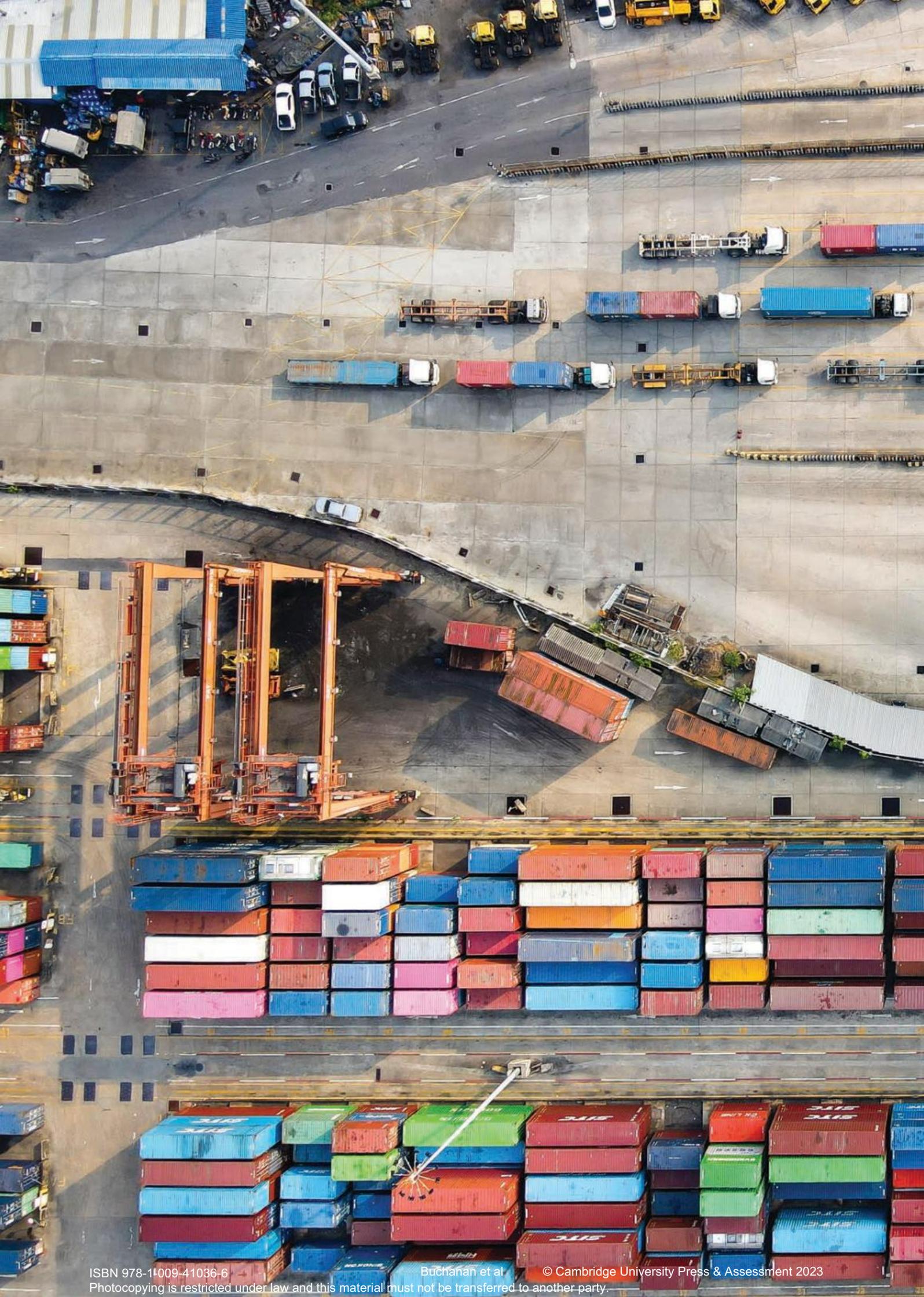
After you have designed your liveable area, **create** an aerial view of the place on a large piece of paper and label the key features.

Digital resources

Visit the Interactive Textbook or Online Teaching Suite to access:

- General Capability Project
- Interactive chapter quiz
- Interactive Scorcher quiz
- Videos, image galleries and other extra materials.

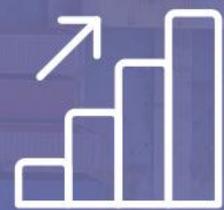






PART

3



Economics
and
Business

What is Economics and Business?

If you have shopped in a supermarket, you will know that there are many different goods available to shoppers. Do you ever wonder where the goods come from? Are the products locally produced or do they come from overseas? Do you know how demand influences the price of a product? Or how demand ensures that the supply of a good is always met?

The study of Economics and Business is important because it helps us to develop an understanding of market forces. This understanding influences our decisions as consumers. Understanding the market enables us to see how producers meet our needs and wants. It also means that we can understand how consumers decide what they will purchase.

The relationship between consumers and producers depends on the laws of demand and supply. Since Earth's resources are finite, producers need to use resources efficiently. This is so waste is minimised and the future is safeguarded.



▲ **Figure A** Supermarkets contain thousands of products that many businesses worked together to produce and provide. How many businesses and people do you think would be involved in a supermarket supplying vegetables to a consumer?

Planning is an essential activity for a successful business. Similarly, setting long-term and short-term goals is necessary. Do you know how to set goals? Do you know what a priority is? Goals and priorities can take time to identify and establish, but with careful planning you can set priorities to successfully achieve your objectives.

Generating an income is essential if a consumer wants to satisfy their needs and wants. Most Australians earn their income by joining the workforce. Therefore, it is important to understand what work is and what motivates people to work (beyond earning an income). Australian workplaces are changing, and there are now many different ways to earn money.



▲ **Figure B** Knowledge of economics and business helps us to plan for the future.

UNIT

1

Economic relationships, influences and choices

Overview

Economics and business are a part of our everyday lives. The choices we make regarding how we use resources directly shape and influence Australia's economy. In this unit, you will learn about the role of consumers and producers in the Australian market and how choices are made based on satisfying individual needs and wants. This unit also explores the importance of financial planning in decision-making. Finally, you will examine how the world of work in Australia is evolving at an increasingly fast pace. You will have the chance to make predictions based on future workplace changes.

Learning goals

After completing Unit 1, you should be able to answer these questions:

- Who are consumers and producers in the Australian market?
- Why is there a relationship between consumers and producers?
- How do consumers and producers interact and influence markets?
- What are financial goals and objectives?
- How do consumers and businesses manage their finances?
- Why is financial planning for the future important?
- What is work, and why do people enter the workforce?
- How is work changing?
- What is income, and where does it come from?
- What are some key characteristics of entrepreneurs?
- What is entrepreneurial behaviour?



▲ **Figure C** Economics and business are a part of our everyday lives.



CHAPTER 7: Economic influences and future planning

Setting the scene: panic-buying in Queensland

In the early months of the COVID-19 global pandemic, panic-buying emerged as a significant trend in Queensland supermarkets. From toilet paper to pasta, Queenslanders rushed to supermarkets across the state to buy their household staples, sharing photos on social media of empty shelves. Instagram stories showed angry shoppers fighting over items. The #panicbuying hashtag generated 46.9 million views worldwide on social media.

In response to the trend, supermarkets pleaded with customers to be responsible with their purchases, only buying what they immediately needed and leaving some products for others. Shoppers did not listen to this request for calm. As a result of panic-buying, supermarkets introduced buying limits on certain products in an attempt to slow down the depletion of supermarket shelves and to allow more customers access to staple items. Australian manufacturers, responding to the higher demands, increased their production to meet the needs of the market.



◀ **Figure 7.1** Panic-buying during COVID-19. Australian supermarkets introduced buying limits on some products in response to panic-buying.



ACTIVITY 7.1

Panic-buying

After reading 'Setting the scene' above, answer the following questions:

- 1 Identify** which item was in highest demand during the panic-buying period of COVID-19. **Suggest** reasons why you think this was the case.
- 2 Generate** a list of 10 other items that might be in high demand by panic-buyers during a pandemic.
- 3 Investigate** whether the panic-buyers were prepared to pay more for their items during the COVID-19 pandemic. **Propose** why this may or may not be the case.
- 4 Explain** why some items were not affected by panic-buying and give three examples.

Chapter overview

Introduction

As a consumer, you make choices every day about which goods and services you purchase. Any number of criteria influence your decisions. These may include the cost of a product, its quality, its features, how readily available it is to you, and the benefits of the purchase. Think about the last item you purchased. Where did you buy it? How much did you pay for it? Why did you choose that item instead of another? You (or maybe, for now, your parents) control these choices.

Similarly, the producers of goods and services make a series of choices. For example, what types of products and services will they produce? What price will they set? How will they make their items different from their competitors to make sure they stand out to you, the consumer? These too are economic choices.

Understanding these forces – including how consumers and producers interact and influence each other – is an essential part of understanding economics. Additionally, learning about market forces such as supply, demand and scarcity will ensure that you, as a consumer, will be able to increase the quality of choices you can make.

Learning goals

After completing this chapter, you should be able to answer these questions:

- Who are consumers and producers in the Australian market?
- Why is there a relationship between consumers and producers?
- How do consumers and producers interact and influence markets?
- What are financial goals and objectives?
- How do consumers and businesses manage their finances?
- Why is financial planning for the future important?



▲ **Figure 7.2** We're all part of Australia's economic landscape.



7.1 Consumers and producers: the fundamentals of economics

FOCUS QUESTION

Who are consumers and producers in the Australian market?

Consumers

consumer a person who buys goods and/or services for their own use

good a physical, tangible item for sale

service generally an action that is performed either on you or for you

product a good, service or idea made to be sold

A **consumer** is a person who buys goods and services for their personal use. In Australia, most people are consumers every single day. From purchasing a pair of shoes in a retail store to buying a coffee at your local cafe to turning on your lights in your home – every time you make a purchase or make use of a good or service, you become a consumer. By deciding what to buy (making a choice), you are playing an essential role in the Australian economy.

Goods and services

A **good** is a physical, tangible item that can be seen and touched – for example, a book or a piece of fruit. A **service** is something that cannot be seen or touched (intangible) and is generally an action that is performed either on you or for you – for example, attending a gym class or going to a physiotherapist for treatment. Goods, services and ideas are often collectively referred to as **products**.

Many Australian businesses produce both goods and services for consumers to buy. For example, at a car dealership you can purchase a car, and the same dealership will often have a service department that repairs vehicles. At a hairdressing salon, you can not only get a haircut but also often buy shampoos and conditioners to use at home. One south-east Queensland car dealership has taken this to the next level and now has a barbershop inside the dealership so you can get a haircut while looking for a car!



▲ **Figure 7.3** An example of a consumer, producer and supplier. A shopper is buying seafood. In this case, the shopper is the consumer, the fishery that harvested the prawns is the producer, and the seafood-store vendor is the supplier.

Producers

For you, as a consumer, to play your essential part in the economy, there must be products for you to buy. Creating products and services for consumers to buy is the role

of the producers in an economy. A **producer** is a person or business that produces and sells products to consumers. For example, a bakery creates baked goods to sell to consumers.

producer a person or business that provides goods

Interesting fact

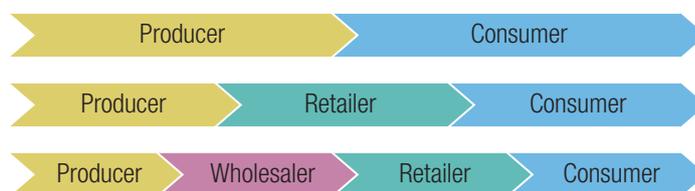
At 30 June 2020, there were 2 422 404 actively trading businesses in the Australian economy!

Interesting fact

First Nations peoples used to trade items using a barter system. This would mean that they traded different items of value (e.g. ochre) for other items of value (e.g. tools). This trade would also be a time when different groups would gather to trade understanding as well.

Direct and indirect distribution

It is essential to understand that producers may not always sell their products directly to consumers (this is called direct distribution). Instead, they may sell their goods and services to a wholesaler (a person or company that buys products in bulk to sell on to other businesses) or to a retailer (who buys in smaller quantities to sell to consumers). This process is known as indirect distribution because the consumer does not receive the item directly from the producer (in this example, the producer is *supplying* goods to a wholesaler or retailer to then sell to consumers).



▲ **Figure 7.4** Direct and indirect distribution. This diagram shows different distribution methods and the roles that different people or businesses play in the distribution chain.



DEVELOPING YOUR UNDERSTANDING 7.1



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

- 1 In your own words, **explain** the roles of a consumer and a producer in the Australian economy.
- 2 **Explain** the difference between a good and a service, providing three examples of each.
- 3 **Generate** a list of five different producers in your local area. Share these with your classmates.

Interpret

- 4 Australian businesses often combine goods and services for sale. **Determine** two examples of companies you have purchased from and **explain** how they do this successfully.

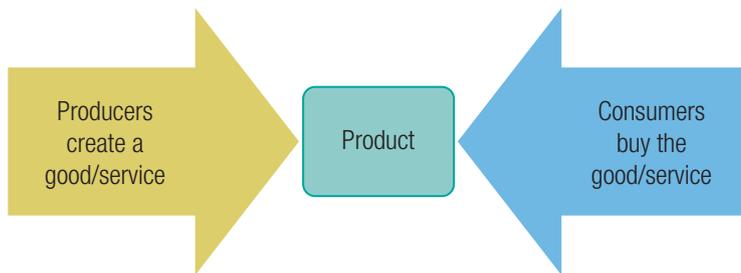


7.2 The reasons businesses exist: the relationship between consumers and producers

FOCUS QUESTION

Why is there a relationship between consumers and producers?

There is a clear relationship between consumers and producers. The connection is the actual good or service (also known as the product) that is purchased. Producers exist to create goods or services for consumers to buy, and consumers buy products from producers to satisfy their needs and wants.



▲ **Figure 7.5** The relationship between consumers and producers. Consumers and producers need each other to fulfil their goals.

Without consumers, producers would have no buyers for their products and would not make a profit. Without producers, consumers would have nothing to buy. They need each other to fulfil their goals.

resources a source of supply used to produce goods and services that meet human needs and wants

need something essential for survival

Maslow's Hierarchy of Needs the full range of needs for a human being, starting from the most basic physiological needs all the way to self-fulfilment

We all have unlimited needs and wants, and limited resources to satisfy these. The economic term **resources** means a source of supply. What most consumers have available to them as resources are their money, time and skills.

Needs and wants

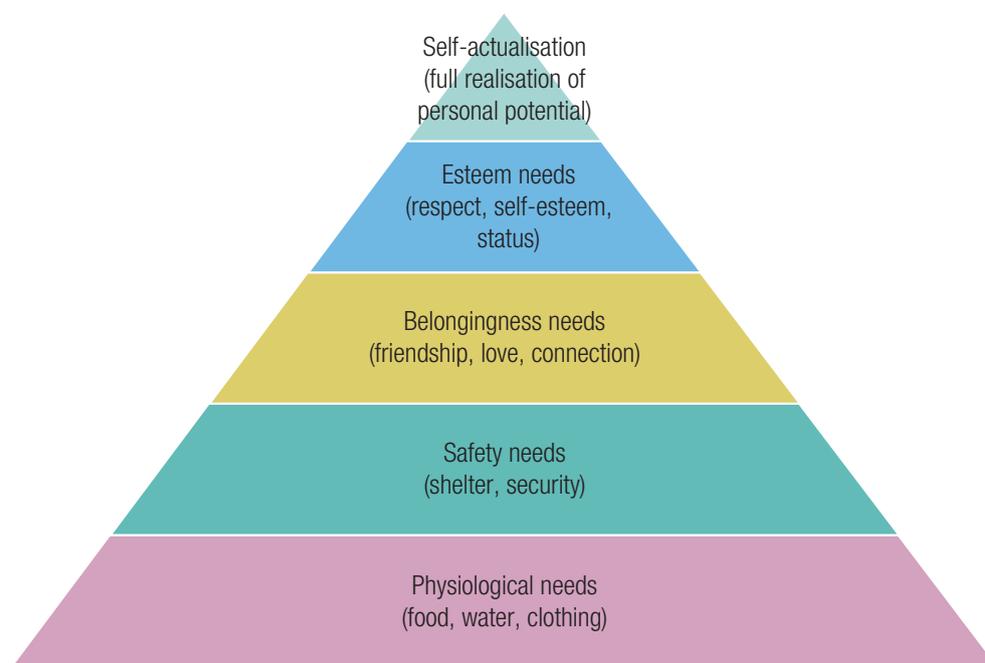
A **need** is something essential for consumers to have to survive – for example, food, clothing and shelter. However, needs go beyond these necessary items. A useful way of exploring higher-level needs is to examine **Maslow's Hierarchy of Needs**. This hierarchy identifies the full range of requirements for a human being, starting from the most basic physiological needs (such as food, sleep and water), moving to a sense of belonging, all the way to self-fulfilment. These needs are sequential – meaning that humans cannot step up to the next level of the hierarchy until they meet their requirements at the current level.

When creating products, producers use Maslow's Hierarchy of Needs to understand the motivations of consumers. When producers understand consumers' motivations and meet their needs, they ensure that they are creating products that consumers are more likely to buy.

A **want**, however, is something that is not essential for a consumer's survival, but is something they would like to have. For example, if a physiological need is clothing, a want may be designer clothing. As human beings, we can have any number of desires. Often, as soon as one want is satisfied, another immediately replaces it – meaning that our wants are unlimited.

want something that is not necessary but desirable

By understanding the difference between needs and wants, a consumer can make more effective choices with their limited resources.



▲ **Figure 7.6** Maslow's Hierarchy of Needs. This hierarchy identifies the full range of requirements for a human being.

Scarcity

Another critical economic fact to understand is that Earth has finite (limited) resources.

Although we, as consumers, would love to have an unlimited supply of resources, this is not the reality. In economics, this assumption is called **relative scarcity**.

relative scarcity an assumption that many of Earth's resources are limited, while consumers have unlimited wants and needs

From time to time, there may be a conflict between how many products a consumer can buy once they consider the scarcity of their resources. An example of this is when you have a limited amount of money to spend at your local shopping centre but have a long list of items you would like to buy!

financial planning the range of strategies that you put in place to manage your finances to achieve your objectives/goals

demand the consumer's desire to purchase goods and services and pay the price for these

supply total amount of goods or services that are available to a consumer

When a conflict occurs, consumers can prioritise purchases that satisfy their needs and use the remaining funds to buy the items they want. They can also recognise that some **financial planning** may need to be put in place to satisfy their desires. In the same way, a producer supplies the products they know there is a **demand** for in the market and ensures there is a sufficient **supply** to the market.



ACTIVITY 7.2

Needs and wants

- 1 Individually, **identify** three of your needs and three of your wants.
- 2 Share your list with a partner or a small group. **Explain** why you have classified the items on your list as a need or want.



CASE STUDY 7.1

Water shortage in Queensland

In January 2020, Stanthorpe in Queensland experienced a severe water shortage due to an extreme and ongoing drought. The population of the town relied on having water trucked in from Connolly Dam, which is 63 kilometres away from Stanthorpe. During that time, restrictions meant that residents could only use 80 litres of water per person per day.

Owners of businesses that relied on water had a choice: either reduce their water usage and lower their production or purchase water, which would lead to increased costs for the business. Some businesses that rely heavily on water (such as the food and beverage industries) face the most obvious challenges when there is a water shortage. However, as virtually all businesses need water to do anything, water shortages are an issue that no business should ignore.



▲ **Figure 7.7** A tanker carrying drinking water. In 2020, Stanthorpe residents relied on having their water trucked in from Connolly Dam.



▲ **Video 7.1**
News report





Analysis questions

Divide the class into six groups. Each group is to represent one of the following business owners in drought-stricken Stanthorpe:

- A winemaker
- A sheep farmer
- A plant nursery owner
- A laundromat owner
- A concreter
- The owner of a hotel with a pool.

1 In your group, **investigate** the issues the business might experience due to the water shortage.

2 **Propose** solutions to the business's water-related problems – for example, choices that could be made to protect the business.

3 Present your group's findings to the rest of the class. Answer questions from the other groups.

4 As a class, **reflect on** the choices that consumers might need to make about their needs and wants in this situation.



▲ **Figure 7.8** The effects of an ongoing drought-induced water shortage. This photograph shows an orchardist with his ripped-out citrus trees, near Stanthorpe, in August 2019.



DEVELOPING YOUR UNDERSTANDING 7.2



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

- 1 Identify** the five levels of Maslow's Hierarchy of Needs, and for each level **describe** three examples.
- 2 Describe** an item that is both a need and a want. **Justify** your reasoning.

Interpret

- 3 Explain** why it is essential for producers to have an understanding of Maslow's Hierarchy of Needs.
- 4** Read the following sentence: 'The fact is that many of Earth's resources are limited'. **Identify** as many of Earth's scarce resources as you can.
- 5 Explain** your understanding of the economic terms 'demand' and 'supply'.



7.3 How do consumers and producers influence the market, and what is opportunity cost?

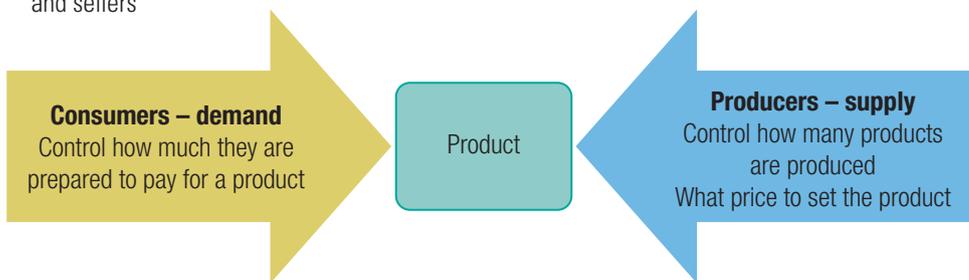
FOCUS QUESTIONS	<ul style="list-style-type: none"> • How do consumers and producers interact and influence markets? • What is opportunity cost?
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We have explored several economic concepts and can now recognise the roles of the consumer and the producer in the Australian economy and how they are connected. These two forces work together every day, interacting and influencing the market for products in Australia. This interaction is called the market system.

The market system

market economy an economic system in which the pricing of goods and services is determined by the interactions of buyers and sellers

The term **market economy** describes how the demand and supply of resources determine the price of a product in the market. A close examination of the market system reveals that it is the consumers who control how much they will pay for a product. In the same way, producers control how many products to make and what price to charge for them.



The consumer continually adjusts how much they are willing to pay, and the producer changes how many products they make and what they charge for their items. These forces

▲ **Figure 7.9** In a market economy, the demand and supply of a product determine the price of that product in the market.

equilibrium price where supply and demand are balanced

work against each other over a period, with consumers and producers making adjustments continuously, until an **equilibrium price** emerges – where both demand and supply are equal.

mixed-market economy when a government intervenes in the economy

The market system (shown in Figure 7.9) is a pure-market system and operates without any government intervention. When a government intervenes in the economy, the system is called a **mixed-market economy**. The Australian economy is a mixed-market economy as governments provide a wide range of services that a market may not offer without this intervention. For example, the Australian Government provides Australians with access to roads, health care, education and defence. Globally, there are mixed-market economies, other than Australia, each with different levels of government intervention.

DEMAND AND SUPPLY

Earlier in this chapter, we introduced the economic concepts of demand and supply. Demand is the consumer's desire to purchase products and pay the price for these products. The **law of demand** states that when you consider only the consumer's willingness to buy goods and services when the price of a product increases, the quantity that consumers will demand that product decreases. For example, the higher the cost of a car, the fewer people will have the resources to purchase the vehicle, so the demand decreases.

However, other factors influence demand for a product other than the price. Some of these other factors include the consumer's tastes and preferences, and the cost of a competitor's products. No matter the factor, the demand for a product is closely linked to the consumers in an economy – they directly control demand.

Conversely, producers control the supply of goods and services. Supply is the total amount of goods or services that are available to a consumer. The **law of supply** states that as the price of a good or service increases, the quantity of products that the producer will offer increases as well. An example of this is if your employer asks you to work for time-and-a-half instead of your average hourly rate, you will be more likely to work!

Another way to look at this is if, for example, consumers are willing to pay more for a custom skateboard, the skateboard manufacturer will be more likely to make more. The producers in our economy directly control how many products are available for a consumer to purchase. Consumers will adjust the amount they are willing to pay for products based on the amount that is available to buy.

Consumers and producers have a closely connected relationship, which influences the supply and demand in markets, and the allocation of resources.

law of demand the quantity purchased varies inversely with price

law of supply an increase in price results in an increase in quantity supplied

7



▲ **Figure 7.10** Governments provide services that may not be otherwise supplied. During times of crisis, governments may need to provide financial support to individuals, households and businesses. For example, in 2020 during the COVID-19 pandemic, the Australian Government provided large sums of money to support job seekers and businesses. At the time, the federal treasurer was Josh Frydenberg.



▲ **Figure 7.11** During the COVID-19 pandemic, an increased number of consumers were willing to buy reusable cloth masks.

opportunity cost the missed benefit from the option not taken

shortage higher demand than supply for a product

surplus higher supply than demand for a product

dynamic pricing (also known as price surging) a pricing strategy in which flexible prices for services or products are set by businesses, based on the market demands at the time

Opportunity cost

Consumers must take into account the value they lose by choosing one alternative over another. This concept is called **opportunity cost**. This economic principle means that, before making a decision between alternatives, we need to look at what benefits might be gained from each alternative.

The equilibrium price

The forces of demand and supply work together over time to reach what is called an equilibrium price. Producers will adjust their prices until they settle on an amount where all their products are sold and there are no customers wanting to buy when there are no products left. The price reaches equilibrium when demand and supply are equal. When there is a higher demand for a product, and there is not enough supply, this is called a **shortage** – just like during the panic-buying in Queensland in early 2020. Where there is a higher supply than demand for a product, this is called a **surplus**. Producers try to minimise surplus where possible, because an excess amount of products may lead to wastage. Consider food items in particular – where there is a surplus, the food goes beyond its use-by date and should be discarded.

Interesting fact

Food waste is costing most Australian households around \$2200 to \$3800 every year. In Brisbane, residents throw away approximately 80 000 tonnes of food waste each year.



▲ **Figure 7.12** Wasting or throwing away food is both an economic and environmental concern.



CASE STUDY 7.2

Uber's dynamic pricing

The Uber rideshare app utilises **dynamic pricing** to calculate the cost of each ride. Uber drivers can enter and exit the market whenever they wish, and as such, supply can vary significantly. Uber takes into account several factors that cause an increase in demand for trips – for example, the time of day, day of the week and environmental factors such as the location of the ride, the weather and what events are occurring in the area. During these times, the price of the trip is adjusted in real time to increase the fare. This higher fare encourages drivers to get on the road and accept ride requests. The dynamic pricing continues to adjust in real time until there are enough drivers to meet demand.



▲ **Figure 7.13** This diagram shows how dynamic pricing works, using Uber as an example.



ACTIVITY 7.3 MAKING THINKING VISIBLE

Connect, extend, challenge

- 1 **Identify** how the information in Case study 7.2 is connected to what you already know about demand and supply.
- 2 **Communicate** new ideas you had that extended your thinking in a different direction.
- 3 **Explain** what is still challenging you on the topic of dynamic pricing. What questions do you have?

Find a partner in the class and share your thinking on these topics.



DEVELOPING YOUR UNDERSTANDING 7.3



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Interpret

- 1 Australia is a mixed-market economy.
 - a **Explain** your understanding of the term 'mixed-market economy'.
 - b **Conduct** some research to find out which other countries have mixed-market economies. **Identify** five of these countries.
 - c Using your research, **explain** why governments choose to intervene in the economy.

Argue

- 2 **Describe** a scenario you have observed where there has been a shortage of supply. **Investigate** why this shortage occurred and how the producer responded to this shortage.
- 3 In your own words, **describe** the laws of demand and supply, using an example.



▲ **Figure 7.14** The United States, the United Kingdom, France and Iceland are all examples of countries with a mixed-market economy.



7.4 Consumer and financial products and services: the importance of financial planning for consumers and businesses

FOCUS QUESTION

What are financial objectives for consumers and businesses?

Spending money is easy. However, using money thoughtfully to reach your life goals takes careful planning. Regardless of the stage of life you are in, financial planning will help you achieve your short-term and long-term goals.



CASE STUDY 7.3

BloomsByElla

BloomsByElla is a floristry business based in Brisbane that is operated by Ella Lyons. Ella realised in Year 10 that she had a passion for floristry and floral design, and decided to enrol in a Certificate III in Floristry while studying for her Queensland Certificate of Education.

During her studies at an external floristry school, Ella learned essential floristry techniques, including the creative skills of visual display and design. A dedicated student, she quickly mastered the technical skills needed to work in the floristry industry.

Wanting to do something with her growing talent, Ella decided to start her own small business with the help of her family. Balancing school studies with her start-up business took a lot of organisation – there were many days that orders arrived from Facebook and Instagram just as she was going to school!

In her senior year of school, Ella quickly learned the financial planning skills needed to get her business started. She also learned how to price her goods and services to determine a break-even point. Ella is passionate about making her business successful and is developing her financial skills to ensure that BloomsByElla is going to be profitable and sustainable in the long term.

Analysis questions

- 1 **Investigate** the types of planning Ella Lyons needed to undertake when starting her business. **Explain** your understanding of the term 'planning', using an example.
- 2 Ella needed to calculate a break-even point so that she could complete her financial planning effectively. **Investigate** and then **explain** what a break-even point describes. **Predict** how this break-even point contributes to how Ella prices her floral arrangements.
- 3 Using a T-chart, **reflect on** the strengths of and challenges faced by BloomsByElla.
- 4 **Identify** a range of people or services that Ella could call upon for financial planning assistance if she needed it. **Consider** those who are already known and those who are unknown to her.



▲ **Figure 7.15** BloomsByElla is a floristry business operated by Ella Lyons, who started the business while still at school.



▲ **Figure 7.16** Ella Lyons is the owner-operator of BloomsByElla.

Financial objectives and goals

Have you heard the phrase ‘failure to plan means planning to fail’? An essential part of planning for the future for both businesses and consumers (individuals) is creating financial objectives and goals. Individuals and businesses are alike in that they both need to manage their finances and plan financially for the future. They must set a range of financial goals and objectives to manage money effectively to ensure that they meet their needs and wants.

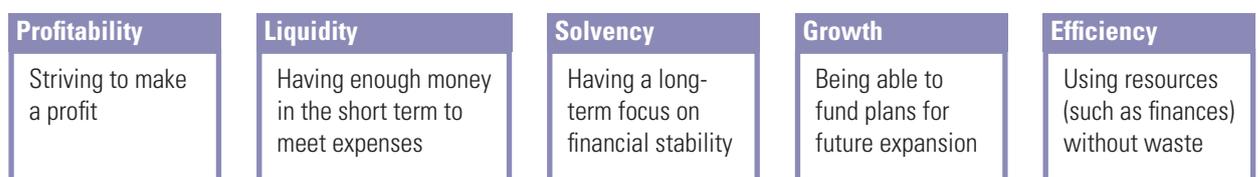
OBJECTIVES

An **objective** is a result that a business aims to achieve within a time frame. The objectives of individuals may vary from person to person, depending on their access to money and products. Often their intentions may be to have enough money to make a future purchase or have enough money to fund their retirement. **Financial objectives** for businesses generally fall into one of these five categories:

- Profitability
- Liquidity
- Solvency
- Growth
- Efficiency.



▲ **Figure 7.17** Keeping on top of bills and accounts can be overwhelming. This is why financial literacy is so important, as it enables you to keep financial records and make basic plans to keep yourself comfortably within a budget.



▲ **Figure 7.18** This diagram shows the financial objectives for businesses.

GOALS

From objectives, goals emerge. A **goal** is an aim or purpose to achieve a specific result. Goals can often be broad and unfocused, so it can be helpful to create SMARTT goals (Figure 7.19). These are short statements that are specific, measurable, attainable, relevant, timely and tangible.

objective a result an individual or a business plans to achieve within a time frame

financial objective a financial result an individual or a business plans to achieve within a time frame



▲ **Figure 7.19** SMARTT goals. These are specific, measurable, attainable, relevant, timely and tangible goals.

An example of a SMARTT goal for an individual is: ‘In the next six months, I will save \$900 to buy a laptop’. An example of a SMARTT goal for a business is: ‘We will reduce customer complaints by 25 per cent in the next three months’ or ‘We will only print what is necessary and reduce our paper wastage by 90 per cent in 2022’.

financial goals

SMARTT goals to assist in saving money and reducing spending

short-term financial goals

goals that can be achieved in less than one year

long-term financial goals

goals that are generally achieved over a long period

Financial goals for individuals are SMARTT goals with a specific focus on saving money and reducing spending. Most people’s short-term financial goals are to have enough money to spend on their needs and wants in the next week or month.

Short-term financial goals are goals that can be achieved in the next week, month or within the next six months. **Long-term financial goals** are different because they take a more extended period to complete, usually more than a year and often many years! It is essential to have a mix of short-term and long-term goals so that you can create

some quick wins for yourself and celebrate your effective financial planning.

Both individuals and businesses should identify their objectives and create SMARTT goals when completing their financial planning. When combined, objectives and SMARTT goals create a clear plan. Once a person or business has a clear purpose, they can then start to plan, begin to save and create opportunities to save money for when they do decide to make a purchase.



▲ **Figure 7.20** Saving for a big purchase can be a very rewarding experience.



ACTIVITY 7.4

Short-term and long-term financial goals

- 1 **Identify** two of your short-term financial goals, and two of your long-term financial goals.
- 2 **Develop** a paragraph to **compare** short-term and long-term financial goals (you can use a Venn diagram to help you).



DEVELOPING YOUR UNDERSTANDING 7.4



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

- 1 **Explain** your understanding of financial objectives.
- 2 **Explain** how objectives and goals assist in financial planning.
- 3 **Select** a local business (or your school canteen) and **propose** a financial objective for the business. Then, **generate** two SMARTT goals that will help the business achieve this objective.

Interpret

- 4 As a class or in small groups, brainstorm a future purchase that you would like to make for your classroom. Then answer the following questions individually.
 - a **Create** a list of all the costs associated with this purchase and all the benefits that this purchase would give. **Decide** whether to go ahead with this purchase.
 - b **Develop** a paragraph to **justify** your reasoning to send to the principal of your school.



7.5 Managing finances and financial planning

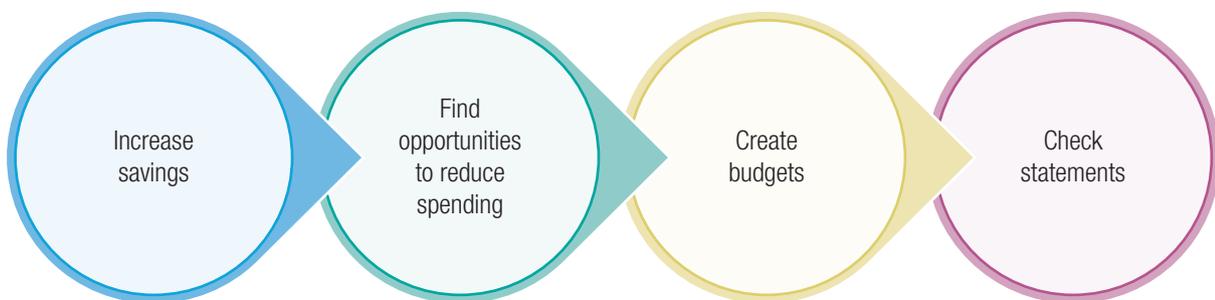
FOCUS QUESTIONS

- How do consumers and businesses manage their finances?
- Why is financial planning for the future important?

Managing finances

As you now know, individuals and businesses have a broad range of financial objectives and SMARTT goals. What is common to both individuals and businesses are the strategies each uses to manage their finances to meet these goals. They are very similar no matter what the environment. The strategies that individuals and businesses use to manage finances and meet financial goals are:

- Increase savings
- Find opportunities to reduce spending
- Create budgets
- Check statements.



▲ **Figure 7.21** Strategies to manage finances and meet goals. These strategies are used by individuals and businesses to meet their financial objectives (SMARTT goals).

INCREASE SAVINGS

savings the remainder of your income once expenses have been subtracted

All financial goals require money! Unless you receive one huge lump sum, it is highly likely that you will need to save for a financial goal over a period of time. **Savings** are what is left over after you subtract your expenses from your income. It is the same for businesses – most financial goals (e.g. buying new equipment or expanding the company) need to be saved for by setting aside small amounts at a set time each week, fortnight or month.

Money that you are setting aside or saving explicitly for a future goal is usually placed in a designated savings account so that it is separate



▲ **Figure 7.22** Start saving! It is wise to start saving money for your goals from as young an age as possible.

from your regular transaction account. Most banks offer a higher interest rate for these savings accounts to encourage you to increase your savings and make larger deposits. You can set up a bank account that does not allow you to withdraw savings easily – it might take a day or two to get access to your savings, which

gives you time to re-evaluate if a purchase is a need or a want. Some apps round up each purchase that you make to the nearest dollar and deposit this money into a separate savings account for you or invest it on your behalf. Using a rounding app can also be an effective way of saving small amounts of money in the short term, leading to long-term savings.

Interesting fact

Brisbane has a tool library! In 2017, the Brisbane Tool Library became Queensland's first library of objects. The tool library allows people to borrow hand tools and power tools, and other equipment, such as camping and sports gear. Based on a circular economy, the Brisbane Tool Library is building a more sustainable society by reducing consumption and preventing waste going to landfill.

FIND OPPORTUNITIES TO REDUCE SPENDING

An easy way to keep focused on finances for both individuals and businesses is to identify opportunities to reduce spending.

Only purchase necessary items

One way to reduce spending is to not purchase unnecessary items. Often, when presented with the opportunity to buy something, you will make a purchase without stopping to think if the item is needed. When this happens, you might purchase something before checking what you already have available – this leads to double-ups or having items that remain unused or unopened. If you are buying only the necessary items, you will naturally save money.

Borrow, rent or buy second-hand

Another way to reduce spending is to evaluate if you actually need to own the item, or if you could borrow or rent the item for a short period instead. By doing this, you are making use of the **circular economy**. The circular economy aims to reduce waste and share resources between consumers. As we have explored previously, Earth has finite resources.

circular economy
an economic system aimed at eliminating waste and the continual use of resources

By borrowing, renting or even purchasing a second-hand item, you are not only reducing the use of resources but are also saving money, as renting, borrowing or buying a second-hand item is often a cheaper option than buying a new item. For example, for businesses, renting a piece of equipment instead of purchasing a new one can reduce spending.

Shop around

Once a decision is made to buy an item, and you have determined that the purchase is necessary and that a brand-new item is essential, a straightforward way to reduce spending is to compare prices between sellers. Often, products retail in more than one location, so both consumers and businesses should complete some research and purchase the item for the lowest price.

CREATE BUDGETS

budget a financial plan listing expected expenses and income during a particular period

Another common way to manage finances is to create a budget. A **budget** is a tool that helps you plan by recording your income and your expected expenses over a period. Although budgets are usually presented in a spreadsheet or in accounting software, some individuals write their budgets on a piece of paper at home. Most businesses also use budgeting to help with financial planning – although their income and expenses will often be on a much larger scale than those of an individual.

Despite this, the process is the same. A budget allows you to see in one place all your expected spending, and also reveal if, after meeting your expenses, you will have any money left over for your wants. Anything remaining is then savings.



ACTIVITY 7.5 MAKING THINKING VISIBLE

Compass points

Lachlan receives a monthly allowance from his parents and is trying to save enough money to buy a surfboard. However, each time he receives money, Lachlan puts it in his wallet and, by the end of the month, ends up having spent everything. Unhappy with his lack of self-control, Lachlan seeks advice from his father, whose reply is the following:

'The best way to avoid spending money is by hiding it. Out of sight, out of mind. From now on, each month, I'll put half of your allowance into a piggy bank and hide it from you, which will make it easier for you to save for your goal.'

Reflect on Lachlan's story and the proposition that 'having an everyday transaction account and a separate savings account makes it easier to not spend the money you've been meaning to save'.

On your own or with the person next to you, answer the following questions:

1 E = excited

What excites you about this proposition? What's the upside?





2 **W = worrisome**

What do you find worrisome about this proposition?

3 **N = need to know**

What else do you need to know or find out about this proposition? What additional information would help you to evaluate things?

4 **S = stance or suggestion for moving forward**

What is your current stance or opinion on the proposition?

A budget is created for a set period, and during the period it has been designed for, you would track your actual spending and compare it to what you predicted each expense to cost.

Budgeting is a valuable financial planning tool as it focuses on both the future and the present, giving you a clear understanding of whether you are on track to fulfil your goals and meet your expenses.

An example of a simple budget is provided in Table 7.1.

▼ **Table 7.1** An example of a simple budget

	January	February	March
Income			
Pay from casual job	\$550	\$300	\$300
Expenses			
Phone bill	\$50	\$50	\$50
Entertainment	\$100	\$100	\$100
Clothing	\$50	\$50	\$50
Income less expenses (savings)	\$350	\$100	\$100
Balance of savings account	\$350	\$450	\$550

CHECK STATEMENTS

Checking your bank statements and receipts carefully is good practice when setting financial goals. Most people find this a monotonous task – but being aware of your income and expenditure gives you greater power over your finances. A statement is a record of the balance of a bank account. It is itemised to show each transaction paid into and out of the account.

Banks periodically send out statements for bank accounts. Many Australians are paid their wages or salaries electronically and will tap-and-go to pay for purchases. So, money is now often a virtual concept with fewer people paying for their purchases with cash. In fact, since 2016, card payments have overtaken cash payments in Australia.

Because of this, tracking trends in spending patterns is difficult. By checking your bank statements, you can see if you are spending money in one place more often than you realised.

There are many apps that can analyse your purchases and group them into categories of spending to help you. By checking your receipts, you can also check that you are being charged the correct amount for your purchases. Many banks offer apps that itemise your spending into categories (e.g. groceries, pharmacy) based on where you are using your bank cards. Seeing your expenses itemised is often an effective way of tracking your spending.



ACTIVITY 7.6 MAKING THINKING VISIBLE

Think, pair, share

Visit the Moneysmart website (<https://cambridge.edu.au/redirect/9486>) and **explore** the different types of personal savings accounts. Note the features and benefits of each type of account.

Think about which savings account would be the most suitable for you. Take a few minutes to **identify** the features that are the most important to you. Find a partner to talk about your choices. Do you favour similar features?

Interesting fact

Australia is the largest user of contactless payments in the world. As of March 2020, Australians were making 800 million tap-and-go transactions per month!



▲ **Figure 7.23** Using tap-and-go to make payments is quickly becoming common practice around the world.

Financial planning

Financial planning is the range of strategies that you put in place to manage your finances to achieve your objectives and goals. In this chapter, we have explored what is meant by financial objectives and goals. We have investigated how these are created, including examples for both individuals and businesses. We have also reviewed a range of strategies, from increasing your savings to creating a detailed budget.

Financial planning is essential to the success of you achieving your goals. Once you have a plan in place, you are more likely to achieve your goals. Further, financial planning allows individuals and businesses the opportunity to:

- **Make purchases more mindfully** – keeping needs and wants at the core of each decision ensures financial stability in the future.

- **Lower financial risk** – financial planning ensures you are not overextending yourself because you are aware of your spending, have a budget and check your bank statements. Financial planning helps you to not make purchases you cannot afford and reduces the risk of you going into debt. Unpaid debts may lead to future issues if you need to apply for a loan.
- **Be prepared for the future** – financial planning is always future-focused. If you have clear plans in place, you will be prepared for anything that comes up in the future and will also have contingencies in place for emergencies.



▲ **Figure 7.24** Financial planning is essential to you achieving your goals.



ACTIVITY 7.7 MAKING THINKING VISIBLE

Think, pair, share

Think about your financial goals for the next three years. Take a few minutes to **identify** three SMARTT goals that are important to you. **Discuss** your choices with a partner. Do you have similar goals?



DEVELOPING YOUR UNDERSTANDING 7.5



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

- 1 **Explain** why it is good practice to have a savings account that is separate from your transaction account.
- 2 **Identify** the benefits of financial planning.
- 3 **Explain** the benefits of regularly checking your bank statements.
- 4 **Create** a list of the strategies, presented in this section, that businesses use to manage their finances.

Interpret

- 5 **Select** one of these strategies and **explain** three of its benefits.

Argue

- 6 Using an example, **explain** the benefits of making use of the circular economy instead of making a new purchase.



End-of-chapter assessment

1 Short-answer questions

- 1 **Explain** the roles of the consumer and the producer in the Australian economy.
- 2 **Explain**, giving two examples, why most Australians are consumers.
- 3 **Compare** goods and services.
- 4 **Describe** a producer in your local area. Clearly **explain** what is produced.
- 5 **Explain** the relationship between a producer and a consumer.
- 6 **Compare** needs and wants.
- 7 **Sequence** the steps of Maslow's Hierarchy of Needs.
- 8 **Describe** a situation where relative scarcity may cause conflict for a consumer.
- 9 **Recall** the market system. **Describe** how this works in Australia.
- 10 **Define** the law of supply and provide an example of the law of supply in action.
- 11 **Explain** to a high school student why financial planning is essential for their future.
- 12 **Compare** financial objectives and goals.
- 13 **Explain** the financial goals (for a business) of solvency and growth.
- 14 **Describe** SMARTT goals and give one example.
- 15 Provide an account of two ways that businesses manage their finances.

2 Extended-response questions

- 1 Using your school canteen, observe and record items that have the highest and lowest sales. Produce a short survey to **analyse** how changing the price of an item may affect its supply and demand. Then, **create** a brief presentation to your class explaining how market forces affect one product in the canteen. **Propose** two recommendations to the canteen based on your analysis.
- 2 A friend has come to you and stated that they do not have time for financial planning. Using what you have learned in this chapter, write an email to your friend explaining why financial planning is essential. **Propose** at least two strategies to your friend to help them start their financial plan.
- 3 Go to the Moneysmart website (<https://cambridge.edu.au/redirect/9487>) and **create** a budget for yourself for the next year. Ensure that you **identify** long-term and short-term SMARTT goals.

3 Classroom activity

As a class, watch the documentary *2040*. (This documentary can be found online.)

The *2040* journey began with award-winning director Damon Gameau (*That Sugar Film*). Motivated by concerns about the planet his four-year-old daughter would inherit, Damon embarked on a global journey to meet innovators leading the way to a better future. In *2040*, Damon speaks to change-makers in the areas of economics, technology, civil society, agriculture, education and sustainability.

Source: The Regenerators website

Create a mind map of the concepts that this documentary covers. As you watch, relate facts you have learned in this chapter to the ideas explored in the documentary.

After you have finished, **reflect on** your experience. In groups, **create** a PMI (positive, minus, interesting) and share these with your classmates.

Digital resources

Visit the Interactive Textbook or Online Teaching Suite to access:

- General Capability Project
- Interactive chapter quiz
- Interactive Scorcher quiz
- Videos, image galleries and other extra materials.





CHAPTER 8: Workplace evolution

Setting the scene: entering a new world of working remotely

When your great-grandparents started working, it is likely that ‘going to work’ was both a thing that they did and also a place where they went. Work was something completed somewhere other than at home – for example, in an office or at a shop or in a factory.

However, work occurring outside the house wasn't always the case. In fact, some of the most impoverished workers were those who had the ‘luxury’ of working from home. Figure 8.1 shows some of these workers, women and children, doing needlework at home in their tenement apartment.

Today, the idea of working from home is seen as a luxury. Workers can avoid the traffic or time of the commute and can dress comfortably. One large insurance company has even incorporated their telecommuting employees into their television ads.

In the future, will the benefits of leaving home to work outweigh the negatives? In 100 years, will employees talk about the luxury of ‘going to’ work?



▲ **Figure 8.1** Women and children doing needlework at home in their tenement apartment, circa 1900



ACTIVITY 8.1 MAKING THINKING VISIBLE

Think, pair, share

- 1 **Identify** some of the positives of working from home.
- 2 **Identify** some of the negatives of working from home.
- 3 Would you prefer to work from home or work in an office or other designated workplace? **Justify** your answer.
- 4 If you were an employer, where would you prefer your workers to be working? **Justify** your answer. Talk about your choice with a partner. Do you have the same opinion?

Chapter overview

Introduction

Generating an income is crucial if a consumer wants to satisfy any of their needs, let alone their wants. Income is derived from a variety of sources, and consumers' motivation to work is varied and dependent on several factors.

One of the ways that consumers can produce income is by coming up with new ideas and becoming producers themselves. All innovative products are the result of entrepreneurial vision and a lot of hard work. By looking at successful entrepreneurs and the skills they have in common, you can identify skills in yourself that you might like to work on. Maybe you will come up with an idea that might be the next big thing.

Learning goals

After completing this chapter, you should be able to answer the following questions:

- What is work, and why do people enter the workforce?
- How is work changing?
- What is income, and where does it come from?
- What are some key characteristics of entrepreneurs?
- What is entrepreneurial behaviour?



▲ **Figure 8.2** An entrepreneurial spirit can only benefit you as you move into the workforce.



8.1 Entering the world of work

FOCUS QUESTIONS

- What types of work exist?
- What is work, and why do people enter the workforce?
- How is work changing?
- What is income, and where does it come from?

casual work a job with no guaranteed hours of work and no entitlement to sick leave or holiday leave entitlements or other forms of benefits that go along with income

career a job or series of jobs within the same industry, generally with increasing responsibilities and pay

full-time a job that has a maximum number of hours (usually around 40 hours per week); employees who work more than this may be entitled to overtime (extra pay at a higher rate) or accrue time off

salary a yearly figure that an employee earns; salaries are generally divided and paid weekly, fortnightly or monthly

part-time working less than the maximum full-time hours of 40 hours per week

Almost everyone you meet has had a job at some point in their life. On a fundamental level, people work to earn money so that they can survive, but many people also seek employment because they enjoy the work they do and take pride from a job well done. We can even think about how working and earning an income fulfil different levels of Maslow’s Hierarchy of Needs (described in Chapter 7). For example, on a fundamental level, working provides money, which helps to meet physical needs. Still, if someone loves their job, then it might also help to fulfil their higher needs as well, all the way up to self-actualisation.

Stages of the working life

Most people start their working lives in their teenage years. Usually, during this time, people work ‘casually’ around their school or university hours. **Casual work** might be after school or on the weekend. This type of work refers to a system of pay where the worker is paid only for the hours they work. They do not receive entitlements like holiday leave or sick leave, and therefore they are paid more per hour to compensate for this.

Once people leave school or perhaps graduate from university, they may look at pursuing a career. A **career** is typically a series of jobs that build upon each other. A job may be full-time with a salary attached to it. **Full-time** work refers to the number of hours per week that a person may work; usually, around 40 hours per week is the maximum.

If an employee works more than this, they may be entitled to overtime. When someone is employed full-time, they usually receive a **salary**. This is a large figure for one year of work, which is divided by 52, 26 or 12, and then paid to the worker in weekly, fortnightly or monthly instalments. Full-time workers also receive leave, which means they can take holidays (usually four weeks per year) or have paid time off when they are sick (usually 10 days per year). During their career, people might elect to change how much they work, perhaps to enable them to return to university to retrain, or to care for children or grandchildren. This may mean that a worker moves from full-time work to **part-time** work. ‘Part-time’ means that a worker is employed for a percentage of

what would usually be a full-time roster. They also receive the same percentage of sick leave and holiday leave. For example, a retail worker who works four days a week is working 0.8 of a full-time job; therefore, they are paid 80 per cent of the salary of a full-time worker and receive 3.2 weeks of holiday leave and eight days of sick leave.

At the end of their working life, many Australians hope to retire. In some occupations, people must retire at a certain age, but many people can continue working as long as they are happy and able to. During the different phases of their working life, people obtain their income from different sources. The most common forms of income are outlined in Table 8.1.

▼ **Table 8.1** Most common forms of income

Type of income	Explanation
Wage	A wage is a weekly or fortnightly payment that a worker receives for the work they have done in the preceding week or fortnight. For casual workers, their wage could be different each week.
Salary	A salary is a yearly figure that is paid to the worker in even weekly, fortnightly or monthly instalments (these weekly amounts can be called a wage).
Government entitlements	Some people are unable to work or have difficulty finding work. They may receive money from the government to help support them. These entitlements have names like Austudy, JobKeeper, JobSeeker, age pension, etc.
Return on investments	Many Australians have shares in companies or have money saved in banks or have invested by buying a property that they rent out. All of these things might generate income.
Royalties	Some creative people (such as authors and musicians) are paid for work they have published via royalties when people buy their work or use it.
Superannuation	In Australia, a portion of every employee's income is deposited into a separate savings account. This money is to help support them when they retire and is called superannuation. The government mandates that all Australians must have a superannuation account, and employers must contribute a specified percentage of an employee's salary to this account.
Commission	In some jobs, workers earn money based on the sales they make. Sales-based pay might mean payment at a lower hourly rate, but, in return, a greater amount if higher sales are generated.

Volunteer work

Some people choose to work despite not earning any income in return. These people are called volunteers. Some of these people do this work on top of their main income-providing job, while others volunteer full-time. In many cases, the work of volunteers greatly benefits the community – for example, the work of the volunteers in the Rural Fire Service, the Australian Volunteer Coast Guard, the State Emergency Service and lifeguards.

Interesting fact

According to the Australian Bureau of Statistics (ABS) Census, in 2016, 18.8 per cent of Queensland's population was doing volunteer work.



▲ **Figure 8.3** Volunteer firefighters in rural Queensland in 2019. Volunteer firefighters receive no payment for their work.



◀ **Figure 8.4** A volunteer takes care of a young fruitbat. This volunteer works for the organisation Bat Conservation and Rescue Queensland Inc.



ACTIVITY 8.2 MAKING THINKING VISIBLE

Compass points

Reflect on the proposition that 'in our society, an individual's prestige is often linked to the type of work they do'. On your own or with the person next to you, answer the following questions:

- 1 **E = excited**
What excites you about this proposition? What's the upside?
- 2 **W = worrisome**
What do you find worrisome about this proposition?
- 3 **N = need to know**
What else do you need to know or find out about this proposition? What additional information would help you to evaluate things?
- 4 **S = stance or suggestion for moving forward**
What is your current stance or opinion on the proposition?



ACTIVITY 8.3

Classroom activity

Divide the class into three groups. Allocate the three questions below to the three groups – that is, one question per group.

- 1 What are your three main reasons for working?
- 2 How has your work changed due to the COVID-19 pandemic?
- 3 Where does your income come from?

Each group is to **conduct** a small survey of friends and family members, recording their answers to the group's question.

Next, the groups are to present the results of their surveys to the class. As a class, **reflect on** the results of the three surveys.



ACTIVITY 8.4

How do you earn your money?

Examine Figure 8.5. Match each person to the appropriate description of how they earn their money.

Real estate agent	Author	Coffee shop owner	Construction worker
<p>The amount of money I make is based on the number of my books that are sold. Every six months, my publisher sends me a cheque with my share of the sales.</p>	<p>I work for a large company that pays me a set amount each week for the 40 hours that I work.</p>	<p>I get paid a portion of the amount of each house sale.</p>	<p>Each quarter, I pay myself based on the earnings of my business.</p>
			

▲ **Figure 8.5** There are many different ways of earning money.

Some people combine different forms of income. This is a way to increase their savings, or to supplement their earnings. Here are some examples:



I'm a retail worker. I work 25 hours per week at a local fashion store. I'm also an artist and have my paintings displayed at a local gallery. When a painting sells, I get paid a percentage of the sale price.



I'm a uni student. I get money from the government but I supplement it by working two shifts a week at a cafe, which pays me a casual wage.



I retired last year. Every fortnight, I receive rental income from properties that I own and income from my superannuation. I do not qualify for the government's age pension.

▲ **Figure 8.6** These are examples of combining incomes from different sources.



DEVELOPING YOUR UNDERSTANDING 8.1



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

- 1 **Identify** three reasons people work.
- 2 **Explain** the differences between part-time work and casual work.

Interpret

- 3 **Research** and list three examples of volunteer work a teenager could do in your local area (you might look into sporting organisations, non-profit organisations, nature groups, etc.).
- 4 **Reflect on** whether what a person earns is more important than the work they do. Develop a paragraph to share your thoughts.

8.2 Being entrepreneurial

FOCUS QUESTIONS

- What are some key characteristics of entrepreneurs?
- What is entrepreneurial behaviour?



8

Entrepreneurs

Some people may not want to work for someone else, but may want to start their own business. People who do this by watching the world, and working out ways to solve problems, are called entrepreneurs. An entrepreneur is someone who founds a business and takes on all the risk that is associated with it.

Entrepreneurs are involved in their business from the outset, and put considerable time and resources into ensuring that the business is successful. They also need to build up a team to help them develop their vision, and make their goals a reality.

Some essential qualities that many entrepreneurs share include:

- Curiosity and audacity
- Efficiency and good time-management skills
- Excellent communication skills
- Perseverance and resilience
- Focus and lateral thinking.

We can look around us and see many people we might consider to be successful entrepreneurs – people who began with very little and built massive business empires. However, you don't have to be the next Bill Gates or Steve Jobs to be a successful entrepreneur.

One of the most important parts of being an entrepreneur or running your own business is making decisions. In the beginning of the life of the business, this means recognising opportunities and taking advantage of them. Once their idea is fleshed out, business owners need to negotiate with people and companies that they need to make their business a reality. These may include finding a shop to hire and negotiating with the owners. Later on, it may mean working with staff to find out their availability and when they can work. It could also mean changing opening hours to suit customers. All of these groups are examples of stakeholders who will have an interest in the business that the entrepreneur has established.

Finally, the business owner needs to be aware of laws and regulations that relate to running their business. This could mean things like ensuring that employees are paid at the appropriate rate, or making

entrepreneur a person, commonly seen as an innovator, who creates a new business, taking on the risks and enjoying most of the benefits of that business

Interesting fact

There are more than 445 000 small businesses (with fewer than 20 employees) in Queensland and more than 2 065 523 in the whole country. Small businesses represent 97 per cent of businesses in Australia.



CASE STUDY 8.1

Starting your own business

Ally McErlean became a hairdresser because she was always interested in doing people's hair. This career fitted in well with having children and moving to different parts of Queensland with her husband, who was a police officer. Eventually, they settled in Brisbane, and for a while she worked for a large salon. In 2014, Ally resigned to take some time for herself, but soon her clients were calling her wanting to know where they could come and get their hair done, so she decided to open a salon. Starting in a small shop in Ferny Hills, the business grew in leaps and bounds. The salon moved from its original premises to a bigger tenancy, and has taken over the shop beside it. When asked why she decided to open her business, Ally says, 'I was sick of making money for everyone else, I wanted to do that for myself. I was also looking for more flexibility. To be able to take holidays when I wanted, not when I was allowed. Having my salon also meant that I could experiment with my ideas and implement them.' The business must be doing the right things because clients continue to flock to it. Also, in 2019, Ally's business won the 'best hairdresser in Brisbane' competition run by *The Courier-Mail*.



▲ **Figure 8.7** Ally McErlean has opened her own salon.

Ally credits the success of the business with the great organisational culture that she has built as well as the business being in a good location. Beyond this, she says, 'Be prepared to work hard, especially in the beginning. We don't open on Sundays, but I still come down to the salon on Sundays to finish up paperwork, or clean or check stock levels. This is part of being in charge.' The other important part of being able to take advantage of entrepreneurial ideas is having the right finance and getting financial advice. 'If we hadn't got advice and I hadn't managed the money well, we wouldn't have been able to take advantage of the two expansion opportunities.'

Analysis questions

- 1 Identify** the advantages that Ally mentioned about running her own business. Why do you think these might not be available if you work for someone else?
- 2 Propose** what the negatives might be about running your own business.
- 3** Ally identifies financial advice as being important. Brainstorm other types of advice that might also be important. **Discuss** your ideas with a partner.



ACTIVITY 8.5

Entrepreneurs

- 1 Research** online some of the characteristics of the world's most successful entrepreneurs.
- 2 Reflect on** the characteristics you might already share with successful entrepreneurs or might want to develop.

Not all entrepreneurs start with the goal of making a lot of money; in fact, some people with entrepreneurial talent work inside businesses. These people use their entrepreneurial skills as ‘intrapreneurs’. This means that they help the organisation they work for to achieve its goals in different and innovative ways.

Some entrepreneurs set out to solve problems in society. Not all companies operate **for profit**. Some businesses operate as **not-for-profit**; others operate as **social enterprises** with specific social objectives as their primary purpose.

The profits of not-for-profit businesses and social enterprises are reinvested back into the business. An entrepreneur, in this case, might look at how they can use the money being made in the business to solve a problem in society.

for profit a business that operates to make a profit (money) for the owners or shareholders of the business

not-for-profit a business that returns profit back to the organisation to continue its work; not-for-profit businesses may derive their income from grants or donations

social enterprise an organisation that is driven by a public or community cause; social enterprises measure their success on the positive impact they make on society (and not on how much money they make)



CASE STUDY 8.2

Nice Coffee Co.

In 2019, while still a university student on the Gold Coast, Jim Chapman decided to start Nice Coffee Co. Jim had worked in Kenya with his parents and had witnessed the living conditions of children in Kibera, Africa’s largest slum. He had spent time at Kibera’s St John’s School and saw how hard it was for the students to learn. The classrooms were dark and leaked and many of the children had empty stomachs. Jim wanted to do something to help, but simply asking people for money didn’t seem



▲ **Figure 8.8** Nice Coffee is a social enterprise that was started by Jim Chapman.



▲ **Figure 8.9** Children at the St John’s School in Kibera. Kibera is Africa’s largest slum.





sustainable. Then, after returning to Australia, during his business lectures at university, he decided he would start a social enterprise: a business that would help the St John's School from the earnings that it created. Jim says, 'I'm a big believer that business can play a huge role in solving some of our greatest challenges that we face as a society. Combining business with "doing good" allows everyday people to make a difference by making small changes to their habits (such as where they buy their coffee).' When asked about his best advice for someone starting a new business, Jim says, 'My best advice is to "just do it!" There are too many great ideas out there that are never developed because people are afraid of failing. Your first business is never going to be perfect, but use it as a platform to learn and grow as an individual. In terms of launching your idea, my advice is to build an elementary version (without spending too much money), then test it with friends and family to get critical feedback before launching.'

Analysis questions

- 1 Explain** the difference between a not-for-profit business and a social enterprise.
- Jim cites the Thankyou social enterprise as one of his inspirations in starting his business. **Research** what Thankyou makes and what inspired its founders.
- Take a few minutes to think about whether a social enterprise is different from a profit-based business that donates money to good causes. **Discuss** your opinion with a partner.

Successful entrepreneurs are generally very good at finding needs and niches, and at thinking outside the box. For example, if you learned that 52.8 per cent of the Australian population aged 15 years and over consumed alcohol in any given week in 2017–18, you might wonder how to tackle this issue of alcohol consumption. If you are an entrepreneurial type of person, you might even create a business to address this issue.



CASE STUDY 8.3

Sobah, a place of sobriety

Clinton Schultz is a registered psychologist and a member of Indigenous Allied Health Australia. In 2017, he founded a social enterprise (Sobah) to raise awareness of the problems of alcohol use in Australian society. Sobah was Australia's first non-alcoholic craft beer company.

In 2014, while working in the areas of suicide prevention and drug and alcohol rehabilitation, Clinton decided to stop drinking and was confronted with the stigma of socialising sober.

In addition, he quickly noticed that the non-alcoholic beers available in Australia were mostly imports from Germany and Belgium and that they were quite bland. Seeing a gap in the market, he endeavoured to provide an alternative and began experimenting with different recipes that used native Australian ingredients such as finger lime, pepperberry and lemon aspen. By the end of 2017, Clinton and his wife, Lozen, commercially launched Sobah.



▲ **Figure 8.10** Clinton and Lozen Schultz. Clinton and Lozen are the founders and owners of Sobah.





Analysis questions

- 1 **Explain** the primary social objective of Sobah.
- 2 **Research** and list three social initiatives that Sobah is promoting.



▲ **Figure 8.11** Sobah's products. These current brews feature Jason Passfield's art on the cans.



ACTIVITY 8.6 MAKING THINKING VISIBLE

Compass points

Reflect on the proposition that 'the COVID-19 pandemic has impacted a huge number of businesses, especially small businesses, and has made more apparent than ever the importance of supporting local, independent businesses'.

On your own or with the person next to you, answer the following questions:

- 1 **E = excited**
What excites you about this proposition? What's the upside?
- 2 **W = worrisome**
What do you find worrisome about this proposition?
- 3 **N = need to know**
What else do you need to know or find out about this proposition? What additional information would help you to evaluate things?
- 4 **S = stance or suggestion for moving forward**
What is your current stance or opinion on the proposition?



ACTIVITY 8.7

Employment in Australia

▼ **Table 8.2** The percentage of employees in small businesses in Australia and in all sizes of businesses in Australia and in Queensland, by industry division, for the period 2016–17 (data source: ABS Census 2016)

	Small businesses in Australia	All businesses in Australia	All businesses in Queensland
Agriculture, forestry and fishing	7.91%	4.46%	5.23%
Mining	0.29%	1.44%	1.85%
Manufacturing	5.39%	7.63%	7.56%
Electricity, gas, water and waste services	0.27%	0.96%	1.09%
Construction	15.90%	9.80%	8.46%
Wholesale trade	3.88%	5.03%	3.99%
Retail trade	9.08%	11.95%	11.74%
Accommodation and food services	9.71%	9.26%	9.51%
Transport, postal and warehousing	5.35%	5.39%	5.51%
Information media and telecommunications	0.84%	1.57%	0.90%
Rental, hiring and real estate services	6.48%	3.73%	3.85%
Professional, scientific and technical services	11.33%	9.47%	8.13%
Administrative and support services	5.54%	8.10%	7.70%
Public administration and safety (private)	0.38%	0.72%	0.71%
Education and training (private)	1.95%	3.84%	3.90%
Health care and social assistance (private)	7.09%	8.34%	8.98%
Arts and recreation services	1.68%	1.89%	1.85%
Other services	6.92%	4.45%	5.04%
Total selected industries	100.00%	100.00%	100.00%

- Identify** the three industry divisions in which the highest percentage of people is employed in:
 - Small businesses in Australia
 - All businesses in Australia
 - All businesses in Queensland.
- Compare** and contrast these figures.



DEVELOPING YOUR UNDERSTANDING 8.2



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

- Identify** three successful entrepreneurs.
- Research** one entrepreneur. **Identify** and list five interesting facts about the business they founded.
- Identify** four essential skills that have helped to make this entrepreneur successful.

Interpret

- Research** the entrepreneur Perina Drummond. **Identify** two social issues she is aiming to address with the business she has founded.



End-of-chapter assessment

1 Short-answer questions

- 1 **Explain** three key reasons that people have for entering the workforce.
- 2 **Explain** two types of ways that workers earn an income.
- 3 **Describe** factors that might lead to a worker deciding to start their own business.
- 4 **Create** a cost–benefit chart that explains some of the benefits and problems of owning your own business.
- 5 Recall the skills that entrepreneurs have and **explain** two of these that you think are particularly important.
- 6 **Explain** why combining different types of income might be a good idea for a worker.
- 7 **Propose** what harm might come from having multiple jobs at the same time.
- 8 **Describe** the difference between an entrepreneur and an intrapreneur.
- 9 **Identify** a problem in your school and **create** an ‘intrapreneurial’ solution for it.
- 10 **Create** a plus–minus chart that outlines the pluses and minuses of working from home.

2 Extended-response questions

- 1 **Identify** a problem in the world that you feel passionate about. **Create** a pitch to present to your class. **Explain** what the problem is and **identify** a social enterprise that you could **create** that would help to address this problem.
- 2 Find out more about an entrepreneur of your choice. Look at the skills that were important in helping them to be successful. **Create** a PowerPoint presentation that explains who they are, what their business is about, what skills they have, and what lessons you have learned from them.
- 3 Visit the Job Outlook website (<https://cambridge.edu.au/redirect/9489>) and take the career quiz. Once you have found out what jobs you might be suited to, **create** an A4 page that explains:
 - a What the job is that you are most interested in
 - b What qualifications you need to work in this job
 - c How much it pays
 - d Why you think it sounds like an exciting field.

3 Classroom activity

As you, as a class, have researched different careers, present these at a virtual jobs fair in your class. At the end of the presentation, **reflect on** three other exciting jobs, writing down your responses.

Digital resources

Visit the Interactive Textbook or Online Teaching Suite to access:

- General Capability Project
- Interactive chapter quiz
- Interactive Scorcher quiz
- Videos, image galleries and other extra materials.







PART

4



**Civics and
Citizenship**

What is Civics and Citizenship?

Australia is a democracy built on centuries of understanding of how to organise and manage citizens and their interactions. In our modern society, our government and courts develop rules and laws to help citizens understand how they should act, and what they should not do. Laws, rules and regulations help to keep citizens safe and provide order, so that when someone breaches the law, there are consequences.

Civics and Citizenship examines how the Australian Constitution sets up the framework through which our government operates and via which laws are enacted. It also provides a way for citizens to participate in our democracy.

One important element of a civilised society is the use of the courts to hold individuals accountable when they act in ways that are contrary to the expectations of society. Fundamental to the operation of our court system is the idea that all people are equal in the eyes of the law.

While Australia is considered to be a predominantly secular society, Australians have always had significant links to spirituality. These links include the beliefs of Aboriginal and Torres Strait Islander peoples about how the land of Australia was formed, the religious beliefs the British colonisers brought with them, and the diverse multifaith beliefs of more recent arrivals.



▲ **Figure A** Themis is the Greek goddess and personification of justice. In modern use she is often referred to as 'Lady Justice' and statues of her can often be found at courts, such as this statue at the Law Courts in George St, Brisbane.

Overview

When the First Fleet arrived in Australia in 1788, the people aboard brought with them ideas about how society should be organised and managed – these ideas were drawn from their British heritage. As the individual colonies were established (these are now Australia’s states and territories), they set up their own system of government, and established courts to adjudicate breaches of the rules – just like in Britain.

Eventually, it was recognised that the colonies acting separately and seeking guidance from Britain was not an efficient or effective way of governing, and so the leaders of the colonies sought approval to federate.

Once the British Government approved the federation of Australia’s separate colonies, the writing of the Australian Constitution began. The final version of the Constitution came into effect on 1 January 1901, but it is not a static document. Changes have been made in the intervening time to recognise society’s changing beliefs. In the same way, the laws created by our parliaments (both state and federal) are not static. They have changed to reflect our changing ideas of what is right, acceptable and important.

Some of these ideas come from our religious beliefs or spiritual convictions. While many parts of Australian life can be considered to be **secular** (that is, not connected with spiritual matters), there are many areas that are still linked to the religious beliefs that were an important part of life for previous generations.

secular not connected with spiritual or religious matters



▲ **Figure B** The Australian Coat of Arms



CHAPTER 9: Government and democracy, Laws and citizens, Diversity and identity

Setting the scene: the Magna Carta

The origin of Australian democracy dates back to a very important document, the Magna Carta. The Magna Carta (or ‘Great Charter’) was written in 1215 in England. It set out the terms under which the barons wished to be ruled by King John. This was the first step taken by the people of England to remove supreme power from the monarch and set the terms for how they wished to be ruled. Over the next 500 years, other documents like this gradually reduced the power of the Crown, ending with the current Westminster system that Australia has adopted.

In Australia, we are lucky to have a copy of the Magna Carta at Parliament House in Canberra. This copy of the original document dates from 1297 and is the only copy in the southern hemisphere and one of only four copies in the world.

The Magna Carta set out important restraints on the use of power by the monarch, and it guided the elaboration of constitutions and laws of several countries, including Australia. In our modern world, the restraints on the use of power by the parliament fixed by the Australian Constitution are a legacy of this iconic document.

Aboriginal and Torres Strait Islander peoples should be aware that this chapter contains images and names of people who have, or may have, passed away.



▲ **Figure 9.1** The Magna Carta. One of the copies of this important document is housed in Christ Church, Dublin, Ireland.



▲ **Figure 9.2** The Magna Carta was written in the thirteenth century. This photograph shows one of the few copies of the original Magna Carta, in Parliament House in Canberra.



ACTIVITY 9.1 MAKING THINKING VISIBLE

Connect, extend, challenge

- 1 Explore how the information presented in this ‘Setting the scene’ is connected to what you already knew about the Magna Carta.
- 2 **Identify** new ideas that you had that extended your thinking in a new direction.
- 3 **Explain** what is still challenging to you on the topic of constitutions and laws. What questions do you now have?

Find a partner in the class and share your thinking on these topics.

Chapter overview

Introduction

Australia is a country built on the concept of constitutional monarchy. But what is a constitution? What is a monarchy? How are laws made and decided upon? In this chapter, you will explore what it means to be a citizen, along with how the Australian Government is elected and how our legal system protects your rights.

On 1 January 1901, the separate self-governing colonies of New South Wales, Queensland, Victoria, South Australia, Western Australia and Tasmania federated (joined) to become the nation of Australia. Before each of the colonies agreed to work together, each had established its own rules and regulations, including taxation and funding arrangements, and made their laws through their parliaments.

After Federation (the name for the joining of the different colonies), the colonies became known as states. In the lead-up to Federation, the colonies each had input into a document that established the rules to determine how Australia would be run. This document is called the *Commonwealth of Australia Constitution Act 1900*. This is now key to helping determine what laws can be made in Australia and how much power our parliament has.

Learning goals

By the end of this topic, you should be able to answer these questions:

- What is the Australian Constitution?
- Why is the separation of powers important in Australia?
- What principles are important to the legal system in Australia?
- What are the key legal entitlements of Australians under the law?
- How are the beliefs of Aboriginal and Torres Strait Islander peoples demonstrated in Australian society?
- What other religions are important in Australian society?
- What is a secular nation?



▲ **Figure 9.3** Parliament House in Canberra. Parliament House is the meeting place of Australia's federal government.



9.1 The key features of Australia’s system of government and the characteristics of our democracy

- FOCUS QUESTIONS**
- What is the Australian Constitution?
 - Why is the separation of powers important in Australia?
 - How does the separation of powers divide law-making between the states and the Commonwealth?



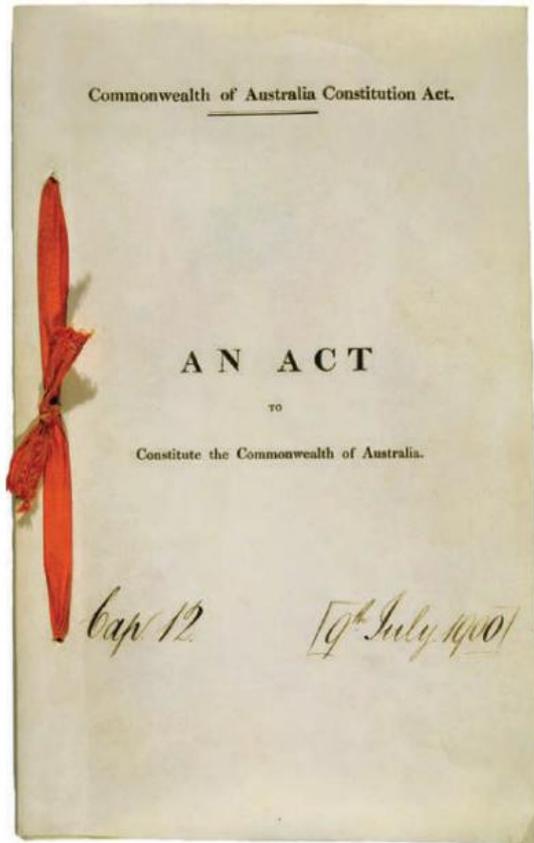
▲ **Video 9.1**
The Australian Constitution, locate this video at: <https://cambridge.edu.au/redirect/10158>

The Australian Constitution

When the British settlers first arrived in Australia, each settlement was governed by a Governor. Orders were sent from Great Britain about the best way to run each of the separate colonies. Over time, the colonies established their unique legal system and began to make laws. Eventually, it was decided that it would be easier if the colonies worked together, and a process called **Federation** began.

Some of the key political leaders in Australia at the time met together and constructed what became the **Constitution** of Australia. This Constitution became law on 1 January 1901.

The Constitution sets out the ground rules for how our federal parliament works, and is the basis of all laws passed in Australia. In a **democracy**, such as Australia, a constitution also details some of the rights and responsibilities of its citizens – for instance, the right and duty to vote or the freedom of religion.



▲ **Figure 9.4** The *Commonwealth of Australia Constitution Act 1900*. This is one of the original copies for the public record.

Federation the union of partially self-governed states under a common central government

constitution a written document that outlines the principles and laws that govern a nation

democracy government by the people, either directly or through elected representatives

Australian democracy

One of the key ways that power is controlled in Australia is by the writing of laws. These are the rules that govern how our society is run.

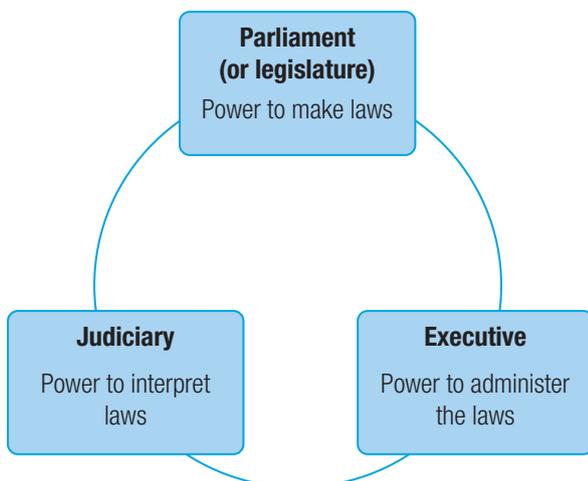
The writers of the Australian Constitution felt that it was important that no one section of society have all the power, and therefore they divided this power between three distinct branches of the government,

in order to protect the people and guard against government injustice and tyranny.

Parliament (or the legislature) received the power to **make laws**. The judiciary (or the judges) received the power to **interpret the law**. Finally, the executive, made up of the Prime Minister, the Cabinet, the Crown (represented by the Governor-General) and their administrative support staff, received the power to **administer the law**.

Chapter 1 of the Australian Constitution explains the powers of the parliament, Chapter 2 the powers of the executive and Chapter 3 the powers of the judiciary. The three elements of power, when split in this way, are referred to as **separation of powers**.

The separation of powers is a key element of a democratic and responsible government. It ensures that no one element of the government has too much power.



▲ **Figure 9.5** The separation of powers. The power to make laws is split between the legislature, the judiciary and the executive.

The Australian Parliament

The Australian Parliament is modelled on the system that is used in Great Britain. It is a **bicameral** parliament, which means that Parliament House consists of two sections called chambers (houses). These chambers are an upper house called the Senate and a lower house called the House of Representatives. The Crown (represented by the Governor-General) is the third element of the Australian Parliament.

Responsible and representative government

Australia's **government** is based on the federalist principle, which sees power being divided between a centralised national government and local regional governments. In Australia, this form of government came about because the states were initially separately governed areas

make laws make new laws or change existing laws

interpret the law determine the intended meaning of the laws

administer the law enforce and oversee laws

separation of powers the distribution of power between parliament, the judiciary and the executive



ACTIVITY 9.2

Research task

As a class, search for 'federal parliament history timeline' on the Parliamentary Education Office website (<https://cambridge.edu.au/redirect/9490>) and access the timeline. **Use** the 'jigsaw strategy' and split into groups of five to six students. Each group is to complete the following tasks:

- 1 **Investigate** one of the key events in the timeline prior to 1902.
- 2 **Identify** key points and develop a paragraph on the selected event.
- 3 Share these key points with your classmates.

bicameral a parliament consisting of two chambers

government a subsection of parliament made up of those members who represent the political party that has the most seats in the parliament

called ‘colonies’, which operated with independent governors and had power from the British parliament to do so.

While the separate colonies were able to make decisions in the best interests of their citizens, this didn’t help when they needed to cooperate on issues like defence, or transportation or taxation. This is why federalism is a good idea, and why many of these ideas can be found in the Australian Constitution.

Broadly, all elected officials (parliamentarians) have four main tasks once they are elected:

- Representing voters in their **electorates**
- Passing **legislation**
- Forming government
- If not in the government, monitoring the activities of the government (scrutinising the government).

Both our state and federal governments follow the principles of representative and responsible government. They are representative in that elected officials represent the wishes of the citizens who elected them. They are responsible in that they follow the principles of accountability, which means that they are not above the law.

Responsible government means different things. Firstly, it means that the government (the party with the most seats in the House of Representatives, or lower house) must maintain the confidence of the house, so that it can pass laws and govern. Secondly, it means that **ministers** (from the executive arm of the separation of powers) must maintain the support of their party. A responsible government also follows the rules of the land. If politicians are found to be doing the wrong thing, then they should be held accountable according to the laws of the country. One of the roles of the opposition is using **Question Time** to ask questions of the government – that is, to hold it accountable and ensure that it is acting responsibly.

electorate a defined area within a state or territory that is represented by a member of a political party

legislation a law that has been passed by government

minister a politician holding a ministry, a government department managing a specific sector of public administration, such as foreign affairs, environment or finance

Question Time occurs when members of the parliament ask questions of the ministers; this usually occurs daily when parliament is sitting



▲ **Figure 9.6** A session of Australia’s Parliament in Canberra. This photograph shows the House of Representatives.

**ACTIVITY 9.3****Research task**

At the time of writing, the current Australian Parliament was the forty-seventh Australian Parliament (following the 2022 **elections**). The Australian Constitution specifies that the term of members of the House of Representatives is a maximum of three years from the date of the first sitting of the House; thus the next federal elections are to be held in 2025 or earlier.

election a local, state or national ballot cast by citizens who vote for a person from a political party

- 1 **Investigate** the composition of the current House of Representatives.
- 2 **Identify** the Prime Minister and their party.
- 3 **Identify** the Leader of the Opposition and their party.

**ACTIVITY 9.4****Research task**

- 1 **Research** a time where the government has not acted in a responsible manner and has been held to account for this.
- 2 **Investigate** the way the United States Government uses the process of 'impeachment' to hold representatives accountable.

**ACTIVITY 9.5**

MPs are elected on the basis of population: the more populous a state, the more members it should have. Table 9.1 displays, for each state and territory, the number of MPs and senators as well as the percentage of the total Australian population each of them represents, in 2020.

▼ **Table 9.1** The population and number of MPs and senators, by state and territory, in 2020

State or territory	Ratio of the population	Number of MPs	Number of senators
New South Wales	31.8%	47	12
Victoria	26.1%	38	12
Queensland	20.1%	30	12
Western Australia	10.4%	16	12
South Australia	6.9%	10	12
Tasmania	2.1%	5	12
ACT	1.7%	3	2
Northern Territory	1.0%	2	2

Refer to what you have just read and Table 9.1 to answer the following questions:

- 1 **Consider** what you notice about the number of MPs and the number of senators for each state and territory.
- 2 **Explain** why it is this way.

What does Australian democracy look like?

Our modern society upholds key ideas as being important to the way a democracy should operate. Many of these ideas are now enshrined in the United Nations Declaration of Human Rights (UNDHR). Because the UNDHR was not adopted until 1948, some of its ideas were not adopted in Australia via our Constitution. Instead, they are understood in the ways described in Table 9.2.

▼ **Table 9.2** Understood freedoms in Australian democracy

Right	Australian iteration
Freedom of speech	In Australia, there is no Bill of Rights like there is in the United States. Instead, freedom of speech in Australia is narrowly defined from the Australian Constitution via the High Court of Australia as a freedom to communicate on matters relating to politics. Despite this, Australians are generally considered to have freedom to communicate on most matters, although there are laws that prevent hate speech, and civil consequences for those that damage the reputation of others.
Freedom of association and assembly	This right is usually a flow-on from freedom of speech. If people have ideas, they want to communicate them to other people who have similar ideas, and gather together. They might form associations to help advance these ideas. One way that they can convince the government that their ideas should be adopted is to hold protests (assembly). In Australia, most states have laws about how protests can occur, and what kind of groups can meet. Like freedom of speech, there are limitations. It would not be a good idea to have people gathering to plan criminal activities, for example!
Freedom of religion	Section 116 of the Australian Constitution precludes the government from establishing a religion, imposing religious observance or having a religious test as a qualification for holding an office or public trust under the Commonwealth. Broadly, this has allowed Australians to practise their spiritual beliefs in any way they choose. Further, states have anti-discrimination legislation that prevents other groups from discriminating against individuals based on their religion.
Freedom of movement	Within Australia, citizens are free to move around. We do not have to stop at state borders to ask permission to enter. However, there may be times when that movement is restricted. People need to ask permission to enter Australia under our Migration Act, and at times within Australia we have also needed permission to move around.

All of these rights (plus others) are considered by the Federal Parliamentary Human Rights Committee, which has the job of reviewing all legislation before it passes the house to determine if it needs to be adjusted on the basis of contravening human rights.

Additionally, some states have implemented their own versions of a Bill of Rights, to protect these and other rights that are deemed important to democratic government.



ACTIVITY 9.6

Research task

- 1 **Research** the VLAD laws in Queensland and **explain** how they prevented freedom of association for a particular group of Queenslanders.
- 2 **Explain** a time where borders around Australia were closed, so that citizens from one state could not enter another. Why did this occur?

Division of powers

One of the negotiation points for the writers of the Australian Constitution was how to protect the laws and the rights of the colonies that existed before Federation.

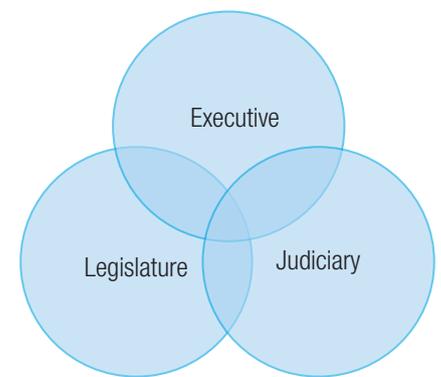
The Constitution, therefore, has limits on the powers of the Commonwealth, with power being divided between the federal government and state governments (the original colonies). Section 51 of the Constitution sets out the legislative powers that were granted to the federal government on Federation. This includes areas such as defence, taxation, currency and immigration.

The powers of the federal and state governments are divided in three ways:

- **Exclusive powers:** powers that may only be used by the Commonwealth Parliament – for example, defence and immigration
- **Concurrent powers:** areas in which both state and federal parliaments may legislate – for example, health and education
- **Residual powers:** areas where only the states may legislate – for example, state criminal law and urban planning.

In the concurrent area, there is the chance that both state and federal laws may be passed that have conflicting aims. The writers of the Constitution had thought of this, and section 109 of the Constitution sets out what happens when there are ‘inconsistencies’ between state and federal law. In such cases, the federal law will be the one that applies.

Around Australia, many state governments have seen the wisdom in further delegating some of their powers, allowing the creation of local government authorities. Local governments are usually referred to as councils in Queensland. They have responsibility for the low-level organisation in the cities and towns across Australia.



▲ **Figure 9.7** The separation of powers. There is not a complete separation of powers in Australia.



▲ **Video 9.2** Federal, state and local governments, locate this video at: <https://cambridge.edu.au/redirect/10159>

▼ **Table 9.3** The powers of the federal, state and local governments

Government	Law-making powers	Examples
Federal government	Responsible for laws that relate to the whole of Australia	Ships coming to Australia must declare their contents and pay import duties; and crew also may face quarantine and immigration clearance before coming ashore
State government	Responsible for laws that relate to the whole of the state	The state government is responsible for deciding what kind of licence is needed to skipper a boat in Queensland waters
Local government	Responsible for laws that relate to the local city council area	A local council is responsible for ensuring that not too many dinghies are parked on the beach in a local area



ACTIVITY 9.7

- 1 **Identify** the website for your local council.
- 2 **Explain** three different things that the council is responsible for.
- 3 **Identify** a problem in society that you feel strongly about (e.g. air-conditioning in school classrooms, a barking neighbourhood dog or a congested major road). **Determine** which level of government is responsible for solving this problem.
- 4 Construct a letter to the most appropriate representative explaining the problem, and how you think it could be solved.



DEVELOPING YOUR UNDERSTANDING 9.1



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

- 1 **Explain** why you think that the separation of power is a key element of democracy.
- 2 **Identify** which arm of government is responsible for making laws in Australia.

Interpret

- 3 **Identify** your local members at the local, state and federal level. **Research** how long they have represented your electorate and what changes they have implemented to improve your local area.
- 4 **Explain** the process of changing the Australian Constitution.
- 5 **Create** a mind map or write a short paragraph that outlines the role of the legislature, executive and judiciary.

Argue

- 6 **Explain** the differences between residual, concurrent and exclusive powers, and **research** an example of each.
- 7 **Research** the Tasmania Dam case and **explain** which power this case was based on.

9.2 The key principles and features of the Australian legal system

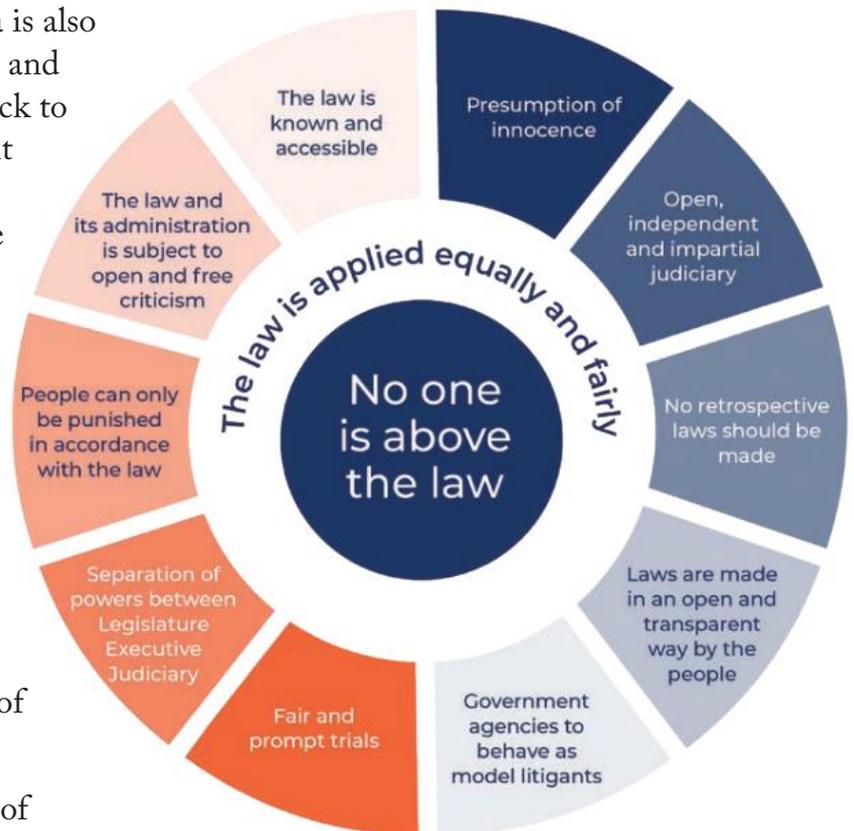


FOCUS QUESTIONS

- How does the Australian legal system work?
- What are the key legal entitlements of Australians under the law?

9

The legal system in Australia is also based on the English system and includes elements that go back to an ancient English document called the Magna Carta, which we encountered at the beginning of this chapter. These include ideas such as the right to trial by a jury of your peers and the independence of the judiciary. Modern democracy is built around an idea that came from the Magna Carta called the ‘rule of law’. This can be seen as part of a responsible system of government.



The key principle of the rule of law idea is that all members of society are equal before the law. It is based on key understandings outlined in Figure 9.8.

▲ **Figure 9.8** This diagram shows the key rights and concepts of the rule of law.

There are other important elements of the rule of law that can be found both in the Australian Constitution and also in our legislation.

One of these is the right to trial by jury. This comes from section 80 of the Constitution. This right does not always apply, however. Civil cases do not usually involve a jury, and low-level criminal cases heard in Magistrates’ Courts, which make up around 90 per cent of all cases, do not have a jury either.

Despite this, there are several other rights that those accused of a crime have.

First, **defendants** have a right to the presumption of innocence. This means that before **conviction** they should be treated as if they have not committed the crime. It is also important to understand that a defendant

defendant a person or company who has been accused of committing a crime

conviction a formal decision that someone is guilty of an offence

prosecution the person or company who commences legal proceedings against another party

(someone accused of a crime) is not responsible for proving that they didn't do what they have been accused of. Instead, it is the duty of the **prosecution** (represented by the state) to prove the facts of the case and to satisfy the judge – or in some cases, the jury – that the defendant did what is being claimed. This means that the prosecution bears the burden of proof: it is up to them to prove what they are alleging to have occurred.



▲ **Figure 9.9** Inside an Australian courtroom

judge an officer of the court who decides on cases in court

witness a person who sees an event take place

juror a member of a jury

Beyond this, the **judge** ensures that the trial is run fairly. This means that both sides have an opportunity to present and examine evidence and to argue their case before the judge or jury.

The prosecution will always be represented by lawyers (either solicitors or barristers); however, this is not always the case for the defence. While defendants have a right to have legal representation, this can be expensive, as legal work is a very specialised field, and some defendants may not be able to afford to have someone represent them.

To help with this, governments fund a service in Queensland called Legal Aid. Defendants must qualify for Legal Aid, and certain tests are put in place to make sure that those most in need are the ones that are helped. Beyond the defence and the prosecution, other citizens may be involved in cases. **Witnesses** may be called to present evidence about the facts of the case. In serious cases, some citizens may be called to be **jurors**. Twelve jurors make up the jury, which decides the guilt or innocence of a person charged in a serious criminal matter (such as murder or manslaughter).



DEVELOPING YOUR UNDERSTANDING 9.2



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

1 Explain the meaning of rule of law, providing examples to illustrate your understanding.

Interpret

2 Identify the elements of the rule of law diagram (Figure 9.8) that you think are most important and **justify** your reasoning.

3 Describe what rights a person accused of a crime has in Australia.

9.3 Australia's diverse cultural origins and social cohesion

FOCUS QUESTIONS

- What is a secular nation?
- How can we see evidence of Australia's Christian heritage in our society today?
- What other religions have come to be important in Australia?
- How are Aboriginal and Torres Strait Islander peoples' beliefs demonstrated in Australian society?



Spiritual beliefs in Australia

For tens of thousands of years, First Nations peoples have been sustained by spiritual beliefs and practices that are based on the actions of ancestors who created the land. These spiritual understandings are connected to specific places, making them unique. Some creator-ancestors travelled, leading to shared spiritual understandings among connected First Nations groups. This incredible diversity continues today.

For Aboriginal people who live on the Australian continent, social, cultural and spiritual knowledges are bound up in what is called 'the Dreaming' in English. Each First Nations group has their own word for their spiritual beliefs.

Torres Strait Islander people have a different understanding of their creation and spirituality. The Tagai is a series of stories that focus on the stars and connect Torres Strait Islander people to the sea and their way of life. The Tagai gives order to the world.

When the first Europeans arrived in Australia, they brought with them the belief system that was most predominant in England at the time – Christianity. Given that the settlement was established as a prison, the rehabilitation of a convict's belief system was seen as being very important. Therefore, on 3 February 1788, a little over a week after the arrival of the First Fleet at Botany Bay,

To the glory of God and in commemoration of the first Christian service held in Australia February 3rd 1788 Rev Richard Johnson B A the Chaplain being the preacher.

▲ **Figure 9.10** Inscription on the southern plaque of the Richard Johnson obelisk in Sydney. The first church service was held on this spot in 1788. What does the existence of this monument, and this inscription, make you wonder?



▲ **Figure 9.11** An ochre stencil rock painting in Cathedral Cave in Carnarvon National Park, Queensland. Carnarvon Gorge is home to many significant cultural sites for the Bidjara and Garingbal people, and rock paintings show a longheld spiritual connection to the area.

the first Anglican Church service was held under a large tree. You can see the spot where the service was held today on the corner of Bligh and Hunter Streets down near Circular Quay in Sydney, where the Richard Johnson obelisk was erected in 1925 to commemorate this event.

When European colonisers began to interact with Aboriginal and Torres Strait Islander people, the Europeans began trying to convert the First Nations peoples to Christianity. First Nations people who were relocated to missions, after being forcibly removed from their traditional lands, were denied access to their sacred sites and hunting grounds. Between 1910 and 1970, as part of the policy of Assimilation, tens of thousands of First Nations children (the **Stolen Generations**) were forcefully separated from their families, forbidden to speak their languages and were forced to adopt a 'white culture', which was seen by Europeans to be superior. Most of these children were sent to missions or institutions, where neglect and abuse were common. Moreover, forcing First Nations children to reject their heritage led to a disconnection from their cultures, and an inability, later on, to pass their culture on to their own children.

Stolen Generations

the generations of First Nations children who were forcibly removed from their families by Anglo-Australian settlers under the Assimilation policy



CASE STUDY 9.1

Closure of Uluru

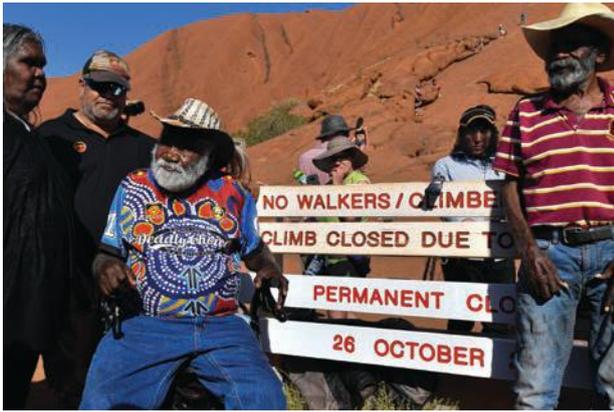
The natural landmark of Uluru is a sacred site for the Anangu people who live in Central Australia. According to their beliefs, Uluru was formed during the Dreaming and is recognised by the Anangu as being incredibly special and important as a resting place of the ancient spirits of the area.

Uluru is also an important centre for tourism in the area, with visitors identifying climbing the rock as an important reason for visiting. This is despite the act being recognised as being culturally insensitive, with signs explaining this installed at the base of the climb. It was argued that for First Nations people, seeing tourists climbing Uluru was similar to people climbing over a church, which would clearly be considered an insult to believers of Christianity. From 26 October 2019, the climb was officially closed, approximately 34 years after the Anangu people were given legal title to the rock and the surrounding land. Today, if you visit the rock and attempt to climb it there are penalties for these actions.

Previously, thousands of tourists would climb the rock each year, even though UNESCO had deemed it a World Heritage listed area due to its cultural importance to the Anangu people over tens of thousands of years. According to the former Chairman of the Uluru-Kata Tjuta Board of Management Sammy Wilson, speaking at the time of the closure; 'The land has law and culture. We welcome tourists here. Closing the climb is not something to feel upset about but a cause for celebration. Let's come together; let's close it together.'

Analysis questions

- 1 Using the information in this case study, and additional research, **explore** at least two reasons why the climb at Uluru was closed.
- 2 **Investigate** the other tourist opportunities available at Uluru that respect and support First Nations peoples.



▲ **Figure 9.12** Aboriginal Elders at Uluru. This photograph was taken on 27 October 2019, the day climbing Uluru was permanently banned.

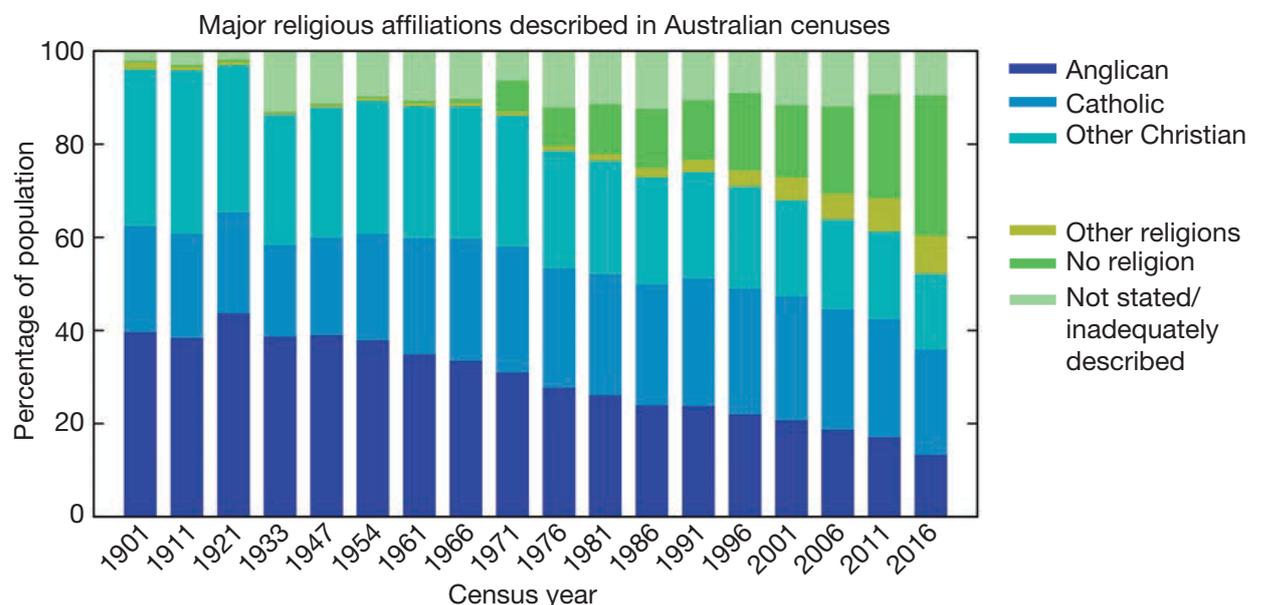


▲ **Figure 9.13** The Central Australian Aboriginal Women's Choir. This choir performed at celebrations marking the permanent closure of Uluru to climbers.

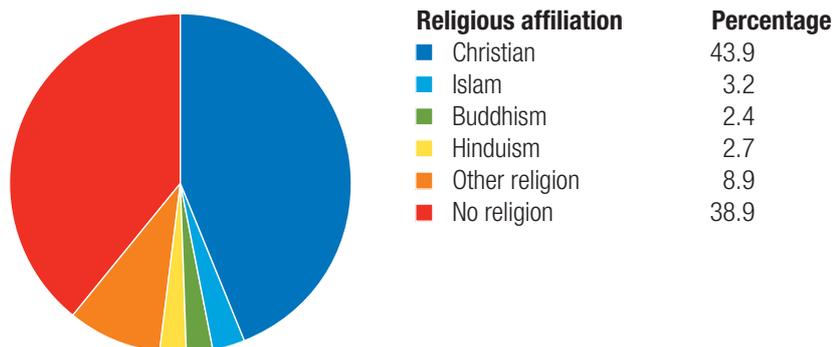
Today, some First Nations people have strong Christian, Islamic or other spiritual beliefs, including blended beliefs such as Aboriginal-Christian. In the Torres Strait each year, the arrival of the first missionaries is marked via the ceremony of 'The Coming of the Light'.

Diversity of spiritual beliefs in Australia

As more and more people arrived in Australia, they brought with them an increasingly diverse array of beliefs. Australia is no longer predominantly a Christian nation, as new arrivals have introduced ideas from many different faiths. Further, in recent years, more people identify as not having a religion. Christianity continues to be the largest faith group in Australia. Because it was the belief system of the colonising Europeans there are many examples of Christian belief in our society. For example, several major public holidays in Australia celebrate Christian festivals, and witnesses in legal trials are asked to swear an oath on the Bible (although people who believe in other religions can choose not to do this). Also, parliamentary sittings start with an Acknowledgement of Country and the reading of the Lord's Prayer.



▲ **Figure 9.14** Australians' religious affiliations by census year. This data is from the 2016 Census.



▲ **Figure 9.15** This graph shows percentages of the major religious affiliations in Australia. This data is from the 2021 Census.



**ACTIVITY 9.8
MAKING THINKING VISIBLE**

Think, pair, share

- 1 Using the 'think, pair, share' strategy, as a class summarise your current knowledge of the religions listed in Figure 9.15.
- 2 Choose one of the religions and prepare a table to **compare** the following:

Religion	Number of believers	History	Gods	Central belief	Afterlife	Practices	Text

- 3 As a class, prepare a group compare-and-contrast table. There may be other religions from your discussions you would like to add.



▲ **Figure 9.16** This photograph shows Christian religious art inside the Anglican Church of St John's Cathedral in Brisbane.

Despite the many examples of Christian belief in our society, Australia is generally considered to be a secular nation. This understanding comes from section 116 of the Australian Constitution, which prevents the Australian Government from making laws for establishing any national religion or imposing any religious observance.

'Secular' means that governments in Australia, in general, do not have any connection with religious or spiritual matters.

Religious organisations also play a significant role in other sections of Australian life.

Religious organisations run schools, aged care facilities and hospitals, and assist those who have lost their jobs or are homeless. In doing these things, organisations help to support their community and also help to support others who may eventually decide to join the religion later.

What do we all value?

In Australia, we strive to share common values. These are outlined in the documents provided to people thinking about becoming citizens, and are a good way to reflect on the things that we all share in common.

Sharing and articulating our values helps us to get along together, and form a society where we agree on important things. In our society, we are all free individuals and traditionally support the idea of ‘a fair go’ for everyone. We aim to respect one another and recognise that we are all equal.

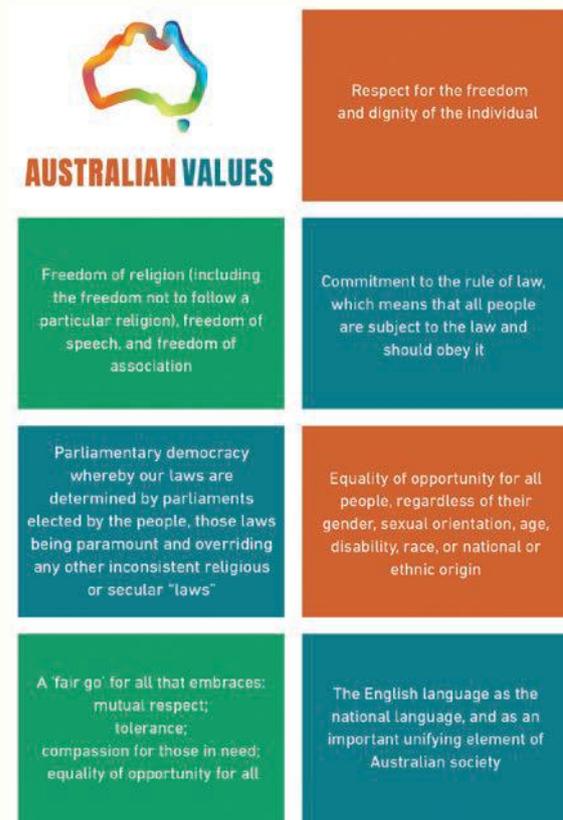


ACTIVITY 9.9

Research task

- 1 Refer to the Department of Home Affairs ‘Life in Australia’ web page.
- 2 **Explain** how you have seen one of the values outlined on page 5 of the *Life in Australia* booklet being demonstrated in our society.
- 3 **Create** a poster that draws attention to the key values of Australia.
- 4 **Describe** how Australian values are also demonstrated at your school.

► **Figure 9.17** Australians aim to value mutual respect, tolerance, compassion for those in need and equality of opportunity for all, as outlined in the Australian Values Statement.



SOURCE: AUSTRALIAN VALUES STATEMENT



DEVELOPING YOUR UNDERSTANDING 9.3



Review questions

Complete the Quiz in the Interactive Textbook, and answer the questions below on paper or in the Interactive Textbook.

Recall

- 1 **Explain** what is the Lord's Prayer.

Interpret

- 2 **Discuss** if you think that the Lord's Prayer belongs at the start of parliament.

Argue

- 3 If the Lord's Prayer were to be replaced with something else, **propose** what that might be.



End-of-chapter assessment

1 Short-answer questions

- 1 **Describe** the states and territories that make up Australia's Federation.
- 2 **Explain** who makes laws in Australia.
- 3 **Describe** the characteristics of a representative democracy.
- 4 **Explain** the role of the legislature, executive and judiciary.
- 5 **Explain** the meaning of the rule of law.
- 6 **Select** two religious affiliations and **compare** and contrast how identification with these religious affiliations has changed over time in Australia.
- 7 **Explain** which values in our society come from different religions.

2 Extended-response questions

- 1 The freedoms of speech, movement and assembly are important to Queenslanders. **Research** the 1891 shearers' strike at Barcaldine and **explain** how each of these freedoms was demonstrated.
- 2 **Explain** the limitations on freedom of speech.
- 3 Write a proposal for a protest related to an issue that you are passionate about. Think about where it might be held and who might be involved.

3 Classroom activity

In your class, hold a debate on which of the Australian values you feel is most important.

Digital resources

Visit the Interactive Textbook or Online Teaching Suite to access:

- General Capability Project
- Interactive chapter quiz
- Interactive Scorcher quiz
- Videos, image galleries and other extra materials.



Glossary

History

abundance a great quantity of something

accuracy the analysis of a source to establish correctness by identifying purpose, corroborating the information with another source and assessing bias

Acknowledgement of Country/Traditional owners a formal statement or gesture of respect for the traditional owners of the land and their spiritual and cultural connection to it

amphora a container generally used in ancient Rome to hold wine or oil

analyse consider in detail for the purpose of finding meaning or relationships, and identifying patterns, similarities and differences

ancestors those who have come before in a family or kinship line

anthropologists scientists engaged in the study of humankind, both from past and present societies

artefact an object that is made by a person, such as a tool or a decoration; it is usually of historical interest

auxiliaries non-citizen troops recruited from non-Roman tribes

barbarian someone from another place who spoke a different language; for ancient Romans, a barbarian was any person who was not part of the Roman Empire

bas-relief a method of sculpture where stone is cut from around a shape, giving the shape the appearance of projecting out from the stone

benefactor someone who provides another person or group with money or other help to support them

bodhisattva a follower of Mahayana Buddhism who is able to reach nirvana (a state without suffering) but delays doing so out of compassion for the suffering of others

bora a location where sacred rituals are held by First Peoples; there are different words in different languages

canal human-made waterway

canopic jars jars for preserving the internal organs of the deceased, as part of the process of mummification; different jars were made for different organs

cause and effect the reasons for events and the consequences of these events

celestial a celestial, or astronomical, object is a natural thing existing outside Earth's atmosphere

cesspit a pit for the disposal of waste water and sewage

change and continuity the reasons why things have changed or stayed the same

chronological order the method of arranging events in the order in which they occurred, from earliest to latest

citizen male person in ancient Rome who was recognised as having the rights of citizenship. The children of Roman citizens automatically became citizens. Women were not considered to be citizens. Citizenship could be granted to ex-slaves who had been freed or to foreign non-citizens as a reward for service

climate the general weather conditions usually found in a specific place

consort a wife or companion of a ruler

constellation a group of stars that appear to form a recognisable pattern in the night sky

consuls the political leaders of ancient Rome, elected each year by the citizens

contestability where interpretations of the past differ

context the analysis of sources to understand the nature of society and the historical period in which the source is created, the significant event/s related to the source, and the language and ideas of the time

co-regents two rulers who rule a kingdom jointly

corroborate to confirm an idea or conclusion by providing new evidence that supports earlier evidence

Country ancestral lands and waters that people are custodians for

CT scan a computerised tomography (CT) scan takes a series of X-ray images from around a body to create three-dimensional images of the body

cultural landscape an area shaped by the practices, beliefs and cultural traditions of First Peoples, reflecting their spiritual and historical connection

deep time history refers to the events and processes over vast spans of time

deep time history of Australia the long timespan of human existence on the Australian continent, back to at least 60 000 BP

displacement forced removal of people from their ancestral lands, often resulting in loss of culture, connection and livelihood

dispossession the taking of lands and resources without consent

diversity a range of different people, ideas or things

divination the practice of foretelling the future through supernatural means

DNA the genetic material that contains instructions for the development and functioning of living organisms

DNA testing scientific test of the chemical in the centre of cells that carries genetic information about a person; it can be used to identify characteristics of a deceased individual, such as their likely physical appearance, and to identify genetic relations between deceased individuals

dolia (singular: dolium) large rounded earthenware jars with a wide mouth

Dreaming a spiritual concept of knowledge and lore, often specific to a place or being

dynasty a succession of rulers from the same family; in ancient Egypt and China, some dynasties included rulers that were not related to the ruling family

Elders knowledge holders respected by First Peoples, often called Aunty or Uncle

embalmer a priest (or someone else) in ancient times who treated human remains with spices and other materials to help preserve the remains and stop them decaying

embankments ridges of earth or stone walls used to hold back water

empathy the ability to relate to other people

evaluate examining and judging the merit or significance of something

everywhen describes the eternal and interconnected nature of time in First Peoples' understandings

evolve the process through which living things change over millions of years

fish traps methods for capturing fish in seas, rivers, creeks and streams, such as pools of shallow water against artificially built walls or fences or woven nets or baskets placed in weir and pond systems

fish weir a way of channelling fish into fish traps by using a fence or wall built into the water of a river, creek or stream; the fence allows the water to freely flow through it

fledgling something that is new or young and without much experience

forager a person or animal that goes from place to place in search of things that they can eat or use

forensic relating to scientific methods of investigating history or crime, and may involve scientific tests of human remains

fossil record evidence of ancient life found in rocks and geological deposits that provides insights into change over geological time

found when something new is created by a people – generally a city or place

fresco a style of painting on the plaster that covers a wall, where the paint is applied while the plaster is still wet

frieze a space on the side or front of an ancient Roman building, which often featured some form of sculptural decoration

fuller a laundry worker in ancient Rome who also processed and sold cloth

funerary text written records relating to funerals, often found written on the interior walls of ancient Egyptian tombs

gladiator a man trained to fight with other men in the Roman arena for the entertainment of Roman audiences

graffiti words or drawings in public places

grains small, hard, dry seeds from grass-like plants, used as a staple food source, often ground into flour for making bread

hierarchy an organised structure in order of rank or status by factors such as wealth or social group

hieratic a simplified version of the hieroglyphic script intended for everyday use

hieroglyphs pictures or symbols that represent words or concepts

historical significance relating to the long-term importance of an event, this is a term people today apply to things that happened in the past

Holocene era (or epoch) a period of geological time that begins at the end of the last glacial period, where global temperatures began to warm and sea levels rose (11 000 years BP to the present)

hominin the group that consists of modern humans, extinct humans and human ancestors

hypothesis a theory based on facts, or a suggested answer to a question, to be proved or disproved

indicators events, such as a tree flowering, that indicate other known events will happen

inscription words written or cut in something, such as a written record carved in stone

intermediary one who comes between. The pharaoh was the intermediary, or link, between the gods and humans on Earth

inundation the yearly flooding of the Nile River

irrigation the practice of supplying land with water so that crops and plants will grow

Italian peninsula the region now covered by the country of Italy, from the Alps in the north, to the central Mediterranean Sea in the south

kinship a social system that establishes a person's relationships and responsibilities to other people and entities

Knowledge stories/Dreaming

stories knowledge connected to specific Country, places or things, with deepening levels, connected to dance, song, art, ceremony and cultural practices, passed on through kinship

land bridge a connection between two land masses that allowed humans and animals to cross to new areas

language groups a community of people who speak a common language, often reflecting cultural, historical and ancestral ties

Latium the region of central Italy where the city of Rome was located

legionary a soldier in a Roman legion, which was a section of the Roman army

levees earth embankments built along riverbanks to prevent flooding

linguistic related to language or the study of language

Lower Egypt the northern region of Egypt around the Nile Delta. The major city in this region was Memphis. The land here was flat, fertile and closer to sea level (thus the label of 'Lower' Egypt)

luminescence dating a method to determine how long ago mineral grains were last exposed to sunlight or heat

lunette a crescent-shaped chain of dunes bordering a lake bed or valley in arid or semi-arid locations

ma'at the ancient Egyptian concept of truth, balance, justice and order – Ma'at is the god of divine balance

magnanimity the quality of being highly moral in forgiveness and overlooking insults from others

Mahayana Buddhism the form of Buddhism that became popular in China

manumission the act of releasing a person from slavery; this appears to have been more common in ancient Rome than in other ancient societies of the time

matron a freeborn, respectable woman in ancient Rome

megafauna large animals over 40 kilograms, such as the elephant, rhinoceros and extinct diprotodon

memoir a book or piece of writing detailing a person's personal experiences with other people, places and events

Middle Kingdom the term used to group the pharaohs of the 11th to 13th dynasties. The capital of Egypt at this time was Thebes. Osiris and Amun were prominent gods and it is considered a time of great wealth and culture, with many remarkable literary works produced and new genres of writing created

migrate to move from one place to another, sometimes over large distances

military campaign a series of conflicts or battles that are aimed at reaching the same goal

monument a structure, such as a large building, constructed for the purpose of commemorating an important person or event

mosaic a decorative pattern or image made from pieces of coloured stone, glass or ceramic

mosaic pattern a combination of diverse pieces of land, as in grass and adjoining forest

mummification a method of preserving a corpse by removing the internal organs and drying out the body

natives a colonial word for First Peoples that is no longer used as it has derogatory meanings

New Kingdom the term used to group the pharaohs of the 18th to 20th dynasties. The capital of Egypt at this time was at Thebes and the chief god was Amun-Re. Egypt expanded its empire widely during the New Kingdom and the chariot was introduced. Pharaohs were generally buried in the Valley of the Kings. Notable pharaohs of this period were Amenhotep III, Hatshepsut, Thutmose III, Akhenaten, Tutankhamun and Ramses II

Nile River the main river running through Egypt

odium intense hatred or dislike

Old Kingdom the term used to group the pharaohs of the 4th to 6th dynasties. The capital of Egypt at this time was at Memphis and the chief god was Re (also spelled Ra). The Great Pyramids at Giza were constructed during this time

oracle advice or instructions supposedly from the gods, spoken by a priest or priestess who claimed to be able to listen to the gods

oral history the recording of past events in a spoken form, including through song, story or dance

organic material remains of living organisms, such as animals or plants

origin analysis of a source to establish who created the source as well as where and when it was produced

pantheon a group of gods

papyrus a plant that was common in the Nile Delta; ancient Egyptians had many uses for papyrus, including as an early form of paper

papyrus scroll a material used as a type of paper by ancient Egyptians; multiple pages could be joined together and rolled into an early form of a book known as a scroll

pasturage area covered with grass or plants suitable for the grazing of livestock

patriarchal a system of society or government controlled by men

patrician any member of a group of citizen families who formed the ruling class of the early Roman Empire; the patricians owned land and held political power

perspective the way we see something, a point of view or attitude to something

pestilential occupied by widespread, troublesome or harmful plants or animals

pharaoh a term used today to describe the kings of Egypt. It derives from the ancient Greek *per aa*, meaning 'the one who lives in the great house'. The rulers of ancient Egypt from the Old Kingdom onwards were called kings, with the title of pharaoh not appearing until sometime in the New Kingdom. The term 'pharaoh' has become virtually interchangeable today with the title of 'king' and will generally be the preferred term used throughout the chapter on ancient Egypt

plebeian commoner, free Roman citizen who was not a patrician

Pleistocene era (or epoch) a long period of geological time that includes the last glacial period, where temperatures were cooler and sea levels lower (1.6 million to 11 000 years BP)

polytheistic worshipping more than one god

pre-history the time of human existence before recorded history

primary source a source of information about the past created in the time being studied

province territories or regions outside of Rome that were controlled by Rome as they were part of the empire

purpose analysis of a source to establish the original reason for its creation

radiocarbon dating a method to determine the age of organic materials, such as hair, bones or wood, by measuring how much carbon-14 is left

regenerative food cultivation a method of farming that creates biodiverse, sustainable and resilient food systems

regenerative relationship a reciprocal and respectful relationship between First Peoples and the natural environment that sustains the health and wellbeing of both

regent a person who exercises power in a kingdom if the expected king or queen is too young

relinquish voluntarily give up something

republic the political system in Rome from c. 509 BCE to c. 27 BCE, where citizens were protected by the law and had the power to elect their political leaders

sack to invade and destroy a city

Sahul an ancient continent that once existed; it was made up of modern mainland Australia, Tasmania, the Torres Strait Islands, New Guinea and parts of Indonesia

scarab an amulet that was often worn or carried by ancient Egyptians, which was carved to look like the Egyptian scarab beetle; it was used as an early form of communication, with information carved into the flat surface on the underside of the scarab

secondary source a source of information about the past created after the time being studied

Senate a powerful political body in ancient Rome, consisting of hundreds of nobles (senators) who had previously served in government – the consuls were expected to follow the advice given by the Senate on important decisions

settlers people who move to a new place and establish a permanent society

shaduf hand-operated device for lifting water from rivers, used in ancient Egypt from 2000 BCE to irrigate the land

shell midden a large mound of seashells piled up as a result of being thrown away after humans consumed the shellfish within the shells

shrine a place used for religious rituals

silt rich, fine soil carried in the waters of a river

smelting a process of heating rocks and sediment to extract metals

sovereign a king or ruler who has total and permanent authority

speleologist a scientist who studies caves, or a person who explores caves for sport

stratigraphy the archaeological term that refers to interpreting and analysing the way different layers of earth (or strata) represent the relationship between events and time periods

subsistence the state of existing by having just enough resources like food and water to stay alive

surplus an amount left over when needs are met

synthesise combine different parts or elements (information, ideas, components) into a new whole, in order to create new understanding

Tagalaka a First People from the Gulf Savannah region of north Queensland

terra nullius a Latin term that means 'nobody's land'

timeline a graphical representation of the passing of time, usually arranged by periods, and on which important events are marked in chronological order

tribune one of 10 plebs elected each year to lead the Council of the Plebs; the tribunes were expected to act in the best interests of the plebs

unification the process of combining things or people

Upper Egypt the southern region of Egypt, stretching along the Nile Valley from Memphis in the north to Aswan in the south. The major city in Upper Egypt was Thebes

usefulness the analysis of a source to determine how relevant it is in relation to historical questions

usurper one who tries to take power illegally or through force

virtues qualities of goodness or moral excellence

vizier the most important adviser and helper of the pharaoh

Welcome to Country where a custodian introduces a person to, and grants permission to go on to, Country

well-field system a system under which areas of land were divided into nine sections. Eight of these sections were farmed individually by different peasant families, while one was farmed collectively for the lord who owned the land

yam a type of root vegetable

Yangtze River Western misnaming of the whole river, which is Chang Jiang (long river), while the eastern section (from Nanjing onwards) is locally known as the 'Yangtze' or 'Yangzi' River

yue a ceremonial axe

Geography

accessibility where resources or services are available and affordable for all people to use

affordability the ability to afford a service or attendance of a facility – for example, going to the doctor

arid very dry, often without rainfall to support plants

artificial made by people, often as a copy of something natural

availability how easily people can access a service or facility

bores holes drilled into the ground to access underground water resources; also called a well for larger holes

catchment an area acting like a giant bucket, catching all of the water from rainfall, run-off and infiltration

change the ways in which something is different from the past

climate the long-term trends in the weather conditions of a place, such as its average rainfall and temperature

commercial building a building that is used for business activities

condensation the process by which water vapour in the atmosphere cools and changes into liquid water

Country ancestral lands and waters that people are custodians for

cubic kilometre a cubic kilometre is equal to a volume of $1000 \times 1000 \times 1000$ metres; a cubic kilometre is also equal to a teralitre, which is exactly one trillion litres

displace force someone to move from their home, usually because of war, natural disaster or persecution

displacement the movement of something or someone from its original place to somewhere else

drought an extended period of time without rain that causes water shortages and crop damage

efficiency the use of resources in the best way to avoid waste

elevation height above sea level – altitude

environment the air, water and land of a particular area, which contains people, animals and plants

environmental resources resources that are from the natural environment, such as water and wood

ephemeral something that happens only for a short time

equity where all people have equal access to resources that meet their basic needs

erosion a process that gradually wears away and removes rock, soil and sediment by wind or water

evaporation the process of a liquid changing to a gas, especially by heating

exploitation the use of something in order to get an advantage from it

fauna the animals of a particular region

fieldwork gathering information and data about a natural or human environment outside the classroom

filtration the process of removing solids and impurities from water

finite resources resources that have a limit or end

fish management a system of sustainably controlling the harvesting of larger fish and other aquatic organisms, with minimum disruption to natural breeding, and allowing smaller individuals to escape and grow

floodplain an area of flat land near a river that is often flooded when the river becomes too full

flora the plants of a particular region

fossil fuels fuels that were formed underground from plant and animal remains millions of years ago; examples include gas, coal and oil

fresh water water with less than 0.5 per cent of dissolved salts

geographical processes a series of events or actions that change environments, spaces and places

gigalitre a gigalitre is exactly one billion litres

glaciers large masses of ice that move slowly; they are frozen rivers of ice that form when snow accumulates and is compacted

habitat the natural environment where an animal or plant usually lives

harvest to pick and collect crops, or to collect plants, animals or fish to eat

heavy metals dense metals such as iron and lead

high tide the time when the sea or a river reaches its highest level and comes furthest up the beach or the bank

hydroelectricity electricity produced by the force of fast-moving water such as rivers or waterfalls

ice cap a thick layer of ice that permanently covers an area of land

infertile land or soil that is not good enough for plants or crops to grow well there

infiltration the process by which water is absorbed into the ground

infinite resources resources that are without limits

infrastructure the physical structures and facilities needed within a community, such as roads, buildings and pipelines

interconnection the relationship between places and people, and the ways in which they influence each other

irrigation the practice of supplying land with water so that crops and plants will grow

liveability the qualities of a place that enable a person to live there with a good standard of living. To work out whether a place has a high or low level of liveability, we consider the quality of economic, environmental and social living conditions in that place

low-lying area an area that has a very low elevation and is close to sea level, usually located near the coast

meander to follow a winding course, like the bends and curves of a river or stream

megacity a city with 10 million or more residents

megalitre a metric unit of capacity equal to a million litres

meteorological event an event relating to changes in the weather, such as fog, rain, storms and cyclones

meteorologist a person who studies the atmosphere, especially the weather, and makes predictions for weather forecasts

monsoon the seasonal changes in atmospheric wind circulation and precipitation

non-renewable resources resources existing in limited quantities that cannot be replaced after they have all been used

nutrient any substance that plants or animals need in order to live and grow

pasture grass or similar plants suitable for animals, such as cows and sheep, to eat

perception the way something is viewed or understood

percolation the process of a liquid moving slowly through a substance that has very small holes in it

perennial something that happens repeatedly or all the time

phenomenon an occurrence or observable fact

population density refers to the number of people who live in a geographic area; in Australia, this is often expressed as the number of people per square kilometre

populous a place that has a lot of people living in it

porous something that has many small holes so liquid or air can pass through, especially slowly

potable water that is clean and safe to drink

precipitation water that falls from the clouds towards the ground, especially as rain or snow

pull factor a reason people move into an area

purification the process of removing dirty or harmful substances from water

push factor a reason people move away from an area

qualitative data non-numerical, observed or collected through interviews, surveys, etc.

quantitative data numbers or counts

renewable resources resources that can be produced as quickly as they are used

residential building a building that is used for private activities

run-off water that is not absorbed by the land and flows from high areas to low areas

rural an area in the countryside that is not part of a large town or city

rural–urban migration when people move from rural areas to urban areas, usually for better opportunities such as employment and education

salinity the amount of salt contained in something

sanitation the system for taking dirty water and other waste products away from buildings to keep places clean and protect people's health

saturate to reach a point where soil cannot absorb any more water

scale the size of an area and how it is viewed in relation to another area

sediment a soft substance that is like a wet powder and consists of very small pieces of a solid material that have fallen to the bottom of a liquid

sense of place the meaning that a person or group attaches to a specific area or space

sewage waste matter such as human urine or solid waste

space a physical area and its physical features

species a group of plants or animals that are classified as having the same characteristics

storm surge a rise in sea levels due to the wind and other atmospheric elements of a storm

stormwater excessive water run-off from rain and snow after a storm

submerge to cause something to be under water

sustainability the wise use of resources so that they are available into the future

thunderstorm a storm that produces thunder and lightning and usually heavy rainfall or hail

topsoil the soil that forms the top layer of ground where plants grow

transpiration the process of losing water through the surface or skin of a body or a plant

tributaries rivers or streams that flow into a larger river or a lake

tropical cyclone a rapidly rotating storm system with strong winds and thunderstorms

tsunami a high wave that forms out at sea due to a disturbance underground, such as an earthquake

urban areas built-up environments, such as cities or large towns

urban consolidation keeping residential development and population growth restricted to the urban areas that already exist

urban planning the process of planning the layout and infrastructure of a place

urban–rural migration when people move from urban areas to rural areas, usually for lifestyle changes

urban sprawl the gradual spread of cities into previously rural areas due to population growth

vegetation the plants found in an area, such as trees, shrubs and grasses

walkability a measure of how easy it is for a pedestrian to walk around

water bore a hole drilled through levels of the ground for the purpose of accessing the groundwater below for use on the surface

water withdrawals the total amount of water withdrawn from a surface-water or groundwater source

Economics and Business

budget a financial plan listing expected expenses and income during a particular period

career a job or series of jobs within the same industry, generally with increasing responsibilities and pay

casual work a job with no guaranteed hours of work and no entitlement to sick leave or holiday leave entitlements or other forms of benefits that go along with income

circular economy an economic system aimed at eliminating waste and the continual use of resources

consumer a person who buys goods and/or services for their own use

demand the consumer's desire to purchase goods and services and pay the price for these

dynamic pricing (also known as price surging) a pricing strategy in which flexible prices for services or products are set by businesses, based on the market demands at the time

entrepreneur a person, commonly seen as an innovator, who creates a new business, taking on the risks and enjoying most of the benefits of that business

equilibrium price where supply and demand are balanced

financial goals SMARTT goals to assist in saving money and reducing spending

financial objective a financial result an individual or a business plans to achieve within a time frame

financial planning the range of strategies that you put in place to manage your finances to achieve your objectives/goals

for profit a business that operates to make a profit (money) for the owners or shareholders of the business

full-time a job that has a maximum number of hours (usually around 40 hours per week); employees who work more than this may be entitled to overtime (extra pay at a higher rate) or accrue time off

goal an aim or purpose

good a physical, tangible item for sale

law of demand the quantity purchased varies inversely with price

law of supply an increase in price results in an increase in quantity supplied

long-term financial goals goals that are generally achieved over a long period

market economy an economic system in which the pricing of goods and services is determined by the interactions of buyers and sellers

Maslow's Hierarchy of Needs the full range of needs for a human being, starting from the most basic physiological needs all the way to self-fulfilment

mixed-market economy when a government intervenes in the economy

need something essential for survival

not-for-profit a business that returns profit back to the organisation to continue its work; not-for-profit businesses may derive their income from grants or donations

objective a result an individual or a business plans to achieve within a time frame

opportunity cost the missed benefit from the option not taken

part-time working less than the maximum full-time hours of 40 hours per week

producer a person or business that provides goods

product a good, service or idea made to be sold

relative scarcity an assumption that many of Earth's resources are limited, while consumers have unlimited wants and needs

resources a source of supply used to produce goods and services that meet human needs and wants

salary a yearly figure that an employee earns; salaries are generally divided and paid weekly, fortnightly or monthly

savings the remainder of your income once expenses have been subtracted

service generally an action that is performed either on you or for you

shortage higher demand than supply for a product

short-term financial goals goals that can be achieved in less than one year

social enterprise an organisation that is driven by a public or community cause; social enterprises measure their success on the positive impact they make on society (and not on how much money they make)

supply total amount of goods or services that are available to a consumer

surplus higher supply than demand for a product

want something that is not necessary but desirable

Civics and Citizenship

administer the law enforce and oversee laws

bicameral a parliament consisting of two chambers

constitution a written document that outlines the principles and laws that govern a nation

conviction a formal decision that someone is guilty of an offence

defendant a person or company who has been accused of committing a crime

democracy government by the people, either directly or through elected representatives

election a local, state or national ballot cast by citizens who vote for a person from a political party

electorate a defined area within a state or territory that is represented by a member of a political party

Federation the union of partially self-governed states under a common central government

government a subsection of parliament made up of those members who represent the political party that has the most seats in the parliament

interpret the law determine the intended meaning of the laws

judge an officer of the court who decides on cases in court

juror a member of a jury

legislation a law that has been passed by government

make laws make new laws or change existing laws

minister a politician holding a ministry, a government department managing a specific sector of public administration, such as foreign affairs, environment or finance

prosecution the person or company who commences legal proceedings against another party

Question Time occurs when members of the parliament ask questions of the ministers; this usually occurs daily when parliament is sitting

secular not connected with spiritual or religious matters

separation of powers the distribution of power between parliament, the judiciary and the executive

Stolen Generations the generations of First Nations children who were forcibly removed from their families by Anglo-Australian settlers under the Assimilation policy

witness a person who sees an event take place

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